Making a Difference:
Putting Consumer Citizenship into Action

Proceedings of the Sixth International Conference of
The Consumer Citizenship Network, Berlin, Germany 2009

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"The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little"
Franklin D. Roosevelt 1937

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INTRODUCTION

The growing imbalances of social, economic and ecological systems are increasingly visible as prices for food and energy rise around the globe, the availability of many resources declines and the devastating effects of climate change touch the lives of rich and poor alike.

The sixth international Consumer Citizenship Network Conference dealt with: *Making a Difference: Putting Consumer Citizenship into Action* The conference investigated the proactive role of the consumer in the transition to more sustainable human development around the world. Central topics which were focused on were: understanding consumer citizenship behaviour; education for consumer citizenship; and cooperation to further consumer citizenship.

The conference marked the conclusion of six years of cooperation between the partners of The Consumer Citizenship Network[1] and the transition to new forms of collaboration. 200 persons from 40 countries attended. The conference particularly appreciated the presence of participants from Burkina Faso, Chile, Japan, Kenya, Nepal and Sri Lanka.

The conference was organised by The Consumer Citizenship Network, an Erasmus thematic network of educators and researchers. The conference was coordinated by the Hedmark University College, Norway and hosted by the Technical University of Berlin, Germany. The conference was made possible with the support from the SOCRATES programme and the Norwegian Ministry of Children and Equality and the Ministry of Education. The conference Chair was Victoria W. Thoresen, Hedmark University College and Ulf Schrader, Technical University, Berlin. The conference committee consisted of conference manager Dag Tangen; Vera Fricke, Technical University, Berlin; Peter Gnielczyk, the Federation of German Consumer Organisations, Berlin; Bjørg Quarcoo, executive secretary, Hedmark University College and Declan Doyle, peer review committee chairman, Institute of Technology, Carlow, Ireland.

The plenary sessions

The conference opened with speeches from Vice-President Gabriele Wendorf, Technical University of Berlin; Fabienne Pierre, United Nations Environment Programme, Paris; Lisbet Bjone, Norwegian Ministry of Children and Equality and Consumer Affairs; Ulf Schrader, Technical University of Berlin; Alexandra Klein, Hedmark University College, Norway; Victoria Thoresen, Hedmark University College; Marlehn Thieme, Director of Deutsche Bank and member of the German Council for Sustainable Development; Gerard Vollmer, European Environment Agency, Copenhagen, Denmark; Jesper Klein, UNICEF ambassador and social critic, Denmark; Gerd Billen, the German National Federation of Consumer Organisations Ethel Quayle; University of Edinburgh; and Carl Lindberg, UNESCO Advisor, Sweden.

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[1] **The Consumer Citizenship Network (CCN)** was an interdisciplinary network of educators, researchers and civil society organizations, (including UNESCO, UNEP and Consumers International) who recognize the pressing need for constructive action by individuals in order to achieve sustainable consumption and global solidarity. The Consumer Citizenship Network developed since 2003 interdisciplinary approaches to central issues dealing with the balance between material and non-material well-being and with how one can translate ethical values into everyday practice through conscientious participation in the market. CCN also brought together expertise in the fields of citizenship-, environmental- and consumer education to further develop research and good practice for teaching and accessing consumer citizenship education. The Network consisted of 133 institutions in 37 countries. The project targeted lecturers, researchers and teacher trainers in higher education; students, professionals working with children and young people, public authorities, and associations dealing with citizenship training, sustainable development and consumer issues. By focusing on social responsibility, the CCN addressed the growing international concern for implementation of norms and behavior which support sustainable development and cooperation.

The conference contained key note speeches, two panel discussions, a video film, 62 paper presentations, the second CCN student essay competition award, exhibitions and social events.

Key note speakers

"Who dares to differ?"
Victoria W. Thoresen, CCN project manager. With waves rolling forth in a persistent sea as a metaphor, Thoresen described the societal transformation created by principled consumers and non-conformist producers in their everyday personal choices made in the market, in relation to professional choices as they relate to the market and in relation to the civic actions and initiatives one becomes involved in locally and globally, – strategic initiatives which are based on a vision of a more just and sustainable future for all.

"Consuming responsibly using the sustainable shopping basket"
Marlehn Thieme is Director of Deutsche Bank and member of the German Council for Sustainable Development. She has worked in banking since 1986 and is a member of the German Banking Foundation as well as a member of the Council of Lutheran Churches in Germany. In recent years she has specialised in the fields of private wealth management and corporate social responsibility.

"Sustainable Consumption and Production – Pharmaceuticals and the Consumer"
Gerard Vollmer is a member of the European Environmental Agency. He has long lasting experience on the national and European level in assessment, banning and restriction of dangerous chemicals and is presently examining sustainable consumption and the production of chemicals as regards: chemical production –energy, waste and transport; green chemistry indicators; pharmaceuticals in the environment and pharmaceuticals as waste.

"Putting Sustainable Consumption on the Agenda"
Gerd Billen is Executive Director of The Federation of German Consumer Organisations. He founded the Consumers' Initiative and became prominent as the advocate of thousands of claimants for compensations for damages resulting from the use of timber preservatives. He was also the first Federal President of the Neuland-Programme for meat from animals bred and raised in welfare-oriented animal husbandry. Gerd Billen has also been Federal Chief Executive of the German Society for Nature Conservation.

"Consumer Citizens as Keys to Social Responsibility – Victimisation of Children through Internet"
Ethel Quayle works at the University of Edinburgh, School of Health in Social Science where she does research for the COPINE project. She was trained as a clinical psychologist with a special interest in sexual offending and has focused for the last twelve years on victimisation of children through Internet abuse images. Recent years has led to the development of a CBT website for offenders and the development of guidelines for working with young people who engage in problematic sexual behaviour in relation to the new technologies.

"Creating tomorrow today"
Carl Lindberg is a Special Representative on Education for Sustainable Development in the Swedish National Commission for UNESCO and also a member of UNESCO's High-Level Panel on the UN Decade of Education for Sustainable Development. He has been actively

involved in the ESD processes in the Scandinavian countries. He was formerly the Deputy State Secretary of the Swedish Ministry of Education and Science.

Panel discussions

The first day of the CCN conference included one panel discussion on the topic **"Globalising Consumer Citizenship"** with the following participants: Christian Thorun, Consumers International, George Banja, Consumer Watch Nairobi, Kenya; Ole Erik Yrvin, Norwegian Ministry of Children and Equality and Consumer Affairs; Amanthi Perera, Mas Holdings, Sri Lanka; and Lewis Akenjii, Association of Conscious Consumers, Budapest, Hungary as moderator.

On the second conference day the following persons were invited to join a panel debating on **"Integrating Education for Sustainable Consumption within Education for Sustainable Development"**: Bernard Combes, UNESCO, Programme Specialist at the Section for Education for Sustainable Development; Sue McGregor, University of Mount Saint Vincent, Canada; Arjun Dhakal, Hinterland Institute, Nepal; and Luis Flores, Consumers International, South America.

Multimedia approaches and displays

Gustavo Morales together with the assistance of Miguel Angel Garcia Gonzales has contributed throughout the CCN project period to CCN's international conferences with thought-provoking audio-visual presentations. After having composed a fanfare for the CCN, he collaborated with local youth to present a short theatrical piece. He reminded us about the dangers of on-line gambling in a video which can easily be used to initiate discussion in classes on the topic. Assessing information was highly enjoyable when presented in an advertising film about Morale's latest product—a little black box of nothing! At the conference, *"Making a difference"*, Gustavo Morales presented a film which reminded CCNs partners of the challenges and accomplishments of the network during the project period. Done artistically and with humour, the film was an impressive description of the spirit of The Consumer Citizenship Network.

The Looking for Likely Alternatives task group had a display during the conference which presented contents from the latest LOLA report.

Edwin Yonah from Kenya provided an exhibition of materials made by youth in a project in the slums of Nairobi where the Youth Education Network runs several projects.

Posters from several of the CCN task groups were posted at the conference.

Presentation of award and contest winners

The **Tower Person Award for Consumer Education** was presented at the conference. Sue McGregor, Canada, received the international award for 2009. The blue TOPACE tower symbolizes outstanding achievements of dedicated consumer educators.

Edwin Yonah from the Jomo Kenyatta University of Agriculture and Technology in Nairobi, Kenya was the winner of the **Second CCN Student Essay Contest** with his essay entitled "Advertisement and the Youth of Kenya?" on advertising, ethics, and responsible lifestyles. He initiated a survey of students and carried out an information campaign. Edwin received a certificate of recognition for his efforts and attended the CCN Berlin conference.

Work Shop Themes

Track 1: Understanding Consumer Citizenship Behaviour
➢ What perspectives can we employ to investigate the global consumer's decision making process?
➢ Which factors hinder a broader diffusion of consumer citizenship behaviour?
➢ What incentives and enabling systems can help consumers to consume socially responsible?
➢ Which methods can help to evaluate and illustrate the social and ecological consequences of consumer behaviour?

Track 2: Education for Consumer Citizenship
a) Education at schools and universities b) General consumer education
➢ Which approaches to consumer citizenship education are most effective?
➢ What challenges and opportunities exist when teaching about long term global goals for sustainable consumption?
➢ How can education lead to choosing sustainable lifestyles?
➢ How can education stimulate creativity for inventing sustainable solutions?
➢ What kind of research is necessary for the development of consumer citizenship education and education for sustainable consumption?
➢ What is the relationship between consumer citizenship education and education for sustainable consumption?

Track 3: Co-operating for Consumer Citizenship
➢ How can co-operation for consumer citizenship be improved
  o between producers and consumers,
  o between authorities and citizens,
  o between schools and communities,
  o between researchers and activists,
➢ What are exemplary community-based initiatives for responsible consumption (urban or rural)?

Work Shop Presentations *Track 1*

Author	Country	Title
Annika Värnes et al	Sweden	Effects of Personal Carbon Trading
Jan Lindenberg	Germany	Beyond Words: Designing Rituals to Promote Sustainable Ways of Living
Marina Marchenoka	Latvia	Development the Feeling of Personal Identity as a Key Factor of Formation of the Citizen
Mikhail Chehlov and Zoja Chehlova	Latvia	Life Values as the Basis for the Formation of a Citizen
Susana Henriques	Portugal	Consumptions and Lifestyles in the Press
Ana Pinto de Moura	Portugal	Understanding the Role of Printed Media in the Social Amplification of Food Risk during the New Millennium
Helen Theodoro-poulou and Despina Sdrali	Greece	Consumer's Decision-Making Process and Purchasing Behaviour for wine in the Island of Lefkada
Elena Battaglini	Italy	New Alliances among Food Production and Consumption. Which Co-operation for which Policies? Empirical Support from a Survey of 800 Consumers
Fani Uzunova	Bulgaria	Motivation for Sustainable Lifestyle or the Importance of "How"
Joanna Kostecka and Barbara Mazur	Poland	Examining Chosen Attitudes of Consumers during the 4th Year of the Decade for Sustainable Development in Poland
Arthur Dahl	Switzerland	The Financial Crisis and Consumer Citizenship
Emanuela Rinaldi	Italy	Enabling Consumers to Change the Market: A Practice of Participation in the Decision-Making Process
Gregor Torkar	Slovenia	Understanding Teachers' Consumer and Environmental Behaviours
Leena Lahti	Finland	One Eco-Action in a Day
Nina Langen	Germany	Fair Trade and Donations: Two Possibilities to Contribute to Poverty Alleviation in Daily Purchase Decisions - Do Consumers Care?
Barbara Mazur et al.	Poland	How to Achieve the Environmental Objectives in Different Cultures
Andre Mendoza	Colombia	Illegally Sweet
Müberra Yuksel and Sevgi Kalkan	Turkey	From Consumer to Stakeholder Citizenship: A Model towards 'World Citizenship' for Lesser Developed Countries
Pedro Baptista and Nuno Videira	Portugal	Towards Sustainable Consumption: A Framework for a Household Environmental Management System
Gabriele Wendorf	Germany	Housing Companies and Tenants: Co-operation towards more Sustainable Housing
Martina Schäfer and Adina Herde	Germany	Sustainable Berlin: The Importance of Infrastructural Context for Sustainable Consumption
Viola Muster and Ulf Schrader	Germany	Private Consumption of Employees as an Issue for Companies
John Thøgersen	Denmark	Seize the Opportunity: The Importance of Timing for Breaking Commuters' Car Driving Habits
Melanie Jaeger and Martina Schäfer	Germany	Windows of Opportunity for Sustainable Consumption: The De-Routinization Effect of Life Events

Work Shop Presentations *Track 2*

Author	Country	Title
Miriam O'Donoghue and Mella Cusack	Ireland	Education for Sustainable Development in Action: The Use of Visual Media to Promote Transformative Learning. **Two parts**
Marnie Bammert	Germany	The Marine Stewardship Council (MSC)
Victor Dordio	Portugal	Proposal for a European Joint Master in Consumer Affairs "EMICA"
Aloida Jurcenko et al.	Latvia	Making a Difference in the Learning Process
Helen Theodoro-poulou et al.	Greece	Teaching University Students on Education for Consumer Citizenship
Tove Brita Eriksen	Norway	Critical Thinking and Active Learning
Anupama Pashricha	USA	An Integrative and Interpretive Analysis of the Literature on Ecological Literacy and Sustainability among College Students
Luis Miguel Cunha et al.	Portugal	Psychometric Evaluation of Child Eating Behaviour: A Tool to Improve Education Regarding Children's Food Consumption
Pia Valota	Italy	What Kind of Research is Necessary for the Development of Consumer Citizenship Education and Education for Sustainable Consumption?
Sue McGregor	Canada	Transdisciplinary Consumer Citizenship Education
Yoko Ueno	OECD	OECD Policy Guidance on Consumer Education
Diana Rumpite	Latvia	Creativity in Consumer Citizenship Education in the Blended Course of English for Specific Purposes at University
Iveta Lice and Vija Dislere	Latvia	LOLA – One of the Creative Approaches to the Consumer Citizenship Education
Dana Vokounova	Slovakia	The Application of Games in a Pedagogical Process
Mella Cusack	Ireland	The Integration of Education for Sustainable (ESD) into Second Level Initial Teacher Education (ITE) and Continuing Professional Development (CPD) Programmes: Challenges and Opportunities
Eija Kouppa-aho and Malin Lindquist Skogar	Finland and Sweden	The Consumer Abilities and the Themes of Consumer Education 2009
Marino Melissano	Italy	Active and Aware Consumers are Healthier Consumers
Jørgen Klein	Norway	Education for Sustainable Development: The Case of Traditional Life Skills among the Nama People, Namibia
Tiina Vänt and Jaana Tamm	Estonia	Experience of Promoting Consumer Education in Estonia
Amanti Perera	Sri Lanka	The Eco GO Beyond Schools Sustainable Development Programme of MAS Holdings in Sri Lanka
Rieko Hanashiro et al.	Japan and USA	An Exploratory Framework for Consumer Citizenship Education in Japan's Home Economics Curriculum
Inese Jurgena, Zigurds Mikainis	Latvia	Consumer Citizenship Education for Sustainable Development in Higher Education in Latvia
Lilja Palovaara Søberg	Norway	Food Pedagogy

Work Shop Presentations *Track 3*

Author	Country	Title
Elena Wolf	UK	The Understanding of the Social Responsibility and Consumer Rights and Responsibilities Awareness in the Countries of the Former Soviet Union
Inger Haug	Norway	Potential Contribution from International Educational Programmes to Environmental Awareness and Political Interaction
Ana Filipa Soledade and Susana Henriques	Portugal	Me and the Other's project: Citizenship Education through Playful
Satu Lahteenoja et al.	Germany and Finland	Using Creative Instruments for Promoting Sustainable Citizenship
Ingrid Sælens-minde	Norway	Green Consumption – a State Responsibility?
Luis Flores Mimica	Chile	The UNEP Global Environmental Citizenship Project and the Participation of Latin American Consumer Organizations
Peter Daub	Netherlands	Consumers and Consumer Organizations in Action
Vera Fricke and Ulf Schrader	Germany	CSR-Mainstreaming and its Influence to Consumer Citizenship
Benjamin Diehl and Ulf Schrader	Germany	Consumer Citizens as Leading Innovators – Enhancing Value Creation Potential through Consumer-Consumer-Interaction
Marlen Arnold	Germany	Open Innovation Methods to Co-operate for CC?
Martin Klaus et al.	Germany	Marketing Communication to and with Net Citizens: Targeting by Means of a Social Network Analysis Approach
Kostadin Grozev	Bulgaria	Consumer Citizenship as an Element of the European Social and Economic Dialogue (the venues of R&D interdisciplinary clusters)
Violeta Dimitrova and Todorka Atanasova	Bulgaria	New Communication Technologies And The Co-operation Between Producers And Consumers
Tone Skaardal Tobiasson	Norway	Using Fashion as a Platform to Engage & Excite
Martin Nkosi Ndlela	Norway	Consumer Empowerment in the Digital Era. A Case Study of ICT - Enabled Process in South Africa and Norway
Chhavi Raj Bhatt et al.	Nepal, China and Norway	Gender Empowerment in Nepal for Sustainable Development

Who dares to differ?

Victoria W. Thoresen
Hedmark University College, Norway

The colours of the sea are reflections of the sky

The way people sing and dance, eat, build houses, dispose of waste, establish relationships -- all these and more indicate how individuals apply their understanding of basic values to everyday situations. In a million concrete ways lifestyles are expressions of personal choices of what one deems right or wrong, just or unjust, honourable or dishonourable, achievable or impossible, sustainable or extravagant, compassionate or hedonistic. In other words, "*Material culture is a physical reflection of one's principles and spiritual beliefs*". (1)

Yet there are not 6.7 billion uniquely individual ways of living and expressing one's principles and beliefs. History and social systems interact with individual initiatives creating patterns and trends that could be compared to drops merging into waves on the ocean. Like waves, social patterns of behaviour fluctuate and are modified. There is the constant motion of attempts to conform and efforts to reject conformity replacing it with alternate principles and actions. In such an ocean of transformation who actually causes significant, long-term change?

Thomas Hobbes stated that citizens are, in fact, powerless, having voluntarily yielded their power to the state. Once a state is established on the basis of a "social contract" it can be said that "citizens are born subject and subservient". In a similar sense, one could claim that the modern consumer is born a subject of the international market system, subservient to its many intricate processes and systems. But the concept of consumer citizenship[2] contradicts this theory of inherited, unavoidable subservience. Consumer citizenship is based on the democratic ideal of initiating change by working within the system, seeking innovative solutions, expressing one's opinions with one's pocketbook, in public debate as well as through stakeholder dialogue. It contends that consumers can reflect their principles and beliefs in the way they interact with the market.

However, according to more Machiavellian interpretations of consumer behaviour statistics, consumers may talk of ethics and morals (of wanting fair trade and ecological products, for example) but in practice they most often bow to "necessita" (necessity) as their guiding principle. Necessity in the context of the present material society usually translates into preference for cheaper, easily available products or products which, as Rolf Jensen writes, are escapes from our sense of deficiency: "Because maintaining day-to-day existence demanded only a portion of man's potential to imagine and learn, science evolved as an effort to explain the universe. Today the potential of intellectual creativity is not used mainly for the common good but for individual dreaming—virtual realities, escapes from deficiencies." (3) And it is within the sphere of personal relationships that the sense of not succeeding is strongest. Thus

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[2] "a consumer citizen is an individual who makes choices based on ethical, social, economic and ecological considerations. The consumer citizen actively contributes to the maintenance of just and sustainable development by caring and acting responsibly on family, national and global levels."

social anthropologists go so far as to claim that: "Money is to the West, what kinship is to the rest" (4).

Yet statistics clearly indicate that some consumers are not all "care-less, vulnerable consumers", but an increasing percentage are individuals who actually do let their principles and beliefs direct their behaviour and lifestyle choices. They are the "informed, rational, reasonable consumer" who is occasionally referred to as the "principled consumer". He/she is not a puritan, nor an ascetic, nor old-fashion, minimalistic or anarchistic. Rather: it is a sophisticated person trained in "making hard choices", who is able to withstand commercial pressure, and who "is not fainthearted but will harness the sun and the winds and soil to fuel our cars and run our factories". Some refer to future consumers as "choice editors" searching for "trusted providers" who can convince the consumers that their brand represents the values the consumer prefers.

Like whitecaps on the water, they stand out as different and daring. But the question becomes, will these individual consumers ever become strong enough or many enough to create a wave of difference and initiate significant, long-term change?

Moving against the current
Let us look at three examples of individuals within the realms of civic activism, scientific investigation, and compassionate humanitarianism who moved against the mainstream and initiated waves of change.

Mahatma Gandhi was a single citizen who modified the status quo and altered the conditions around him. Mahatma Gandhi, now widely acclaimed and respected, was at times ridiculed, laughed at and criticized for trying to undermine the growing Indian economy. Today Gandhi stands as a foremost model of non-violent social activism, a guardian for the poor and a defender of the exploited. And the Indian cotton industry, which Gandhi sought to strengthen, has maintained and expanded its markets.

What is considered "necessary" for most people has from time to time been rejected by some, as in the case of Mother Teresa, whose lifestyle was seen by many as harsh and masochistic. Mother Teresa was a humanitarian and advocate for the poor, the helpless and the terminally ill. She was met with criticism and doubt from within and without the Catholic Church but her actions started a chain reaction which resulted in an extensive international network of hospices, homes for people with HIV/AIDS, leprosy and tuberculosis, homes for orphans, schools and soup kitchens.

Louis Pasteur, the father of modern medicine, was honed and discredited when he claimed that micro-organisms and hygiene played important roles in health. His creation of vaccination as a means of prevention was considered at first to be dangerous and unacceptable. It did not take long until Pasteur's views accumulated enough support to reach a kind of "tipping point" where not only a few modified their ways, but entire institutions and systems in large numbers did so. Pasteur's innovations are just barely more than 100 years old yet many millions of people around the globe take them as a course of habit.

The present status quo
It is no longer a question of whether or not the present patterns of consumption in the world are damaging the environment, contributing to climate change and causing extensive mental and physical illnesses.

Increased exposure to droughts, floods and storms is already destroying opportunity and reinforcing inequality. Meanwhile, there is now overwhelming scientific evidence that the world is moving towards the point at which irreversible ecological catastrophe becomes unavoidable. Business-as-usual climate change points in a clear direction: unprecedented reversal in human development in our lifetime, and acute risks for our children and their grandchildren. (5)

It is rather a question of who will change their patterns of consumption, their ways of doing business and begin to encourage innovative, alternative ways of living.

The non-conformist producer and consumer
If one takes the position as Isin and Wood do that the consumer is a person who is able to critically assess available information and make independent decisions, (6) then it is logical to assume that consumer citizens who apply principles of sustainability, justice, and global solidarity to their actions in the marketplace, may in time represent trends and patterns of behaviour which no longer are considered sporadic and unreliable, but rather constitute an identifiable consumer demand for products which fulfil their expectations.

Even if one takes the position that consumers are controlled by marketing and advertisement techniques as well as by prices and availability, then it is logical to assume as Michael Wilmott does that the producers and markets which reflect values of sustainability, reliability, and accountability in their daily businesses will gradually create waves of change within global markets. (7) The growing interest in the application of international standards of social responsibility by businesses and organizations indicate a clear movement in these directions. The concept of Citizen brands which "put society at the heart of business" is spreading and the "door for good corporate citizenship has never been more open" (8)

Core values
Whether it is the non-conforming consumer or producer who dares to differ, there are three core values they have in common motivating their actions. According to their own descriptions (for example: UN Global Compact, ISO SR, Earth Charter, Consumers International) these are: global solidarity, moderation and trustworthiness.

Solidarity
The condition of one's family members has, through out centuries, been paramount to most people. Their family has been there, beside them, in the same room. They could see their tears, hear their sighs and feel their pain. Today we see the tears, hear the sighs and feel the pain of people across the globe. The intimacy of modern telecommunications has expanded the threshold of our personal awareness of how others exist. Almost instantly we can bring forth scientifically based statistics on, for example: environmental performance in Burkina Faso or Norway. Or we can see the increase in sugar consumption per person in Germany and reflect on whether or not this might indicate unhealthy lifestyle trends. We have access to facts and figures upon which to base actions.

Long before the international community established the Millennium Development Goals focusing on equitable distribution of resources, eradication of poverty, etc societies were, to varying degrees, involved in assisting others outside their boundaries. "The generosity of the human spirit" is what distinguishes human from animals. Yet it was not until the international agreements of Rio de Janeiro, of the WSSD in Johannesburg and consequent strategies of

groups such as OECD and EU strategy that systematic agendas for encouraging sustainable production and consumption have come into being. And although social scientists claim there is a "market for convictions" (9) it is only the recent century which has witnessed civic action on a global scale, connected by the internet, fuelled by the media. Even though international commitments are still relatively young of date, they exist and provide a contemporary roadmap for principled action on the part of consumers and producers everywhere.

Moderation
Progress and prosperity have been measured for many years by calculating a country's Gross National Product.

> *Almost two decades ago, the first Human Development Report sent a clear message that human development is about enlarging people's choices, allowing them to develop their full potential and lead productive, creative lives in dignity and in accordance with their needs and interests. By ranking countries in a way which is more consistent with this thinking, the HDR report has helped shift the debate away from gross domestic product (GDP) per capita as the only measure of development. (10)*

The concept of human development turned the focus from accumulation of wealth and towards a definition of prosperity based on "improved health, access to knowledge and decent standards of living" thereby contributing to a dematerialization of the discourse on what people's basic needs are. Understanding and applying the concepts of human development to our own individual lives is a challenge which needs to be addressed consistently. Present statistics indicate that reduction of sales of luxury items, decreases in excessive executive bonuses, and media attention to "non-rich" lifestyles occurs mostly in times of economic "crisis". For example, USA personal savings rate has increased from below zero in mid 2008 to 3.9% in Dec to 5% in January. USA's outstanding credit card debt has decreased and loans for new cars and boats are much fewer than in 2007. "The consumer is rebuilding their own balance sheet" (11) The challenge remains how to stimulate consumer moderation as a general approach to lifestyle choices rather than only as a crisis management reaction.

Trustworthiness
Standards of social responsibility, charters of corporate responsibility and anti-corruption declarations are only a few of the numerous instruments which have been developed in recent years in order to enable businesses and governments as well as individuals to prove their degree of trustworthiness. Increased transparency and accountability are expected and the principled consumer now looks for documentation of not only a product's life cycle but also the behaviour of the producer and all involved in the supply chain and the disposal of a product.

Actions
Daring to differ in attitudes and values is an easy task as long as one is not tested in the crucible of everyday reality. If the principled consumer citizen and the non-conformist producer are truly motivated by values of solidarity, moderation and trustworthiness then these would consequently influence day-to-day actions. They would determine what kinds of lifestyle choices they make, how they involve themselves in civic action and what is deemed most important when assessing information and consequences. Mahatma Gandhi advised: "Whenever you are in doubt, apply the following test: recall the poorest and weakest person

you may have seen and ask yourself if the step you contemplate is going to be of use to them." (12)

First and foremost, priorities would have to be determined in relation to personal choices as well as communal decisions. The consumer citizen tries to be heard, even though he/she belongs to a society referred to by John Elliot and Rachel Dobsonas the "anxiety society" dominated by "tyranny of choice".(13) Using their individual and collective "voice" they inform producers of what they want to appear on the market. They speak for the vulnerable and marginalized requesting fair trade, environmentally friendly products, and socially responsible production methods. They contribute to the public debate and to the direction of economic growth. Codes and labels, online information from consumer organisations and governmental testing agencies provide the raw material for the choices they make. "Designing the right mix of economic, social and environmental policies" is the recipe which OECD claims which will lead to sustainable development. (14) This requires civic involvement and stakeholder dialogue as regards product development and evaluation; and political controls and legislative review. The issues these activities can be related to are many. Consumers International has focused on themes which could lead to the following reflections and subsequent actions on the part of the principled consumer citizen or the non-conformist producer.

> How can I raise awareness about how global food companies promote foods high in fats, sugar and salt to children?
> Should I join the debate on intellectual property rights and films, music and software?
> How can I contribute to getting drug companies to be more reliable in their marketing?
> Is there anything I can do to reduce the electronic waste being dumped in developing countries?
> How can the Ethical Consumer Research Association (ECRA) help me know which company to avoid?

Research and Education
Daring to be different is a condition which requires careful reflection and comprehensive training. The Guidelines for Consumer Citizenship Education prepared by the Consumer Citizenship Network and the document, "Here and Now—Education for Sustainable Consumption" prepared by UNEP and the UN Marrakech Task Force for Education for Sustainable Consumption are two valuable resources with which to approach education for responsible, sustainable consumption. It is beyond the scope of this article to go into the diverse aspects of research and education for sustainable consumption, except to summarize by saying that the following are essential elements:
-strategic solutions
-scenario projections
-foresight systems
-future oriented thinking
-long-term planning.

The sea is persistent, with waves that constantly roll forth. The waves of transformation in modern society created by principled consumers and non-conformist producers can roll forth in a similar manner everyday in connection to the personal choices one makes in the market, in relation to professional choices as they relate to the market and in relation to the civic actions and initiatives one becomes involved in locally and globally, -- initiatives which are

strategic, and of a positive nature not based only on anger and disappointment but on a vision of a more just and sustainable future for all.

Areas in which a consumer citizen can dare to differ from the mainstream

Values:
Solidarity/ Moderation/ Trustworthiness

Preparation/reflection:
Research/ Education

Action:
Priority assessment/Consumer requests/ Information evaluation/ consequence analysis/ stakeholder dialogue

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The Financial Crisis and Consumer Citizenship

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ABSTRACT

The concept of consumer citizenship evolved in a period of economic growth and unsustainable consumption. The financial crisis has changed the context radically, creating a wider range of consumer circumstances.

The globalized economy rests on an unlimited growth paradigm, despite warnings about unsustainability. Maintaining growth has meant living beyond available means, accumulating debt at governmental, corporate and individual consumer levels. The banking system collapsed from loss of confidence in debt repayment, producing recession and undercutting consumption. The system has accumulated excessive financial, social and environmental debt.

Today consumer education must address different classes of consumers:
- those who can still afford the consumer society, ethically challenged by their relative wealth;
- those forced out of the consumer society through dispossession, unemployment and loss of savings;
- the poor whose dream of joining the consumer society is now shattered;
- poor victims of economic and environmental catastrophes, paying the biggest price for problems they did not create.

Responding to these groups requires alternative more ethical visions of society and human purpose, shifting emphasis from "consumer" to "citizenship". This includes detachment from material consumption once basic needs are met, finding true pleasure in voluntary sharing. The economic system should become more altruistic and cooperative, aiming for poverty reduction and employment creation. Consumption should be reoriented towards the more intangible dimensions of civilization: culture, art, science, human consciousness and spirituality. Such consumer citizens will depend less on variations in the material economy, directing their priorities and interests towards a broader vision of human prosperity.

INTRODUCTION

The concept of consumer citizenship evolved in Europe in a period of continuing economic growth leading to excessive consumption that is environmentally unsustainable at the planetary level. The main driving forces for this effort at consumer education were the environmental problems produced by pollution and excessive production of waste, and health problems linked to consumptive lifestyles, together with some concern for the imbalance between industrialized and developing countries. Consumer citizenship education has focused on consuming less and consuming better in societies defined as wealthy in global terms.

With the sudden emergence of a major crisis in the financial system, starting in the United States, the major consumer country and largest economy, but spreading to all parts of the world and extending to the whole economy, the context has changed radically. A deep recession (commentators are still mostly avoiding the term depression) is affecting the whole world and unemployment is rocketing. The British finance minister has described it as the worst recession in 100 years (*The Guardian Weekly* 13.02.09, p. 12), and governments are taking emergency measures of a scale previously unimaginable. In late February, the head of the European Central Bank said "We live in non-linear times: the classic economic models and theories cannot be applied, and future development cannot be foreseen" (quoted in Seager 2009).

The problem may become much worse. A number of European countries are on the brink of insolvency (Spiegel Online 2009). The crisis began with a loss of confidence in the ability of the banking system to honour its obligations resulting in a collapse of credit. Excessive and "toxic" debt in the banking system has been transferred to governments in an attempt to restart the system. There is now a real risk of a loss of confidence in the ability of governments to repay their debts, which would result in the collapse of the whole global financial framework underpinning trade and commerce, with unimaginable consequences for the functioning of an increasingly integrated global economy. The only hope is a rapid replacement of an economic system that has proven fundamentally flawed by a new global system with effective governance and proper regulation, while addressing the ethical lapses that have been revealed. This new and still evolving situation has profound implications for consumer citizenship. The following reflections are intended to launch the discussion.

CRITIQUE OF THE ECONOMIC SYSTEM

It is important to understand first what went wrong with the economy that caused it to collapsed so readily and unexpectedly. The modern globalized economy has been driven by a growth paradigm that refused to consider any limits, despite decades of warnings about its ultimate unsustainability. The main driver of economic growth has been consumption, and anything that would increase consumption was good for the economy: planned obsolescence, aggressive advertising and marketing, encouraging addiction, carefully orchestrated changes in style, etc. The new information technologies and media have globalized this and made it more effective, so that everywhere people want to live the western consumer lifestyle. Whenever the economy has slowed, there are calls for increased consumption. Citizens in the industrialized countries have come to expect steadily increasing purchasing power, and the prospect of a decline with the recession has triggered strikes and people in the streets.

However, maintaining this growth often required living beyond the available means. Consumer debt has risen steadily, helped by instruments such as credit cards. The average American has 6 credit cards with a median total credit card debt in 2008 of $6,500. The U.S. banking crisis began because of unwarranted mortgage lending for house purchases to people without the means to repay the loans, combined with encouragement to borrow against property for consumer purchases. Growth in consumption turned into a giant pyramid scheme. Debt was accumulated at the governmental, corporate and individual consumer levels. Business cannot function without credit. Investors borrowed to leverage their speculative positions. The American government allowed a steadily growing current accounts deficit as it borrowed 70% of the world's savings to maintain its role as a superpower and the lifestyle to which its population was accustomed, to the greater profit of the business sector.

While there were a few warnings, even from leading economists, that this could not last, life was too good, so no one wanted to believe them. The inevitable collapse of the banking system due to a generalized loss of confidence that these levels of debt could ever be repaid has driven the world into deep recession despite major efforts by governments to inject cash and restore confidence. It is the accompanying collapse in consumption that requires consumer citizenship to rethink its messages.

More worryingly, financial debt is only part of the problem, as there has been a similar world-wide accumulation of social and environmental debt. The increasing warnings of a possible collapse of civilization need to be take seriously (Dahl 2008).

ADAPTING CONSUMER CITIZENSHIP TO TODAY'S WORLD
Faced with the present and probable future economic challenges, the underlying concepts of consumer education in Europe need to be re-examined to explore how the approach can be broadened and be made more effective for the wider range of consumer circumstances now present in Europe as well as in developing countries. These could be grouped into different classes of consumers for whom the approach to consumer education needs to be very different:
- those who can still afford the consumer society, but who face the ethical dilemmas of being the "haves" surrounded by "have nots";
- those who have been forced to drop out of the consumer society through dispossession, unemployment and loss of savings, and have suffered the trauma of finding previous consumptive pleasures now beyond their reach;
- the poor who have dreamed of joining the consumer society, but now find that dream shattered;
- the most disadvantaged of the poor who are often the first victims, who never contributed to the problems but now must pay the biggest price.

For those who are reasonably well-off or materially comfortable, existing arguments for healthy, more energy-efficient and low carbon lifestyles need to be complemented with a stronger ethical dimension of responsibility for global environmental impacts such as climate change, and solidarity with those paying the price. They need to come to a recognition that sustainability and their own future welfare may require wealth redistribution and thus reductions in their own purchasing power and consumer choice. They should come to see the advantages of voluntary simplicity and more emphasis on social relationships and community, so that they realize that they gain more than they give up in this transition.

The newly unemployed and those who have lost homes, savings and pensions need to learn how to get by and meet basic needs on minimal revenue, which means efficient consumption focused on basics. Too many people fall back on fast and unhealthy food, become increasingly sedentary, and make poor consumer choices because they do not have the right knowledge and skills. Obesity is more prevalent among the poor in industrialized countries. Consumer education needs to teach how to live well even when poor.

Those who have always been poor usually know how to get by, although consumer education can probably bring improvements. What is more important is to counteract if not to replace the sales pitch for the Western consumer lifestyle portrayed in the media and advertising with alternative visions of society that are more appropriate and sustainable. Consumer education could become a kind of social and cultural vaccination against the siren call of advertising, building awareness of how one is manipulated into buying unnecessary or even damaging

things. This of course will be deeply subversive to the present economic orthodoxy, but that orthodoxy has now discredited itself, and more discerning consumers will help the transition.

A NEW VISION
In this context, the new response of consumer citizenship to these different groups needs to propose alternative more ethical visions of society and human purpose, with a shift of emphasis from "consumer" to "citizenship". This requires a spirit of detachment from material consumption once basic needs are met, finding true pleasure in voluntary sharing, social relationships, and intangibles like culture and spirituality. It is at this basic ethical level that the approach to the different consumer groups finds its basic unity. Justice and equity are equally relevant to the rich and the poor, even if their expression in action will be different in each case.

A first step can be to reveal the hollowness of the present consumer society in ethics, values and meaning, so that those within it do not regret the sacrifices they are called on to make, and those who have dropped out of it into poverty or who never could do more than admire it from a distance give up their attachment to materialistic desires and turn their attention towards alternative visions of the society of the future, and actions that are accessible to everyone.

For example, a recent Bahá'í text contains the following critique:
"Consumer culture, today's inheritor by default of materialism's gospel of human betterment, is unembarrassed by the ephemeral nature of the goals that inspire it. For the small minority of people who can afford them, the benefits it offers are immediate, and the rationale unapologetic. Emboldened by the breakdown of traditional morality, the advance of the new creed is essentially no more than the triumph of animal impulse, as instinctive and blind as appetite, released at long last from the restraints of supernatural sanctions. Its most obvious casualty has been language. Tendencies once universally castigated as moral failings mutate into necessities of social progress. Selfishness becomes a prized commercial resource; falsehood reinvents itself as public information.... Under appropriate euphemisms, greed, lust, indolence, pride - even violence - acquire not merely broad acceptance but social and economic value. Ironically, as words have been drained of meaning, so have the very material comforts and acquisitions for which truth has been casually sacrificed." (Bahá'í World Centre, 2005, p. 10)

One new challenge for consumer education is the fact that the years ahead will likely see either an unprecedented economic disaster or a rapid evolution towards an alternative economic system in which the concept of consumption will be very different from that of today. The growth paradigm on which the present economy has been based was founded on four fundamental drivers: population growth, the energy subsidy from cheap fossil fuels, discovery and exploitation of new natural resources, and technological innovation. However the world population should plateau around 2050; oil production is expected to peak shortly and climate change requires a rapid transition to renewable energy; the planet has now been quite thoroughly explored and its resources overexploited. This leaves only innovation as an economic driver, and this will produce a different kind of system. It is not yet possible to imagine what that might be like. However, at an ethical level, it is possible to suggest some of the design principles that will have to underly this new economic system to make it socially and environmentally sustainable.

In a sustainable society, the goal of wealth creation should be to make everyone wealthy, which would give everyone access to reasonable levels of consumption to meet basic needs. The economic system therefore needs to be reoriented to become more altruistic and cooperative, aiming for poverty reduction, employment creation, and providing the means to advance the more intangible dimensions of civilization: culture, art, science, human consciousness and spirituality. Consumption of these intangibles does not have to be limited and escapes from the economic concept of scarcity; the more knowledge is shared, the more valuable it becomes, not for a specific owner, but for the whole of society. If each individual sees his/her reward in service to others rather than self-acquisition, then consumption becomes merely acquiring the capacities and tools necessary to be of service, rather than an end in itself. The economy will be driven not by maximizing consumption but by the fulfilment of all the human potential for wealth creation, including in that concept much more than material wealth.

TURNING A VISION INTO ACTION

It is important that consumer education not be founded primarily on a negative critique of the consumer society, but that it propose positive alternatives such as those outlined above. Where such concepts would have been rejected as idealistic if not utopian only a year ago, the economic world has now been stripped of its certainties and shaken to its roots, and does not know where to go next. This is the perfect opportunity for a wide public debate on the alternatives, and consumer citizenship provides an excellent framework for such a debate in an educational context.

It is also important to go from general principles and values to specific actions. This is a constant demand in discussions of environmental sustainability or responding to climate change (Dahl 2008a). Just as the economy is driven by many individual acts of consumption, so many small acts of individual responsibility can sum up to a significant positive change at the global level. Class discussions can focus on choices that are immediately relevant. For example, material signs of identity or belonging to a group are an important characteristic of youth culture, but they do not have to be particular clothing styles or brand names cultivated by the manufacturers for commercial ends.

Another advantage of values-based consumer citizenship education is that it is more adaptive and flexible in times of rapid and perhaps turbulent change. Education about particular consumer choices becomes less relevant if those choices are no longer available, whereas values are equally relevant in new contexts.

With the major challenges we now face, new partners are joining in the effort to change lifestyles at a large scale. The Alliance of Religions and Conservation (ARC) and UNDP are working with all the major religions to prepare action plans on climate change and the natural environment for presentation to governments at the Copenhagen climate change conference in December 2009 (ARC 2008). These are intended to be seven-year plans for generational change, and will give a major push to values-based responses to our present unsustainability.

One challenge is to measure the effectiveness of education aiming to form or implement values, as is often the case in consumer citizenship. A project has just begun with European Commission funding for a partnership of academic institutions and a variety of civil society organizations to develop values-based indicators of education for sustainable development. Five organizations are involved initially, but a larger number will be invited to join as the

project develops over the next two years. The results will certainly be of interest to the partners in CCN.

These are only small actions relative to the scale of the problems facing the world, but they have the potential to leverage much larger effects because of the power of action at the level of values. Using such approaches, the new consumer citizen will be better protected from the ups and downs of the material economy because his/her real priorities and interests will be directed towards a much broader definition of human prosperity.

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Towards Sustainable Consumption: A Framework for a Household Environmental Management System

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ABSTRACT

The encouragement of proactive behavior from consumers is vital to promote a sound implementation of sustainable production and consumption policies. To address this challenge, this paper explores an innovative framework supporting the conceptualization of a tool to evaluate and continuously improve the environmental performance of households - the Household Environmental Management System (HEMaS).

One of the distinguishing features of the analysis is the consideration of rebounding effects, which was facilitated by the use of indicators of environmental impacts per euro of products. Unlike conventional simulators of environmental impacts of private consumption, the proposed framework considers all consumption and not only priority categories. In this way, the rebound effect is considered, which promotes the environmental optimization of the application of disposable income, as opposed to a simple "reduction of consumption" policy. HEMaS receives input data on expenditures and household activities, and then generates an environmental profile and personalized measures for improving household environmental performance. The paper concludes with a discussion on the potential advantages and limitations of the tool in supporting sustainable consumption policies and voluntary adoption of performance improvement measures by responsible consumers.

1. INTRODUCTION

Today's society is facing a major challenge on its quest for sustainability and we are living in a moment of social, economic and ecological unrest. In many parts of the world the welfare is not increasing, the gap between rich and poor is rising, the markets are facing great instability, and natural resources are being over-exploited (Sanne, 2007).

According to Sanne (2007), the efforts put on environmental policies have only brought marginal ecological improvements in contrast with what is said by the political discourse, given the fact that the persisting political-economic paradigm is still one of unfettered economic growth. Within this context, there is a particular need to rethink strategies to address the growing levels of production and consumption (TNO et al., 2008).

In spite of economic growth our quality of life has not improved (Sanne, 2007), so it is crucial to redefine progress working more closely with consumers. The encouragement of proactive behavior from consumers is vital to promote a sound implementation of sustainable production and consumption policies. According to the Eurobarometer (DGE, 2008) the main challenge at the consumer level is to translate the Europeans' green attitudes into environmentally friendly behaviour and concrete actions. This paper will address this issue by presenting a tool (Baptista, 2008) – HEMaS, Household Environmental Management System, to assist households in improving their environmental performance with respect to

consumption practices, based on an innovative analytical framework which accounts for rebound effects[3].

Section 2 of this paper briefly presents the rebound effect and develops the analytical framework that supports the conceptualization of HEMaS (Section 3). On Section 4 we discuss the potential advantages and limitations in implementing HEMaS.

2. FRAMEWORK FOR ANALYSIS

The rebound effect is a major concern of environmental policy and for the pursuit of sustainability. The rebound happens every time environmental gains from increasing efficiency are offset by the consequential rise on demand for goods and services. Thus, technological progress is not sufficient for promoting sustainable development (Sanne, 2000; Binswanger, 2001), since the prevalent economic paradigm will tend to the limits of exploration of Earth's resources.

Hence it is fundamental that environmental policies combine technological progress with sustainable lifestyles and quality of life improvement (Herring & Roy, 2007). The rebound effects are significant and should be considered on the designing of Sustainable Consumption and Production (SCP) policies (Sanne, 2000). Within this context, focusing on the role of consumers is expected to leverage the effectiveness of policies, avoiding rebound effects (EEA, 2008). This background suggests the need for a new and more holistic (TNO et al., 2008) framework for sustainability analysis of SCP policies.

In line with these arguments, Sanne (2000) presented a roadmap with some options to avoid the rebound effect, which may be translated in the following consumer-oriented guidelines:

- Reduction of working hours to limit production and to improve the quality of life;
- Reduction of the environmental impacts per euro (EI/€) of products through increased efficiency, administrative and economic means;
- Redirection of consumption from environmental harmful products to more friendly ones.

The redirection of consumption will be the basic idea supporting the concept of the tool presented in the next section. The analytical framework will harness the power of the consumer as an influential player in the market. Hence, this approach does not focus on objectives of "consumption reduction". When households are encouraged to buy fewer products, the money saved will be eventually spent in "future consumption". Even when the money is placed on banks or stocks it is translated in further investment and productivity (Wapner & Willoughby, 2005). So, in order to deal with the substitution and income effects (rebounds) it should be considered the budget constraints of consumers (Binswanger, 2001).

The actual net environmental gains of SCP policies and measures are dependent of the types of products that are replaced (e.g. substitution of travels by train with car due to its efficiency improvements), by products that are purchased with the financial savings, and the readjustment of the whole economy. To this extent, the consumers' financial resources should shift from the consumption of certain products to others with less EI/€ This approach is potentially valuable at a micro level but to define concrete actions at a macro level it requires a better comprehension of the environmental impacts (EI) of various activities and their price and income elasticities (Sanne, 2000).

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[3] This concept was previously developed by Baptista (2008).

3. HOUSEHOLD ENVIRONMENTAL MANAGEMENT SYSTEM

Similarly to environmental management systems' standards, which are designed for organizations (e.g. ISO 14001 and the Eco-Management and Audit Scheme), HEMaS aims, in this case, to evaluate and continuously improve environmental performance of households. Furthermore, HEMaS is different from conventional ecological and carbon footprints simulators as it considers all consumed goods and services and not only the commonly agreed priority categories. This approach has two advantages:

- It manages better the redirection of consumption to minimize the EI from the application of household's disposable income. What matters is the difference of EI between the products substituted, either by reducing or promoting consumption;
- It has potential to serve as a platform for the operationalization of sustainability strategies (e.g. linked with markets of environmental compensation, management of data and of information on organizations' environmental accounting).

It was defined as the main objective for HEMaS to environmentally optimize the application of household's disposable income on the consumption of various products. In this perspective the use of indicators of EI/€ of product proved to be fundamental. Such indicators are already used to translate the intensity of resource use. However, little has been explored as a means to overcome the problems posed by the rebound effects.

HEMaS is a systemic tool which uses data on consumption patterns and on certain household activities as an input, generating environmental performance information and concrete proposals for action as outputs. It monitors household consumption patterns, behaviour and respective EI. After this procedure a consumer profile is analyzed to produce an action plan to be reported. This cyclic operation of HEMaS provides all elements necessary for the continuous environmental improvement. The timescale of this cyclical process is flexible (e.g. monthly, quarterly) depending on the specific objectives of the initiative. HEMaS is composed of five steps: 1) characterization of a household expenditure patterns; 2) characterization of consumer activities; 3) evaluation of the associated EI; 4) assessment of the measures' significance; 5) communication of an action plan.

The structure and detail of the characterization of a household expenditure patterns (step1) must be in accordance with the study provider of EI/€ data. The use of reference classifications like COICOP (Classification of Individual Consumption According to Purpose) minimizes errors from allocation of data. Additionally, the number of classes of products considered depends also on the initiative's objectives. The characterization of the expenditure patterns may be obtained through questionnaires (online or personal), or through methods of automatic monitoring. If only questionnaires are used the number of categories that may be monitored is more limited. Therefore, the automatic monitoring option is more promising although it requires a major infrastructure. Nevertheless both options can be complementary allowing the gradual expansion of the infrastructure for automatic monitoring. For example, at an inception stage of HEMaS implementation, some data on household expenses may be obtained through a dedicated credit card, or through customers' accounts of various retailers.

The second step of HEMaS has two purposes: a) to consider the variability of the EI of products according to the household practices (e.g. sending or not a product for recycling); b) to provide a more functional perspective of consumption by distributing key products (e.g. water, energy) through household activities (e.g. washing, watching TV). This last feature allows for a better analysis of a household profile, subsequently generating more targeted measures for improving environmental performance. The characterization of household activities (step 2) can be developed through complementary methods: audits, questionnaires,

and instant monitoring. The audits are more suitable to make the inventory of household infrastructures (e.g. characteristics of appliances, existence of tap aerators). Nevertheless, the characterization of the "actual" household activities has to be based on questionnaires and instant monitoring. In order to ease this process, the use of mobile phones (see project mobGAS[4]) to register instantly the activities can be an option.

After the household profile has been drawn (i.e. expenditure patterns and characterization of activities) it is possible to estimate the associated EI. This third step of HEMaS is an algorithmic procedure where expenditure patterns are multiplied by EI/€ indicators. As a result, it is presented the EI of each category of consumption products, and also it is allocated EI of key products (e.g. water, energy) to the respective activities where the consumption takes place. The EI/€ of products can be extracted from studies such as EIPRO (Tukker et al., 2006; see more on Tukker & Jansen, 2006). EIPRO is the most detailed study of this sort for the scope of EU-25, providing EI/€ (abiotic depletion, acidification, ecotoxicity, global warming, eutrophication, human toxicity, ozone layer depletion, and photochemical oxidation) for 282 categories of products.

On the fourth step of HEMaS the environmental profile and the characteristics of the household are analyzed in order to generate personalized measures. The measures consist of promoting green behaviour (e.g. recycling), consumption of low EI/€ products, and/or reducing the consumption of high EI/€ products[5]. The determination of the significance of measures is based on the criteria of bringing more environmental gains with less consumer resistance. Such approach has the advantage to improve the acceptability of measures and also to establish consumption thresholds (e.g. at a certain stage, a household cannot improve anymore its profile on food consumption despite it still has significant EI). To identify the areas with more potential to act, an analytic procedure may be carried out through which a household environmental profile is compared with reference values or benchmarks. These may be modeled for different types of consumer lifestyles or derived from the profiles of similar households with better environmental performances. Adopting the latter alternative confers an empirical apprenticeship nature to HEMaS. As more and more consumers use this tool, the system will be able to compute the more adequate measures based on the historic analysis of similar households. This approach may be deployed through DataMining techniques.

A cycle of HEMaS ends with the communication of an action plan (step 5) including the personalized measures for a given household. This presents customized and clear guidelines for consumers to take action. This step is particularly important since consumers tend not to respond promptly to environmental policy signals (Spaargaren, 2004; Hunter et al., 2006).

4. DISCUSSION
A structure receptive for continuous improvement
HEMaS's main advantage is its architectural design, which means it merely provides a hosting structure which is composed of independent "methodological modules". Thus HEMaS presents a great flexibility allowing the adjustment to different target levels of detail and available resources. Accordingly, the methodology of each phase can be continuously improved, the data of EI of products recalculated, the algorithms enhanced, all with the aim of improving HEMaS. There are six main areas that can be further developed to enhance HEMaS operational value:

1. The number of categories of consumption determines HEMaS's detail. The more categories considered the less variability of EI between the individual products in each

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[4] Available at http://mobgas.jrc.it.
[5] Also, it should be considered the expenses associated to the measures so that the overall environmental benefit is higher.

category, leading to smaller errors on the household's EI estimates. However, a more detailed HEMaS require almost exclusively the automatic monitoring for the household's pattern of expenditure characterization. Also, it is important that the EI/€ are periodically calculated so that HEMaS goes along with the evolution of markets.

2. At a maximum detail, HEMaS may account for the EI of single products. Until then it is important to differentiate the products with added-value (e.g. green labels) from the conventional products of each category in order to correct the EI estimated from that consumption. If this is overlooked, the added-value products would have the same EI/€ of the conventional products, and therefore adjustment coefficients are needed to avoid this limitation.

3. Households may be indirectly contributing to EI even when they are not consuming. Such is the case of savings deposited in banks, which are then used in financial applications. This begs for the analysis of the environmental effects arising from decisions and policies adopted by financial institutions.

4. EI in HEMaS are estimated directly from household expenditure patterns. Nevertheless, this may include sometimes "unusual" consumption like vacancies or a car purchase. This is translated in a high variation of the household's environmental profile through time. To overcome this, the EI of some categories of consumption should be distributed along a certain period of time. One option is to operate HEMaS at a higher temporal scale (e.g. quarterly, yearly). Other way is to distribute the EI of products by their approximate lifetime.

5. HEMaS's second step (where household activities are characterized) may require too much effort, namely: a) on the quantification of coefficients to adjust the EI/€ according to consumers' behaviour (e.g. when the household recycles); b) on the audit to collect the characteristics of the household appliances (e.g. power), in order to link the activities with the consumption of electricity, for example. Therefore it is suggested to use standard values in these situations as reference starting point.

6. Options for improving the generation of measures are twofold: a) allowing the consideration of household's opportunity for change (analysis of its accessibilities, such as an assessment of the public transport network as a realistic option instead of private transport); b) evaluation of when investments on more efficient appliances becomes environmentally beneficial (e.g. answering questions such as "Is it better to substitute my refrigerator or should I wait for the end of its lifetime to do so?").

Some of HEMaS's limitations

HEMaS provides a conceptual framework to deal with the rebound effect at a micro level and to support voluntary actions by households willing to improve their environmental performance. As presented above, this approach relies on the use of EI/€, however the use of these indicators may induce some errors that are worth mentioning: a) lack of sufficient detail in the studies providing data on EI/€ estimates; b) variability of EI/€ inside of each category of consumption. These limitations can later be minimized through improvement of HEMaS's level of detail or through adaptations to its product impact assessment methodologies.

Other limitations worth mentioning are related with monitoring of household consumption (e.g. possible concerns for disclosing private information to the system) and assuring household's commitment to implement the suggested measures for improving their environmental performance. As such, given the voluntary nature of this tool, managers of the system (e.g. local governments, NGO's, firms, environmental national authorities) should prepare programs to encourage household participation, such as local communities' environmental awards, analogies to the concept of voluntary initiatives coordinated by

consumers (e.g. Eco-Teams[6], Environmental Home Guard[7]), integration with markets of environmental compensation, among others.

5. CONCLUSIONS

The tool conceptualized in this paper (HEMaS) aims to evaluate and continuously improve the environmental performance of households, supported by an innovative analysis which accounts for rebound effects in consumption activities. The indicators of EI/€ proved their potential to avoid these effects, although further research is needed on its prospective application in areas such as organizations' sustainability reporting, assessment of environmental subsidies, and internalization of externalities.

Additionally, the approach adopted in HEMaS may be linked with other sustainability concepts such as participated democracy through civil society organizations, voluntary internalization of environmental costs (association to carbon offsetting companies), data management for organizations' sustainability reporting. This is particularly relevant since nowadays the overburden of information and lack of standardization is working against the efforts for proper provision of information to consumers.

Despite the advances this paper may bring to research on how to avoid the rebound effects it does not respond unequivocally which are the best directions towards sustainability. To achieve this, further research is needed in order to understand the macro implications of concrete actions, overtaking sustainability barriers and confronting prevailing growth paradigms – the very core of the rebound effects.

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[6] More information on http://www.globalactionplan.org.uk/communityhousehold.aspx.
[7] More information on http://www.oecd.org/dataoecd/29/22/2397833.pdf.

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Effects of Personal Carbon Trading

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Abstract
The efforts to reduce greenhouse gas emissions in many industrial sectors are being counteracted by a steady increase in consumption. If emissions from consumption by Swedish consumers are studied, rather than the emissions from production within Sweden, Swedish greenhouse gas emissions become 25% higher. This is due to the fact that a large proportion of the goods that are purchased in Sweden have been produced in other countries.

Still, climate policy initiatives are mainly targeting production, with little emphasis on stimulating change in consumer behaviour. This paper focuses on the role of personal carbon trading (PCT) as an incentive to encourage environmentally responsible consumption. While PCT has mainly been studied in the United Kingdom, this paper discusses PCT in the Swedish context. PCT is compared with existing Swedish policy initiatives addressing the climate issue and the potential of PCT to induce change in personal behaviour is discussed.

1. Introduction

Sweden has been pointed out as one of the more successful among the developed nations in tackling climate change. This is related to the facts that the overall Swedish greenhouse gas emissions are decreasing; that the energy consumed in Sweden stems from low emitting energy sources; and that many energy efficiency improvements have been made in the industrial sectors. However, emission reductions achieved in industrial production are being counteracted by an increase in consumption. Further, an increasing proportion of the products purchased in Sweden have been imported from other countries, which means that Swedish emissions are significantly higher if considering emissions from consumption by Swedish consumers and not only emissions from production in Sweden.

In spite of this, climate policy initiatives are often targeting production, with little emphasis on stimulating change in consumer behaviour. Personal carbon trading (PCT), however, is a type of policy instrument targeting private emissions of CO_2. A PCT scheme would resemble the European Emissions Trading Scheme, EU ETS, but instead of companies, PCT focuses on the emissions from individuals. An overall emissions cap would be set, and the right to emit CO_2 would be divided equally across the population. People who consume less than their allowance could sell their surplus to others, who feel that they need to consume more.

PCT has been debated in the UK and has received attention as being an instrument which is just and equitable and has the potential to change consumer behaviour. This paper focuses on the potential role for PCT as a climate policy instrument in the Swedish context. First, Swedish greenhouse gas emissions, emission trends and climate targets are described. Thereafter, a review and assessment of the current Swedish climate policy mix is provided. Finally, personal carbon trading and its potential role as a climate policy instrument in Sweden are addressed.

2. Swedish greenhouse gas emissions and emission targets

Due to the large share of hydro and nuclear energy sources, Swedish per capita emissions of greenhouse gases are rather low in comparison with many other European countries. The largest source of greenhouse gas emissions in Sweden is the transportation sector, followed by fuel combustion in energy production and fuel combustion within manufacturing industries.

There seems to be a declining trend in Swedish emissions. Between 1990 and 2006, the Swedish greenhouse gas emissions decreased by about 8.7%, with current emissions in CO_2 equivalents totalling 65.7 million tonnes (Swedish Environmental Protection Agency, 2007). The Swedish per capita emissions have also decreased, from 8.4 tonnes per capita in 1990 to 7.2 tonnes per capita in 2006. The energy sector showed the greatest reduction, where emission reductions have been achieved in particular in the residential and service sectors. In the transport sector however, emissions increased during the same period, mainly due to an increase in the emissions from road traffic. Heavy goods traffic accounts for most of the increase, mainly related to increased transport mileage with heavy goods vehicles.

Emissions of CO_2 from industrial combustion have been fairly stable in recent years. Due to improvements in energy efficiency, both use of oil and electricity per production value decreased between 1992 and 2006. However, due to increased production, the total fossil fuel use has increased during this period.

Swedish emissions from other perspectives

From an emission reduction perspective, the overall picture for Sweden appears rather positive. However, if international transportation by flight and over sea is added, the total emissions have not decreased but have instead remained stable from 1990 until present at around 75 million tonnes CO_2 equivalents. International transportation in this case includes fuels purchased in Sweden.

It can also be pointed out, that the data reported to the UNFCCC considers only territorial emissions from production in the reporting countries. A large proportion of the goods purchased in Sweden have been imported. In a recent report, the Swedish Environmental Protection Agency estimated Swedish emissions using a consumption perspective. It was found that emissions of CO_2 equivalents are about 25% higher when counting the emissions from consumption by Swedish consumers than when counting only emissions from domestic production (Swedish Environmental Protection Agency, 2008). In this estimation, the emissions caused by products produced in Sweden and exported to other countries are excluded, while instead the emissions caused by production of products imported to Sweden are included. With this consumption perspective on greenhouse gas emissions, Swedish per capita emissions equal about 10 tonnes CO_2 equivalents. Looking at the composition of emission sources from a consumption perspective, about 80% of total emissions are caused by private and 20% by public consumption. Emissions from private consumption can further be broken down into food (25%), housing (30%), transport (30%), and shopping (15%).

Swedish emission targets

Looking at the emission data, it appears that Sweden will reach its commitment in the Kyoto protocol as well as the target set up by the Swedish parliament. However, the urge for more ambitious targets is being emphasised, in Sweden as well as in other countries. The Swedish government has stated that the Swedish emissions in year 2020 should be about 25% lower than the emissions in 1990. In addition, as a long-term emission target adopted by the Swedish Parliament, Swedish per capita emissions should be lower than 4.5 tonnes in 2050.

Also on the EU level, the need for ambitious climate targets is identified. The climate goals for the EU should be partly reached by the European Emissions trading Scheme. For sectors not included in the EU ETS, including transport, housing, agriculture and waste, emissions should be cut by 10% from the levels in 2005 by 2020. For Sweden, this means a reduction in emissions in these sectors by 17% by 2020, compared to the levels in 2005. In addition, Sweden's share of renewable energy demand should be 49% by 2020 (Commission of the European Communities, 2008). However, looking at the very long-term, an increasing number of countries, including Sweden, are identifying a need for near zero emission targets (Scientific Council on Climate Issues, 2007).

3. Existing climate policy instruments in Sweden

As part of the historical and evolving Swedish climate policy strategy, several policy instruments have been implemented to combat greenhouse gas emissions, both sector-specific and generic instruments. In this section, some of the most important Swedish climate policy instruments are reviewed and assessed.

Trading systems

The EU Emission Trading Scheme, EU ETS, is one of the most important means of reducing the greenhouse gas emissions in the EU region. The EU ETS started in 2005 and covers around 11,000 installations in the energy and some energy-intensive industrial sectors, including the iron and steel industry, the mineral industry and the pulp and paper industries. From 2012, the EU ETS will also include aviation (Directive 2008/101/EC).

Another important means of targeting the CO_2 emissions in the electricity and heat production sector in Sweden is the system of Green Certificates. The system is not primarily aimed at reducing CO_2 emissions, but to promote the production of energy from renewable sources.

Energy and CO_2 taxes

The Swedish energy and CO_2 taxes apply on combustion of fuels in engines or fuels used for heating, and electricity generation. Waste is also treated as a material subject to the regular CO_2 and energy tax legislation. The EU energy directive leaves room for countries to exempt energy intensive industries from the energy tax, provided that they take part of an arrangement which leads to the fulfilment of similar environmental targets. In Sweden, energy intensive industries taking part in the *Programme for increasing energy efficiency in energy intensive industries* are in this way excluded from the energy tax, which means that a long list of industrial activities are to some degree exempted from these taxes. Households pay full energy and CO_2 tax on fuels used for heating. No tax is paid on fuels used in shipping, train or commercial aviation.

Incentives to purchase and produce clean vehicles

A number of instruments form a set of incentives to purchase or lease low emission and alternatively fuel cars. For private consumers, a subsidy is given for each clean vehicle purchased, during a period between April 2007 and December 2009. In addition, taxation of private cars and other light duty vehicles is linked to emissions of CO_2. For companies, taxation of prerequisites of company cars is reduced for alternatively fuelled cars and hybrid cars. Finally, a range of local policies concerning public transport, parking policies, and the exemption from congestion tax in Stockholm for alternative cars further subsidise this category of cars. In addition, 85% of the vehicles bought or vehicles for which leasing

agreement is introduced by any authority under the Swedish government must be so called clean vehicles.

Other subsidies

The Climate Investment Programmes (Klimp) are programmes aimed at achieving long term emission reductions. Between 2003 and 2008, the government awarded local authorities investment support for programmes aimed at enabling CO_2 emission reductions in sectors such as electricity and heating, transport and waste.

A range of instruments are targeting emissions from energy use in residential and other buildings. All are instruments in the form of subsidies, targeting CO_2 emissions from different technologies and buildings operated by different actors. A typical example is the subsidy for reducing oil use in residential houses. Consumers have responded extremely well to the incentive and use of oil for heating is in sharp decline.

Regulatory instruments

The Environmental Code contains the general, overriding Swedish environmental legislation. In the climate area, it can be mentioned that prior to starting a new manufacturing installation, according to the Environmental Code, a permission is needed, where also the emissions of greenhouse gases from the installations are regulated.

Assessment of the current climate policy mix

Having reviewed the Swedish climate policy mix, it appears that from a production perspective, most sectors are covered by a range of instruments. Climate polices in Sweden constitutes a mix of instruments, geared at different actors, activities and emissions. Instruments target both individual and public consumers, commercial actors, and municipalities. However, some key exceptions exist. In the aviation sector, both domestic and international aviation is fully exempted from both energy and CO_2 taxes as well as from VAT on aviation fuel. However, aviation will be included in the EU ETS in the future. In addition, only indirect effects influence key emissions in the agricultural sector. In particular, no polices are geared at methane emissions from livestock.

However, if the consumption perspective is again considered, it appears that a proportion of consumption is not covered by the Swedish policy mix. According to calculations by the Swedish Environmental Protection Agency (2008), there are currently about 19 million tonnes CO_2 equivalents from production of imported goods that are not covered by any policy. Consider again the four categories of private consumption: transportation, housing, food and shopping. Consumption of transportation is directly influenced by the taxation of energy and CO_2 taxes, subsidies and tax exemptions. Polices in the heat and electricity sector influence consumption patterns for products and services related to housing. For consumption of food, emissions during production and transportation are only indirectly targeted by the taxes energy and CO_2.

Finally, for shopping, all polices are upstream in the production chain. Thus, whereas there are a range of policies targeting the consumption side in the transport and housing categories, the categories shopping and food are only indirectly targeted. Moreover, many of the products in these categories have been imported, and the emissions during their production and transports of them are not covered by any Swedish climate policy instrument.

4. Personal Carbon Trading as a potential Swedish climate policy instrument

Regarding the Swedish emissions from a consumption perspective, it is clear that some emissions are currently not covered by policies. Further, in order to reach the near zero emission targets, radical changes in terms of changes in consumer behaviour are most likely needed. This is perhaps the most important feature of personal carbon trading, i.e. its potential to induce change in consumer behaviour.

In spite of energy efficiency improvements, emissions are increasing in some areas due to increased consumption and production. A benefit of personal carbon trading is that it includes awareness raising since the costs of CO_2 become visible for consumers. In a study by Bristow et al., (2008) it was found that for individuals that were willing to make changes in their behaviour, the emission reductions were 50% higher under a personal trading scheme than under a carbon tax scheme. However, more people said that they would change their behaviour under a tax scheme than under a trading scheme. Further, individuals seem to find it easier to make changes in their transport behaviour than in their domestic energy use. When asked to change their transport habits towards a 60 per cent reduction targets, households were able to achieve an average saving of 21 per cent (Prescott, 2008). This raises the question about how much people are willing and able to save without supportive measures.

The personal trading schemes discussed and investigated in the UK context have mainly been aimed at targeting private consumption of household energy and private consumption of fuel for transportation. Recalling the Swedish greenhouse gas emissions and the Swedish policy mix, it appears that emissions from the residential sector are already declining due to some policy instruments already implemented.

In the transport sector, however, Swedish emissions are increasing. However, the increase is most apparent in the area of heavy goods transports. In addition, also for private transports, there is a range of policy measures implemented, as described earlier. The question remains if these policy instruments will prove sufficient. As Prescott (2008) points out, during a period when the costs for driving and flying have decreased or remained at stable level, at the same time, incomes have increased which has made driving and flying more affordable. During the same period, bus and train fares have increased.

The consumption categories that are not directly covered by any Swedish policies are food and shopping, which are instead targeted on the production side. In particular, the proportion of food and consumables that is imported is not covered by any Swedish policy instrument. However, including these consumption categories in a PCT scheme has not been investigated to any greater extent in the UK. Although there have been suggestions to include consumption of all products and services under a PCT scheme, this has been declared not feasible within any near future by the Tyndall centre (Starkey & Andersson, 2005).

A critique against personal carbon trading is that it would be quite costly. A personal carbon trading scheme that considers emissions during the various production processes of consumables and food would certainly be no exception. In addition, finding accurate emission data in particular for imported goods would be very difficult. Further, the way emission data is currently reported to the UNFCCC, there is currently little incentive for nations to include emissions that occur in other countries in their domestic policies.

The introduction of a new PCT scheme would likely lead to interactions with other carbon related policies that are already in existence. Of particular concern would the interaction with

the current EU ETS. Implementing a PCT scheme alongside the EU ETS could cause problems regarding double counting. However, problems regarding policy interactions have always existed and could be addressed.

6. Concluding remarks

It appears as if current Swedish emissions are targeted quite well by the existing policy mix. In the short term, there could possibly be room for personal carbon trading as a Swedish policy instrument in the transportation sector. Further studies would be needed to find out how people would react under such a scheme and what the benefits would be from a personal carbon trading scheme compared to other policy initiatives.

In the long term perspective, if the near zero emission target should be achieved, new and innovative measures will certainly be needed. In order to reach such targets, improvements in energy efficiency will not be enough. Changes in behaviour are also needed. Currently however, energy efficiency achievements are being counteracted by increasing consumption. In addition, a large proportion of the goods consumed have been imported and these emissions are not covered by domestic policies. An innovative system such as personal carbon trading could address these problems and has at the same time the potential of being an equitable policy instrument.

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HOW TO ACHIEVE THE ENVIRONMENTAL OBJECTIVES IN DIFFERENT CULTURES

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1. INTRODUCTION

The concept of culture although notoriously difficult to define turns to be very useful in explaining many phenomena such as economic growth or consumer behaviour. Cultures, in defining what attitudes and behaviours are appropriate, develop the logic through which societies interpret and adopt to environment. Because of it culture is an influential variable not only in economics and politics but also in ecological arena. Our spiritual, aesthetic, and ethical views resulting from culture often motivate and constrain our behaviors. Using cultural typology originally suggested by *Cultural theory* (individualism, hierarchy and egalitarianism) and transformed it into G. Hofstede cultural dimensions (individualism and power distance), this paper explores diverse worldviews that might influence individual and collective attitudes relevant to environmental issues. It seems to be possible when ling the dimension of these variables for particular societal cultures, to seek for the factors which could activate members of the society for the sake of the environment.

The purpose of the article is to present the cultural conditioned notions, beliefs and convictions that indicate which arguments for which societies might be put forward for gaining sustainable behaviors in respect to different cultures. The research conducted between students representing national cultures with various levels of Hofstede's variables (eg. Polish, Turkish and Indian) shows which arguments used in public discourse are promising to push them to behave in a sustainable way.

2. CULTURAL DIMENSIONS

Cultures evaluate risk and policy proposals based on their perceived implications for the culture's preferred way of living. Exploring cultural belief systems begins with developing or selecting taxonomy of worldviews. Seeking a typology less temporally and spatially bound Curtis A. Pendergraft choose that suggested by Cultural Theory. An axiom of CT is that all societies and their underlying worldviews, irrespective of time or place, must be more or less hierarchic, more or less individualistic, more or less egalitarian. Instead of this theory which has no ethnocentric approach G. Hofstede's conception of cultural dimensions might be used to map individuals or groups into the cultural matrix by analyzing their responses to statements which carry implications about how life ought to be lived. The major hypothesis of this research was that respondents would indeed fall into clusters along the lines suggested by Hofstede's cultural dimensions which influence people's beliefs and behaviors. Short description of two of them is shown below. For the purpose of presented research *Hierarchy* and *Egalitarism* have been replaced by one bilateral cultural dimension called by Hofstede *Power distance*. On the one edge of this dimension there are societies with egalitarian attitude towards social structure, on the other one there are those accepting and protecting sharp and unbreakable distances between stratified society.

Hofstede's description of *Power Distance* is as follows (Hofstede 2005)**:** *The degree of inequality among people which the population of a country considers as normal: from relatively equal (that is, small power distance) to extremely unequal (large power distance).*

The extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally. This represents inequality (more versus less), but defined from below, not from above. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders.

When considering *Individualism* Hofstede explains that it is (Hofstede, 2005). *The degree to which people in a country prefer to act as individuals rather than as members of groups. On the individualist side we find societies in which the ties between individuals are loose: everyone is expected to look after him/herself and his/her immediate family. On the collectivist side, we find societies in which people from birth onwards are integrated into strong, cohesive in-groups, often extended families (with uncles, aunts and grandparents) which continue protecting them in exchange for unquestioning loyalty. The word 'collectivism' in this sense has no political meaning: it refers to the group, not to the state.*

Country	Power Distance (PDI)	Individualism (IND)
Turkey	66	37
Poland	68	60
India	77	48

Table 1Power distance and Individualism scores for Turkey, Poland and India
Source: http://www.geert-hofstede.com/

In the light of Hofstede's dimensions India has Power Distance as the highest with the ranking of 77 compared to Poland (68) and Turkey (66). Individualism score for Poland (60) is bigger than for India (48) and Turkey (37). Polish culture can be considered as the most individualistic, Indian – as the most hierarchical and Turkish as the most egalitarian of all three. Scores resulting from Hofstede research are exhibited in the table 1.

3. METHODOLOGY AND SAMPLE

Twelve statements drawn from the public discourse about environmental issues were selected by C. A. Pendergraft based on the idea that their implications for how we ought to live would differentiate adherents of the various cultures (Pendergraft 1998: 661-664). Responses were collected from 76 persons (33 Polish, 27 Turkish, 16 Indian) studying at University of Finance and Management in Bialystok (Poland) between January and March 2009. Prior to analysis of the responses a cultural index based on the literature of Cultural Theory and Hofstede cultural dimensions was constructed. Responses for the three cultural types (egalitarian, hierarchic and individualistic) were assigned to each response for each country. The logic behind them is presented below and the predictions for the answers are displayed in the table 2.

1. *Private property will serve not only as a basis for feeding people but for long-term freedom and democracy.*
The stronger the agreement with the statement the less egalitarian the respondent is expected to be.
The expectation is that the stronger the sense of community the more persuasive will be an argument that private property rights cannot be allowed to threaten the common good. It might be supposed that hierarchs, given their greater concern for community, would tend to be a little less enthusiastic about private property than would individualists.

2. *Environmental problems are technical problems: we need to let experts handle them.*
Responses to this statement should reflect perceptions of equality (are experts really more competent than the rest of us, especially in ethical or moral matters?) and views of nature (to what degree can we tamper with or manage it?). Egalitarians should disagree with this

statement on the ground that it is elitist, anti-democratic, and tends toward hubris. Hierarchs should find it more appealing, since our relations with nature require competent management. Individualists could agree because some people are indeed more competent and knowledgeable than others, but on the other hand may see expertise, especially if it advises limitations on freedom, as ascribed rather than proven, and suspicious on that basis.

3. *Humans have no innate or god-given mandate to dominate the planet.*

The word 'dominate' should spark reactions here. It should be a negative symbol for egalitarians. Terms such as 'innate' and 'god-given' are also loaded with connotations about relationships among humans, between humans and nature, and about religion. It is expected that egalitarians will tend to agree with this statement, while hierarchs and individualists find it less appealing. Political and social conservatives and fundamentalist Christians should tend to disagree with this statement.

4. *Environmentalism is mostly just a popular bandwagon and politicians will always jump aboard one of those.*

This double-barreled statement is intended to stress the respondent, leading many to choose 'neutral'. Those who feel most strongly about environmentalism (mostly egalitarians) should disagree with it, overcoming their skepticism about politicians. Those who fear constraints on freedom should agree with it. Hierarchs and those whose worldviews are more moderate should tend toward neutrality. This statement turned out to be one of the strongest indicators of difference between egalitarianism and the other cultures.

5. *The explosive increase in population is the number one environmental hazard.*

Both egalitarians and hierarchs should be more concerned than individualists about population growth, if for slightly different reasons. However, some individualists, fearing that overpopulation will limit freedom and opportunity, may agree. Again religion may play a role, and so, in this instance, might race. Roman Catholics and fundamentalist Protestants may disagree, as may Blacks (who are often fundamentalist Protestants) and Hispanics (who are often Roman Catholics, and among who fundamentalism has made inroads lately). Egalitarians and fervent environmentalists should agree with the statement, concerned about balance.

6. *If I had to choose between freedom and equality I'd take equality.*

Individualists and hierarchs should disagree with this, but the statement should put more stress on egalitarians. Hierarchs, who don't care much for equality, but who are leery about freedom degenerating into license, will tend to disagree or choose neutrality. Responses at the extremes should be characteristic of the low grid cultures. The statement was sometimes reversed (... if I'd take freedom) and the scoring adjusted accordingly.

7. *Rich and poor, we are all on this planet together, and rich countries must take financial responsibility for cleaning up global pollution; we are obligated to help the Third World.*

This statement should appeal much more to egalitarians than to hierarchs, and more to hierarchs than to individualists. The environmentalist and egalitarian aspect is obvious, but the final clause puts some stress on the hierarchic respondent, who may feel a sense of *noblesse oblige* not felt by individualists.

8. *If we don't change the way we live, we will make the whole planet uninhabitable.*

This statement is intended to measure the anxiety felt by respondents about the sustainability of our current way of life. Egalitarians, perceiving nature as delicately balanced, see widespread asymmetries in wealth and power as a social and environmental negative, and should tend to agree with Planet. Hierarchs should tend to disagree with the statement because they are adverse to radical change, and disinclined to accept the notion that under their direction we are headed the wrong way. They may agree that the course is in need of some correction, but should reject the implication that we are totally misled. Individualists may agree with the statement because of a perception that the private sphere is threatened by an

expanding public sphere, but their tendency to see nature as resilient should influence most to disagree with the statement.

9. *Environmental issues should be strictly regulated by law.*

It seems that hierarchs should approve this statement much stronger than individualists and egalitarians. The reason behind such assumption is not very sophisticated – hierarchs value order. *Individualists* and egalitarians together also should endorse it but for other reasons: individualists – because law stands for freedom, egalitarians – because everybody should follow the rules.

10. *People should behave according to their own convictions rather than to law regulations.*

It appears that egalitarians and hierarchs should completely exclude this statement: hierarchs because it generally threatens the concept of hierarchy, egalitarians – because all people ought to have the same duties and similar privileges. Individualists which value liberty might think that sometimes quality of law is low and individual morality can have higher level than common law.

11. *Beneath the skin, people are pretty much all the same.*

This statement should appeal most to the egalitarian, less to the individualist, and least to the hierarch. It is aimed at probing notions of sameness versus difference, which, it is thought, is a latent influence on notions of justice.

12. *Nature is not nearly as delicate as some people claim.*

This statement should appeal more to individualists than to egalitarians, with hierarchs somewhere between. Believing this allows those with cornucopian notions, i.e. individualists, more latitude in utilizing natural resources, while rejecting it harmonizes with concern for ecological balance.

4. RESRACH RESULTS

Supposing that Polish culture is the most individualistic, Indian – the most hierarchical and Turkish – the most egalitarian of all cultures researched here it was forecasted the respondents probable answers. The forecasting on the answers given by Polish, Turkish and Indian respondents are displayed in the table 2.

Statements	Poland	India	Turkey
1. *Private property will serve not only as a basis of feeding people but for long term freedom and democracy.*	agree	agree	agree
2. *Environmental problems are technical problems: we need to let experts handle them.*	agree	agree	disagree
3. *Humans have no innate or god-given mandate to dominate the planet.*	disagree		
4. *Environmentalism is mostly just a popular bandwagon and politicians will always jump aboard one of those.*	agree	neutral	disagree
5. *The explosive increase in population is the number one environmental hazard.*	disagree	agree	agree
6. *If I had to choose between freedom and equality I'd take equality.*	disagree	disagree	agree
7. *Rich and poor, we are all on this planet together, and rich countries must take financial responsibility for cleaning up global pollution; we are obligated to help the Third World.*	almost agree	agree	strongly agree
8. *If we don't change the way we live, we will make the whole planet uninhabitable.*	disagree	disagree	agree
9. *Environmental issues should be strictly regulated by law.*	agree	strongly agree	agree
10. *People should behave according to their own conviction rather than law regulations.*	agree	disagree	partly agree

11. Beneath the skin, people are pretty much all the same.	disagree	strongly disagree	agree
12. Nature is not nearly as delicate as some people claim.	agree	disagree	disagree

Table 2 Provisional responses of Polish, Indian and Turkish students

The research partly confirmed adequacy of previsions made for egalitarians, hierarchs and individualists on the basis of Cultural Theory and Hofstede cultural dimensions. It positively verified five statements: *(1) Private property will serve not only as a basis of feeding people but for long term freedom and democracy, (5) The explosive increase in population is the number one environmental hazard, (7) Rich and poor, we are all on this planet together, and rich countries must take financial responsibility for cleaning up global pollution; we are obligated to help the Third World, (9) Environmental issues should be strictly regulated by law,* and *(10) People should behave according to their own conviction rather than law regulations.* They are displayed on the graphs below in the chronological order.
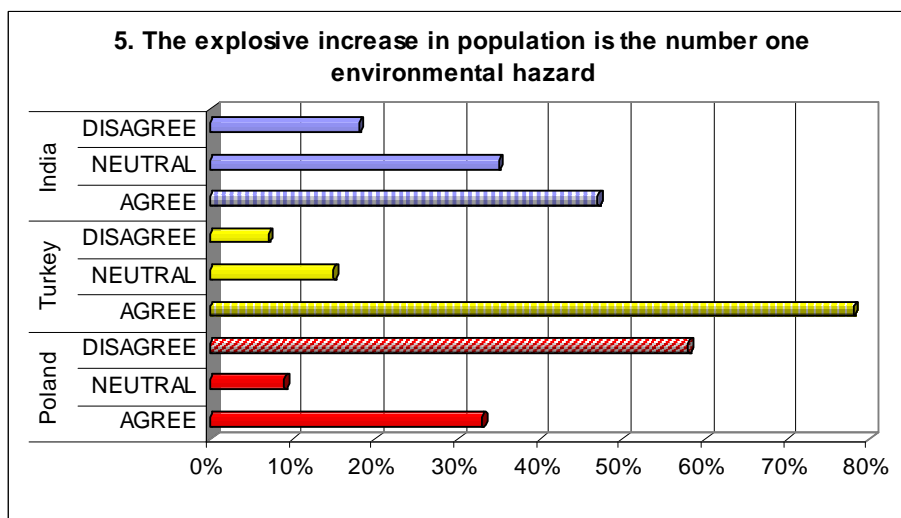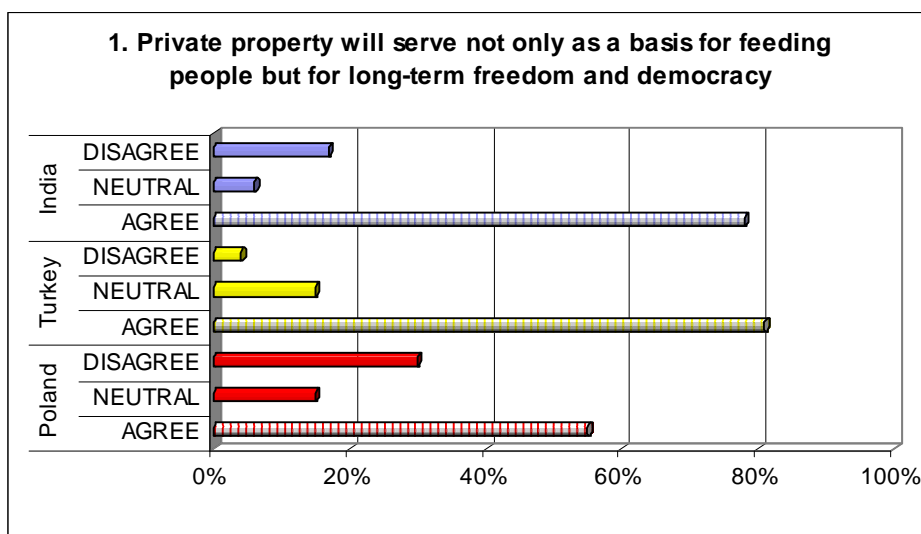
In respect to the remaining statements the research proved the differences between previsions and final results. In the case of two statements it was observed the single discrepancy where previsions for only one country failed: *(4) Environmentalism is mostly just a popular*

7. Rich and poor, we are all on this planet together, and rich countries must take financial responsibility for cleaning up global pollution; we are obliged to help the Third World

9. Environmental issues should be strictly regulated by law

10. People should behave according to their own convictions rather than to law regulations
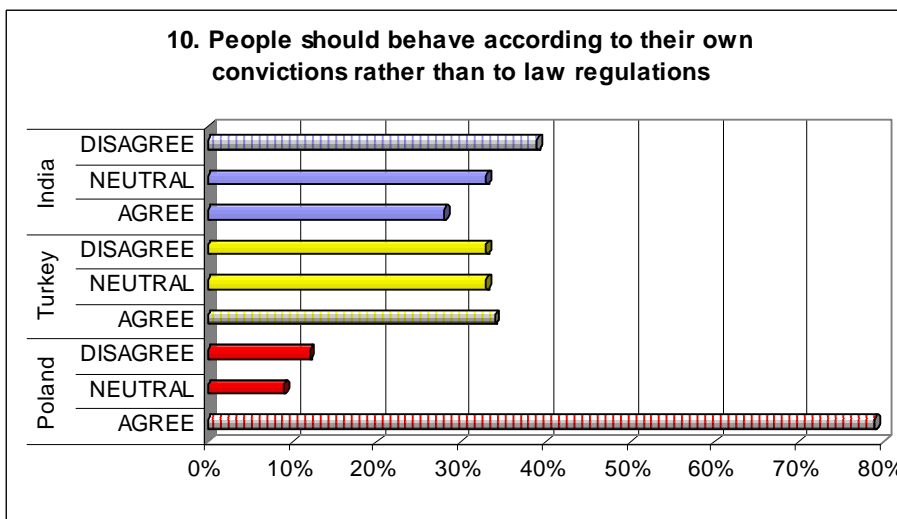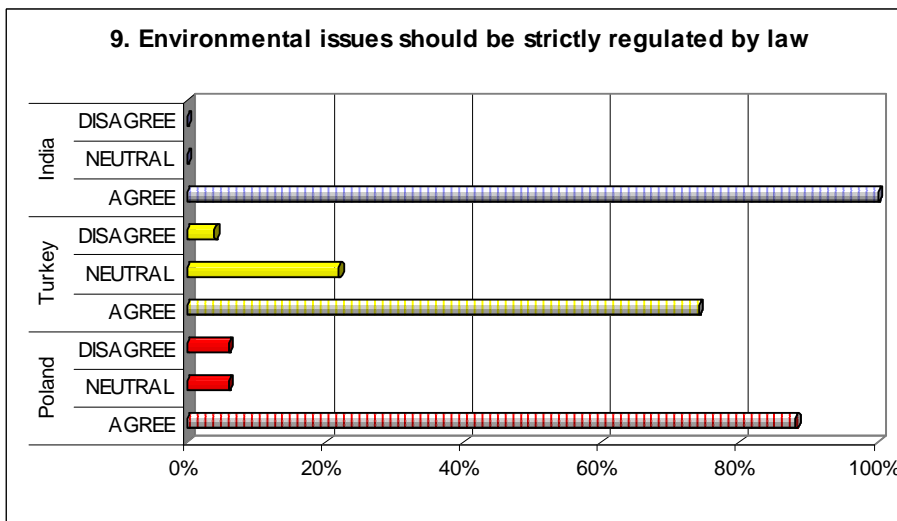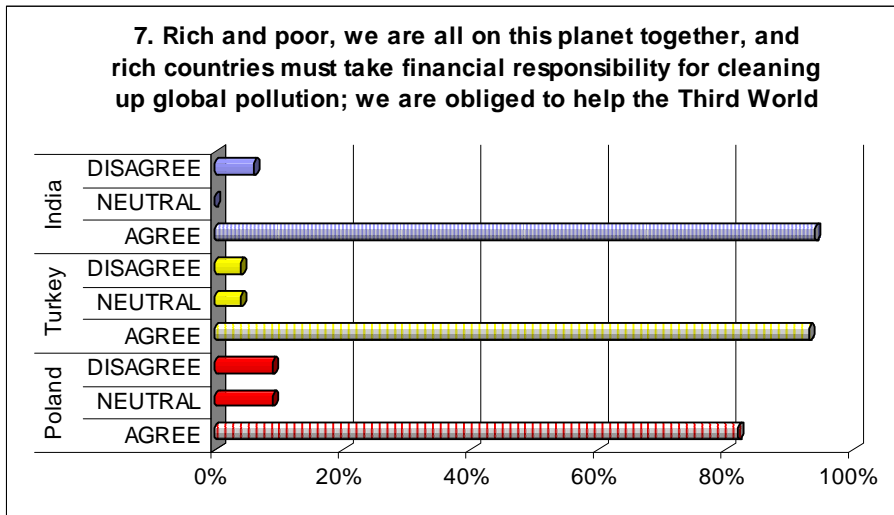
bandwagon and politicians will always jump aboard one of those and *(6) If I had to choose between freedom and equality I'd take equality*. In respect to other five it was double controversy where previsions for two countries were unsuccessful: *(2) Environmental problems are technical problems: we need to let experts handle them, (3) Humans have no*

innate or god-given mandate to dominate the planet, (8) If we don't change the way we live, we will make the whole planet uninhabitable, (11) Beneath the skin, people are pretty much all the same, and *(12) Nature is not nearly as delicate as some people claim.*
Single disparity between expectations and research results is displayed on the graphs below.

4. Environmentalism is mostly just a popular bandwagon and politicians will always jump aboard one of those

6. If I had to choose between freedom and equality I'd take equality
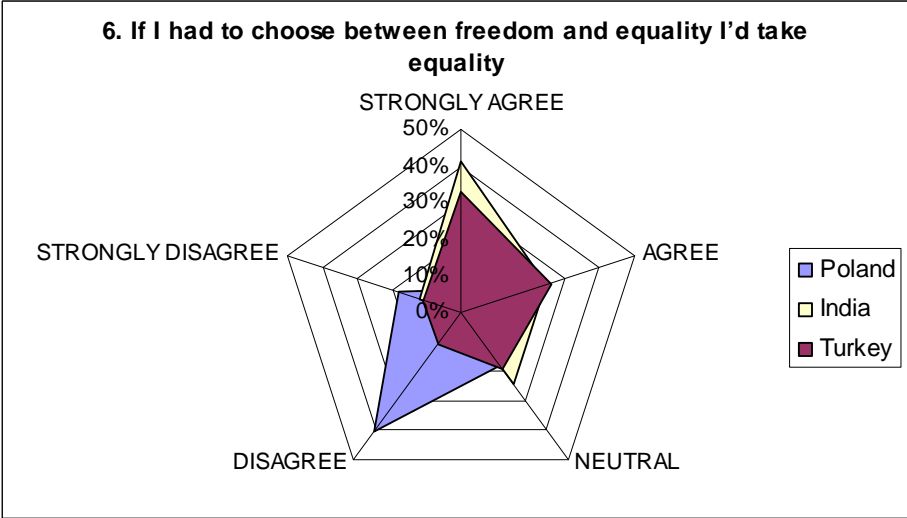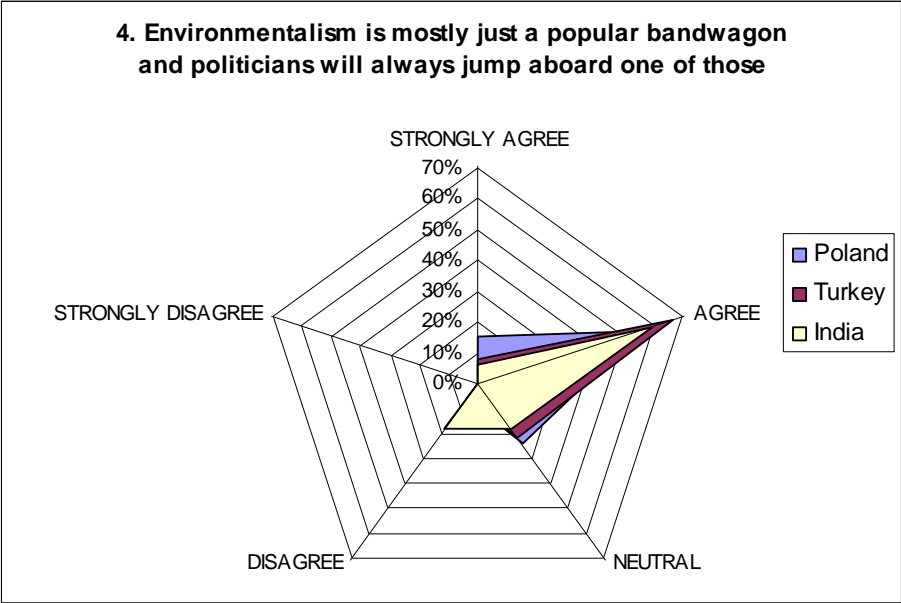
5. CONCLUSIONS

This paper discusses culturally conditioned worldviews relevant to environmental issues. In general the sample population does seem to hold worldviews that are explicable by cultural approach, but in some individual cases these worldviews seem to be synergetic. People want a healthy environment: conflict over how to achieve the goal is partly culture-based and it might be solved, at least to some extent, by using different arguments to different cultural groups: individualistic, egalitarian and hierarchic.

A virtue of cultural approach is its suggestion that we can illuminate causes and courses of environmental conflicts by identifying and analyzing elements of conflicting or mixed worldviews. It offers an analogical method of extrapolating from individual to collective levels of analysis. The sample population consists of very diverse groups, and is characterized by a broad range of cultural positions, but in almost every demographic grouping there are

those who deviate from the general tendency in that group. Effective collective action will no doubt have to include in its organizing principles notions that are incongruent. The aim will have to be to emphasize areas of overlap and minimize areas of disagreement among cultural worldviews. Cultural Theory's contribution could be to identify these interstices, pointing toward both areas of potential overlap and divergence.

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Development the Feeling of Personal Identity as a Key Factor of

Formation of the Citizen

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Introduction

The urgency of the present research is stipulated by the discrepant tendencies of development of the modern society and the complicated social situation in Latvia.

The crisis of personality is strengthened by the background of the social and economical crisis. A teenager, who is forced to reappraise his/her values and beliefs, comes into collision with the problem of the crisis of own identity and should look for the Self in the situation of instability of new reality in Latvia.

The Aim of the research is analysing of development of the teenager's personal identity in Latvia

The Methods of the research are:
- the theoretical analysis of the psychological literature on the approaches to the problem of personal and social identity (*James, W.*), The Theory of Identity and The Conception of Psychosocial Identity (*Erikson, E., Cooley, Ch.*), the Theories of Structure and Development of Personality (*Vigotsky, L.*), The Conception of Self-Actualized Personality (*Havighurst, R., Maslow, A.*), The Empirical Approach and the Statuses Model of Identity (*Marcia J.*);
- the empirical analysis of the obtained data related to the given problem.

The Results of the research are the following**:** data obtained and analyzed in the result of the theoretical analysis of the scientific psychological and sociological literature on the problem of the research with the help of principles of development and systematization and the scientific analysis of obtained empirical data allow us to determine the major ways of optimization of the process of recognition and development of the student's personal identity, the adaptation to the Latvian community decreasing the existing difficulties of forming his/her identity.

Keywords: identity, teenager, citizen, crisis, Self, personality, community, adaptation, recognition, society.

1. Personal Identity as the Interpersonal Phenomenon

The urgency of the given research is determined by the increasing attention of educators, psychologists and sociologists to problems of the teenager's personality, to the process of socialization and forming his/her unique life style where the recognition of own personal identity in the contemporary society plays the most significant role.

Modern society offers a wide range of alternatives for the young, but it is too complicated for teenagers to put them into practice nowadays.

The years of social, political and economic crises in Latvia led to washing out the valuable grasp which is necessary for forming and development of successful personal Self-identity.

Nowadays, when scientists of almost all spheres of modern life tell about the crisis of identity in our Latvian society on the whole, and the mass-media write about the change and instability of eternal spiritual values, their "usefulness" in the modern Latvian society, the problem of searching and finding the feeling of personal identity is the major problem of the teenager's age.

That is why it is necessary to examine the problem of personal identity, first, in the theoretical aspect analyzing opinions of scientists about the forming identity as the interpersonal phenomenon and, second, to conduct the empirical analysis of the degrees of forming teenagers' identity in Latvia.

There are lots of definitions of the personal identity of different psychological schools in the scientific literature. The idea that people should have freedom of will influences the world events in Europe from the very beginning of the XVI century. Humanism, the Renaissance, the Cartesian dualism glorified the strength of personality, consciousness, human personal responsibility.

The essence of the concept of personal identity was determined as "the process of realizing the continuity, identity in the time of own personality" in the philosophy of the XVII century (*Locke, D., 1985; Leibniz, G, 2007*).

The American philosopher James, W. expressed the essence of personal identity as "the continuity and non-discrepancy of personality" two centuries later, at the end of the XIX century. He described personality using the word "character" as the state, when a person feels own activity and vitalities in the most intensive and deep form, it is when the inner voice says: "This is the real Me" (*James, 1991*). James distinguishes four forms of existing Me:

- Material Me (the body, the property of a person);
- Social Me (friendship, evaluation by others, prestige);
- Spiritual, Inner Me (processes of consciousness, mental abilities);
- Pure Me (feeling of identity).

James believes that the human personality is not the same in many respects because of many differences expressed in the state of a person, if he/she is hungry, or nourished, tired or relaxed, if he/she is young or old, poor or rich, etc.

But also there always are stable and significant clarified components of the human personal identity:

- beliefs,
- living goals,
- the attitude to the Self, and to the society,
- the system of values, regulating own behaviour, etc.

Besides that, changes of personality occur gradually and never touch the whole his/her inner essence at once, thus ensuring the continuity of the development of personality.

James claims that the term "personal identity" should not be understood in the sense of the absolute metaphysical unity where all distinctions are absent, because personality is always identical in the past and in the present as the personal identity really always exists.

According to Charles Horton Cooley's opinion (*1994*), the problem of personal identity is tackled from the point of view of the Theory of Self-concept, as the set of own human conceptions about the Self, formed by the influence of people's opinions around us. This structure of "The Idea of the Self" includes three components:

- the idea about how another person perceives Me;

- the idea about how this another person evaluates Me;
- the level of self-evaluation related to the evaluation by this person – it may be the feeling of pride or humiliation.

The conception "The Idea of the Self" starts to form from the early age of a person during the interaction with groups of "significant others": these could be friends, members of the family, peers…

The numbers of scientists (*Brakewell, G., Habermas, J., 1992*) believe that the first psychosocial conception of identity was the conception of the Self by Mead, G. (*1988*).

Developing James' and Cooley's ideas, Mead distinguishes the following components of personality:

- the impulsive Me, that is the source of personal development, changes, creativity;
- the normative Me, acceptance of the group's norms by the personality;
- the Self as the personal Me, as the result of interaction between the Me and the Self.

Mead believes that the identity is connected with the personality's ability to perceive the Self reflectively. It is possible, because the interactive subject anticipates the set of a partner and can perceive the Self from the partner's point of view (the phenomenon of "taking of the role of the other").

The term "identity" for the first time implemented by Freud (1996), became the central element of the original conception of identity offered by the famous American psychologist Erikson, E. considered as the founder of Ego-psychology.

Erikson, E. supposes that there are psychological stages of the Self's development, each stage involving certain developmental tasks that are psychosocial in nature, and the individual sets the major reference points with respect to the Self and his/her social environment. He claims that each stage of development has its own parameters, and the various tasks are referred to by two terms – positive and negative, and development of personality continues for the whole life-time.

Erikson believes that the individual should solve the central task, which becomes the dominant one at each stage of the development (*Erikson, 1996*).

This finding of personal identity is so important that individual can choose to achieve the negative than to stay without any identity.

The individual faces the crisis which is expressed in the choice the teenager should do combined with the Self and the possibilities provided by the contemporary society he lives in. The teenager should clarify his/her own role as a member of this society.

This conception was prolonged by Havighurst, R. (*1989*), who distinguishes the following tasks of development of the teenager's age:

- Achieving new and more mature relations with peers of both genders;
- Achieving a masculine or feminine social role;
- Accepting one's physique and using the body effectively;
- Achieving emotional independence of parents and other adults;
- Preparing for marriage and family life;
- Preparing for a professional career;
- Acquiring a set of values and an ethical system as a guide to behaviour; developing an ideology;
- Desiring and achieving socially responsible behaviour.

Thus we can see that the main tasks of the teenager's age include cardinal changes that happen almost in all spheres of life.

The problem of division of teenager's age into periods and determination of objectives was also put forward by L.Vygotsky, who saw the internal change of the very development as a sound basis for division into periods (*Vygotsky L., 1984*). L.Vygotsky believed that criteria for determination of specific periods in man's development were the mental and social changes emerging for the first time on the given stage of the given age period. The teenager's personality changes as a single whole in its inner structure and movement of its every part is determined by laws of changes of this whole. Thus for L.Vygotsky the central moment of development is the change.

The aspects mentioned above allow us to conclude that promotion of development is promotion of change, which is different at every specific age. On the one hand, the change happens on the basis of what has been already formed and achieved, but on the other hand, it is directed to the still absent things.

Teenager's problems appear, when:
- he/she lacks resources for realisation of the necessary change (either the things that must be developed have not been formed yet, or there is lack of what is called "image of the expected future");
- these resources are not used for some reason.

For successful realisation of the age change it is necessary to activate the resourceful mechanisms of the given age, which consist in using the available possibilities and their orientation on the aspects that must be developed.

The given paper considers the two most widespread lines of theoretical interpretation and empirical research of the personal identity.

The first can be related to the modern psychoanalytical movement, since the authors working in the given paradigm, base themselves on Erikson's theory of identity and his conception of psychosocial identity (*Erikson, 1967, 1982*) and J. Marcia's empirical approach with the statuses model of the identity.

The second line of the research is based on J. Mead's conception of "Me" and unites representatives of the cognitive approach.

On a basis of the above-mentioned theories the concept of the **personality's identity** (or personal identity) is defined as a set of features or other individual qualities, characterised by a definite stability or continuity in time and space, allowing to differentiate the given individual from other people. In other words, we understand the personal identity as a set of qualities that makes a person equal to himself and different from other people.

2. Empirical Research in Latvia

The aim of the research is:

- to define the statuses of the teenager's personal identity in Latvia;
- to define the scale of self-actualisation of teenagers in Latvia.

The participants of the empirical research: pupils of the 7th -12th forms (in total 368 respondents) of various institutions of general education in Latvia.

The methodological part of the empirical research includes:

I. Defining the statuses of personal identity at the teenager's age [*Marcia J. (1966, 1980, 1994*)], based on E. Erikson's (*1996*) conception of psychosocial identity;

II. Self-actualisation test (SAT), theoretically based on A. Maslow's conception of the self-realising personality.

    I.   In J. Marcia's statuses model there are four states (statuses) of identity:

1. Identity diffusion;
2. Foreclosure;
3. Moratorium;
4. Identity achievement.

For construction of the model two parameters are used:

1) Presence or absence of the crisis – the state of searching for the identity;
2) Presence or absence of units of the identity – personally significant objectives, values and beliefs.

Units of identity	Before crisis	Crisis	After crisis
Developed	**Early identity**	**-**	**Identity achievement**
Not developed	**Identity diffusion**	**Moratorium**	**Identity diffusion**

Table 1 States (statuses) of identity according to J. Marcia

Identity diffusion. Such a state of identity is typical for people, who do not have stable objectives, values and beliefs, and who do not attempt to develop them. They either have never been in the state of crisis or were not able to solve problems they had faced.

The states of diffusion, foreclosure and moratorium are topical for teenager's age. The most progressive of them is the level of moratorium, and J. Marcia believes that it is a vital and necessary precondition for finding the personal identity (*Marcia J., 1988*).

Early identity (foreclosure). This state is referred to the person, who has never gone through the crisis of identity, but possesses a definite set of aims, values and beliefs. These elements are developed relatively early in life, not as a result of independent search and choice, but owing to identification with parents or other meaningful people. Aims, values and beliefs, which were accepted in such a way can be similar to those of parents and reflect parents' expectations.

Moratorium. J. Marcia uses this concept in relation to the person, who is in the state of personality's crisis and is actively attempting to solve it, trying various variants. Such a person is in the state of searching for information that would be useful for solving the crisis (reading of literature about various possibilities, talks to friends, parents, real experiments with life styles).

Identity achievement. This state of identity is reached by the person, who has gone through the period of crisis and has developed a definite scope of personally significant objectives, values and beliefs. Such a person is aware of what he/she wants and accordingly structures his/her life. He/she experiences his/her aims, values and beliefs as personally important and providing him/her a feeling of purposefulness and comprehension of life.

Illustration 1. States of personal identity of teenagers in the 7th-12th forms of schools of general education in Latvia
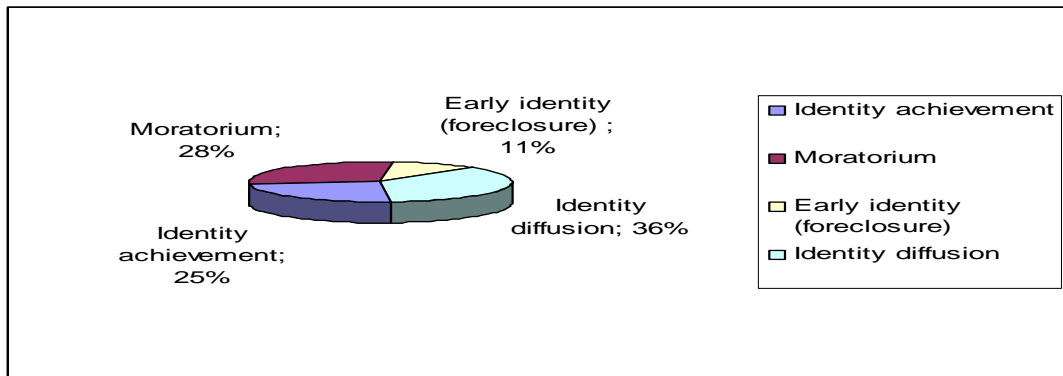
II. The next stage of the research is determination of teenagers' self-actualisation. SAT measures self-actualisation according **two basic** and **a range of additional scales**.

Basic scales:
- Scale of time competence (Tc), comprising 17 points;
- Scale of support (I), comprising 91 points.

Additional scales:

Unlike the basic scales measuring global qualities of self-actualisation, the additional scales are oriented to marking its separate aspects.

- Scale of values orientation (SAV) (20 points);
- Scale of flexibility of behaviour (Ex) (24 points);
- Scale of spontaneity (S) (14 points);
- Scale of self-respect (Sr) (15 points);
- Scale of self-accept (Sa) (21 points);
- Scale of concepts of human nature (Nc) (10 points);
- Scale of synergy (Sy) (7 points);
- Scale of accepting aggression (A) (16 points);
- Scale of contacting (C) (20 points);
- Scale of cognitive abilities (Cog) (11 points);
- Scale of creativity (Cr) (14 points).

Scales of self-actualisation	7th form	8th form	9th form	10th form	11th form	12th form
Time competence (Tc) (17)	5	7	8	12	14	11
Support (I) (91)	46	51	54	70	59	63
Values orientation (SAV) (20)	11	9	16	10	13	15
Flexibility of behaviour (Ex) (24)	12	8	10	16	14	19
Spontaneity (S) (14)	10	10	13	12	11	13
Self-respect (Sr) (15)	13	10	9	12	14	14
Self-accepting (Sa) (21)	18	21	17	20	19	20
Concepts of human nature (Nc) (10)	9	4	7	8	5	6
Synergy (Sy) (7)	3	4	3	4	6	5
Accepting aggression (A) (16)	8	11	10	9	12	14
Contacting (C) (20)	14	9	11	13	12	15
Cognitive abilities (Cog) (11)	10	7	9	9	10	11
Creativity (Cr) (14)	6	8	7	10	11	9

Table 2 Determination of teenagers' self-actualisation in Latvia

Determination of teenagers` self-actualisation in Latvia
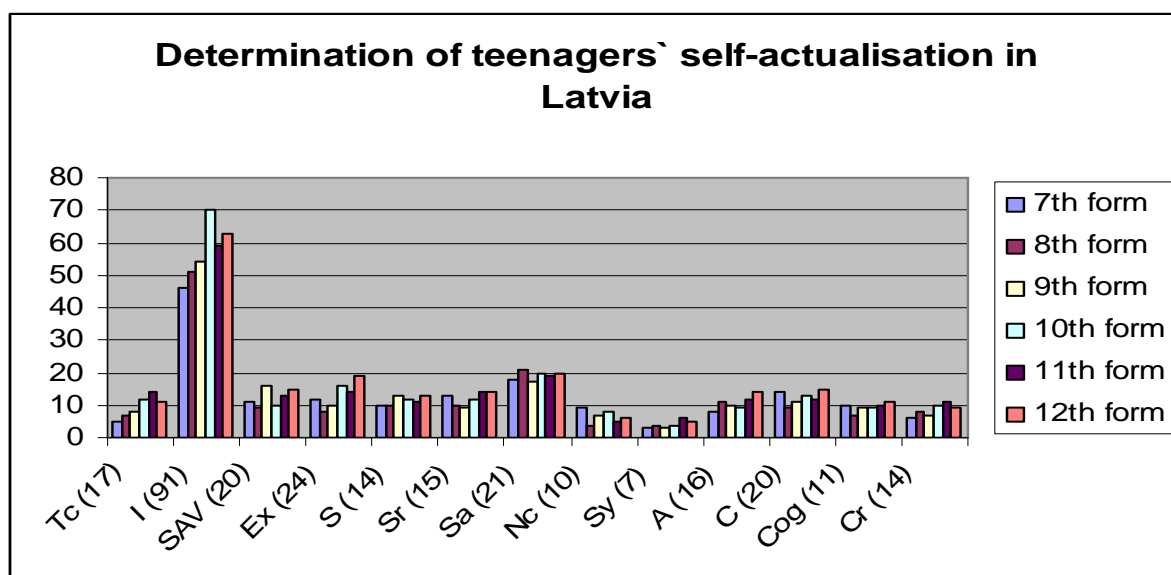
Illustration 2 Determination of teenagers' self-actualisation in Latvia

Conclusion

o The Conception of Formation of Personal Identity offered by Erikson, E. further developed by Marsia, D., and his followers reflects the process of the development of personality occuring in the interaction with social environment as well as in her internal psychic world. Identity is the phenomenon located at the border of personality and surrounded world in this aspect.

o The status of a teenager's personal identity is closely connected with his/her ability to recognize people interacting with him/her, and who are personally very significant for them.

o The higher definiteness of a teenager with the interaction with the outer world observed in the status of identity reached and predetermined is connected in the whole with a teenager's deeper understanding the people who are significant for them.

o The reached identity resulted in the total of the activity of a teenager and his/her personal perception of values. It could be further resulted in the own experience of enduring the crisis of identity that ensures more precise understanding of peers.

o The ¼ part of the whole quantity of Latvian teenagers is characterized of achievement identity, more than ¼ part of the whole quantity of Latvian teenagers is characterized by the status of identity - moratorium and almost a half of them are characterized by diffusion and early identity (foreclosure) identity.

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Motivation for Sustainable Lifestyle or the Importance of "How"

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INTRODUCTION

The history of civilization is nothing more but the on-going battle of ideas in which people try to influence each other (by means of force or persuasion) in order to reach their goals. Today our society is facing a challenge of sustainable development and all people who have recognized the ultimate importance of that change try to influence behavior of others towards sustainable lifestyles. This is especially the mission of parents and educators. But to complete it successfully they need to use the latest achievements of many sciences and in the first place – the developments of psychology. Too often however, the efforts of even very talented teachers and almost all efforts of parents are somehow chaotic and not grounded in science.

According to psychology human behavior is a response to external stimuli. The way individual is choosing this response could be presented as a sequence of several mental processes. First of all, individual needs understanding of the situation he/she is experiencing. This 'picture' of the situation appears in mind through the processes of sensory and social *perception*. Once having the information about the situation, the individual has to answer the question 'Why?' This question is about the meaning, the purpose of behavior. The mental process leading to the answer is ***motivation***. With his/her purpose in mind individual implements the decision that has been taken and faces the results. But this is not the end. Humans are self-learning systems and information about the results performing as a feedback is used in the next cycle for future decisions. This final process is ***learning***. So the 'technology' of human behavior is explained as a perpetual sequence of Perception, Motivation, and Learning.

This, of course, is an attempt to explain unexplainable. Human behavior is not fully logical and will remain a 'black box'. Let's hope the box would never be opened, because otherwise human life would be very boring or may be even impossible… But we do need knowledge of how people reach their logical decisions and behaviors and the core of this knowledge is about the process of motivation.

> "A man is fated to search for a meaning"
>
> David Gardner

"Why" is the first and probably the most frequently asked question in human life. The answer gives us understanding of the meaning of our behavior. Unlike animals in the majority of cases we don't act instinctively but search for a reason to do or not to do something in a particular situation. The psychological process of finding this reason is called *arousal*. And the reason itself is always related to our needs. This is true even in situations when we behave as if we don't really think it over. The process of arousal determines why we do anything at all, why we initiate action. Once we have decided to do something the next question is 'what exactly'. This second psychological process is called *choice*.

> "The dignity of man is in choice"
>
> Max Frisch

Choice determines why we attempt to do one thing rather than another.

So motivation is concerned with what activates people and, after they are active, why they choose the particular behaviors that they do.

VROOM'S PROCESS THEORY OF MOTIVATION

There are many theories developed to explain the process of motivation but I will stress here only on Expectancy theory because to my opinion it could be very useful in teaching sustainable lifestyle. In fact several scientists have worked in that field. The theory was originally formulated by the American psychologist Edward C. Tolman (Huczynski, A.; Buchanan, D. 1991: 64). But it was Victor Vroom who produced the first systematic formulation of an expectancy theory. The theory states that human behavior is directed by the conscious *expectations* that people have about how their behavior leads to the achievement of desired goal. Vroom introduced four concepts taking part in motivational process: (Vroom 1964)

1. *Expectation* – the subjective probability (or the perception of the individual) that behavior would lead to a particular outcome.
2. *First* and *second level outcomes.* According to Vroom human understanding of outcome is divided to two parts. *First level outcome* is the reward (or punishment) that follows certain behavior. For instance, after completing a task student expects to pass the exam. *Second level outcome* is the individual's need which is expected to be satisfied by the first level outcome. Student may expect that passing the exam will help him/her to obtain a diploma.
3. *Instrumentality.* This concept refers to the individual's perception of the relationships between first level outcomes (rewards) and second level outcomes (needs). Instrumentality is high (+1) when the individual believes that the first level outcome (reward) is a tool, or instrument to the achievement of the second level outcome (satisfaction of the need).
4. *Valence.* This is the preference that the individual has for a particular outcome. If we value the outcome the valence is positive, if we want to avoid the outcome the valence is negative and if it is all the same to us, the valence is neutral.

It isn't very usual to see equations in psychology but Vroom proposed the following one to define the strength or 'force' of the individual's motivation:

Motivation = Expectancy x Instrumentality x Valance

Since this formula states that the three factors of Expectancy, Instrumentality, and Valance are to be multiplied by each other, a low value in one will result in a low value of motivation. Therefore, all three must be highly positive in order for motivation to be high. Expectancy theory predicts that individuals will be motivated when:

- They believe that their efforts will lead to task performance (the task is achievable, they have the necessary skills, there are enough resources etc.)
- They expect rewards (first level outcomes) for results stemming from the task performance
- They expect rewards to bring satisfaction of their needs (second level outcomes) and
- They value these outcomes (they expect the outcomes will bring them satisfaction).

IMPLEMENTATION OF VROOM'S THEORY IN EDUCATION FOR SUSTAINABLE LIFESTYLE

The above theory speaks clearly that if one of those four kinds of expectations is missing (that is, the logical chain of expectations is broken somewhere) the motivation disappears. So when teaching sustainable lifestyles educators need to ensure they provide information and use

didactical methods supporting building up of all four kinds of expectations. Let's discuss this matter in more detail considering sustainable lifestyle as an example.

First expectation: The task is achievable. What educators have to achieve in this stage is their students to build up strong expectation that sustainable lifestyle is possible. Two kinds of factors influence this expectation – (1) factors related to practical issues and (2) psychological factors. *Factors related to practical issues* encompass such contradictory matters as what exactly sustainable lifestyle is, which aspects of life should be considered under the concept of sustainable lifestyle, what kinds of criteria can help to decide whether a certain product or service or behavior are really sustainable etc. All these issues are still very 'fuzzy' and the diversity of possible 'hidden problems and effects' is so big that people easily 'get tired' and develop at best the attitude that 'Sustainable lifestyle is surely a very good intent but not achievable in practice'. *Psychological factors* address mainly personal concerns about the efforts necessary to change existing habits and the chance these efforts to bring success.

Second expectation: The result will bring the reward (first level outcome). A lot of different issues can be considered under the heading of 'reward' here. *In global aspect* the reward is the transition of society towards sustainable development. Educators have to find convincing examples concerning how individual behavior may produce global changes. Many people may not realize the power of a single individual. Especially in societies with high level of conformity people think something like: "I am a drop in the ocean. I can not change the world." So it is very important at that stage to make students realize that the society is a 'yin and yang' system. Being the biggest human system, the society is both a result of and a prerequisite for the functioning of smaller human systems – organizations, social groups, and individuals. And these smaller human systems through the choices of their behavior both 'create' their social environment and react to its influence. Here, the situation when every end is a beginning can be seen. The reward of sustainable lifestyle has *personal aspect* as well. Educators have to build up understanding that sustainable lifestyle gives more chances for improvement and life success. Health issues are very important here, but especially for young audiences other aspects are needed as well. Sustainable lifestyle should be presented as 'a road to success' using famous individuals as role models. Very helpful in this situation will be linking sustainable lifestyle with fun. Sustainable life shouldn't be like personal sacrifice to the wellbeing of society or like "the necessary evil". In fact, with the very young children educators and parents have the chance to introduce sustainable lifestyle as 'the first' or 'normal' framework of life, so it will not be considered as the necessary evil when the children grow up. But it is not the case with the teens and adults. And if the new lifestyle does not provide at least the same possibilities to experience fun and other positive emotions it will not have a chance.

Third expectation: The reward is instrumental to the satisfaction of my needs (second level outcome). During the previous stage educators may have linked sustainable lifestyle with life success, but individuals need to realize why success is so important issue in human lives, i.e. what is underlying this not very clear concept. That means, educators have to introduce the concept of human needs as the driving force of human behavior. Only when people realize the reason of human behavior they may ask themselves questions of "What actually my needs are?" and "What behaviors are available in order to satisfy these needs?" Answers of those very questions however make human choices informed or conscious. Everything else is not very far from the accidental choice. It is very important here to send a clear message of diversity – different people develop different needs, so they have different understanding of life success. This is a chance for the teacher to show what kinds of alternative behaviors are available in order to ensure individual approach to life and still remain in a sustainable track.

Fourth expectation: The reward is valuable and the needs it satisfies are highly rated.
We can bring a lot of evidences that sustainable lifestyle will satisfy many human needs. The problem is – this is not enough. Human needs have different importance to different people. So motivational cycle will be closed only if the needs satisfied by sustainable lifestyle are highly rated for that particular individual. In other words, satisfaction of these needs is valued, because it brings happiness. It is a little strange to define happiness in such a way but in fact to be happy means to live in accordance with your values. So before the beginning of the training process educators have to be aware of the values (that is the hierarchy of needs) of students in order to implement individual approach.

Everything presented up to here is a well known theory, of course. But during the teaching process we usually don't think of students' motivation in that way. So let me present here an example of how this theory should be used in order to persuade someone to quit smoking. Especially in Bulgaria smoking is a very strong lifestyle issue since a lot of children start to smoke very early. According to Vroom's theory of motivation we need to ensure the following expectations:

1. The task is achievable – the individual has to believe he/she is able to overcome this habit.
2. Non smoking will bring rewards (first level outcome) – Teachers have to be very innovative in order to convince especially young people that there are other rewards from non smoking than healthy life. Instead of simply showing the results from smoking (different illnesses), society has to develop social rewards which will attract young people – for instance fan clubs where famous persons are directly involved but the requirement for membership is non smoking.
3. Non smoking will satisfy a variety of needs – A lot of examples have to be presented here showing how the simple act of non smoking increases life opportunities – for better jobs, for more social relationships etc.
4. Satisfaction of these needs is important. Everything done up to here will work only if for that particular individual the needs of good job or social relationships are sound. One girl gave up smoking because her favorite movie star in an interview said that to kiss a smoking girl is as if you are kissing an ashtray. However what if our particular individual is not interested of these needs at all? He/she for instance is a musician, or artist and everything he/she values is artistic success? We then need to link artistic success with non smoking even if some people believe the image of an artist requires a lot of smoke around. Teachers need to prove that smokers have smaller chances to be promoted because they are bad examples for youngsters and bring bad image to sponsors. In the face of competition they have smaller chances also because the possibility to develop illness is high and that could be a threat for the future profits of their sponsors or employers.

SUMMARY
The aim of this presentation is not to introduce a new theory but to help linking the theory and practice. We all try to complete the mission of teaching young people sustainable lifestyle but sometimes our efforts are somehow chaotic. This is especially true for Bulgaria where all the efforts start and end with simply showing the healthy aspects of different behaviors. Unfortunately this is not a working approach… What we need in order to succeed is to be very skilled in using the process of motivation. Vroom's Expectancy theory of motivation particularly could be very useful in teaching sustainable lifestyle.

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Life Values as the Basis for the Formation of a Citizen

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Introduction

Citizenship education is a very topical issue in Latvia nowadays. Latvia's regaining of independence and accession to the European Union ensured real freedom of personality and genuine democracy. These were the preconditions for citizenship education to senior secondary school students. However, there can be observed certain contradictions in this process. Teachers try to develop students' ability to engage in a dialogue with other citizens and their groups and with governmental institutions, to develop responsibility for one's own actions and choices, students' understanding of legal and moral obligations to the society and the state, as well as the ability to exercise one's rights and freedoms not violating the rights and freedoms of other citizens.

At the same time, traditional educational models functioning in Latvia at present do not fully provide young people with the fundamental world outlook necessary to form citizenship. We believe that this is due to the fact that knowledge-based approach rather than value-based approach still dominates in the actual pedagogic practice. We agree with the axiolgical approach of modern pedagogy, according to which the category of value is one of the fundamental categories for the construction of a new paradigm in the philosophy of education. The value orientations of an individual constitute a channel for the acquisition of the spiritual culture of society and for the transformation of objective cultural values into stimuli and motives guiding people's behaviour.

The analysis of the results of our research has shown that cultural values are the precondition for the effective development of citizenship, which is a very important personality feature.

The purpose of the article is to develop the structure of citizenship education and to determine the effect of life values on the development of citizenship for senior secondary school students.

Key words: citizenship education, citizenship, life values, attitudes.

The Citizenship of Senior Secondary School Students

Most of the contemporary psychologists include the following components in the structure of citizenship education:

the cognitive component (knowledge, notions concerning the state, and awareness of oneself as its citizen);

the axiological component (the system of attitudes and values);

the behavioural component (the realization of oneself as a citizen in a particular society).

Each of these components has its own characteristic features; at the same time, they are all interconnected and interdependent in their actual functioning. This integration of the components of citizenship education makes it possible for individuals to adapt to the changeable conditions of their life activities.

The analysis of the structure of citizenship has enabled us to consider citizenship as an integrative personality feature expressing both moral and legal culture, including the inner freedom of personality, the feeling of dignity, respect, and trust in relation to other citizens,

responsibility to the state, and the harmonious combination of national and international feelings.

In our study, we analysed various pedagogic conditions for the formation of positive personality features regarding citizenship.

Objective conditions presuppose the enrichment of the content of education with humanitarian issues. Orientation to humanitarian issues means focusing of education on man.

There was carried out a discussion based on Dostoyevsky's novel "Crime and Punishment": "Who am I – "a little man" or a responsible personality?" "Does the development of civic society depend on my activity?" etc.

In our study, there was also determined the subjective component for the development of citizenship – the life values of senior secondary school students.

The Life Values of Senior Secondary School Students as a Condition for the Development of Citizenship

The following objectives were set for the analysis of the life values of senior secondary school students:

- to study the system of values of senior secondary school students;
- to analyse their understanding of citizenship values.

The study was carried out in several secondary schools in the city of Riga characterised by various forms regarding the organization of the educational process: Pushkin Lyceum offering specialization in certain areas, Secondary School No 34 specializing in the English language studies, and an ordinary secondary school.

Understanding the development of citizenship as movement towards one's inner freedom and the awareness of one's responsibility to the society also requires the analysis of students' system of values. Citizenship is characterised by a wide range of meaningful values.

Based on the analysis of key value-based human attitudes represented in modern philosophy and psychology (M. Gessen, K. Roger), we have singled out the basic human attitudes:

- an attitude to self as a value;
- an attitude to another person as a value;
- an attitude to freedom as a value;
- an attitude to independent statehood as a value;
- an attitude to duty as a value;
- an attitude to work as a value.

An attitude to Man as the highest value is a system-forming factor concerning the citizenship culture of senior secondary school students.

In order to analyse the values of senior secondary school students, there was used the method of expert assessments. The roles of experts were performed by teachers working with these students. There were developed criteria for assessing value-based attitudes, and the content of the criteria was explained to the teachers.

As a result, there was designed a table of "Highly Significant Values." These are the values that senior secondary school students should have acquired. In order to determine the general value concentration index, we expressed various levels of the development of these values by numerical values ranging from 0 to 2, where 2 means a high level of the development of these qualities (A); 1 – an intermediate level (B); 0 – a low level or their absence (C). We determined the following standards for attributing students to a certain level:

0 – 0.5 – low level (C); 0.51-0.75 – intermediate level (B); 0.76-1 – high level (A).

Characteristics of the content of the levels of value concentration.
The high level of "value concentration."
A wide range of highly significant positive values. Senior form students know these values, understand their content, and are guided by these values in their behaviour.
The intermediate level of "value concentration."
A reasonably high level of highly significant positive values. Senior form students know these values, but are not always guided by them in their behaviour, which depends on a particular situation.
The low level of "value concentration".
A limited range of highly significant positive values. Senior form students know these values, but they do not understand the content of all values, and are not guided by them in their behaviour.
The teachers of mathematics, literature, and foreign languages took part in the observation and survey. After the teachers had completed the table, the index reflecting the development of highly significant values was determined for each student.
The students whose index ranged from 0.76 to 1 where characterised as having the high level of value concentration. The number of such students in our sample was as follows:

Pushkin Lyceum – 35,
Secondary School No 34 – 19,
Secondary School No 29 – 10.

If the index ranged from 0.75 to 0.65, the students were characterised as having the intermediate level of value concentration.
Pushkin Lyceum – 45,
Secondary School No 34 – 30,
Secondary School No 29 – 10.
The index lower than 0.5 shows a low level of value concentration.
Pushkin Lyceum – 24,
Secondary School No 34 – 26,
Secondary School No 29 – 30
These data are reflected in the following charts.

Fig.1A. The criterion "value concentration".
The division of the respondents of the experimental groups into levels at the forming stage of the experiment. October 2005 (%).

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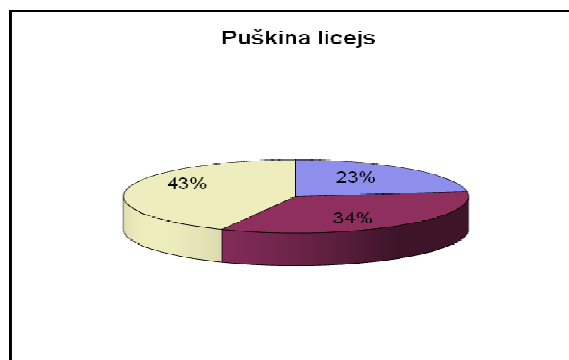
High level - 23% - 24 students; Intermediate level – 34% - 35 students; Low level – 43% - 45 students.

Fig.1B. The criterion "value concentration".
The division of the respondents of the control groups into levels at the establishing stage of the experiment. October 2005 (%).
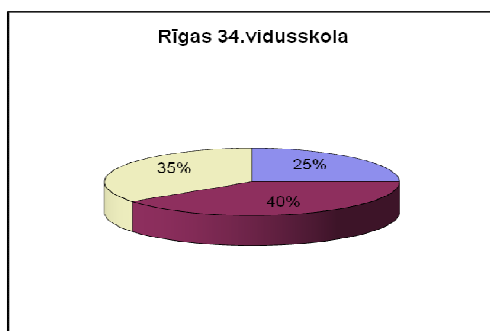
High level – 25% - 19 students.
Intermediate level – 40% - 30 students.
Low level – 35% - 26 students.
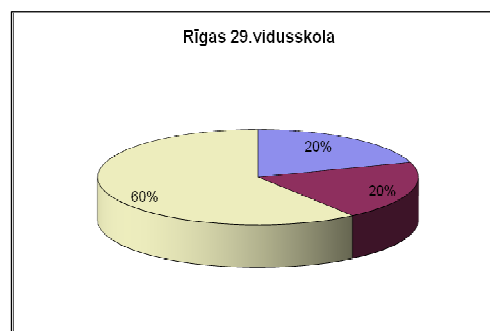
High level – 20% - 10 students.
Intermediate level – 20% - 10 students.
Low level – 60% - 30 students.

There should be noted the wide spectrum of highly significant values among the students of Pushkin Lyceum and Riga Secondary School No 34. The students know these values, are aware of their content, but do not always implement them in their behaviour. The students of Riga Secondary School No 29 are characterized by a limited range of significant, a superficial understanding of their content, and low activity with regard of their realization.

The observation of students' behaviour and their participation in social activities made it possible to draw a conclusion that the students having a high level of value concentration are more actively involved in various social activities (the school parliament, cooperation with various organizations, participation in elections). Consequently, the development of life values is a precondition for the development of citizenship.

Conclusion
As a result of the present study, there could be drawn a conclusion that the development of citizenship is possible in a democratic society, which has formed in Latvia at present.
The axiological approach to the content of education, with cultural values as its central component, promotes the development of citizenship for senior secondary school students.
The subjective factor is very important in the development of this valuable social feature. The subjective factor refers to the development of life values of senior secondary school students. Based on them, a positive attitude to the society, to the state, and to oneself as a citizen, as well as to other citizens of the state is formed.

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Companies Promoting Sustainable Consumption of Their Employees

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Introduction

Corporate Social Responsibility sheds light on many subjects which have been ignored in conventional business life. Shortcomings with regards to sustainability get obvious and both company-related and society-related issues are taken into account. Employees and their concerns are considered by referring to labor rights and working conditions. It's rarely seen that employees are perceived in their role as private consumers and customers (Berger/Kanetkar 1995), although private consumption is crucial with respect to promoting sustainability in our society. This paper is going to illustrate, why companies should promote sustainable consumption patterns of their employees (i) and how they become able of doing it (ii).

Sustainable consumption and companies

Even though the needed change of consumption patterns was already postulated by the Agenda 21 in 1992, some time went on until sustainable consumption became a serious topic in the critical science and research community. Meanwhile there is no doubt, that purchase, consumption and disposal of goods are crucial elements of sustainable development. Therefore especially two objectives are fundamental: sustainable products and sustainable consumption patterns (with regards to the Marrakesh-process 2002). That means that on the one hand companies need to integrate social and ecological aspects in their products, need to advance product innovations (Diehl/Schrader 2009) and are supposed to promote these products and information about sustainability to their customers. On the other hand it is necessary, that consumers ask for and buy sustainable products and that they adapt sustainable consumption patterns, which is about to become a mainstream trend (Fricke/Schrader 2009). Companies are also asked to cooperate with external stakeholders to banish unsustainable products from the marketplace (e.g. WBSCD 2008). Eventually many different actors like the government, NGOs or the media are able to influence both companies and consumers and they are powerful in creating supportive conditions, in which sustainable consumption is more likely. Nevertheless companies and consumers are the decisive parties and their performance will indicate if a society consumes responsible or not.

But companies' contribution to help consumers to consume socially responsible is deficient. They are basically focused on the business-to-business marketplace (to realize sustainable supply chains) and the business-to-consumer marketplace, which are both external stakeholders. But concentrating on these groups, companies are neglecting an important internal fraction: their employees. Even though employees are the important target group for in-house CSR-activities (e.g. work-life-balance activities and life-long-learning, occupational health and safety actions and the enhancement of labor rights), sustainable consumption or rather activities to foster sustainable consumption patterns are disregarded. Apparently there is an incomplete attribution of "consumers". Consumers are exclusively perceived as customers, therefore companies that promote sustainable consumption promote customers consumption patterns. Employees are left out. Previously it is hardly known, that any companies are engaged in promoting private sustainable consumption of their employees, although companies are perfectly able of doing so.

Reasons for promoting sustainable consumption of employees

As mentioned before companies' performance is crucial for implementing sustainable consumption in our society and their activities can reasonably completed by promoting sustainable consumption of their employees. The CSR-concept is possibly much more plausible and holistic, if companies' interest in sustainability is 'all-inclusive'. Respecting employees not only as company members, but also as private persons with different private behavioral patterns can help to enhance companies' credibility and reliability. It also points out companies' employee-orientation. Meanwhile it's certain, that employee-orientation is decisive to create employee satisfaction, motivation, commitment and in the end companies profit (e.g. BMAS 2008). Minding one's own business by promoting sustainability nearby within its own company and with its own employees before starting to "heal the world" is also quite understandable. While promotion of sustainable consumption for customers is often related to promotion of companies' sustainable products and therefore arousing suspicion that increasing sales is the actual objective, actions for the private consumption of employees are good chances to prove the fact, that companies are serious about their mission.

Furthermore activities, which promote private consumption patterns, are not only affecting private life. It is assumed, that private dispositions like attitudes and lifestyles affect workplace-related actions and the working performance. So the promotion of sustainable private behavior could also have positive effects on workplace-related behavior, because employees, who have internalized sustainable lifestyles in their privacy, are also probable to act likewise on their workplace. Since the organizational change towards sustainability can only be carried by all the company members, it is fundamental, that their values, attitudes and behavioral settings are corresponding. So organizational learning and individual learning of 'what it means to live sustainable' can only go on together. Moreover the organizational change needs acceptance and sympathy by the employees. Often organisational change efforts can bring about a range of unintended outcomes like distrust, frustration or even organizational change cynism (Stanley et al. 2005). It is assumed, that employee involvement and a participatory style of management can help to avoid these effects (e.g. Brown/Cregan 2008). Now promotion activities for private consumption can't be realized without involving employees (even though wide differences can be assumed), these actions are a great opportunity to practice participation and to prove managements' interest in employees' concerns.

Organisational Learning leads also to another point, which clarifies the relevance and importance of companies' promotion of private sustainable consumption of their employees. Companies are fruitful places for learning. On the one hand learning on the workplace is seen as a matter of course regarding vocational education, vocational training or internal and work-related learning processes. On the other hand companies are places, where different ways and forms of learning can be realized, for instance informal learning, learning by doing, learning through examples or learning by experiences (e.g. Bierema/Erout 2004). Both dimensions are rewarding to advance employees consumption behavior.

Firstly, actions of organizational education (e.g. instructions for in-house recycling activities, information about energy savings in the company, etc.) also hold an undefined potential to take effect in every-day-life-actions of the employees (e.g. Berger/Kanetkar 1995; Thøgersen 1999). So-called spill-over-effects are likely, if they have any importance or impact for private performances and can be easily transferred from the company-related situation to other circumstances. Spill-over-effects occur by chance, they are not intended on purpose and mainly they are an accidental byproduct of the organizational education for sustainability. But byproducts are not enough. These Spill-over-effects can help to understand the role of employees as vital catalysts between organizational experiences and private live. Moreover spill-over-effects point out that people change behavior, if new information or experiences

they've made are sensible to them, easy to handle and useful for their private life. That means that companies' promotion for sustainable consumption is prospective to be successful, if certain information and activities fit into day-to-day routines and are possibly useful to solve ordinary problems (e.g. high costs for energy, etc.). Therefore the promotion of sustainable consumption can also be seen as a chance to signalize that employees' problems and uneasiness is taken seriously and that they can find assistance in the company if they need some.

Secondly, the variety of organizational forms of learning is fabulous to stimulate and set up the information and learning process. The workplace provides convenient conditions, which facilitate education and communication for sustainability. On the one hand corporate actions for sustainability are usually voluntary, therefore they can be a welcome change from normal working activities and possibly the willingness is higher than in any free-time-context to spend time and attention to these topics. On the other hand peer pressure and social expectancy can create an atmosphere, where people are more likely to approach new subjects, which they wouldn't consider in their private life. Nevertheless there is the risk that external constraint (explicitly, implicitly or subconsciously) leads to reactance. Reactance appears if someone perceives a threat of his or her behavioral freedom, for instance when someone is pressured to accept a certain view or attitude (Brehm et al 1966). That must be crucially concidered, when certain actions are planned and organized.

The workplace is moreover an important hub, where people are influenced and inspired by each other. Experiences and information are exchanged (e.g. colleagues tell each other, how they realized energy savings at home) and it's quite likely that companies' activities for private consumption continue to have an effect later on, just because people talk about it. It is shown in many surveys (e.g. UBA 2008; Greendex 2008), that people are willing to change their behavior, but they are reluctant in doing so. They need leadership, information and support (SCR 2006) to change their behavior and companies are able to provide these conditions. It is extraordinary fruitful, if people know and watch other people, who consume responsible. The "I will if you will"-principle (SCR 2006) can be perfectly realized in companies, though colleagues, supervisors and chefs are all participating. Doing these activities together and having collective experiences is not only fruitful for team building and the corporate feeling; acceptance is much more likely, if people realize that even management is participating.

People are exchanging information in all social relationships. Therefore companies' activities for private consumption are prospective to influence much more people than just their employees. Employees, who have accepted the importance and relevance of changing consumption patterns and who are willing to change their behaviour are vital multipliers to widespread the mission. Moreover private people, who tell their own experiences in their own words, are much more credible than organisations or companies can be. The word-of-mouth-influence is highly sufficient and established (e.g. Carl 2006). Employees are possibly associated with different social milieus. Therefore promotion activities are potential to be widespread in areas, where information about sustainability is rare or hardly existent. Additionally that can bring positive effects for the companies' image in regard of being an attractive employer and being a responsible member of the community (e.g. Huck 2006).

Supporting sustainable consumption of employees is a new and innovative concept. Companies that realize the concept will be "first-movers" in this area and undoubtedly there are first-mover-advantages (e.g. image profits, positive publicity, etc.), companies will profit from (e.g. Lieberman/Montgomery 1988). But it is assumed, that in this context time-related competition advantages aren't relevant. By contrast it is for sure, that first-mover-disadvantages are also of importance, because no company is willing to do voluntary actions

if there are unknown difficulties and harms they can face. Therefore it's crucial to explore this topic theoretically and empirically and to provide useful instructions for companies.

To sum up, corporate promotion of employees' sustainable consumption can profit from the specific workplace situation and can bring about advantages for both companies and employees (see figure 1).

Influence on sustainable consumption	Advantages for companies	Advantages for employees/consumers
via • Role models • Group dynamics/Group pressure/social expectancy • Learning environment/ learning culture • Incentives • No other obligations/no private distraction • Participation opportunities	• Holistic social responsibility • Employee satisfaction • Employee motivation • Employee commitment and loyalty • Spill-over effects to the work place • Improvement of sustainable organisational culture • Image improvement	• Satisfaction of sustainable consumption needs (e.g. by information, assistance and free trials) • Relief from work-routine • Participation opportunities • Exchange and feedback • Increase of work satisfaction

Figure 1 *Reasons to promote employees' sustainable consumption*

Success factors for promoting sustainable consumption of employees
It is assumed, that there are certain determinants, which are crucial to set up successful activities or rather to avoid any flops.

Thus, at the forefront there has to be considered, that a direct and progressive interest, the company shows on employees' privacy could meet with refusal or any kind of reactance. Reactance can strengthen an attitude or behavior that is just the opposite of what was intended. That means in detail that any failure by influencing private consumption patterns is a missed chance to promote sustainable behavior, but moreover it provokes the risk, that unsustainable habits and practices are reinforced or refreshed. So a responsible and sensitive handling by arranging certain activities is indispensable. Furthermore it is not only important to avoid reactance for these reasons, it is also essential to create positive attitudes and feelings. Gaining employees, who are sympathetic with the activities and pleased to get new information and experiences are much more committed and interested. So it must be the whole purpose of any activities generating high acceptance and avoiding reactance.

Firstly, it might be rewarding to identify different target-groups. It is assumed, that the employees are a heterogeneous group of people that might need different forms of information, support and participation. Findings from target group communication in the environment or sustainability education (e.g. Kleinhückelkotten 2005) can be helpful here. Combining knowledge from social-milieu-research (e.g. Sinus Sociovision) and social marketing (e.g. Kotler/Roberto 2002) makes possible, that activities are matched with the different needs of the target groups. But target-group communication for employees demands special consideration. As mentioned before avoiding reactance is of prime importance and therefore a selection and separation of different target groups of employees isn't practicable. Firstly, because selection and allocation are supposed to limit personal freedom (and that can bring about reactance). Secondly, the mode of allocation couldn't be transparent without being pretentious. Thirdly, data-mining needed to be extremly detailed and precise. Therefore the following is suggested: target group communication must be realized implicitly. After identifying different interests and requests of employees (e.g. by employee suggestions, idea

managment, team meetings, questionaires, etc.) a range of acitivities must be designed. On the one hand they should cover different interests (variety of information), on the other hand they should provide different information contents (quality of information). Eventually employees are authorized to choose their favorite activities on their own (self selection).

Secondly, it might be relevant, that employees are involved in planning and organizing the activities. On the one hand participation is requisite to consider different interests and needs of employees; on the other hand integration and possibilities for decision making help to generate acceptance and motivation (e.g. BMAS 2008). Combining different instruments of employee participation is suitable to give a variety of impulses and incentives to get employees joining in.

Thirdly, it is assumed, that also stakeholder involvement is crucial to set up successful activities. Selecting stakeholders, who are in line with employees' interests, can be helpful to encourage employees to participate; they can strengthen their commitment and their motivation. Stakeholders like environmental organizations or consumer protection organizations are working typically non-profit, they are experts in certain fields of activity and therefore their credibility and reliability is enormous. Companies that collaborate with these organizations profit by their positive connotations and strengthen their own image and goodwill (e.g. Berger et al 2006). Stakeholders can give the company a back seat while the activities are going on and employees might feel more comfortable. Stakeholder involvement is also appropriate to refresh and energize the promotion activities and to entrain the employees.

Lastly, basic conditions which are determined by the company, seem to be decisive as well. Company performance and core competences are relevant, because promotion activities for sustainable consumption take place in that context. So it is assumed, that activities are more convincing, if they meet, especially at the beginning, with company-related issues. Employees might perceive the promotion activities more credible and authentic, if they see a link to companies' business activities. Moreover inconsistent and conflicting corporate actions should be identified and avoided. It's an obvious taboo, that employees are promoted to consume sustainable, while for instance the company is ignoring environmental regulations. Ultimately it is important to point out, that all determinants might be interdependent and influencing each other.
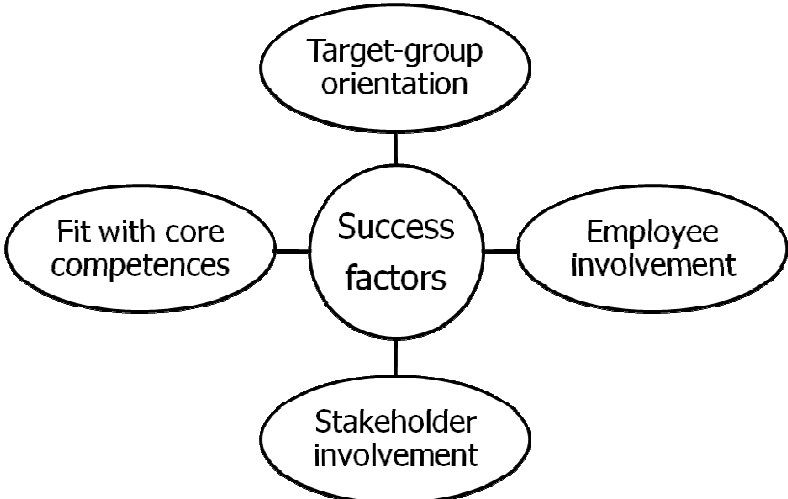
Figure 2 *Hypothetical Factors of Success*

Conclusions

Empirical research will be conducted to validate the determinants and to create an instruction guide for companies that are willing to promote sustainable consumption of their employees.

It was shown that companies are in principle qualified to help their employees to consume socially responsible, because the workplace can be a fruitful enabling system, in which information, reflection and learning for sustainability is possible. Companies' contribution to promote sustainability can be reasonably extended by focusing their employees.

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From Consumer to Stakeholder Citizenship:
A Model towards 'World Citizenship' for Lesser Developed Countries

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Introduction

The encouragement of consumerism has been justified on the economic argument that increasing demand would lead to growth, which would ultimately trickle down to benefit all. Under the conditions of globalization, however, the basic relationship between consumption and growth has been weakened because of the displacement of production to lesser developed countries (LDCs) along with the widening gap of consumption level between the developed countries (DCs) and LDCs.

Consumption in the developed world has created socially and environmentally undesirable consequences all over the world. Unethical or irresponsible corporate practices have also made consumers become aware of these companies and turned them into consumer citizens mostly in developed countries. An opinion poll of 25,000 consumers over 20 countries has indicated the increasing importance consumers are putting on the social responsibility of companies. Although these findings verify the hypothesis that "the more that social interaction is de-territorialized, the more interrelations are taking place beyond the control of the nation-state; and the more the perception of (national) citizenship is weakened, the more the notion of corporate/ consumer, citizenship is growing globally." Yet, we claim this increase is less, particularly in putting consumer citizenship in practice in LDCs. (Environics International News Release, "Consumers Worldwide Expect Business to Achieve Social as Well as Economic Goals," (September 30, 1999).

It is hard to expect workers (as consumers in LDC's) who cannot even afford to buy what they are manufacturing in LDCs to become consumer citizens. In order to identify the obstacles of being consumer citizens in LDCs, in this paper we will try to investigate the leading arguments that relevant non-governmental organizations hold in Turkey.

The major research questions that we will address are on the major obstacles against the formation of consumer citizenship in LDCs. There are six main barriers such as:

1. Lack of awareness and inadequate information, (lack of technology, education etc.)
2. Lack of sufficient purchasing power to make choices with respect to the criteria for the ethical consumption,
3. Culture and societal values
4. Demographic reasons & vulnerable to manipulation
5. Lack of legislation or insufficient implementations
6. As a consequence, deficiencies in putting in practice along with shortage of corporate citizenship practice by MNCs as role models.

In order to identify these obstacles, we will summarize what civil society organizations have to state on critical issues which are involved in the promotion of consumer rights and responsibilities and then delineate a conceptual framework to suggest a more proactive role of the consumer citizen in place of the conventional reactionary roles particularly in LDCs. In our analysis, with reference to Bourdieu (1977, 1990) we have focused on the actual context of partnership practices of Non- Governmental Organizations in Turkey.

The Role Of Civil Society Organizations in Practicing Consumer Citizenship :
Although civil society as a concept has long been in use, it has only been popularly employed in the last decade. There are a number of reasons for this attention such as: failure of the state or corporations to ensure effective provision of social welfare, and disillusionment among the public that the traditional two-sector institutions on serving their interests (Beck, 1992 in Matten and Crane 2005).

This has opened up space to consider a third sector as an institutional actor in democratic societies, that is, civil society. As such, civil society is often said to form a third sector after the market and the state, which are involved in the promotion of certain interests, causes, or goals.

There are number of interests, causes, and goals that CSOs might be involved with, from environmental protection, to animal rights, social welfare, regeneration, child protection, development, famine relief, or health promotion—all of which are likely to pertain to business ethics in some way. (Matten and Crane, 1995)

Among social movements of dissent, boycotts are probably the most commonly recognized and most widely used form of nonviolent direct action. Research suggests that something like 20 per cent of people claim to have boycotted, or are willing to boycott, a product for ethical reasons (Brock et al. 2001 in Matten and Crane 2005). As such, they represent an organized form of ethical consumption. Essentially, while ethical consumption is often an individual activity or choice; a boycott is usually a co-ordinated endeavor that seeks to achieve some impact on corporations through collective action.(www.ethica1consumer.org/boycotts)

More recently, though, we have also witnessed an increasing number of more intensive businesses—CSO collaborations seeking to provide more partnership-based solutions to social and environmental problems (Hartman and Stafford 1997; Mcltosh and Thomas 2002; Murphy and Bendeil 1997 in Matten and Crane 2005). In some ways, the key issue for sustainability in the tripartite (state-business-civil society) relations is not so much that civil groups agree but that they are able to actively participate in decisions that affect them. As (Bendeli 2000 in Matten and Crane 2005) contends: What are required are new forms of democratic governance so that people can determine their own futures in a sustainable environment by participation.

The increasingly deterritorialized nature of business activity puts corporations with international operations into a number of different civil societies across the globe. MNCs are therefore confronted with a whole new set of unfamiliar CSOs in overseas countries. For example, Impregilo's involvement in constructing more than 160 hydroelectric projects around the world in countries such as Argentina, China, Honduras, Nigeria, Pakistan and Turkey (the controversial Ilisu Dam) has brought it to the attention of various local environmental and community groups in those countries, as well as CSOs from countries

represented by some of Impregilo's consortia partners. As a case study, we will look into the role of a CSO plays in Turkey.

The Turkish Associations of Consumers for Raising Consumer Awareness :
In Turkey, there are approximately 60 consumer associations- although not all of them are functional. TUBIDER is one of the national consumer associations which is established at the beginning of 1997 in Turkey and has approximately 3000 members. It has determined its missions as

- ☑ Against the violation of law and regulations by MNCs,
- ☑ Prevention on manipulation of consumers and abuse of their citizenship rights
- ☑ Creation and dissemination of consumer awareness on demanding rights.

Yet, it focuses mostly on consumer rights rather than consumer responsibilities just like the other consumer associations in Turkey. Recently, with the establishment of Consumer Federations as of December 19th in 2008, the emphasis has shifted not only from just being a member to the actual consumer rights, but it has also affected their gradual development as a reaction to the growth of MNCs and their irresponsible practices against most stakeholders. This common reaction has given momentum to the expansion of both national and regional associations of consumer rights and led their joint action as a federation in line with what the Treaty of Lisbon has envisaged. This federation has taken common reaction to the recent issues such as; electricity and natural gas bills that have risen about 80 % increase in a period of less than a year in 2008 by the municipalities in Turkey. This reveals the fact that not only private sector but also public sector is making unfair price increases. The Consumer Federation has sued banks with the mismanagement of credit card and telecommunication with overuse of mobile phones that have abused their clients and used global crises as excuse.

The representatives of federation of consumer rights have recently participated in a demonstration against the commercialization, privatization and co-modification of water for profit. They claim that water is a basic human right since it has sanitary, energy, food and environmental value. Therefore, it can neither be regarded as public good, nor as consumer demand. Multi national water companies, World Bank, OECD and the water square-called America, EU, Canada and Japan are making different types of tricks in order to palm the water off other people to accept the water as a commercial product and to take it under the scope of service trade. These are trying to create a new exploitation and predomination area via water (Atılgan 2009). Even at the U.N declaration water is defined as a "human need" rather than a human right due to lobbying activities of MNC's.

Water is obviously an inalienable human right. Global decision makers are trying to have approved the commercialization of the water, under the scope of service trade, in World Trade Organization negotiations. They are making use of their project credits for the purpose of reaching their targets as an insisting tool and enlarging the water market. The fact that water services are produced by private sector in the countries such as France and England is not a good example for the developing countries. Rich countries has far better opportunities comparing the developing countries in terms of executing social containing programs, creating social awareness and controlling and closing the investment deficits. The developing countries are not in a condition to cope with rich country-origin multinational water companies. As a matter of fact, countries have been damaged by the problems arising between multinational water companies and the local authorities. The service deficits caused by the nonperforming public and private enterprises have been reflected to the societies as

social instability, death, epidemic disease and severing of the poverty. Even in France which the leader in taking place in market in water sector, there is a considerable discomfort arising from such a model of public-private sector collaboration that is imposed by the World Bank. (Atılgan 2009).

There are numerous examples regarding the negative results due to the privatization of the water. Rapidly increasing water tariffs, deteriorating water quality and water supplying services that particularly exclude poor in LDCs reveal the actual cases of privatization via MNCs leading to instability and further poverty. For instance, Coca Cola, Nestle, Suez and Läckeby Water Group have lately commenced to improve their corporate image and reputation via corporate social responsibility projects to look green through their public relations according to the tenets of the `Global Impact`, while they are continually increasing their control on high quality water resources since 2007 in Turkey. The same MNCs have been resisted against in Canada, USA, Brazil, Bolivia, Argentina, and the Philippines by activists through various social movements as well.

Trade Unions such as Hak-is, DISK, KESK and Hizmet-is along with TMMOB, TTB (professional occupational associations) and various local and regional environmentalist pressure groups have so far undertaken a proactive role toward a more sustainable human development with due respect to water and arranged an oppositional protest platform during the 5th World Water Forum that has been held this March in Istanbul. Making water commercialized is one of the most risky ventures since water is the most important source life, culture and economic wealth. They have created a proactive debate both in the virtual dialogue platforms through blogs and as social resistance movements that have been organized for about a year. They are against the dams that the recent govenment promise to the poor people in return for votes and voice the fact that water provided will not only be expensive via prepaid card system so both the access of the poor to the water and the quality of provided water seem to be questionable.

Mark Hays from Corporate Accountability International states; "Those who are dealing with corporate control of water's manifold downsides – water takings, water shut-offs, price hikes, short cuts on water treatment – are people deeply affected by the water crisis and corporations' actions," "Yet these same people, who are going thirsty, don't have a true voice at these meetings – their voices need to be heard, and they should be in the drivers'seat."

The Global Water justice Movement activists are calling on the United Nations to redefine water as basic human right rather than need and take the lead in creating transparent, democratic space to decide international water policy. But to date, the UN continues to be in a contradictory position by, on the one hand, raising awareness about the world water crisis and calling for needed change, and on the other housing the CEO Water Mandate.

The Theoretical Model based on Habermas` Normative Multi-Stakeholder Partnerships Culminating in Citizenship
Drawing upon Scherer & Palazzo (2007) who attempted to reconstruct corporate social responsibility from a political perspective based on Habermas's point of view, I will try to explain the transformation of citizenship through a conceptual model. Following Habermas, the assumption in the model is that for critical assessment of information on green policies (e.g., particularly concerning energy, water and food) people should be trained in deliberative investigation and/ or polling to become both conscious "consumer citizens" and learn their

rights and responsibilities, while the existing government and business institutions need a stronger link to civil society and non-governmental organizations.

As Ulrich Beck (1997 in Matten ad Crane 2005) states, social knowledge or ecological issues are always constructed as discourses in a risk society" with a limited duration and limited action space; that is why reinventing politics and policy and deepening of democracy by going beyond tacit neoliberal consensus and searching for progressive alternative futures Likewise, Habermas also opts for space for dissent through increasing political choices through alliances among external stakeholders (i.e., governments, corporations, nongovernmental organizations and media) or institutionalization of caring and daring actions through social movements rather than limiting options only to awareness of consumers, that is, "green consumerism" of citizens or promoting diversity and multicultural pluralism solely via communication technologies such as mobile phones or internet.

Nevertheless, in his later theories on "deliberative democracy", Habermas has attempted to reconcile democracy and private enterprise through critical intervention in cultural public sphere. He is suggesting that citizens are emerging as engaged producers, rather than just consumers. Accordingly, policies are made through interactive dialogues and participation laterally between and among citizens via NGOs. His assumptions are not in line with the post-modern reading of multiple modernization projects or multiplicity of oppositional platforms to voice resistance; however, Habermas emphasizes the dominance of the normativity and regime or the rules of the game of the neoliberal paradigm and seeks after enhancing the safety net and reformist aspects from within the capitalist system.

Instead of paying lip service to the jargon of CSR, Habermas is endeavoring to bring back ethics and consistency between rhetoric and practice. Authority and democracy in consumption are not about consumer sovereignty and rights to own, or buy or to complain to be appropriately represented. In order for the stakeholder democracy or citizenship may be regarded as a deliberative democracy, it is necessary to establish who or what group has legitimate claims to sovereignty and authority as citizens and attain "public accountability" in all three sector- public, private and non-profit by engaging in both formal and informal networks of governance according to Habermas.

It is clear that the propositions emerging from civil society movements on social and environmental issues have important implications for development thinking and practice in developing countries as well as the developed ones.. But this has significance only when these issues are considered seriously by political, bureaucratic and corporate circles allowing ideas for solving the policy problems and working with social groups and movements to emerge. Even if there is no guarantee that approving the substance of the problem would automatically mean that there would be agreement on the means or methods to be employed. As Naomi Klein has stated (2002 in Matten and Crane 2005) NGOs cannot gain much solely through argumentation even if it an ideal speech condition, mass struggle and direct proactive action need to be undertaken at a larger scale than local level since capitalism has the rationale of a drug addict and there is neither fair policy making nor understanding of conflicting issues of different stakeholders. NGOs and all civil society groups are often regarded as watchdogs of both business and government' with the ability to engage in `critical collaboration`, but with increasing need to reveal accountability to `stakeholder constituencies`.

On the whole, a certain degree of institutionalization or critical intervention in policy-making would also help to maintain enhanced communication links between leadership and grassroots

within the interest group movements as well as making more efficient contacts and mounting joint actions with other social movements. In a nutshell, corporate social responsibility has to be taken into account along with issues of both reputation and active citizenship, if corporate responsibility is indeed equally significant as corporate performance.

In the stakeholder citizenship model below, the underlying hypothesis is that in the transformation process from CSR to corporate, consumer and finally to stakeholder citizenship, reputation management in conjunction with corporate social responsibility activities pave the way towards both increased participation and more institutionalized and then internalized sense of citizenship. Thus, the fourth quadrant represents a paradigm shift of the media from state and market model to a trustee model of the civil society where the wider communication interests of all stakeholders are taken into account. It is almost a temporary ideal situation where all stakeholders welfare is optimized through delivering the sustainable development policies and actions as strategic values.

Figure 1: A Model of Engaged Stakeholder Management

State (Low-High)
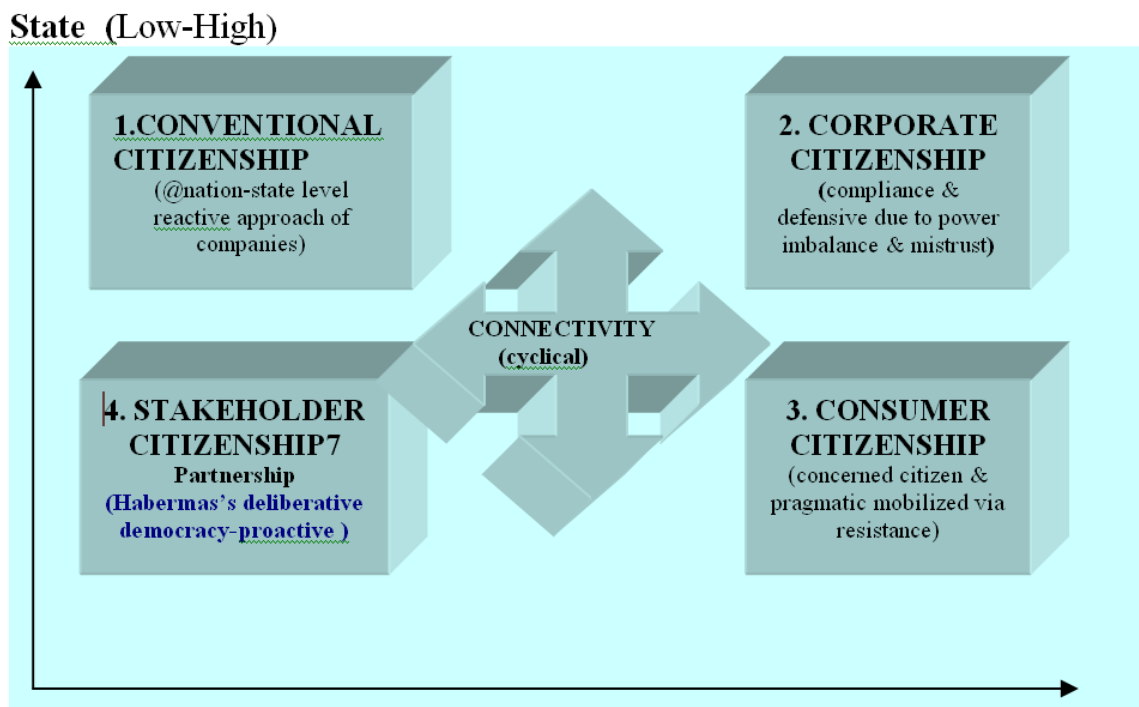
Market(Low-High)

By and large, most of the organizations within lesser developed countries are still either at the first or second stage at present; however, the desired stages are the third and fourth phases. Yet, the 4th stage is not a fixed ideal stage since deliberative democracy of Habermas is like an issue-based conflict resolution perspective that highlights communicative action. Public deliberation is an antidote to instrumental rationality in which all private interests are considered fixed and immutable, while it brings out new information and perspectives which may be essential to the formation of sound public and business policy.

On the whole, we can say that the dominant neoliberal paradigm promotes ever expanding economic disparity and consumption at the expense of the earth and future generations. Collaboration between government, business and civil society actors is an urgent imperative for moving forward with sustainability and solidarity. Yet, a fundamental issue is how any accompanied changes in official attitude or formal policy decisions impose on the general capacity of the large-scale social movements themselves.

In other words, how do these transformations help (or hinder) social movements to mounting more forceful and sustainable actions, and producing intended results. In any event, whether it is at the local municipal, national, regional or international level, a growing support accorded to some of these transnational social movements by the public is an issue that governments and corporations cannot totally disregard. What path the established political or development establishment may usually take in a specific context is a complex question to which Habermas's deliberative democracy might shed light on.

.By and large,we have endeavored to sketch the groundwork of a model with a range of examples from Turkey at first glance to be able to address the question of putting consumer citizenship and stakeholder citizenship into action. As Scherer & Palazzo (2007) argue, deliberative democracy is not simply a variant of normative stakeholder theory since it goes beyond the narrow focus from case-wise analysis of concrete stakeholders' conflicts and their management to a broader analysis of a corporation's connectedness to various public discourses and its vibrant cooperation with national, regional and transnational institutions.

Greater emphasis is place on tri-sector negotiation and implementation structures-at international, national and local level. This might be achieved with built-in power-sharing and decision-making mechanisms and stakeholder accountability mechanisms such as consensus formation, stakeholder feedback, alternative opposition platforms and the like. Thus, ethics or argumentation alone is not enough. The pressure group and stakeholder constituencies` indirect impacts should be accompanied by direct policy interventions through law, legislation, regulations on multinational companies. Binding and enforceable legislation at the international level to regulate MNCs` activities, and effective international institutions to enforce it are needed. The road to this goal is long and fraught with difficulty and conflict at different levels of analysis. That is the prerequisite toward more sustainable human development around the world by putting consumer citizenship into action.

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Understanding the Role of Printed Media in the Social Amplification of Food Risk During the New Millennium

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Keywords: Cover news; risk perception; social risk amplification

1. Introduction

Since the mid 1980s, most Western European countries have faced various food safety incidents (e.g., BSE, dioxin contamination) that had led to increasing public unease about health and safety of modern methods of food production (Knowles *et al.*, 2007). Some of these food safety incidents have had an international impact (e.g., BSE, dioxin contamination and avian influenza epidemic), while others have been contained within national boundaries, as it was the case of the nitrofuran residues in Portuguese poultry during 2002-2003 (Vaz and Nunes, 2007). As a result, food scares about a particular food create adversely short-effects on preferences and consumption of that food that can more widely affect the overall effectiveness and efficiency of the food supply chain (Latouche *et al.*, 1998; Verbeke and Viaene, 1999; Verbeke, 2001; Verbeke and Van Kenhove, 2002; Roosen *et al.*, 2003; Llyond *et al.*, 2006; Angulo and Gil, 2007).

In fact, it is well established that experts and lay people tend to perceived food risks differently (Slovic, 1987; Hansen *et al.*, 2003; de Boer *et al.*, 2005; Jensen *et al.*, 2005, van Kleef *et al.*, 2006). Scientists define risk in narrow quantitative terms: they would consider the nature of harm that would occur (the hazard), the probability of that will occur (the risk) and the number of people who may be affected (the exposure). The statistical treatment of risk derives an expected average value for a risky situation based on the sum of the products of possible outcomes and their respective relative probabilities of occurrence. On the contrary, consumers operate with a much broader concept of risk, incorporating sensitivity to a wide range of hazard characteristics which form the basis of consumer concerns (Jensen *et al.*, 2005; de Boer *et al.*, 2005; McCarthy *et al.*, 2006).

According to the psychometric paradigm, the risk is subjectively defined by individuals who may be influenced by a wide array of psychological, social, institutional and cultural factors (Slovic, 1993). This approach indicate that every hazard has a specific unique pattern of social and psychologically determined characteristics (denominated "risk characteristics") that are related to the perceptions of risk (Fischhoff *et al.*, 1978; Slovic, 1987, 1993). Those include the degree to which exposure to hazard is voluntary, controllable, known to science, known to those exposed, familiar, dreaded, certain to be fatal, catastrophic and immediately manifested (Slovic *et al.*, 1987). They tend to be highly correlated and can be represented by three main factors: "dread", "unknown" and "the number of people exposed" to the hazard or "extent" (Fischhoff *et al.*, 1978; 1981; Slovic, 1987).

An important determinant of risk perception is information about the risk. The risk events will be largely irrelevant or localized in their impact unless people observe and communicate them to others (Kasperson *et al.*, 2003). According to Frewer *et al.* (1993/1994) the media are among the most important factors affecting the way risk communication is transmitted and

perceived. Where there is no direct personal experience, information about hazards, individuals look for simplifying summaries from trusted sources: the news and informal personal n*et*works (Kasperson *et al*., 2003). In fact, for most members of the general public, the mass media, particularly via newspaper and television coverage, are a primary source of information about risk-related matters. For instance, out of the list of 14 different sources on healthy eating, "TV/radio programmes" (43.8 %) was the second information source selected by Portuguese consumers, and "newspaper articles" followed on seventh position (Moura *et al.*, 2008).

Although media are identified as important in the growing field of risk theory there has been a lack of detailed analysis of their role in the communication process (Eldridge and Reilly, 2003).

2. Media coverage of food hazards

At the very least it is obvious that media coverage of risk is selective: not all risks can be in the news all of the time. Ideally, the media plays the role of intermediary, facilitating communication among various societal stakeholders and providing counter viewpoints from different sides of a debate. Likewise, it can be viewed as a vehicle for informing the public on scientific nuances and complexities of the food safety system. However, journalists and press editors adjust the story frame to their ideology, professional and knowledge limitations, as well as to time and space constraints (Horning, 1992). Writing about science and technology can thus emphasize scientific facts, their socio-political implications, environmental risks, human health concerns. Likewise, through framing, media highlight certain points of view and marginalize or ignore others, defining occurrences and explaining how they are to be understood (Horning, 1993). That is why Kasperson *et al.* (1988) identified mass media as one of various "amplifications stations" that receive, interpret and pass on risk signals, transforming the original risk signal. To this extent, it is natural to hypothesise that some specific media biases could be in place and establish relationships between the coverage and the content of newspapers and the citizens' perceptions regarding food hazards (Frewer *et al.*, 1993/94; Frewer *et al.*, 2002; Kehagia and Chrysochou, 2007; Marks *et al.*, 2003; Vilella-Vila and Costa-Font, 2008).

Individual stories will attract attention when major organizations or governments come into conflict over the extent of the hazard or simply when there is disagreement between various actors in the risk debate (Frewer *et al.*, 2002; Frewer *et al.*; 1993/1994). As danger is seen as dramatic, it is implicit that focused hazard reporting will occur in the media. However, risk is a concept based on predicting the future that conflicts with the basic news principle: the "day event" emphasis. Many potential hazards will not be reported as risk stories unless or until they are manifested in some way. The lack of coverage on BSE from 1991 to 1995 in the United Kingdom is partly explained by the fact that certain hazards are seen very distant (Eldridge and Reilly, 2003). On the other hand, scientific uncertainty ("virtual risk") is less newsworthy than certainty (definitive findings) and moderate opinions are less attractive than "extreme" points of views. In the same way, hazards that consumers feel that they cannot protect themselves, as in the case of genetically modified foods, where traceability of ingredients, and labelling practices are not clear for consumers, may be amplified. In this case, the hazard itself is perceived to be under societal, rather than individual, control (Frewer, 2003). However, the effects of the media tend to be temporary and limited in magnitude. According to Kalaitzandonakes *et al.* (2004) in a case based on a continuous media coverage there is no media effect; in contrast, while in a case of acute and brief media coverage the media effect is substantial. Additionally, the specific media impact may depend on the specific dynamics of the press media in a specific society.

The aim of this exploratory study is to characterize the nature of the reporting of food-related hazards in cover news from the major daily Portuguese newspaper.

3. Methodology

The selection of food-related news on potential hazards was based on the analysis of cover contents from the national edition of the most selled Portuguese daily newspaper: *Jornal de Notícias* – JN. For ease of reporting, hazards are categorised into four types: chemical (e.g., nitrofuran in poultry or arsenic in tap water), biological (e.g., animal disease-related, such as Bovine Spongiform Encephalopathy – BSE - via new variant Creutzfeldt-Jakob disease, microbiological food contamination by *Salmonella*, *Listeria*, *E. coli* or avian flu), technological (e.g., GMOs), and related to dietary behaviour/lifestyle hazards (e.g., excessive intake of alcohol, sugar, salt or fat, or a sedentary life).

The present study refers to front covers of newspapers published from January 1, 2000, to December, 31, 2006, with a total of 2,557 consulted newspapers covers.

3. Results and discussion

Covers of newspapers under analysis yielded 200 cover news headlines on food related hazard, representing 7.8 % of printed covers. Annual frequencies of such news, during the seven year period are distributed without sharp variations. However, food hazards news drew more attention during the years of 2001 and 2003, representing 10.7 % and 9.6 %, respectively, of the total annual newspaper covers (see figure 1).
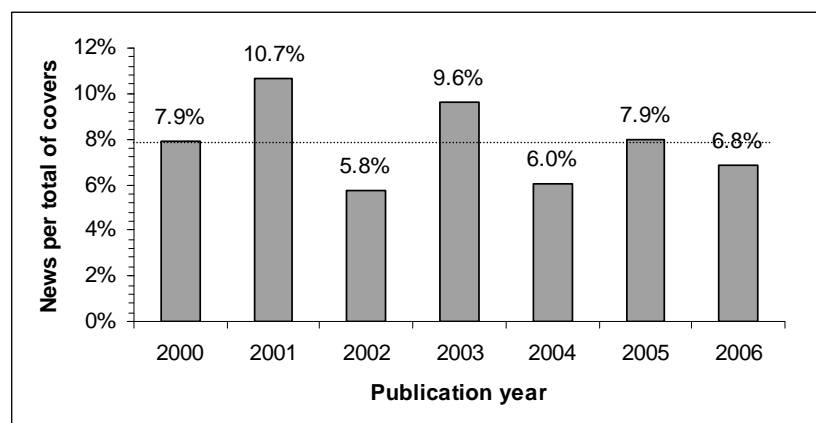
Figure 1 Annual frequency of food hazards related cover news at JN newspaper, from 2000 to 2006.

Globally, the vast majority of the selected news was related to biological hazards, followed by lifestyle hazards (see figure 2). Circulation of technological hazards at cover level may be considered as inexistent, with one single cover news throughout the entire period (2000-2006). Cover news headlines reported different hazards separately and rarely in conjunction with other hazards.
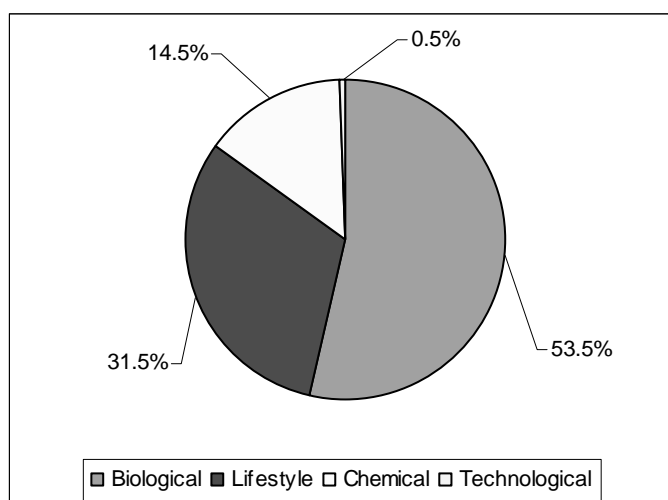
Figure 2 Grouping of food hazards related cover news published at JN, by hazard type during the whole study period (2000-2006).

Considering time variance among food hazard types, on a year basis, it was observed that the most read Portuguese newspaper tended to express in their covers biological hazards more broadly along the study period. The same applies for lifestyle hazards: continuous coverage during 2000-2006 period, although with less intensity (see figure 3).
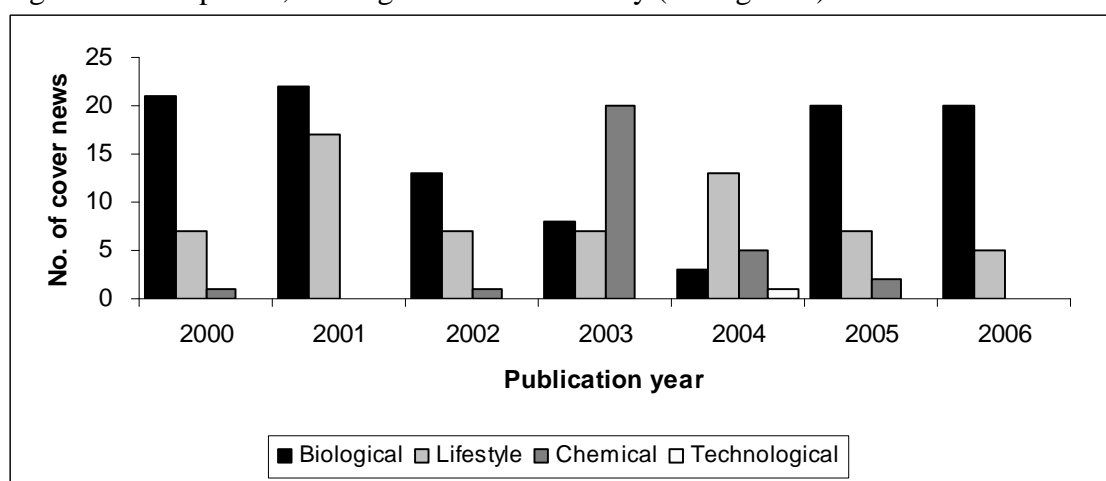
Figure 3 Yearly distribution of cover news published in JN on different food hazard types during 2000-2006.

Additionally, one may observe that the 2001, 2003 and 2005 peaks in the frequency of cover news were closely associated with specific hazards (see figure 4): BSE in Portugal during 2001 (from December 2000 to March 2001); nitrofurans in Portuguese poultry at 2003 (February to May), and avian flu at 2005 (November 2005 to March 2006). More specifically, these were clearly related to different food crisis. Similar relations were found in the U.S. (Singer and Endreny, 1993) and in Greece (Kehagia and Chrysochou, 2007) for different food crisis.
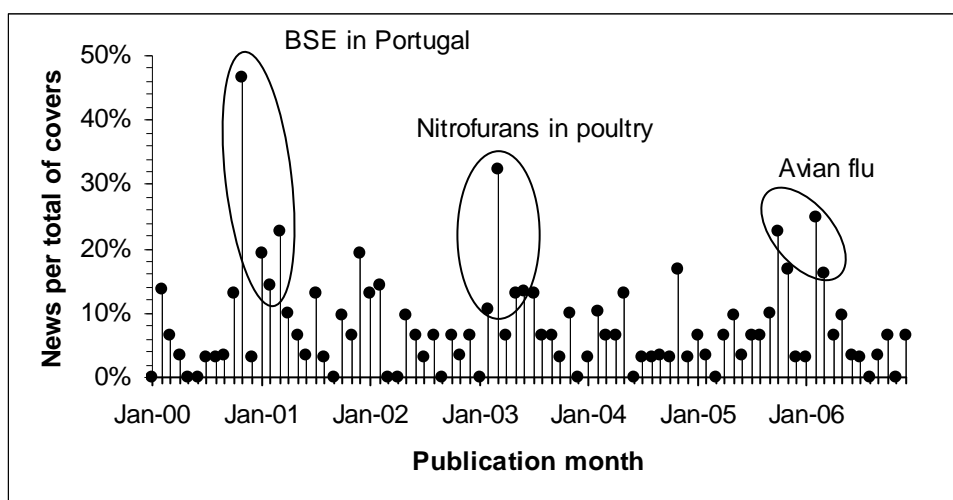
Figure 4 Monthly frequency of food hazards related cover news at JN during 2000-2006

Moreover, it was interesting to note that in an almost "chronic" manner, hazards such as excessive eating, drinking of alcohol and contaminated tap water were reported throughout the entire period with a total of 22 (11.0 %), 19 (9.5 %) and 16 (8.0 %) cover news, respectively, and a maximum monthly frequency of 2 cover news. An important factor regarding the first hazard is that the prevalence of overweight and obesity in Portugal has been increasing, with values of 44 % for men and 46 % for women (Carmo *et al.*, 2000). In addition, the prevalence level of overweight and obesity in children and young people is one of the highest in Europe (Lobstein *et al.*, 2004 found figures similar for other countries of the southern Europe), considering that around one-third of Portuguese young children are overweight or obese (Padez *et al.*, 2004). Moreover, although the level of alcohol consumption is failing in Portugal since mid to late 1980s, according to WHO (2002) the 12.5 litres of pure alcohol per person in 2001 exceeded in more than 15 % the EU-25 average alcohol consumption (10.8 litres of pure alcohol per person). These are clear society concerns.

5. Conclusions and further research

This exploratory analysis shows that different food hazards are differentiated in the way they are reported in cover news from the most selled newspaper in Portugal, with biological and lifestyle hazards presenting a more extensive coverage, while technological hazards, such as GMOs have little or no coverage.

From the present analysis it is clear that food hazards are under constant attention of the media, nevertheless, one may identify two major patterns on their coverage. One directly related with food crisis, such as BSE in cows, nitrofurans in poultry or the avian flu, all having a direct impact on consumer behaviour with a marked decreased on the consumption of foods related to the hazard under scrutiny. A second, showing lower frequencies but with periodic coverage, in an almost "chronic" fashion, mainly related to lifestyle hazards such as eating disorders and excessive alcohol consumption, having a direct impact on consumer attitudes towards food and being perceived as some of the most dreaded hazards (Moura *et al.*, 2009).

Reported results are part of an ongoing project regarding printed media coverage of food hazards. These preliminary results, focusing on the headline contents of cover news are of great interest, but of limited scope. Further information will be unveiled with the results from the analysis of the full article contents.

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Seize the opportunity: The importance of timing for breaking commuters' car driving habits

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Abstract
A study testing an innovative way to facilitate consumers' adoption of a socially responsible transport solution is reported. A large sample of Copenhagen car drivers were randomly assigned to either receive a free month travel card for public transportation or serve as a control group. It was predicted that the free travel card would neutralize the negative effect of car driving habits and make the use of public transportation more consistent with the traveller's conscious intentions, which was confirmed. The behavioural effects of the free travel card appeared only among individuals who had recently relocated residence or workplace prior to the intervention. This suggests that timing is essential when designing interventions to promote alternatives to car driving.

Introduction

The growing number of cars contributes to serious problems all over the World, including congestion, air pollution and noise at the local level and climate changes at the global level. In their struggle to solve these problems, governments and NGOs appeal to consumer citizenship behaviour in their promotion of alternative means of transportation including walking, cycling and using public transport, but mostly with little success. This paper reports from a study designed to testing an innovative way to assist consumers who want to change commuting mode from car to public transportation.

At least part of the reason why it is so difficult to get drivers out of their cars and use other travel modes is that the choice of travel mode tends to become habitual (e.g., Bamberg, Ajzen, and Schmidt 2003; Gärling, Boe, and Fujii 2001; Thøgersen and Møller 2008; Verplanken et al. 1994; Verplanken et al. 1998). Habits are formed when a behavior is repeated frequently in a stable context and leads to rewarding outcomes (Ouellette and Wood 1998), something which is true for most everyday travel mode choices (Thøgersen 2006). Habitual travel mode choices may deviate from the person's expressed intentions and the deviation is usually in the direction of a higher use of private cars and a lower use of public transportation, bicycling and walking (Møller and Thøgersen 2008; Verplanken et al. 1994; Verplanken et al. 1998; Aarts, Verplanken, and Knippenberg 1998). Hence, it is possible to achieve a more desirable modal split (from a societal point of view) by just helping individual travelers to act according to their expressed intentions.

According to habit and attitude research, the key to changing habitual behavior is to create conditions that, for some reason or other, make the automatic execution of the habit impossible or at least unattractive (Ronis, Yates, and Kirscht 1989) and which give individuals sufficient motivation and ability to make a deliberate choice (Fazio 1990). The challenge is to design interventions that are effective in producing this outcome, yet politically and individually acceptable. After a change to a deliberate mode of decision-making, a long-term change in the modal split may result, but only if alternatives to the private car are perceived as being acceptable after closer scrutiny.

The approach

The proposed approach to voluntary travel behavior change is similar to the way newspapers, telecommunication services, and other goods and services that are bought on a subscription

basis are often marketed to new customers: by means of a temporary promotion offer, typically including a trial period for free or at a substantially reduced price. The promotion is intended to create sufficient initial interest to entice new customers to try the product or service, and it is hoped that the experience creates a positive attitude and perhaps a new habit that secures repeated purchase after the trial period. In order to avoid misuse, it is customary to restrict the promotion offer to people who have not been subscribers to the product or service for some time. To my knowledge, there have as yet been only sporadic attempts to promote public transportation this way, in spite of the obvious similarities between the areas (Thøgersen 2007).

It is an important assumption behind this kind of intervention that at least some of the receivers of the promotion will continue using the service more than before the promotion period, even though they have to pay full fare again. In the travel-mode choice case, there are at least two reasons for expecting such a long-term effect. One reason is that some car-drivers may hold unjustified negative expectations about public transport. Hence, trial-based experience resulting from the promotion period would result in more favorable attitudes towards using public transport (for empirical evidence, see Bamberg and Schmidt 1999). Another possible reason is that some car-drivers have a vague (but not necessarily negative) perception about how it would be to use public transport. Using their car works for them, so they have not bothered to seriously consider alternatives. Also, even a relatively small cost in terms of time and effort needed to investigate and possibly test alternatives seems to be an insurmountable barrier. Hence, any means that could make them try public transport would increase the quality of their knowledge of this alternative and some would realize that for them using public transport is actually preferable to using the car, at least for some purposes.

Method

We tested the price promotion in a field experiment with car-drivers in the Greater Copenhagen area fulfilling certain screening criteria. The basic idea was to make car-drivers, many of which were assumed to choose travel mode habitually, "an offer they could not resist," and thereby motivate them to deliberate about their travel mode choices, and in fact try public transport.

Participants

Data were collected by means of telephone interviews carried out in October and November 2002 and April 2003.[8] Subjects were a random sample of car-owners in the Greater Copenhagen area fulfilling the following screening criteria: have a driver's license and a car at their disposal, commute to job or study at least once a week, and not having been a monthly travel card holder for mass transit in the Greater Copenhagen area for at least a year. Also, traveling salesmen and others that are dependent on a private car for their job were excluded. If more than one person in the household fulfilled the criteria, the "next birthday" method was used to pick the participant for the study.

Of those meeting the screening criteria, 1071 agreed to participate in the first wave, resulting in a response rate of 75 percent of those qualifying. Thirty individuals were excluded because letters with experimental treatment material were returned by post due to incorrect addresses, because they claimed that they had not received the experimental treatment material, or because of errors in the administration of experimental treatments during the telephone interview.[9]

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[8] The data were collected by TNS Gallup.

[9] The excluded subjects did not differ significantly (the 5% level) from included subjects on any of the target variables in the first wave.

The screening criteria did not take into account that some live so close to their workplace that they have no need of motorized transport for commuting. As a crude measure it was judged that everyone who in Wave 1 reported having commuted by foot more than once or by bicycle more than four times out of the last ten times fell into this category and they were excluded from the study.

The allocation to experiment and control groups followed a somewhat complex design: First, participants were randomly assigned to either experimental treatment (70%) or control group (30%). In the experiment group, subjects were then assigned to one of several treatments.

Those expressing any intention to use mass transit in the near future were randomly assigned to one of two treatments: (a) a planning exercise alone or (b) a planning exercise plus a free month travel card. The planning exercise consisted in asking subjects to plan their next trip by mass transit (when exactly they would go, from where to where, using which bus or train connection, see Bamberg 2002).

Those expressing no intention to use mass transit in the near future were randomly assigned to one of three treatments: (a) a customized timetable alone, (b) a customized timetable plus a free month travel card, or (c) a free month travel card alone. The customized timetable treatment consisted in sending subjects a customized timetable for his or her daily commute based on information about home and work given during the first interview. Free month travel cards and customized timetables were sent to participants by ordinary mail immediately after the first interview.

Neither the planning exercise nor the customized timetable produced an increase in commuting by public transport over and above the control group (for details, see Thøgersen and Møller 2008). For this reason, and because the focus here is on the effects of the price promotion, experimental subjects *not* receiving a free travel card were excluded from this study. Hence, the final sample consisted of 597 car-owners living in the greater Copenhagen area and being in employment or under education, who (apparently) did not live too close to work to need motorized transportation for commuting, serving either as experimental subjects (373, receiving a free month travel card) or as members of the control group (224).

The gender distribution of the participants was 56/44 percent males/females. The average age was 43 and the age range 18 to 71. Seventy-five percent were living with at least one other adult and 43 percent had children under the age of 18 in the household. Forty-seven percent had a college or university degree. Forty-nine percent lived in a house, 49 percent in an apartment and 2 percent in other types of homes. None of these descriptors differed significantly between the experiment group and the control group.

Measures

In all three waves, answers were obtained to questions about travel behavior and a number of beliefs and psychological constructs regarding traveling. Participants were also asked to questions about major changes in their lives in the last three months before filling out the first questionnaire, including whether they had changed residence and/or workplace. For the analysis presented in this paper, this latter information was used to classify participants. Besides this, only the frequency of using public transportation is used. The wording and scale of this measure are explained in the note to Figure 1.

Previously reported results

Results of the wider study have previously been reported in three published papers:

In Møller and Thøgersen (2008), the implications of car use habits for drivers' use of public transportation is analyzed. A relatively low percentage of the drivers in this study (10-20%) considered commuting by public transportation in the near future. A hierarchical analysis, where use of public transportation was regressed into intentions to do so, car use habit, and

the interaction between the two, confirmed the theory-derived hypothesis that car use habits act as a moderator of the intention-behavior relationship for public transportation. In other words, car use habits are an obstacle to the transformation of intentions to commute by public transportation into action.

Thøgersen and Møller (2008) extended these results by the field experiment where a free month travel card was tested as a tool to persuade drivers to skip the habitual choice of the car and consider using – and to try – public transport instead. As predicted, the free month travel card had a significant impact on drivers' use of public transport and it also neutralized the impact of car-driving habits on the intention-behavior relationship for public transportation. However, according to the calculations reported in this article, in the longer run (i.e., four months after the experiment) experimental subjects did not use public transport more than control subjects.

In Thøgersen (In press), these data were reanalyzed. After excluding participants that had no need of motorized transportation for commuting, based on their pattern of walking or bicycled to work or study, a significant long-term effect of the free month travel card was revealed. Four months after the free travel card had expired, those that had received it and actually needed motorized transportation for commuting still used public transportation significantly and substantially (40%) more than at baseline.

This study

Hence, the previously published analyses show that strong car-driving habits are an obstacle for converting intentions to use public transportation into action and that a free month travel card can remove this obstacle. We have also shown that among drivers with a need for motorized transportation, there is still a significant and substantial effect on their use of public transportation four months later. Here, we extend the study by analyzing whether the effects of the intervention are contingent on specific context factors.

The study reported here is based on the suggestion that people's habitual patterns are more vulnerable to influence attempts when major changes happen in their lives (Andreasen 1984). Specifically with regard to travel mode choice, it has been suggested that it is easier to break people's habits when they have recently changed residence (Bamberg 2006). Hence, I test the following hypothesis:

Hypothesis: The effect of receiving a free month travel card (i.e., the experimental treatment) on the use of public transportation for commuting is stronger for people who have recently changed residence or workplace than for who people who have not.

Operationally, "recently" is defined as the last three months before the intervention. Since relocation is assumed to influence people's receptivity to influence attempts, the effect should show up in the short run. Hence, the hypothesis is tested by comparing the pattern of travel mode choice reported at baseline (i.e., before the intervention) and at the second interview (i.e., during the intervention).

Results

I use a 2 (free card vs. control group) x 2 (relocation or not) x 2 (Wave 1 vs. Wave 2) mixed between and within subjects design to analyze the impacts of the free travel card and relocation on participants' use of public transportation. The means are reported in Figure 1.

According to the GLM analysis, there was no direct effect of the time of the interview (p = .28). However, there was a significant two-way interaction between experimental condition (free card vs. control) and time (p = .001) and a significant three-way interaction between experimental condition (free card vs. control), relocation and time (p = .02). The two-way interaction was produced by the use of public transport increasing more in the experiment group (0.5 trips out of 10) than in the control group (-0.05 trips out of 10), as expected. The

three-way interaction was the outcome of this difference in the increase in the use of public transportation between the experiment group and the control group being especially pronounced among those that had changed residence or workplace in the last three months (difference between experimental groups: 1.34 trips out of 10, $p < .001$), whereas the difference in the change over time between experimental groups was small among those that were staying put (0.27 trips out of 10, n.s.). This is consistent with the hypothesis.

Figure 1: Use of public transport by experimental treatment and relocation of residence or workplace at Time 1 (baseline) and Time 2 (intervention period). Means.
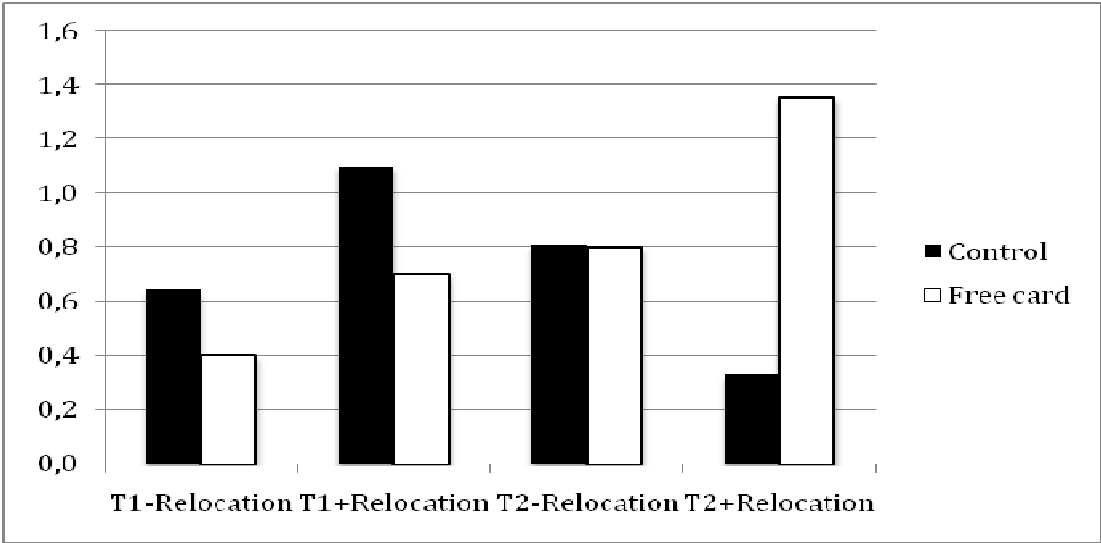
Note: Behavior frequency was measured on a scale from 0 to 10 with the item: "How many of the last 10 times did you use public transport for the trip between home and work/educational institution?"

Discussion

This paper adds further refinements to our knowledge about price promotions as a method to make habitual car drivers consider and try public transportation. Previous studies have shown that some drivers would actually like to use public transportation more, but do not, mainly because of old habits. A price promotion in the form of a free month travel card was offered to a random sample of Copenhagen car drivers. The results were encouraging. The price promotion led to a doubling of the use of public transportation in the experiment group and a significant effect remained four months after the intervention. As shown in Thøgersen and Møller (2008), the success of the price promotion was partly due to the fact that it neutralized the negative influence of car-driving habits on transforming intentions to use public transportation into behavior.

However, not all car-drivers are equally ready to try public transportation. The results presented in this paper show that the effect of the free travel card was limited to people who had recently (i.e., within the last three months) changed either residence or workplace. Among those that had not experienced a change in any of these locations recently, the behavioral impact of the free travel card was not significant. This result is consistent with previous research suggesting that individuals' habitual behaviors are more easily influenced under circumstances where they experience major life changes.

It seems reasonable that car drivers are more likely to develop an intention to try public transportation for commuting in connection with changes of residence or workplace than under stable conditions. Hence, it is under these circumstances that a discrepancy between intentions and behavior are most likely to appear. People who in this situation get the chance to try public transport for free for a month are more likely to increase their use of public transport, according to this study. The results also suggest that people who do *not* receive a free month pass when they change residence or workplace tend to *decrease* their already low use of public transport.

This result was not predicted and, hence, should be interpreted with care until replicated in other studies. However, one may speculate that during relocation, people often feel that the uncertainties of the new situation are uncomfortable. One way of coping would be to stick to general habits that are flexible enough to accommodate the new situation. It has been suggested that the habit of using the car for commuting is one such flexible habit (cf., Verplanken et al. 1994).

The results presented in this paper show that the cost effectiveness a price promotion in the form of a free month travel card can be improved by targeting it to consumer segments whose lives are undergoing changes that make them more open to reconsider their travel options. Timing is essential when designing interventions to promote alternatives to car driving.

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New Alliances among Food Production and Consumption
Which Co-Operation for which Policies?
Empirical Support from a Survey of 800 Consumers

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Introduction

Risk society (Beck, 1986) does not influence eating styles as much as it does the relationship between consumers and the food-system. As debate moves away, from the scientific fray into the day-to-day lives of common people, the consequence has been that consumers have become more competent and selective. So much so that consumers are now in a position to influence the choices made by the food processing industry as a whole, almost elevating them to the role of the system's referees (Fabris, 2003). In order to establish a relationship founded on trust, it becomes crucial to understand how they actually perceive food quality.

Our survey based data on a sample of 800 consumers (Battaglini, 2007) show that there is no relation between trust in the food and the structural variables that define the socio-economic condition of the consumers. The main results of our survey illustrate that it is very difficult to marshal consumer trust. What is then required are new strategic alliances between the socioeconomic actors of the food chain, bridging food production and consumption.

In this view, the paper will discuss the concept of *food chain* intended as the aggregation of stakeholders and the combination of material flows (raw materials, additives, semi-finished products, packaging) that contribute to the manufacturing, distribution, marketing and supplying of the product (Murcott and Campbell, 2004). The construct of *food chain* is useful to shed light on the activities that are required in the food processing passages whereby the agricultural produce is transformed into food eaten at table or processed in the back-kitchen, i.e. in the places where food is processed. The core of the paper will be then to identify which policies are required to implement *food quality governance* and show best practices developed in Italy.

2. Perception of food risks: survey's selected method and techniques

Considering the interdisciplinary nature of the survey, but also its exploratory character, we have defined, right from the outset, an open approach towards existing theories, focusing on the analytical description of relations among perception of food risks, information and consumer conduct.

Following an accurate analysis of the economic, sociologic and anthropologic literature on consumption a hypothetical analysis model was developed in connection with the purchasing conduct of consumers. We have thus adopted a research perspective of the 'contextual constructionist' kind 10, believing that the perception of food risks on the part of consumers is a function of several variables, subjective as well as structural. Subjective variables include those relating to different forms of rationality and culture and to the degree of trust single consumers grant to the complex network of individual and collective players, among which the media. As for structural variables, we have considered, on the other hand, those pertaining to the domain of society and birth, to geographic origins, to occupation and to income.

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[10] This theoretical setting derives from Mary Douglas' theory of dynamic integration with the classical structural perspectives in which (co)determining factors are the social, political and historical contexts within which behavioural patterns take place, and in our case, consumption choices (see Beato, 1998).

The model was then tested and fine-tuned by utilising focus group techniques, which contributed to develop accurate tools for the survey.

Consumers behaviour constitutes the synthesis of social and cultural and components, besides impacting their lifestyle. With a view to explaining the impact of risk in the behavioural patterns of consumers, a broader model was required where the point of departure is not represented by needs, as economical consumption theory states, but by norms and values. Both, in fact, are basic aspects in the articulation of the "structure of preferences" which, in turn, determine consumption choices.

Two different focus groups, conducted in different regional contexts, allowed us to reconstruct causal sequences in the behaviour of consumers. They highlighted the attributes that consumers felt were relevant in the choice of food products. Together these attributes form quality, intended as the presence of an aggregation of characteristics in a specific product that ultimately determine its choice or, if absent, its rejection on the part of consumers.

An attribute considered crucial by consumers is the genuineness-naturalness-freshness combination which shows a significant correlation – inversely proportional – to the consumers' level of trust for the products they eat. In particular, there is concern for the ever lengthening process leading to the end product. Another possible sequence is in a way alternative to the one outlined earlier. Specifically, research on safety is linked to differing often contradictory motivations. There are many examples. Safety is linked to the famous brand which, however, produces low-quality goods utilising raw materials of dubious provenance. Artefacts are preferable, although, in reality, any producer can create a potential adulterator. Thus against this backdrop the only certainty lies in the fact that one has to live with existing uncertainties.

The semi-standard questionnaire that was used included 28 questions and was submitted – applying the CATI system – to a sample of 800 Italian consumers, stratified by gender, age, geographical provenance (Northwest, Northeast, Centre, South and Islands) as well as by the size in terms of residents of the city of residence.

The data was processed through various sequential phases that included single, multiple factorial as well as cluster analyses that served to define the behaviour of consumer groups[11].

3. Food risks and consumers' trust

Anxiety and concern are the dominant sentiments felt by Italians at table. These fears regard not only the entire food processing system (transport, brands, non-EU production, presence of chemical products, etc.) but also the elements that are contained in the food they eat (food preservatives, hormones, antibiotics, saturated fat, etc.): 87.4% of consumers considered the production system "very risky", and 75.8% of respondents felt 'anxiety' while eating.

The main source of anxiety regards pesticides (66.0%), hormones (67.1%) and antibiotics (64.3%). These responses were further confirmed by the data emerging in connection with the risk elements within the productive system: 95.2% of respondents was worried by the use of chemical products; 88.3% by the use of GM food, while 82.1% was concerned by the transport system and 76.4% by the way sales outlets are managed.

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[11] Coordinated by the present author, the research is the outcome of an interdisciplinary effort involving agrarian and environmental economists as well as environmental and cultural sociologists and methodologists. Though significant synergies were achieved, there are specific merits to be acknowledged: the survey on available literature was carried out by Daniele di Nunzio and Serena Rugiero of IRES; the investigation model was defined together with Prof. Davide Marino of Università del Molise; the questionnaire was compiled by Anna Ancora, a methodology researcher; the data were processed by Prof. Stefano Nobile of 'La Sapienza' University of Rome and by Prof. Roberto Rocci of 'Tor Vergata' University of Rome.

The observation of the choice attributes that condition the purchasing of food gives us the image of a society that is rooted in a vision of quality that combines the need to please the palate with that of safeguarding safety and health. The attributes respondents care most about are taste (97.2%), best before date (96.5%), health benefits (94.0%).

The willingness to pay (WTP), i.e. the demand exercised by consumers even in the presence of a higher price to obtain increased guarantees and certifications concerned half the sample surveyed (45.2%). Elaborating consumers typologies through a cluster analysis, we also observed that WTP has no significant correlation with structural variables as social position, gender or educational level.

The examination of the attributes leading consumers to buy even when prices are higher proved just how widespread is the awareness that the entire food processing system must be constantly controlled in order to safeguard one's health: provenance and traceability and environmental respect are considered key factors (respectively 41.0% and 35.3% of respondents). The analysis on the relationship between consumers and high quality content products (DOP, DOC, organic, typical, etc.) helps us to better understand this demand for quality and to shed light on the contradictions that entail this kind of consumption. Though a broader knowledge, it was shown, does lead to an increased consumption of quality products, precise information continues to be lacking, generating an asymmetry in what are the perceptions of consumers and the correctness of their consumption practices.

4. Bridging consumers' trust and food production. The need of a "food quality governance"

Our data show that living in an era of uncertainty has led consumers to become more competent, demanding and selective. Consequently, consumers have taken up a relevant role in influencing the choices made by the entire food processing industry to the extent that they have emerged as referees of the system as a whole. Consumers, though, do not wish to take up a confrontational stance with regards to the food producer, but demand that it be a trustworthy partner in a situation where the perception of food risk is high.

Given that primary needs have been satisfied and goods mainly serve to satisfy desires, consumption in industrial societies is entirely substitutive. Thus, if expanding, market quotas flourish on marginal or non-competitive companies in a zero sum game that betrays the Fordist illusion of unlimited growth and of growing expectations in terms of social and consumption mobility. There will always be niches that expand in order to meet new desires but unlike what occurred in the past the phenomenon will indicate niche expansion rather than sectoral growth as was the case in the period after the war. As confirmed in our study, Italian consumers claims to a high propensity for information. But this propensity and willingness to learn is often frustrated by an industry and a distribution system that do little in this regard, producing, in other words, a plethora of data but little knowledge.

These elements of analysis produce at least a consequence – a consequence laden with difficulties that seriously impact food safety policies: it becomes difficult to marshal consumer trust (Fürst et al., 1991). And if trust cannot be marshalled top-down, what is then required are motivational decisions that integrate the traditional policies of food quality control with voluntary regulation through specific measures aimed at providing adequate awareness and training.

According to the way we have tackled it in our study, food quality is in all practical terms a commitment, involving all parties of the food processing cycle (producers, processors, distributors, consumers), for the activation of 'new alliances' (Fabris, 2003) between interests and knowledge, between production and consumption, under the sign of the mutual interdependency of nature and culture.

The aim of these conclusive remarks is, therefore, to single out the processes (and the context these take place) aimed at enhancing agro-food quality as well as practices and policies pursued or to be pursued.

With a view to analysing the new alliances between nature and culture, between production and 'thoughtful' consumption, the utilisation of the 'food chain' concept is useful inasmuch as it allows us to bring into focus the activities inherent in the processing phase leading to the transformation of the food item, which from the field should not end up only and exclusively on the table but also in the back kitchen and thus also in those places where food processing of a metabolic nature takes place. We prefer this concept to that of industrial processing which singles out all the activities, players and flows that are critical for the definition of the product's characteristics but not specifically for the processes themselves. By giving relevance to the latter, the notion of 'food chain' also includes, for example, the processing of leftovers and waste in the consumption process, on which we intend to focus our policy in view of its impact on the environment.

What is intended as the food production chain, is the aggregation of players and the combination of material flows (raw materials, additives, semi-finished products, packaging) that contribute to the manufacturing, distribution, marketing and supplying of the product (Murcott and Campbell, 2004). This term thus defines the full range of activities, players and material flows that are crucial in determining the characteristics of the product but not the actual processes. With a view to identifying the socio-economic actors involved in agro-food processes, the notion of food chain is useful to shed light on the activities that are required in the food processing passages whereby the agricultural produce is transformed into food eaten at table or, as we shall see shortly, processed in the back-kitchen, i.e. in the places where food is processed. In addition, the concept of food chain also includes the processing of leftovers and waste during the consumption process, an aspect we would like to focus on considering the impact it has on environment.

The following table (1) may be useful:

PROCESS	PHASE	PLACE
Cultivation	Production	Farm
Processing	Transformation	Agro-food enterprise
Conservation/Distribution/Selling	Distribution/trade/ selling	Storage Market POS
Cooking	Preparation	Professional Domestic cooking
Eating	Consumption	Table
Processing	Distribution/ recycling	Back-kitchen

Table 1 The food chain from the field to the back-kitchen
Source: adapted from Murcott and Campbell (2004)

Food quality, intended as a synthesis of organoleptic, health- and nature-related, ethical productivity components, is pursued within the food chain and, therefore, in a context of material and energy flows (also social) that contribute to the cultivation, transformation, marketing, supplying, consumption and recycling of the food product. Thus intended, food quality essentially implies that food products undergo as little transformation and alteration as

possible and that the agro-food cycle be as a closed as possible – like what occurs in nature – with enhanced efficiency in terms of energy consumption and reduced waste material.

In this framework, which are the stakeholders of the processes involved in the food chain that we have outlined theoretically and which are the policies, among those that have already been implemented in Italy, that best serve to sustain those products and processes aimed at enhancing productive quality and the territory? In the following table, we have tried to trace the different phases of the food chain and, therefore, the different places where these production and disposal processes take place, singling out, for each one, the public policies that could sustain the processes outlined and the players involved, which are the active upholders of interest. We do not pretend to supply an exhaustive overview of existing best practices, but rather to highlight those practices that allow for the interaction between production and consumption, between food demand and supply that the 'discerning' taste of players – producers and consumers – express and substantiate.

PROCESS	PHASE	PLACE	PUBLIC POLICIES FOR QUALITY ENHANCEMENT	STAKEHOLDERS
Cultivation/ Animal rearing	Production	Commercial farm	Spreading of Agricultural Best Practice (ABP) – eco-compliance. Integrated Product Policy (IPP). Incentives for the development of bio-dynamic, organic and eco-compatible agriculture. Utilisation of eco-efficient technologies. Incentives designed to enhance voluntary regulation. Company and collective brand-names. Certification systems: quality, territorial trademarks (PDO, PGI, TSG), eco-compatibility, corporate social responsibility, production traceability, product certification.	EU, Government, Local Authorities Entrepreneurs Workers Employers and trade union representatives Consumers' associations
Transform	Transformation	Commercial farm	Integrated Product Policy (IPP). Incentives designed to enhance voluntary regulation Certification systems: quality, territorial trademarks (PDO, PGI, TSG), eco-compatibility, corporate social responsibility, production traceability, product certification.	EU, Government, Local Authorities Entrepreneurs Workers Employers and trade union representatives Consumers' associations
Conserve/ Distribute/ Sell	Distribution/ Commerce/ Sale	Warehouse Market POS	Integrated Product Policy (IPP). Incentives designed to enhance voluntary regulation.. Company and collective brand-names. Certification systems: quality,	EU, Government, Local Authorities Distributors Tradesmen

			territorial trademarks (PDO, PGI, TSG), eco-compatibility, corporate social responsibility, production traceability, product certification. Promotion of/adhesion to discerning consumption initiatives. Adhesion to *Last Minute Market*[12] or Food Bank initiatives.	Large retailers Workers Employers and trade union representatives Consumers' associations
Cooking	Preparation	Professional or Family kitchen	Purchase groups. Promotion of/adhesion to discerning consumption initiatives. Adhesion to *Last Minute Market* or Food Bank initiatives. Care in the utilisation of packing materials. Utilisation of 'best technologies' in terms of eco-efficiency. Agreements involving quality restaurants with local producers with a view to safeguarding food biodiversity and to enhancing the territory. Policies aimed at shortening the food processing chain. Policies aimed at encouraging eco-efficient technologies.	Consumers Chefs, Restaurants Agricultural producers Local authorities
Eating	Consumption	Table	Purchase groups. Promotion of/adhesion to discerning consumption initiatives. Agreements involving quality restaurants with local producers with a view to safeguarding food biodiversity and to enhancing the territory.	Consumers Chefs, Restaurants Agricultural producers Local authorities EU, Government

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[12] Introduced in Italy by Prof. Andrea Segre, Last Minute Market projects aim "to transform waste into a resource". The projects are activated by Carpe Cibum, a co-operative providing a service that makes possible the reutilisation of unsold goods which have no commercial value but which are still fit for consumption. These items are made available through donations to Bodies and Associations that provide assistance to people belonging to disadvantaged social classes. A similar initiative, the Food Bank focuses on collecting food surplus that is then distributed by charity organisations that assist the poor and the outcasts. The first food bank was set up in Phoenix, Arizona, at the end of the Sixties. In Italy, the initiative was developed and consolidated by Danilo Fossati, chairman of the food producer Star, and by monsignor Luigi Giussani, founder of the ecclesial movement Communion and Liberation. Europe can rely on 174 food banks in 13 countries (Italy, Greece, Spain, Portugal, France, Switzerland, Belgium, Luxembourg, United Kingdom, Ireland, Poland, Latvia, Ukraine).

			Policies aimed at shortening the food processing chain.	
Discarding	Elimination/ recycling	Back-kitchen	Reduction of waste matter. Separate waste collection. Composting. Policies aimed at encouraging closed cycles. Adhesion to *Last Minute Market* or Food Bank initiatives.	Consumers Chefs, Restaurants Agricultural producers Local authorities EU, Government

Table 2 Food chain policies for quality governance

Our conclusive hypothesis is that within the framework of our country's agro-food system it is necessary to develop an agro-food quality governance in which government, market and society interact to sustain discerning policies aimed at protecting resources, places and people that would ultimately have repercussions on the tastes and knowledgeability of products. At a policy level, this process would resolve the tensions between structure and player, between production and consumption if food quality, in its socio-cultural and environmental components, became a shared objective as well as a vehicle for economic competitiveness, where wellbeing is intended not only in monetary terms but also as the satisfaction of broader values.

Thus the integration among the diverse production and consumption phases concern both material and structural aspects as well as symbolic and cultural ones which both impact production and consumption through the domain of information and knowledgeabilility. The complex interactions between production and consumption pass from the knowledge node to the cognitive and emotional double dimension of how we produce and communicate food. Knowledge ultimately boils down to how consumer tastes – at the double level of taste and knowledge – interface with attitudes, styles and the choices of food entrepreneurs.

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Fair Trade and Donations: Two Possibilities to Contribute to Poverty Alleviation in Daily Purchase Decisions - Do Consumers Care?

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1. INTRODUCTION

In 2005 1.4 billion people in developing countries were living below the poverty line which means they had less than $1.25 available per day (Worldbank 2008). At the same time, the "ethical consumer" is increasingly discussed (e.g. Schulz 2008, Harrison et al. 2005).

The trend, that consumers account for ethical concerns in their purchase decision, seems to be confirmed by increasing sales volumes of Fair Trade (FT) products (Transfair 2008) as well as the increased visibility of promotion products of which a part of the sales revenue is a donation to the respectively promoted project (the so called cause related marketing (CRM)). The market for certified coffee, e.g. FT and organic, grows at double digit rates since 2000. FT labelled coffee shows a growth rate of 46% worldwide between 2004 and 2006 and 14% in 2008 in Germany (Byers et al. 2008; Transfair 2008). Organic coffee has a market share of 3.5% in Germany and shows as well double digit growth (BLE 2008). Besides single labelled coffee double certified coffee is a new trend. Worldwide nearly 50% of the FT coffee is double certified carrying also an organic certification (Byers et al. 2008). FT and to a certain extent also organic produced products are considered as ethical products (De Pelsmacker et al. 2005). The reason is that the production of FT and organic products follows specific rules which restrict the output of environmental damage, constitutes specific working conditions as well as animal well being and have the goal to reduce poverty by empowerment of marginalised producers etc.

These developments are important because purchasing FT products or donations to e.g. development aid organisations for instance in form of CRM are two of the most common options for people in industrialised countries to make an individual contribution to poverty alleviation. But what if consumers face the possibility to support producers in developing countries through a product purchase? Which (product) features play a major role? Are the concerns about working conditions, fair wages etc. just lip services? Does the responsible and conscious FT consumer take care about the differences between FT and donations?

The aim of our study is to investigate these questions by use of coffee purchase as an example. We choose coffee as a study object because it is the favourite beverage of German consumers (Deutscher Kaffeeverband 2009). Therefore we can assume that consumers really care about their coffee choice and that the results will benefit from consumers high involvement. Also, coffee is a typical product from developing countries. Thus, it is well suited for a CRM campaign, especially a donation to a charity organisation working in a coffee producing country. The market place confirms our assumption: in May 2008 Dallmayr launched a coffee called "Ethiopia" of which per sold package five trees are planted in Ethiopia. In this regard, the campaign is close to a regular donation and comparable to FT.

Consumers might contribute to charity or buy FT products for various reasons. Therefore, preferences are expected to vary across individuals. Without understanding the form and extent of preference heterogeneity it will be difficult to make assumptions regarding the relationship between donations, FT and CRM activities in combination with a product

purchase. Against this background, we conducted a choice experiment with n=481 in Germany to investigate consumers' preferences for differently labelled coffee. Our objectives are: 1. to compare attitudes towards important coffee and food features with the choices resulting from the choice experiment; 2. to perform a market segmentation in order to distinguish and compare consumers with preferences for FT and those with preferences for donations.

The remainder of the paper is as follows: in the next section theoretical background information is given. In section 3 the methodological background is described. Section 4 provides estimation results from the econometric analysis. We finish with some concluding remarks.

2. Theoretical Background
2.1. The Phenomenon of Ethical Consumption

Ethical consumption as a form of market behaviour became obvious in the last three decades (Harrison et al. 2005). The definition of the ethical consumer is seldom exclusive and mostly descriptive. Harrison et al. (2005) explain ethical purchase behaviour as a traditional consumption plus a concern. The assumption that a consumer purchases the cheapest good which is fitting his needs leads to the definition of the traditional purchasing. If people deviate from the normal assumption and consider other concerns like working conditions for disadvantaged producers in developing countries or absence of child labour in their purchase, then their shopping decision can be called ethical purchase behaviour. The motives of people to buy a certain kind of product are manifold. They vary from a concern for environmental issues over political to religious, spiritual and social motives. The one important common point which is independent from the motives of consumption is that ethical consumers bear in mind the effect their purchase decision has not only on themselves but especially "on the external world around them" (Harrison et al. 2005). When we combine the definition of Tallontire et al. (2001) - an ethical consumer is a customer feeling responsible towards society - and that of De Pelsmacker et al. (2005) saying that these feelings are expressed by means of his purchase behaviour then we arrive at the relationship between FT and charitable giving. Besides this, in the context of FT it is often talked about ethical or responsible consumers (Ruwet 2007).

If we follow Priller and Sommerfeld (2005) and define donations as a form of social participation, a contribution to welfare production which is able to maintain and open up social connecting forces in modern societies, we can state that one precondition out of a bundle of motives for a donation is that the giving individual is an ethical being. And if we define, according to Nicholls and Opal (2005), FT as a kind of an alternative market mechanism which is neither donations nor non-profit but a form of political and ethical consumption, an individual buying fairly traded products is an ethical consumer. Therefore we can link ethical consumption patterns, donations, FT and CRM.

2.2. Donations in Germany
2.2.1. Donation volume in Germany

Regularly available numbers regarding donations to non-profit organisations in Germany are provided by the GfK, Deutscher Spendenmonitor, and the National Income statistic (see table 1). Their results differ strongly with respect to the donation amounts (from 2.6 to 7 billion EUR/year) and the donation purpose in Germany (Priller and Sommerfeld 2005). For instance TNS Infratest (2008) reports that development projects benefit of about 19% of the 2.8 Billion EUR which were donated in 2007 in Germany. GfK (2008a) reports different percentages on a different basis: in the first half of 2008 9.3% of humanitarian help, which is 80% of the total donation volume, was given to long-term development projects and 18.7% went to first aid.

Survey	Year	Billion EUR	Method
GfK Charity Scope	2005	2,4	Respondents at least 10 years old, 10.000 interviews, diary, monthly
	2006	2,0	
	2007	2,0	
Deutscher Spendenmonitor	2005	3,5	Respondents at least 14 years old, 4.000 interviews, Face-to-Face, yearly
	2006	3,4	
	2007	2,8	
National Income Statistic	2001	2,9	Taxpayer, complete inventory count

Table 1: *Charitable giving survey data in Germany Source: Sommerfeld (2008) for the data until 2006, data for 2007 from GFK (2008a) and TNS Infratest (2008), data for the national income statistic from Buschle (2006).*

2.2.2. Socio-demographic and regional differences of donors

The willingness to spend and the amount of donations depend on age (younger people spend less), economic situation which often depends on education level (wage earner spend more than trainees or unemployed people, retirees and housewives spend most), religious denomination (raises the probability of contribution, while there is not much of a difference between Catholics or Protestants) and the number of children in the household (positive correlated with donation) (Buschle 2006). Related to the entity of taxpayers most of the donors can be found among the married couples with three or more children. No differences in terms of donation habits can be found regarding gender (GfK 2008b). In 2008 more than 50% of the monetary donations come according to GfK (2008b) from people older than 60 years (which are only 26% of the panel) and more than 50% of these are given by those people older than 70 years.

2.3. Fair Trade in Germany

As can be seen in table 2 in recent years the number and the sales of FT products increased. The overall sales volume of FT products with the certification mark is 142 Mio. € in 2007 (Transfair 2008). 70% of all FT products are also certified organic. Coffee is the front runner of the FT products in Germany: it has more than 50% share of sales (LZ Net 2007); with a market share of 1% in 2005 (Krier 2005).

Year	Sales volume of fair traded products [Mio EUR]	% to PY	Sales volume with Fair Trade **labeled** products [Mio EUR]	% to PY	**coffee** sales [t]	% to PY	Fair Trade and organic certified [%]
2004	99	7	n.s.	n.s.	n.s.	n.s.	n.s.
2005	121	22	73	25	3600	9	64
2006	155	30	110	51	4000	18	70
2007	193	23	142	29	4600	11	> 70

Table 2 *Fair Trade sales figures in Germany 2004-2007 Source: Forum Fairer Handel (2004, 2006, 2007, 2008).*

The German consumer initiative stated that women buy more (40% buy FT) than men (33% buyers), that higher income classes (more than 2500 EUR/month) are more likely FT buyers than people with a lower income, higher educated people (high school) are more often buyer (50%) than less educated (32%) (Verbraucher Initiative 2007).

3. METHODOLOGICAL BACKGROUND
3.1. Choice experiments
Choice experiments are a flexible approach to record preference data from individuals in artificial but at the same time realistic situations. Realistic in the sense, that a situation is created where an individual should compare alternatives through their attributes and come to a decision between the alternatives. For more information see e.g. Adamowicz et al. (1998).

3.2. Latent class analysis
To analyze the data gathered with the choice experiments random utility models based on latent class / finite mixture modelling are applied (e.g. Scarpa and Thiene 2005). Latent class analysis assumes that within the basic population different groups or segments with varying preference structures, which result in different preference parameters β, can be distinguished. In a simultaneous process the latent class model (LCM) estimates utility parameters of the different attributes and the probability of the affiliation of the respondents to these components. This means that it simultaneously determines and describes product choice and group membership while it separates the sample in several, homogenous subgroups which map the heterogeneity in the population (Holmes and Adamowicz 2003). Every consumer is attached to that segment where he has the biggest probability of affiliation to a segment, near 1 (Gensler 2003). The respondents are grouped into the segments based on statistical information criteria (Greene 2003). The Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC) are frequently used to determine the number of segments. Therefore, model parameters are estimated for increasing numbers of segments until the point where an additional segment does not improve the model fit according to the named criteria (Wedel and Kamakura 2000).

4. Experimental Design, EMPIRICAL RESULTS AND DISCUSSION
The data for this study was collected through a consumer survey in the region Cologne/Bonn, Germany in January 2008 via face to face interviews. Participants were screened for inclusion in the study based on the question whether they drink coffee or not. Only coffee drinkers qualified for the study. The final sample consists of 481 coffee drinking participants. The interview consisted of five sections regarding participants' purchase and consumption habits, knowledge of FT, donation habits, attitudes towards donations and FT, and socio-demographic information as well as the choice experiment.

During the coffee choice experiment participants were asked to make six choices. Each choice set consisted of four coffee packages representing different attribute bundles and various attribute levels. The experimental design included four coffee attributes with different levels each. Namely, Price: 2.99 EUR, 3.99 EUR, 4.99 EUR, 5.99 EUR; Organic: no, yes; Label: no label, FT, charity organization; Donation: no donation, 0.2 EUR or 0.5 EUR or 1 EUR directly to the producer.

Data from the consumer survey are analyzed by means of LCM. The optimal number of classes in the LCM was identified by assessing the AIC, its variant AIC 3, and BIC as well as the log likelihood statistic from 1 to 5 class models. With the increasing number of classes the log likelihood statistic as well as the AIC and BIC values present remarkable changes (the values become smaller) and the R² value increases strongly. A conditional bootstrap with 500 draws showed that the 5 class model does not increase significantly model fit. Thus, we chose the 4 class model which gives overall best results. These results are reported in table 3.

Choice Model	Class1		Class2		Class3		Class4		Overall	
R²	0,3922		0,0464		0,2811		0,1812		0,3005	
R²(0)	0,4294		0,1055		0,317		0,4734		0,3322	
Attributes	parameter	z-value	parameter	z-value	parameter	z-value	parameter	z-value	p-value	p-value of Wald (=)
Price	-2,2593	-16,36	-0,2347	-4,11	-0,3137	-4,63	-0,8971	-3,39	2,2E-61	1,2E-49
Organic										
not organic	-0,3377	-7,29	0,0819	1,46	-0,8490	-9,86	0,5373	2,07	8,7E-34	2,1E-21
Organic	0,3377	7,29	-0,0819	-1,46	0,8490	9,86	-0,5373	-2,07		
Label										
no label	-0,3248	-4,96	-0,1869	-2,63	-0,8175	-7,95	1,2260	3,27	2,6E-61	3,4E-33
Fair Trade	0,6529	8,62	0,0277	0,32	1,5877	13,68	-1,5078	-2,67		
Donation Label	-0,3281	-4,89	0,1592	2,13	-0,7701	-7,33	0,2818	0,68		
Donation										
no donation	-0,6769	-8,17	-0,3918	-4,49	-0,6660	-5,67	2,2652	2,05	2E-56	2E-10
0.2 EUR	-0,3367	-3,98	-0,2333	-2,59	0,0069	0,06	-3,9670	-1,24		
0.5 EUR	0,2349	3,26	0,3618	5,07	0,5521	5,86	0,4980	0,44		
1 EUR	0,7787	9,98	0,2633	2,93	0,1070	0,99	1,2038	1,07		
None	-12,8737	-18,17	-6,0169	-5,57	-3,0591	-8,08	0,2127	0,15	4,4E-86	6,5E-37
Class Membership model										
Intercept	0,7385	1,05	0,6391	0,84	-0,156	-0,18	-1,2216	-0,84	0,64	
Covariates										
Age	-0,0996	-2,30	0,1235	2,62	-0,0971	-1,81	0,0731	0,86	0,001	
Education	0,1689	1,00	-0,0675	-0,37	0,4789	2,39	-0,5803	-1,62	0,081	
Income	-0,0010	-0,02	-0,0029	-0,05	0,0566	0,98	-0,0527	-0,57	0,810	
Gender	-0,0577	-0,25	-0,1576	-0,62	-0,0137	-0,05	0,2291	0,47	0,940	
Children	0,3033	1,91	-0,0380	-0,19	-0,2073	-0,88	-0,0580	-0,17	0,190	
Donor and buyer	0,2017	1,46	0,3766	2,57	0,4768	3,09	-1,0551	-2,97	0,006	
Feel responsible	-0,0932	-1,20	0,0400	0,50	-0,0101	-0,11	0,0633	0,40	0,580	
Feel connected	0,1380	1,94	-0,0257	-0,32	-0,0101	-0,11	-0,1021	-0,69	0,240	
Want to help	0,1154	1,36	-0,0444	-0,45	0,1471	1,41	-0,2181	-1,13	0,290	
Think ,organic' is important	0,1299	1,51	0,0692	0,71	-0,2094	-1,84	0,0103	0,06	0,110	
Think ,no child labor' is important	0,0838	1,04	0,0301	0,29	-0,1906	-1,34	0,0767	0,53	0,500	
Think ,adequate producer price' is important	0,0564	0,72	-0,1396	-1,43	-0,4158	-3,69	0,4990	3,33	0,0002	
Think ,cheap product' is important	-0,2795	-2,96	-0,1387	-1,34	0,3133	2,86	0,1049	0,57	0,0002	

***Table 3** Parameter estimates of the 4 class model*

The upper part of the table presents the choice model and shows the parameter estimates of the segment specific utility functions. The lower part of table 3 shows the results of the class membership model. All coffee attributes affect significantly the choice over the classes. The Wald (=) statistic (which checks "the equality of each set of regression effects across classes" (Vermunt and Magidson, p.121) indicates whether parameters differ significantly between groups. It shows preference heterogeneity for all attributes and the "none of these" alternative. The comparison of the coefficients reveals differences between the classes with regard to the highest valued attributes and allows the naming of the groups: class 1 - the price conscious coffee shoppers - are the most price sensitive and with 43% of all respondents belonging to it

the biggest class, Class 2 - the donors - love the donation in combination with the product purchase but not FT and is with 28% of the respondents a bit bigger than class 3 (25%), class 3 - the FT and organic lovers - highly value organic production and FT and class 4 - the denier - is the smallest class with 2% and dislikes any kind of label on the coffee. The different parameter estimates for the classes support the existence of preference heterogeneity in the sample for coffee attributes. Results from the model of choices indicate that class 1 is a bit similar to class 3 in having positive parameter estimates for organic production, FT and the donation amount labelled on the coffee pack. The high z-values lead to the conclusion that all the estimates for class 1 are significant. Class 2 cannot be analysed with respect to organic production and FT because the z-values are not significant. Interestingly class 2 shows the lowest parameter estimates compared to the other classes for the labelled amount of donation. Class 3 is the least price sensitive class and has a strong preference for organic and FT indicated by the high magnitudes of the parameter. No clear statement can be given about the preference for a high amount of donation because the z-values for 0.2 and 1 EUR are not significant. Nevertheless, we can state that class 3 prefers a donation of 0.5 EUR over no donation and therefore CRM activities positively influence the utility of class 3 members. Class 4 members strongly dislike organic and FT labelling and "no amount" of donation influences the members' utility positively.

The class membership model allows us to identify the sources for the differences in the choice model. Results show a significant effect of the covariates age, education, classification of respondents as donors, FT buyer, both or nothing at all, the adequate producer price and the desire to buy cheap products. Class 1 includes respondents which are compared to the other segments significantly younger and indicated significantly more often that the price of a product is very important for their purchase decision and that cheap products are preferred. Class 2 includes significantly more donors and elderly respondents than the other classes. When it comes to the influence of the variable adequate producer price and the importance of cheap products class 3 significantly differs from the other classes: the compliance for the statement that a fair price is essential for the purchase of food was very high. At the same time class 3 strongly disagreed with that statement. In class 3 we find significantly often very well educated people with a university degree, more purchasers of FT products and more people purchasing and donating to developmental projects at the same time. Class 4 significantly differs from the other classes with respect to the statement of the fair price for producers: they strongly negate that this is an issue influencing their purchase decision. Class 4 includes respondents who neither donated nor purchased FT products.

5. CONCLUSION

This study investigates the preference heterogeneity of consumers regarding FT and donations to developmental purposes. In this regard, we applied choice experiments in a consumer survey and used a LCM to analyze the data for characterisation of the preference heterogeneity. The results of the latent class analysis show that segments of consumers can be differentiated with respect to their preferences for FT and monetary donations. Furthermore, it becomes evident that class membership is conditional on individual characteristics like attitudes and socio-demographic characteristics. In the analysis we found evidence of four latent classes with statistically well defined preferences. Our results are to a certain extent in line with the earlier mentioned of the Verbraucher Initiative (2007) and GfK (2008b): elderly people who at the same time give donations to developmental purposes tend to choose a coffee with a donation label. At the same time we identify a completely different group of highly educated mid-agers with a strong favour for organic production and FT. This group is hardly price sensitive. Although consumers also give to charity they do not value a donation in form of CRM. The largest class of price sensitive people show characteristics of free

riding: in the choice model they show positive parameters for FT, organic production and a high indicated donation amount going to the coffee producer. But in the model for classes these variables are not significantly different from the other classes. Interestingly concerns about fair wages for producers (54% agreed this is very important or important for their food purchase decision), absence of child labour (82% agreed this is very important or important for their food purchase decision) do play an important role when people are asked directly for these issues in the questionnaire. But only class 1 and 3 do the transfer from the statements and choose the coffee with the FT label. Furthermore, the results in table 3 indicate that statements regarding the feeling of responsibility towards marginalised producers or the wish to help these people included as covariates do not provide further inside in the creating process of utility.

It becomes evident that half of the respondents have a positive attitude towards FT and CRM activities. As these respondents are not identical cannibalism between CRM activities and FT is not very likely. Thus, we can state that at least some German coffee drinkers care about poverty of marginalised people in developing countries in daily purchase decisions.

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Consumer's Decision-Making Process and Purchasing Behaviour for Wine in the Island of Lefkada

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Abstract

Wine has become a significant beverage in many nations around the world. Actually, in Greece wisely consuming wine is considered being part of the daily diet, which can contribute to a healthier life. Recently sale on local produced wine is falling because of many imported cheaper wines. If local wine production declines the economic condition of many small towns in Greece whose local economy depends on wine production will be in peril and the consequences irreversible. The aim of this study was to analyse consumer's decision-making process and purchasing behaviour for wine in order to increase local wine consumption by collecting primary data through a questionnaire survey. The questionnaire gathered information on the demographic characteristics and purchasing behaviour for local wine of 101 wine consumers who reside on the island of Lefkada. It was found that wine consumers drink wine few times per week mainly for pleasure during family or traditional gatherings. Consumers choose the wine based on taste and colour or on the recommendation of friends and they buy wine from liquor stores and not from local wine co-operatives. It is important to educate consumers to realize that buying from wine co-operatives they can have better prices and in that way they promote local economy. Also, producers can be educated through seminars for consumer's decision making process in order to learn methods to promote their product at national and international level.

Key words: Consumer's decision-making process, purchasing behaviour, consumption, wine cooperation

Introduction

Since ancient time in Greece, moderate wine consumption was part of a daily diet and it was believed that it had beneficial effects on human health. Even today, it has been proved that the moderate consumption of wine, and particularly red wine, has positive effects on health and even promotes longevity (Galani –Nikolakaki et al., 2002; Lachman et al., 2007; Takacs et al., 2007). Nevertheless, wine consumption constitutes an important part of the diet in many nations around the world (Makris et al., 2006).

However, in traditional wine producing and consuming countries, the function of wine has been changing from nutrition to pleasure. Wine is consumed on special occasions and represents a sort of status symbol, leading to a more occasional drinking. According to various studies, the consumption of wine nowadays is influenced, on one hand from a long-lasting tradition that is characterized by religious and symbolic values, and on the other hand from a new behaviour of market and consumption that is connected with pleasure, psychological satisfaction and cultural values (Fotopoulos et al., 2003; Hertzberg & Malorgio, 2008). Today, there is an increasing demand for wines, especially those that they have fresh and fruits aroma (Zalacain et al., 2007).

Enterprises that deal with the marketing of wine need to know the consumer's needs for wine, his preferences, his attitude and his purchasing behaviour, so that to create the necessary

conditions for future production. Many studies have been carried out with regard to the attitudes and the preferences of consumers toward to wine. More specifically, Gil and Sanchez (1997) investigated and compared the preferences of consumers of wine from two different regions of Spain. The price, the origin and the year yield of grapes were the three characteristics that they used in their analysis. The results showed that consumers from these two regions follow different behaviours and, accordingly, they developed different strategies of marketing, so that they satisfy the particular preferences of all consumers.

In another study, Goldsmith and Hauteville (1998) investigated the characteristics of wine consumers and they grouped the consumers in three groups based of how frequently they purchase wine. According to the results of this study, the group with the heavier users of wine appears to be better informed compared to the other two groups of consumers. Tzimitra-Kalogianni et al. (1999) investigated the behaviour of wine consumers in regions of northern Greece. The Greek consumers consider that the wine makes good in their health and they prefer to buy bottled wine, mainly from supermarket or wine-cellars and they prefer dry wine. The main characteristics of wine that influence the purchasing behaviour of consumers are the flavour, the colour, the grapevine origin, the aroma and the brand name. The price of wine in Greece is considered to be reasonable for the majority of consumers. However, this study showed that even those consumers who consume wine almost in a daily basis, they are not well informed for the particular characteristics of wine. It was proposed for consumers interests need to be informed for the stages of production of wine, the differences among different types of wine and the ethics of wine consumption. Also, Hertzberg & Malorgio (2008) examined the preferences of 444 wine consumers in North-Eastern Italy. The results showed that certain demographic characteristics of consumer, such as age, affect the wine consumption frequency and the type of wine that they prefer. According to the researchers, the presence of α designation of origin, a known brand and the indication of the grapevine variety on the label increase the choice probability and are all associated with a positive wine consuming. Other criteria of choice are the flavour and the opinion of social environment. Finally, important characteristics of wine that influence the purchasing behaviour of consumer are the place of origin of wine and its price. (Mtimet & Albisu, 2006; Martinez-Carrasco et al., 2006; Perrouty et al., 2006; Hertzberg & Malorgio, 2008).

In recent years, in Greece wine consumption per capita is 35 litres per year. In previous years, greek wine consumption had a reducing tendency, probably because consumers replaced greek wine in favour of the imported alcoholic drinks and beer. The demand of imported alcoholic drinks had increased because of a favourable advertisement (Oustapasidis & Vlachvei, 1999).

In the past few years the quality of local wines has improved considerably, but they are still downgraded in the domestic market, since they can not compete against cheapest imported wines. The decrease on sales on local produced wine can cause economical problems in many small towns in Greece whose local economy depends on wine production. One place that faces such a problem is the island of Lefkada. Wine production and marketing in the island is done mainly in a co-operative level. The main aim of the co-operative is bottling and marketing the wine on behalf of the producers. However, one of the main problems that the co-operative faces is its inability to promote the "lefkaditiko" wine to a wider consuming public. The aim of the present work was to investigate the wine purchasing and consuming behaviour of residents of island of Lefkada in order to increase local wine consumption and to recommend to the consumers that by buying from wine co-operatives they can have better prices and in that way they promote the local economy.

The research area:

Lefkada is a mountainous island in the Ionian Sea, which is fourth in size out of all the islands in Ionian Sea. The population of the island according to the census of 2001 is 22,006 individuals who reside permanently on the island. The economically active population is 8,471 of which 18% is occupied in the primary sector and 11% in the trade. Wine production is one of the main economic activities for the island of Lefkada. Since ancient times up to today, vines grow in all the possible cultivated mountainous areas of the island, which is the main agricultural product of this place. Table 3 shows the cultivated acres since 1980. Since 1986 the cultivated acres are decreasing progressively every year, until the last four years where the cultivated area remains constant, while the production of wine is also decreasing with small ups and downs (Table 4).
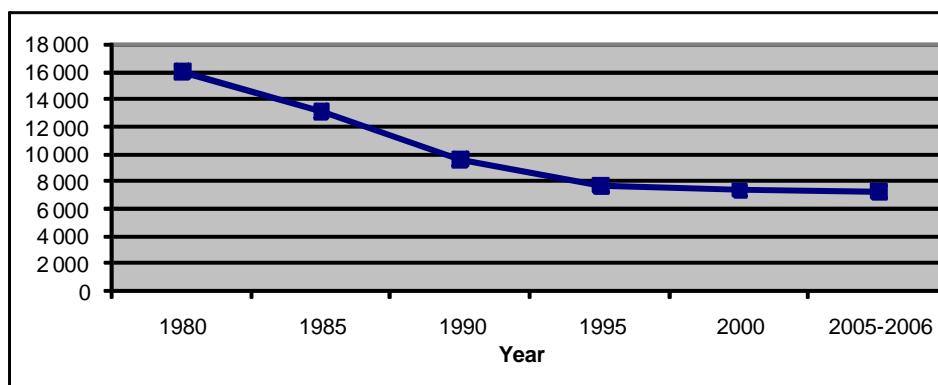
Table 3: Mean of cultivated acres for the production of wine for years 1980-2006
Source: Agricultural Sector of Lefkada

Table 4: Average consumption of wine for years 1980-2006 (in tons)
Source: Agricultural Sector of Lefkada
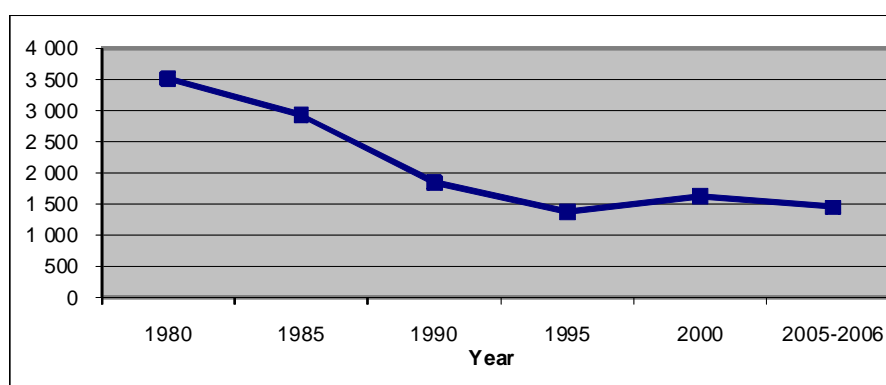
Methodology

The aim of this study was to analyse consumer's decision-making process and purchasing behaviour for wine in order to increase local wine consumption. The study focused on wine consumers who lived on the island of Lefkada.

A questionnaire survey was conducted to collect primary data for this study during 2007. The survey was conducted using a structured close-ended type questionnaire. The questionnaire consisted of three sections: the first one investigated the socio-economic characteristics of the respondents; the second one explored purchasing and consumption behaviour and motivations, and the third one explored the wine consumers' opinion about the wine cooperative of the island.

The collected data were analyzed using descriptive statistics for calculating the means and standard deviations of continuous variables and the frequencies and percentages of categorical variables. The correlation between the respondents' characteristics and their purchasing behavior was studied using the chi-square test.

Results

The questionnaire gathered information about major socio-demographic characteristics of 101 wine consumers and their purchasing behaviour for local wine. There were three general limitations in the study. First, all the participants consumed wine being produced in the island of Lefkada, second, all the participants were aged 18 and over and at last, only one adult from each household could responded to the questionnaire.

Socio-demographic and economic characteristics of the sample:

According to the data analysis, the majority of the respondents (51%) were women. Most of the individuals were unmarried (48%). The respondents had attended high school (36%) and were employed mainly in the civil sector (29%). Twenty nine percent (29%) of the sample had a yearly personal income less than €6,000.

Thirty one percent (31%) of the respondents consume "lefkaditiko" wine few times per week, mainly for reasons of pleasure (80%). The consumption of "lefkaditiko" wine is associated with familial meetings and circumstances.

With regard to the type of wine, 42% percent of the consumers prefer white dry and 33% prefer red. Consumers prefer wine in bulk not bottled (69%). Consumers buy wine mainly from supermarkets (40%) and wine-cellars (32%). On the contrary, only 6% of consumers prefer to buy the local bottled "lefkaditiko" wine from the local co-operative. Fifty six percent (56%) of the respondents buy lefkaditiko" wine on the basis of flavour. For 38% of the respondents the aroma plays important role in their choice of "lefkaditiko" wine, while other important criteria that shape their purchasing behaviour are the lucidity of wine (42%), its colour clearness (37%), the intensity of colour (43%), the brightness (36%) and its fluidity (30%).

The price of 'lefkaditiko" wine is judged as average for 75% of the consumers, even if it affects in the purchasing decisions of consumers in moderate degree (36%). Buying 'lefkaditiko" wine is based on the packaging (38%) and trade name (29%). Advertisement does not constitute criterion for the choice of "lefkaditiko" wine according to the 29% of the respondents. Sixteen percent of the respondents consider that advertising plays an important role to their decision to buy "lefkaditiko" wine. Also, the effect of social environment in the purchasing decision for wine plays important role for 54% of the buyers. Finally, the authenticity of product affects the decision of consumers (43%) to buy "lefkaditiko" wine, because it is a local traditional product connected with the cultural history of island.

In general terms, consumers are satisfied to a great degree from the quality of "lefkaditiko" wine (56%). However, to the question that concerned the improvement of quality of "lefkaditiko" wine, 43% proposed the production of more varieties, while 26% proposed the promotion of the product outside the island. Twenty one percent (21%) judged that there is no need for improvement. Twenty percent (20%) believe that "lefkaditiko" wine needs to improve its packaging. Improvement of price was proposed by the 12% of the consumers and, finally, 1% judged that it should becomes better control at the collection of grapes, so that it is produced wine of better quality.

Results of χ^2

Based on the results of χ^2, the knowledge on subjects of wine is related with the gender of the consumer ($p<0.05$). Also, the frequency of wine consumption appears to be higher for married

people (p<0.05). Finally, men prefer to consume wine which is associated with their tradition and culture (p<0.05).

Conclusions

According to the results, the respondents consumed wine few times per week, mainly for pleasure and during family or traditional gatherings. Consumers chose the wine based on taste and colour or on the recommendation of their friends and they used to buy it from liquor stores and not from local wine co-operatives. Results also showed that certain individual characteristics, such as gender and family status, affect the consumer structure of preferences.

As a consequence of the increased level of competitiveness in wine markets, companies need to acquire information about the customers' requests. It is important to educate consumers to realize that buying from wine co-operative they can have better prices and in that way they promote local economy. Furthermore, producers, through seminars, can be educated for consumer's decision making process in order to learn methods to promote their product in national and international level.

Moreover, consumers believe that it is important to promote and advertise local products like the "lefkaditiko" wine which they can promote local economy. Therefore, it is important on one hand consumers to be informed about products' and on the other hand to improve local foods quality so they are competitive in the local or in the international market.

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Illegally Sweet

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Introduction

Have you ever tasted Colombian sweets? ... bocadillos veleños, arequipe con brevas, mantecada, liberales, dulce de mango, de uchuva, caramelos de café, cocada…?
Do you know COCADA? a traditional candy made out of coconuts? Coconuts, those nuts that grow in warm lands where also Cacao is grown? Cacao, you know, the main bitter/sweet ingredient to produce chocolate. Don't you? Well, the bitter part of this sweet story is that for sure, all you know about Colombia is not related to its "sweets" but to drugs. So, when I mention Coco or Cocoa you might straightaway relate it, at least unconsciously, to Coca.

This paper aims at firstly, clarify, make a difference and explain why is it that Coca is not cocaine and that as such, this plant has lots to tell regarding consumer citizenship in third world countries, although not only there. Secondly, to develop the following idea: "sustainable consumption, in order to go really global, should -also- address the thin border between legal and illegal", or better, we should tackle the topic of drugs consumption and the fact that third world countries produce much of what developed countries consume.
But such a discussion has been set on different tables at different times, the point here and now is trying to look beyond and see which could be the "positive" side of the legalization discourse. Our aim then, is working on the following questions:

How can we help choosing sustainable lifestyles, which overcome the borders between what's legal (in northern countries) and what's not in the South?
> Could legalization bring about any kind of social sustainability?
and
> Would all this fit into the long-term global goals for sustainable development?

Having set this on the table, it is important to deep in the idea that sustainable consumption should assess the responsibility that the developed world has with regards to the production of illegal matters, such as cocaine.
I will focus here on cocaine hence marihuana has had another path thanks, among others, to frankness, transparency, non restrictive policies – in countries such as Holland-, communication means and a very wide variety of users.

Coca is not cocaine

It is crucial to clarify a continuing confusion on the distinction between the Coca leaf and its principal derivate: cocaine. This clarification needs to be reached in order to repair a world-wide prejudice and to prompt at global level, respect for our cultural heritage.
According to Comunidae Segura (a network on ideas and practices regarding human and citizenship security) and to a study published by Harvard University in 1975 (Duke, J. ed. al):
"*chewing 100 grams of coca is enough to satisfy the nutritional needs of an adult for 24 hours. Thanks to the fact that Coca leaf contains calcium, proteins, vitamins A and E, and other nutrients, the plant offers even better possibilities to the field of human nutrition than it does to that of medicine, where it is commonly used today […] In spite of coca being*

persecuted for being the raw material of cocaine, scientists discovered that the sap in its leaves contains more then ten different alkaloid substances, and that cocaine strictly speaking amounts to less than 1% of that total. According to pharmacological studies carried out at the University of Caldas, Colombia, if consumed in its natural form, the leaf is not toxic and doesn't produce dependency. It acts like a mild stimulant, improving attention and the coordination of ideas, akin to concentrated coffee".

Why then the prejudice against coca?

Pien Metaal[13], Political Scientist at the Transnational Institute[14], replies: "*The answer to this question would take up an entire book. To put it in very briefly, the prejudice against coca is basically due to racism and an ignorance of other cultures*".

Urban consumption, a possibility

For over a thousand years South American indigenous peoples have chewed Coca leaves.[15] Nowadays its use is not just hidden in isolated exuberant parts of the South American Mountains; the Coca leaf is already arriving to the city markets.

Some weeks ago, there was this huge national gather of farmers at the Bolivar Square in Bogotá, the city's main square. That market, called Mercados Campesinos is a project supported among others by OXFAM[16], ILSA[17] and the European Union, which aims are: promoting local experiences in the management of biodiversity, sustainable agriculture and food sovereignty, providing information, and promoting actions to face the GMO's problems among communities and organizations. At a larger extend it aims at preventing farmers from running away and abandon the country side; an abandonment, almost a critical mass one, which has many roots: political, such as the fact that farmers stop growing food because they got tired of having the guerrilla passing by their farms and taking away all the harvest "for free" leaving them empty handed; facts such as fear because a lot of the country side, specially in the south of the country is ruled by narcotraffic, a mafia that forces population to grow coca; facts such as the will to go to the city to find the life that TV ads preaches everyone can have; and even because of natural reasons such as el niño and la niña phenomena, because global climate change also affects their harvests and living means.

Now, in this Mercado Campesino, I found a very relevant initiative regarding the topic that we are developing here. There was this one stall selling Coca Products.

The "manager" was a young man with a whole ancestral knowledge behind; he was coming from Bolivia, country in which the discourse towards legalization has moved far ahead. The guy was displaying all sorts of products ranging from coca tea to coca rub cream for aching muscles, passing through coca energetic beverage, coca soap, and a coca powder to be added to soups and juices. As seen, Coca uses range from alleviating hunger and thirst, to combat fatigue and the effects of altitude. Now along with coca leaves, one can also find at the farmer's market: Quinua, Amaranto and Maka other endemic plants from the Andean mountains which happen to provide Omega 6 and lots of amino-acids, minerals and vitamins[18] that are of utmost importance for the human diet. Now, the consumption of these

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[13]Metaal P. is co-author of the report "Coca Yes, Cocaine No? Legal Options for the Coca Leaf" of TNI's Drugs and Democracy project [where one can see that] the inclusion of the coca leaf alongside cocaine and heroin in Schedule I of the UN Single Convention on Narcotic Drugs from 1961"[13].

[14] TNI Transnational Institute. Dutch research center that studies drug policy

[15] Altman AJ, Albert DM, Fournier GA (1985). "Cocaine's use in ophthalmology: our 100-year heritage". Surv Ophthalmol 29: 300–307. doi:10.1016/0039-6257(85)90153-5.

[16] OXFAM a gather of 13 institutions to fight poverty and injustice in 100 countries in the world http://ilsa.org.co:81/node/155

[17] ILSA Latin American institute for Alternative Legal Services http://ilsa.org.co:81/node/155

[18] Duke, J.A., Aulik, D., and Plowman, T. 1975. Nutritional Value of Coca. *Botanical Museum Leaflets* 24(6):113-119.

products help preserving a whole range of daily practices and ancient cosmology lying as part of their day to day life, and this talks about other rhythms and ways of being and doing, different to those that contemporary sells us every day.

These products, apart from the Mercados Campesinos, are starting, again, to be sold at two or three shops in Bogotá but have a small success because apart from being banned from big supermarkets, the products are not enough publicized and many consumers see those as a mere tradition without any scientific base. That is why people with a rather privileged purchasing capacity, belonging to higher strata of the society, do not actually buy those, or if they do is just to try it as an exotic something but without looking all the connotations that this new market for Coca products has behind. The world that lies behind this new market, the one of Coca leaves is not the world of cocaine, it implies a clearer labour, which in the case of drugs production is totally dark and full of child labour, expropriation of farmer's land, fumigation of fields done with substances that are harmful for the population (although the United States affirms that it is all ok[19]), etc. It is a market that gives value to our territory, our history, fauna, flora, diversity, and especially to our people, the farmers and their endangered roots.

Going global

An interesting scenario to address and work on the topic is the international arena. In that line: what if profiting the fact that as said above the Coca plant contains lots of nutrients, the strategy were to address it at an international level but on a radically different way to the one so far used? What if we could bring it to the next universal Exhibition in EXPO-2015 Milan, and set a rather different Colombian pavillion? Expo 2015 will be focus on food and health, (its slogan reads: feeding the planet, energy for life…), so what about having a Colombian pavilion dedicated entirely to that which makes us "famous"? What if we could show all the pros and cons of the issue and face the fame that we have got so far and showing that other side of the Coca plant?. It would not be a pavilion where among things like coffee, emeralds, typical dances, biodiversity or "sweets" we set a small corner to talk about Coca, no, it would have to be a pavillion, totally focused on the plant. Unfortunately, I do not see it happening. Not because, on one hand there is any mobilization towards the legalization of the matter, and on the other, because there is fear on the air…

Although the real fear should come from the direction in which humankind seems to be moving towards.

Having said that, the moment to take the topic down to earth has come. An example is needed; and here I will start with a personal experience: Having come back from Europe, after a couple of years studying abroad, I noticed that there were more foreigners on the streets. Looking back, that was not so common before, given the fame that Colombia had/has, as an extremely dangerous country, so dangerous that some governments of foreigner lands used to beware their citizens before their depart.

Finding much more tourists, is not bad, but I have always looked at these "intrepid" tourists as a hazard, given that Colombia with such a great deal of biodiversity, cheap food, wonderful landscapes and welcoming people, fulfills the requirements to develop an eco-tourism industry, an industry where in not well prepared countries, sets its population at risk to be spoiled; that happens already world-wide from porters, monks and kids in Nepal to indigenous in the Amazon. So the fact of seeing this proliferation of foreigners in my country provoked a slightly disturbing feeling in me.

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http://www.comunidadesegura.org/?q=en/node/35426

http://www.prlog.org/10000473--osteoporosis-free-with-peruvian-coca-leaf.html

[19] http://www.mindfully.org/Reform/2004/Super-Coca-TNI8sep04.htm

Some weeks after my arrival, I learnt that a journalist had made a special reportage following the footprints of the tourist path of drugs. I knew that of course, if Colombia has fame because of something is because Cocaine it is produce there, but somehow I had never acknowledged that there was a "path of Cocaine"!, it might sound naïve but, given that the drug topic is so "familiar" for us, I have never got into senses of the fact that, just like in Italy there is the wine path, or in France, Quebec and Switzerland there are *routes du fromage*, in Colombia we have the path of Cocaine. People come from all over the world, especially Europe, the United States and Israel to "taste" drugs. And that is both, disrupting and offensive hence with which "ethical right" do countries like the United States claim that it is us who have to control Coca crops when they have not being able to control consumption up there?!.

Now, this goes deeper because here we are talking directly about sustainability, the ability to sustain life, the ways to reach well being and quality of life, not only for those who spoil their lives by consuming drugs but for those who produce it.

Legalization? Don't

Usually, when one says to a child: "do not do this", the first thing he'll do is to defy the order. It seems that breaking the bans, disobey the law or tear the constraints that in a way or another threaten our freedom, are a constant in human's behaviour. Promoters of legalization of tobacco and alcohol in the United States understood that long time ago.

In our case, we are talking about two kinds of legalization, one aiming at debunk the fact that Coca plant is, to say it briefly: "bad" and then give back its proper "legal" value; the other, moving towards a legalization of a substance that has lots to do with social responsibility but also with freedom and the fact that by having it illegal is nurturing the worlds of guerrilla and narcotraffic.

Cocaine has had gone so far in its "success", but why? That is the first thing one has to ask. Now, the answer is way to easy to find: because it is illegal. And it is illegal from different perspectives: a. illegal from viewpoint of the people who grow it, but they know that their lands will be "harvesting" more money in less time, avoiding all the troubles that nowadays they face regarding home-economics, education and transportation means of local products such as fruits or vegetables.

b. illegal from the viewpoint of the drug's dealers; but being it a prohibited merchandise, they can play with its cost and sell it at their willing price, and finally, most important, c. illegal from the "user's" viewpoint for whom by means of Cocaine they enter a certain social circle, fight depression, and keep awake hence according to Freud in his work "Über Coca" (1884), cocaine is a stimulant of the central nervous system, an appetite suppressant and a social "gadget", meaning: "*cocaine's status as a club drug shows its immense popularity among the 'party crowd'*"[20]. What users cannot figure out is how addictive the substance is.

Now where did the "legalization" got lost if, "*in 1885 the U.S. manufacturer Parke-Davis sold cocaine in various forms, including cigarettes, powder, and even a cocaine mixture that could be injected directly into the user's veins with the included needle. The company promised that its Cocaine products would "supply the place of food, make the coward brave, the silent eloquent and ... render the sufferer insensitive to pain."*"[21].

With all this landscape it is far well understandable the fact that foreign addicts come buying cocaine to Colombia hence, there is no other county selling it so, so absurdly cheap.

Legalization, the main part of the discussion lies here. But as said legalization is difficult to reach. I do not see it happening in the next 80 years. Nevertheless a start has been rising in other latitudes such as Peru or Bolivia (who has sold it under formal terms to Coca-Cola

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[20] http://en.wikipedia.org/wiki/Cocaine#cite_ref-17
[21] http://en.wikipedia.org/wiki/Cocaine#cite_ref-barlow_15-0

company, hence a clue ingredient of the beverage was, or is the Coca leaf, they claim that is a flavor enhancer…) .

Amira Armenta, working at the Transnational Institute states that another possible argument to explain Coca policies has to do with the production of the soft drink Coca-Sek, made of Coca leaves just like Coca-Cola, according to her: "*the indigenous population from the Cauca region reported that the multinational company would pressure to veto the Coca-Sek produced by the community. But in spite all this, in 2003, the Colombian company Nasa Coca won a Coca-Cola trademark infringement suit that tried to ban any publicity using this name […]. To prohibit Coca tea right now is to once again submit the communities to foreign interests*".

Conclusions

With this panorama it seems that the academia could/should start promoting the look towards the "illegal" in order to assess its worldwide relevance and tackle its possible transitions on a planet whereas the only thing that prohibition awakes is desire.

In this regard, Antanas Mockus[22] former mayor of Bogotá used to say: "*during my period as Major what I wanted was people acting as real committed citizens. For that, I convinced them to obey the law, even if this meant that I had to modify the law*". And that refers not only to policy laws but also to the laws that regulate the collective mind.

Now, could the illegality topic go beyond disciplines such as Law or Economics and start being addressed by the world of, for instance, Design? Could we ask citizens, just as the motto of an initiative called Dott, Design of The Times in the UK asked: "*who designs your life*"? Could we prompt self-responsibility and respect at both personal and social levels? In this regard Victor Papanek[23], a well-known designer used to say: "*design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself)*".

The above mentioned are some of the questions that we aim at leaving for your consideration. But furthermore, we could ask if Coca plant could be instrumental in the so called "sustainable development" discourse?.

To end up, there is to say that maybe all this is not even about the war against drugs… Maybe that is just a distracter, a very disrupting one, because maybe, the real problem lies where "*Asian Dub Foundation*" an English group of musicians, expressed in one of their concerts while visiting Colombia. They said: "*Colombia: the developed world does not want to go to your country and help you to fight drugs… what they actually want, is your oil!*"

Oil… maybe the problem is that hidden fossil treasure. But that is another story, the story of a civilization based on oil. A, nor bitter neither sweet element in nature. An element that for our civilization seems to be utmost tasty. Oil, petroleum, cars, commodities derived; things in which investments are nowadays done, investments in research to find it and produce more.

If all the money that is invested in the Oil industry or all the money that is invested in fighting drugs, fumigating and deviating the actual problems of humanity were invested in education, a big deal of the global troubles could be solved. Education aiming at: inform civilians regarding what Coca crops actually are; re-give value to ancient practices related to Andean

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[22] Citizenship culture: a didactic program to enhance citizens' sense of belonging and care for the city by means of strong reciprocators (Feder's definition for those people willing to socially sanction their fellow citizens when are not obeying a social norm even if from it there is any derived benefit for him/her). For the program Mockus engaged theatre, mimes and informal games among citizens.

[23] Papanek, Victor. (1995) The Green Imperative. Published by Thames and Hudson, London.

endemic plants; open people's minds to the possibilities that traditional plants offer, promote respect towards the unknown, and therefore fighting the deviating fears of our civilization.

But specially, an education which helps consumers in the process of attaining criteria and accordingly, adopt a self-position in front of the Coca crop, being it legal or not.

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Understanding Teachers' Consumer and Environmental Behaviours

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Abstract
Better understanding of consumer and environmental behaviours of pre-school, primary school and biology teachers in Slovenia is a primary goal of this research paper. The aim of the paper is to find out how are teacher's values, their different degrees of science education, employment in Eco schools and working experiences influencing on reported consumer and environmental behaviours? A survey was conducted on a sample of 341 pre-school teachers, primary (elementary) school teachers and biology teachers in Slovenia. Results show that in five out of nine environmental and consumer behaviours fulfilment value type is proven to have a positive impact. Variance analysis made to determine teachers' environmental and consumer behaviours according to their different degree of science education speak in favour of more educated. Eco school variable did not prove to be significant in explaining positive consumer and environmental behaviours. Last but not least, older and more experienced teachers held more positive environmental and consumer behaviours.

Key words: consumer behaviour, environmental behaviour, teacher, values, Eco school

INTRODUCTION

Sustainable education has a major role in the new primary school curriculum in Slovenia (beginning fully in 2007), and is formalized in the 1996 White Paper on Education in the Republic of Slovenia. Developing a responsible attitude by children towards nature is one of the major goals of the new educational framework set out in that White Paper. Teachers often serve as role models for children and students (e.g. Chawla, 1998). A teacher that wishes to be a successful environmental educator should become an example of a sustainable way of life (and not just talk about it), and should therefore possess appropriate behaviours (Torkar, 2006). Kollmuss and Agyeman (2002) reported that people often profess positive environmental attitudes but do not engage in appropriate behaviours. This inconsistency is very dangerous in the school environment, where teachers are closely observed by students.

A better understanding of consumer and environmental behaviours of pre-school, primary school and biology teachers in Slovenia is a primary goal of this research paper. Pre-school teachers in Slovenia teach children up to the age of 6. From the age of 6 to 11 they are taught by primary (elementary) school teachers. Primary school biology teachers teach pupils aged 13 and 14 a school subject biology, and sometimes also to 11 and 12 years old pupils a school subject science.

The aim is to find out how are teacher's values, their different degrees of science education, employment in Eco schools and seniority (work experiences) influencing on their consumer and environmental behaviours?

Personal values

Values are often invoked in discussions of how to develop a more sustainable relationship with the environment. Several studies have shown that values contribute to the explanation of various environmental attitudes and behaviours (see De Groot and Steg, 2007; Karp, 1996;

Poortiga et al., 2006; Schultz and Zelezny, 1998; Schultz and Zelezny, 1999; Schultz et al., 2005). A large number of empirical studies concerning values are based on Schwartz's Value Theory (Schwartz, 1992). He defined a value as "a desirable transsituational goal varying in importance, which serves as a guiding principle in the life of a person or other social entity" (1992, p.21). Values provide an efficient instrument for describing and explaining similarities and differences between persons, groups, nations, and cultures (Rokeach, 1973). According to the majority of authors, who investigated the values by means of emprical methods, the structure of human values is hierarchically structured (Musek, 1993; Rokeach 1973; Schwartz and Bardi, 2001).

The Schwartz Value Survey (Figure 1) contains 56 survey items that participants are asked to rate on a nine-point scale, indicating how important each stated value is as a guiding principle in their life. The importance of these values may differ across persons and cultures, but the structure of these values is believed to be universal (Schwartz and Bardi, 2001; Schwartz, 2007). The first dimension, openness to change versus conservatism, distinguishes values that stress independence from values that emphasize tradition and conformity. The second dimension distinguishes a social or self-transcendent value orientation from an egoistic or self-enhancement value orientation. The self-transcendent value type includes altruistic and biospheric values such as universalism and benevolence, and the self-enhancement value type includes values that are related to the pursuit of personal interests, such as power and achievement (Struch et al., 2002).
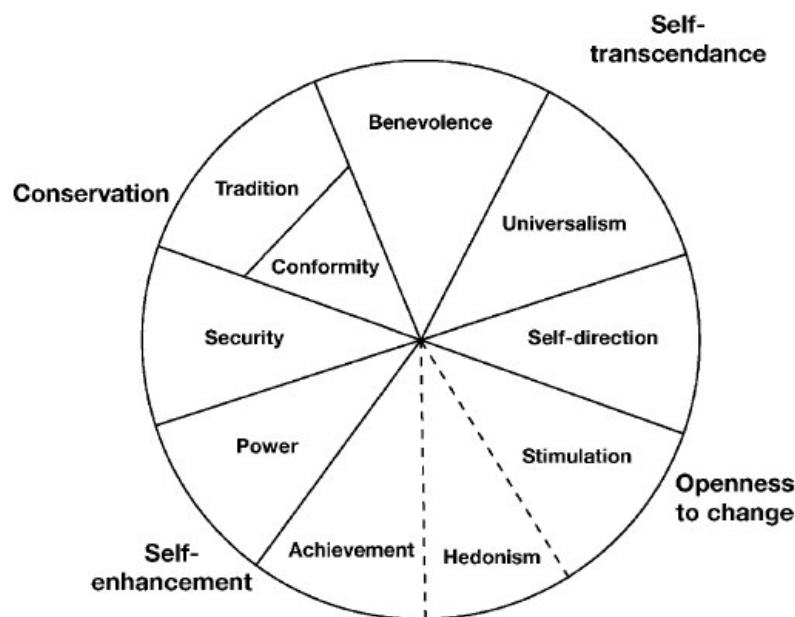
Figure 1 *Schwartz's theoretical model of relations among his ten motivational types of values (Struch et al., 2002)*

In studies examining the link between values and environmental behaviour researchers found that values of self-transcendence were positively correlated with self-reported consumer and environmental behaviour (Karp, 1996; Schultz and Zelezny, 1999; Schultz et al., 2005). In contrast, self-enhancement values were negatively correlated with self-reported consumer and environmental behaviour (Karp, 1996). The results of a study examining willingness to reduce car use support the overall pattern of relations between values and pro-environmental behaviour (Nordlund and Garvill, 2002). From their research it is also evident that individuals that gave priority to self-transcendent values were more aware of threats (or consequences) to

the environment and perceived a stronger moral obligation to act to protect the environment than individuals that gave priority to self-enhancement values.

As already mentioned before, most of the studies mainly used Schwartz's Value Survey (1992) to measure link between values and consumer behaviour. In our study we intend to use Musek's Scale of Values (MSV) (Musek, 1993; Musek, 1997; Musek, 2000), which has a structure similar to Schwartz's instrument. Schwartz's value types correspond to the concept of middle-range categories of values (also named value types) in Musek's model. Based on the results of multivariate studies, he assigned meaningful empirical categories of values to various levels of the postulated structural hierarchy. At the most general level of the entire structural hierarchy, there are only two very large categories of values. Musek compared these with Nietzsche's value dichotomy – Apollonian values of harmony versus Dionysian values of passion and power. At the next level, each of these two categories splits into two further subcategories, which could be called value types. Dionysian values can be subdivided into a hedonistic value type and a potency value type. Apollonian values can be subdivided into a moral value type and a fulfilment value type. At the next level, each of the value types can be further divided into middle-range categories of values. Thus, the hedonistic value type breaks down into sensual, security, and health categories, the potency value type into status and patriotism categories, the moral value type into traditional, democratic (or societal), and social values, and the fulfilment type into cognitive, cultural, self-actualizing, and religious values. Finally, at the most specific level of the hierarchy, there are various single values that can be derived from the middle-range categories of values (Musek 2000). For details, see Table 1.

DIONYSIAN VALUES		APOLLONIAN VALUES		*Macro dimensions*
HEDONIC TYPE	POTENCY TYPE	MORAL TYPE	FULFILLMENT TYPE	*Value types*
sensual health security	status patriotic legalism	traditional family societal	cultural aesthetic actualization cognitive religious	*Value orientations*
joy, entertainment, sociability, exciting life, comfortable life, sexual satisfaction, good food, free movement, freedom health security, rest	power, reputation, fame, political success, money, overriding others, longevity patriotism, national pride order, laws	honesty, benevolence, diligence family happiness, good partnership, love for children, love, hope equity, national equality, peace, concordance, justice	culture, arts, creativity beauty, nature self actualization, knowledge, progress truth, wisdom faith in God	*Specific (single) values*

Table 1 *Hierarchical structure of the value universe* (Musek, 2000)

Degree of science education

A level of science education among trainee teachers depends on the subject (course) they are majoring. In the research paper we want to find out how the level of teacher's science education influences on their environmental and consumer behaviours. In the process of Secondary School education in Slovenia first differences occur. Students coming from vocational schools usually have less science education background than those coming from grammar schools (gymnasiums). For example, a number of hours of biology in whole school period may range from 70 hours in some vocational schools to 280 hours in grammar schools concentrated on the natural sciences.

Amount of science education (biology, chemistry, and physics) is also diverse among students of different studies on Faculty of Education, University of Ljubljana:
- Pre-school teachers with 120 hours of science subjects.
- Primary (elementary) school teachers with 255 hours of science subjects.
- Biology teachers with more than 1700 hours of science subjects.

Eco School

The Slovenian programme Eco School as a Way of Life is a part of the international programme Eco Schools, which has had an ambitious and expanded framework from the very beginning. Slovenian project doesn't represent just individual environmental projects carried out by motivated children and their mentors, but a systematic environmental action of the schools. Such approaches, enabled Slovenia to quickly establish itself among a motley international crowd of states, composed of 45 counties and 15.000 schools. The programme Eco School as a Way of Life has been annually carried out in Slovenia from 1996 onwards, when Association for Environmental Education in Europe – Slovenia became a full member of FEEE (Foundation for Environmental Education in Europe). Over the period of ten years, the Eco School as a Way of Life programme has developed into a strong and important movement, which is becoming more and more appreciated among pupils, teachers, local governments, parents, governmental institutions, sponsors and general public.

Slovenia has more than three hundred Eco schools. This number includes primary, secondary, vocational and nursing schools and units of the Centre for School and Outdoor Activities. The Eco School as a Way of Life programme can contribute a great deal to the holistic education for sustainable development in school, in its surroundings, as well as in the wider area. The Eco School strives to achieve the goals, defined in the national curriculum.

Based on an educational plan, things can go better, but not owing to the saving of energy and water, but to the development of values of sustainable development. The question of basic human values is highly emphasized in the programme. All ecological projects start within us. The goal of the Eco school programme is to offer understanding of sustainable development in all aspects of life. (Pavšer, 2007) We want to find out, how working in Eco schools changed teachers' environmental and consumer behaviours.

Working experiences

We intend to find out how are working experiences (seniority) influencing on environmental and consumer behaviours of teachers. Musek (1993) reported that older age groups rate higher values representing personal growth (self-transcendence) which are found to be predictors of pro-environmental behaviours (Karp, 1996; Schultz and Zelezny, 1999; Schultz et al., 2005).

RESEARCH METHODOLOGY

Sample

A survey was conducted on a sample of 341 pre-school teachers (118 participants), primary (elementary) school teachers (118 participants), and biology teachers (105 participants) in Slovenia. The sample included 3 males (all biology teachers) and 338 females. Most were 40 to 45 years old.

Instrument

Participants answered a questionnaire designed to measure environmental and consumer behaviours, values, and demographics. The items and questions used in the questionnaire were taken from the Slovenian Public Opinion Poll (Toš (ed.), 1997, 1999).

Environmental behaviour. Nine questions scored on a five-point scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always; or 0 = zero, 1 = once, 2 = twice, 3 = three times, 4 = four times or more) were used to measure environmental and consumer behaviour. The validity and reliability of the survey were tested by applying it to a group of 29 teachers. According to this, Cronbach Alpha internal consistency coefficient was calculated as Alpha = 0.66.

Musek Scale of Values (MSV). The survey contains a list of 54 different values. Following the instructions, the participants assessed the importance of values on a scale of 1 to 10. High scores (10) indicate a high importance of the scored value. The scores from the MSV could be interpreted at respective levels of categorization. The scores were put under various statistical analyses including multivariate analyses that allow to reveal the inner, implicit structure of the entire system of values being rated. See Table 1.

The average rate for certain value category – dimension and value type - was calculated from the average score of most influential values in certain category. For example, average rate for fulfilment value type is calculated from the average scores of values wisdom, culture, arts, truth and self actualization.

Other attributes. Teachers in the study were asked some demographic questions, including gender, profession and age. We also asked them if they work in Eco schools.

Data collection

The data was collected in 2005 and 2006. Participants completed their questionnaires during teachers' seminars in a lecture room at the University of Ljubljana's Faculty of Education or at primary schools around Slovenia. Participation was voluntary and confidential. An average of 40 minutes was required to complete the questionnaire.

Data analysis

The information gathered in the study was brought together in a database, which was created using the SPSS package program. The arithmetic means were calculated for behaviours. Separate scores were calculated for all MSV value types and macro dimensions. Spearman's rank correlation coefficient was calculated to examine correlations between values and the average score of environmental behaviours. ANOVA test and T-test were used to determine which factors have a statistically significant effect on subjects' behaviours. Whether the groups were homogenous or not was determined with Levene test.

RESULTS AND DISCUSSION

Spearman's rank correlation coefficients were calculated to show possible correlations between values and behaviours. The results in Table 2 show that on five out of ten environmental and consumer behaviours fulfilment value type is proven to have a positive impact. A fulfilment value type is represented by values of personal, cultural, and spiritual growth (Musek, 1993) and it highly corresponds to Schwartz's self-transcendent value type. Our findings support the results of previous studies (Karp, 1996; Schultz and Zelezny, 1999; Schultz et al., 2005). Regarding these results, some additional findings can also be mentioned. At the most general level, Apollonian values were found to be relevant (positively) in explaining two behaviours that are dealing with saving energy.

Items	Hedonic	Potency	Moral	Fulfil-ment	Apollonian	Dionysian
by donating money for environmental protection;	0,065	0,059	0,040	0,138*	0,072	0,0816
through volunteer work (campaigns, research, etc.);	-0,059	-0,073	-0,025	0,038	-0,065	-0,006
by signing a petition advocating environmental protection;	0,061	0,026	0,036	0,072	0,050	0,135
by limiting car use and more frequent use of public transport, cycling, and walking;	0,145	0,030	0,002	0,125*	0,070	0,005
by purchasing energy-saving light bulbs;	0,074	0,094	0,093	0,130*	0,105	0,005*
by choosing refillable products and packages;	0,027	0,087	0,028	0,026	0,097	0,030
by recycling paper, glass, and other household waste;	-0,034	-0,010	0,049	0,131*	0,007	0,081
by paying attention to product labels to establish their environmental friendliness;	-0,047	-0,048	-0,048	0,031	-0,015	0,018
by conserving power.	0,032	0,033	0,087	0,109*	0,012	0,118*

Table 2 *Correlations between teachers' values and their environmental and consumer behaviours*
*Notes: * indicate significance at the .05 level.*

As a result of variance analysis made to determine teachers' environmental and consumer behaviours according to their different degree of science education (studying for kindergarten teacher, elementary school teacher, and biology teacher), some meaningful results were reached. According to the results gathered in Table 3, there is an important difference in volunteer work in favour of biology teachers. There are no important differences in donating money or purchasing energy saving bulbs according to their different degrees of science education. There is meaningful difference in signing petitions advocating environmental protection between elementary school teachers in favour of biology teachers. As it is seen from results, there is one important difference in use of public transport, cycling and walking instead of car use between elementary school teachers, in favour of kindergarten teachers. Another important difference was found in question dealing with refillable products and packages. There are some meaningful differences in favour of kindergarten teachers and biology teachers and the same was found for teacher's attention to environmentally friendly product labels when buying goods. There is meaningful difference in recycling between

elementary school teachers in favour of kindergarten teachers and between elementary school teachers in favour of biology teachers. Last but not least question is about saving energy which is also practiced by majority of teachers questioned in the survey and there are no important differences according to their different degrees of science education.

Items	Degree of science education	N	X	SD	F	P	Levene statistic	LSD test
by donating money for environmental protection?	a b c	117 117 104	0.34 0.22 0.35	0.84 0.63 0.75	1.02	0.36	F=3.71 P=0.02	a – b a – c b – c
through volunteer work for environmental protection (campaigns, research, etc.)?	a b c	117 117 104	1.44 1.62 1.97	1.23 1.13 1.11	6.0	0.00	F=2.99 P=0.05	a – b a – c* b – c*
by signing a petition advocating environmental protection?	a b c	117 117 104	0.36 0.19 0.41	0.70 0.47 0.60	4.35	0.01	F=12.73 P=0.00	a – b a – c b – c*
by limiting car use and more frequent use of public transport, cycling, and walking?	a b c	116 117 104	1.51 1.26 1.36	0.87 0.85 0.82	2.58	0.08	F=0.38 P=0.68	a – b* a – c b – c
by purchasing energy-saving light bulbs?	a b c	116 117 104	2.03 1.88 1.83	0.90 1.08 1.11	1.23	0.29	F=2.46 P=0.09	a – b a – c b – c
by choosing refillable products and packages?	a b c	116 117 104	1.96 1.71 2.0	0.88 0.90 0.85	3.71	0.02	F=1.77 P=0.17	a – b* a – c b – c*
by recycling paper, glass, and other household waste?	a b c	116 117 104	2.62 2.31 2.58	0.68 0.81 0.69	6.17	0.00	F=7.34 P=0.00	a – b* a – c b – c*
by paying attention to product labels to establish their environmental friendliness'	a b c	116 117 104	1.81 1.56 1.97	0.84 0.88 0.94	6.41	0.00	F=0.99 P=0.37	a – b* a – c b – c*
by saving energy or power?	a b c	116 117 104	2.25 2.15 2.33	0.74 0.79 0.77	1.41	0.25	F=0.24 P=0.79	a – b a – c b – c

Table 3 *Variance analysis concerning teachers' environmental and consumer behaviours according to different degrees of science education (a – kindergarten teachers, b – primary school teachers, c – biology teachers) Notes: * indicates significant difference between a, b, c.*

In Table 4 are gathered the results of teacher's environmental and consumer behaviours according to Eco school variable. We tried to find out if teacher's employment in Eco schools effects on his or her environmental and consumer behaviours. Eco schools are believed to be a successful approach in development of values for sustainable development. The question of basic human values is highly emphasized in the Slovenian programme of Eco School (Pavšer, 2007). As it is seen from the results in Table 4 there are no important differences among teachers (not) working in Eco schools.

Items	Eco school	N	X	SD	t	df	P
by donating money for environmental protection;	Yes	75	0.33	0.77	0.435	324	0.66
	No	251	0.29	0.73			
through volunteer work (campaigns, research, etc.);	Yes	75	1.78	1.13	1.22	324	0.22
	No	251	1.59	1.18			
by signing a petition advocating environmental protection;	Yes	75	0.40	0.66	1.21	324	0.22
	No	251	0.30	0.60			
by limiting car use and more frequent use of public transport, cycling, and walking;	Yes	74	1.32	0.86	-0.48	323	0.63
	No	251	1.38	0.85			
by purchasing energy-saving light bulbs;	Yes	74	1.93	1.10	0.00	323	0.99
	No	251	1.93	0.99			
by choosing refillable products and packages;	Yes	74	1.98	0.85	0.22	323	1.22
	No	251	1.84	0.88			
by recycling paper, glass, and other household waste;	Yes	74	2.52	0.72	0.41	323	0.68
	No	251	2.48	0.76			
by paying attention to product labels to establish their environmental friendliness;	Yes	74	1.91	0.87	1.58	323	0.11
	No	251	1.73	0.75			
by conserving power.	Yes	74	2.38	0.68	1.61	323	0.11
	No	251	2.21	0.79			

*Table 4 - According to Eco school variable, teacher's environmental and consumer behaviours Notes: * indicates significant difference between a, b, c.*

As a result of variance analysis made to determine teachers' environmental and consumer behaviours according to working experiences (seniority), some meaningful results were reached. According to the results gathered in Table 5, there is an important difference in donating money for environmental protection in favour of more experienced teachers. There is meaningful difference in signing petitions advocating environmental protection between low in favour of medium experienced teachers. As it is seen from results, there is one important difference in use of public transport, cycling and walking instead of car use between medium experienced teachers, in favour of low experienced teachers. It is the only behaviour measured in the study where low experienced and presumably younger teachers showed the most positive environmental behaviour. There are some significant differences in purchasing energy-saving light bulbs between low experienced in favour of high experienced teachers. There are also some meaningful differences in favour of more experienced found for teacher's attention to environmentally friendly product labels when buying goods. Last but not least, there is one important distinction according to their work experiences between low experienced in favour of high experienced teachers in the question about conserving energy.

Items	Working experiences	N	X	SD	F	P	Levene statistic	LSD test
by donating money for environmental protection;	low	99	0.15	0.56	5.24	0.01	F=17.25	a – b
	medium	91	0.21	0.63			P=0.00	a – c*
	high	146	0.44	0.88				b – c
through volunteer work (campaigns, research, etc.);	low	99	1.43	1.13	2.91	0.06	F=1.76	a – b*
	medium	91	1.83	1.15			P=0.17	a – c
	high	146	1.69	1.21				b – c

by signing a petition advocating environmental protection;	low medium high	99 91 146	0.30 0.26 0.35	0.58 0.61 0.61	0.58	0.56	F=1.12 P=0.33	a – b a – c b – c
by limiting car use and more frequent use of public transport, cycling, and walking;	low medium high	99 91 145	1.50 1.19 1.41	0.83 0.71 0.94	3.50	0.03	F=9.78 P=0.00	a – b* a – c b – c
by purchasing energy-saving light bulbs;	low medium high	99 91 145	1.70 1.99 2.04	1.12 0.95 0.96	3.70	0.03	F=5.82 P=0.00	a – b a – c* b – c
by choosing refillable products and packages;	low medium high	99 91 145	1.77 2.0 1.89	0.90 0.87 0.87	1.50	0.22	F=2.82 P=0.06	a – b a – c b – c
by recycling paper, glass, and other household waste;	low medium high	99 91 145	2.49 2.43 2.54	0.76 0.78 0.72	0.68	0.50	F=1.08 P=0.34	a – b a – c b – c
by paying attention to product labels to establish their environmental friendliness;	low medium high	99 91 145	1.61 1.65 1.95	0.86 0.83 0.90	5.63	0.00	F=0.57 P=0.56	a – b a – c* b – c*
by conserving power.	low medium high	99 91 145	2.09 2.24 2.34	0.85 0.72 0.73	3.25	0.04	F=0.23 P=0.80	a – b a – c* b – c

*Table 5 - Variance analysis concerning teachers' environmental behaviours according to their years of working as teachers (low = up to 10 years, medium = 10-20 years, high = more than 20 years of working experiences) Notes: * indicates significant difference between a, b, c.*

CONCLUSIONS AND PERSPECTIVES

We can conclude that some of the teacher's environmental and consumer behaviours are positively influenced by his/her self-transcendence values, longer working experiences and higher level of science education. Surprisingly, working in Eco School, which is specialised for environmental education, didn't effect on teacher's environmental and consumer behaviours.

In future it is important that we raise teachers' awareness of decisive role they play in our common strive for sustainable development. Even more emphasis must be devoted to their personal growth and environmental education. We are ahead of a long and expensive transitional process for educational systems around the globe. Despite that we believe it is the cheapest way towards sustainable future for the global human society.

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One Eco-Action in a Day

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Introduction

We have in Savonlinna Department of Teacher Education in Finland a course "Ecology, society and sustainable development". The course discuses about the consumption. Important are the global, local and individual problems in the sustainability. The viewpoints are in the ecological, social and economical aspects. The course uses and studies how to teach at schools the sustainability: projects, eco-labels, the ecological footprint and the carbon footprint etc. The course organizes a simply questionnaire for other students: What will be my eco-action today? In the same situation, people got information and sustainable development. The answers are classified. In this paper is also a short description why we need eco-actions, and what we have done on the earth.

Man and nature

The most fundamental interdependencies are those involving interactions between people and the natural environment. These interactions shape landscapes and give places and regions their distinctive characteristics, and they are increasingly influenced by processes of globalization. The massive transformation of nature by human activity has led to claim that we can do no longer talk about "natural" environments or untouched wilderness. Geographers have played a major role in highlighting the global scope of the transformation in their discussions of global environment change.

For example temperate forests originally covered about 95 percent of Europe. Permanent fields were established usually thorough clearing the woodland. Between A.D. 1000 and A.D. 1300, a period of warmer climate, together with advances in agricultural knowledge and practices, led to a significant transformation of the European landscape. By about 1200 most of the best soils of Western Europe had been cleared of forest.

Urbanization encroached on rural landscapes and generated unprecented amounts and concentrations of human, domestic, and industrial waste, and manufacturing, unregulated at first, resulted in extremely unhealthy levels of air pollution and in pollution of rivers and streams. In many ways, man has intervened in large global processes and caused very harmful results. The large fluxes of carbon dioxide in the atmosphere change the energy exchange. The surface waters have been changed through addition of nitrogen and phosphorous. These additional flows often linear in contrast to the cyclic flows in nature, and interfere with stable biogeochemical cycles. The future of human kind requires respect for these basic rules, and protection of the rich and beautiful mosaic of life forms on this unique planet.

The questionnaire

As told before the course of "Ecology, society and sustainable development" organize in Savonlinna Departnment of Teacher Education a simply questionnaire for other students: "What will be my eco-action today". By this question the course tried to activate students to think again about the sustainability. We know that very often we are tired out of thinking the sustainability. We need new and new ideas to wake up to think what we are doing for it. We also know that the small local thinks are important for the global thinking.

120 student and teachers answered. The answers classified using the groups housing, food, welfare, services, leisure time, transport, else. Most of the answers considered housing

(shower, recycling, the use of the water etc). The next group was the transport: to walk or cycle into the university. Many did not take plastic by shopping. Some said that they will eat only vegetables today.

Conclusions

In Finland people are quite well informed about the sustainability and the infrastructure is organized for that more and more well. We can see this also in the answers. The Finnish cold climate gives some problems, for example the need to heat houses well. The distances are long in the few populated country etc.

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Transdisciplinary Consumer Citizenship Education

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Consumer citizenship education is gaining great currency as an idea and a full-fledged practice, especially in Europe, thanks to the perseverance and intellectual energy of the Consumer Citizenship Network. Consumer citizenship education (CCE) is a marked departure from traditional consumer education. The latter is concerned with the relationship between the consumer and the business/industry sector with the government sector acting as a mediator and protector. The former conceives people as citizens first and consumers second, bringing justice, equality, peace and other notions of humanity into the equation. Conventional consumer education tends to draw heavily on one discipline, economics, as well as the disciplines of political studies, psychology, history and sociology (cultural and group orientations to consumption) (McGregor, 2009b). Consumer citizenship education, simply by the addition of the word *citizen*, necessitates a different approach. Educators need to move beyond mono- and multi-disciplinary approaches to designing curricula and attendant pedagogy. They even need to move beyond interdisciplinary approaches, wherein two or more disciplines temporarily work together, or educators appreciate the merit of turning to several disciplines to find synergy of ideas. The premise of this paper is that, in order to respect the *citizen* aspect of consumer citizenship education, educators and policy makers need to turn to transdisciplinary inquiry.

Trans means zigzagging back and forth, moving across, going beyond, the blurring of, and pushing past, existing boundaries. In the context of consumer citizenship education, it represents a deep respect for the interface between ideas coming from academic disciplines and where they meet with the people who are actually experiencing and living the problems the academy strives to address in its isolation. Horlick-Jones and Sime (2004) coined the phrase *border-work* to refer to the intellectual work that occurs when people living on the borders of the academy (university disciplines) and civil society engage in complex problem solving. A fellow CCN colleague agrees, noting that transdisciplinarity involves an *academy-society interface*, wherein, through a lengthy and complex process, academe knowledge and action-relevant knowledge are integrated (Liokumoviča, 2008).

To date, four CCN network participants have been drawn to the idea of bringing transdisciplinarity (TD) to consumer citizenship education (CCE), as evidenced by papers presented at this conference venue. First, McGregor (2005) broached the topic in a keynote address (Bratislava, Slovakia), explaining that conceiving our work through this lens offers a new form of learning, inquiry and problem posing that involves cooperation among different parts of society in order to meet complex challenges of a global society. Second, Thoresen (2008) asserted that education for consumer citizenship demands *transdisciplinary teaching*, but this is not described. Third, at the Sofia, Bulgaria CCN conference, Pålshaugen (2008) was interested in transdisciplinary cooperation, and not education per se. She was intrigued with using transdisciplinary dialogue as a way to deal with the issue of sustainability, anticipating that this approach would facilitate mutual learning and problem solving via cooperation among different parts of society (including academia).

Fourth, Liokumoviča (2008) explained that her paper was about providing insight into the theoretical background of CCE in light of *inter- and transdisciplinary approaches* (she hyphenates these words). However, although she briefly made a very clear distinction between the two approaches, she continued to use the hyphenated term, and did not

specifically address transdisciplinarity. Like Pålshaugen (2008), she focused on transdisciplinary cooperation, recognizing, as a key challenge, the lack of a common *methodology*, which is separate from the research *methods* of particular disciplines.

This paper will use Thoresen's (2008) call for transdisciplinary teaching and Liokumoviča's (2008) line of thinking (academe-society interface) as its jumping off point, beginning with clarifying two points. First, interdisciplinarity and transdisciplinarity are two totally different approaches to global problems, and hyphenating them together indicates a natural stage of progression from one worldview to another. As Liokumoviča so aptly noted, interdisciplinary study implies a *disciplinary interface,* and is confined to removing the boundaries between disciplines within the academy (see McGregor, 2007). Transdisciplinarity moves way beyond this, involving an *academy-society interface*, wherein, through a lengthy and complex process, academe knowledge and action-relevant knowledge are integrated (Liokumoviča). Not only are the walls taken down between the disciplines within higher education, but the walls are taken down between higher education *and* the rest of the world. The intent is to enable new types of knowledge to emerge through complex and integrated, mutually learned insights. This embodied knowledge is created in the spaces between the disciplines and society (rather than in separately walled, disciplinary knowledge silos) (McGregor).

The second fundamental distinction is the sharp difference between methodology and methods, terms that should not be used interchangeably (per Liokumoviča, 2008). Methodology is a term used to refer to four factors (axioms) that distinguish one research paradigm from another: (a) what counts as knowledge and how we come to know it (*epistemology*); (b) what counts as reality, feeling, existence or being (*ontology)*; (c) what is acceptable as rigour and inference (*logic*); and (d) what counts as fundamental values and what is consciousness (moral choices, ethics, and normative judgements) (*axiology*). Once someone decides on a specific methodology (the three most common being positivistic, interpretive/narrative and critical), one can consciously choose particular methods of sampling, data collection, analysis and sharing of results, and particular pedagogical approaches to teaching and learning. As a point of interest, McGregor (2007, 2008) asserted that consumer studies definitely aligns itself with the positivistic (empirical) methodology, with recent movement towards a critical methodology via consumer citizenship scholarship and education.

Bringing the TD methodology to consumer citizenship education is a new initiative, almost as new as the methodology itself, which includes four axioms: complexity and emergence (*knowledge*), multiple levels of *reality*, the *logic* of the included middle, and integral *value* constellations. The remainder of the paper focuses on what consumer citizenship education might look like through a transdisciplinary methodology, drawing heavily from McGregor (2009a, b). The ideas in this paper serve to scaffold future conversations about the possible nature of pedagogical CCE innovations. The contents of the paper should enable CCN participants to expand on Thoresen's (2005) CCE interdisciplinary guidelines. CCE can become a transdisciplinary pursuit employing the four-axiom TD methodology.

Four Axioms of Transdisciplinary Methodology
Consumer citizenship educators need transdisciplinary knowledge if they intend to educate people to solve the problems of humanity, problems that are exacerbated by unsustainable, unethical, even immoral, consumption. Transdisciplinary knowledge is created via a new methodology: (a) multiple levels of *reality* and attendant levels of perceptions, (b) the *logic* of the included middle, and (c) *knowledge* as complexity and emergence (Nicolescu, 1985, 2002, 2005b; 2006a,b; 2007). Cicovacki (2003, 2004) recommends a fourth axiom for a TD methodology, that of *values* (axiology) (see Figure 1 next page).

Axiom 1 - Ontology: Multiple Levels of Reality
Conventional consumer education is predicated on the positivistic and empirical notions of fragmentation, separation, dualities (this or that), and universal laws that apply to everything and everyone (no concern for context). From this perspective, scholars and educators assume that our picture of reality (e.g., consumption) is incomplete and made up of many separate parts and that they can conduct experiments about this reality, eventually building up a more complete picture. To do this, they design taxonomies, categories and hierarchies, the most famous one in consumer education being Bannister and Monsma's (1982) classification system for consumer education concepts. This is not a bad approach to consumer education. It is just not the approach that would be used within a TD methodology.

Rather than assuming that we can best understand consumer education as comprising one level of reality (static, rationale, objective, generic, with mind, body and soul disconnected and separate), a TD methodology assumes there are multiple layers of reality that interact with each other. Consumer citizenship educators would respect the dynamic, complex relationships between (a) the political, social, historical and individual levels (called TD subject, the internal world of humans) and (b) the environmental, economic and individual and planetary/cosmic levels (called TD Object, the external world).
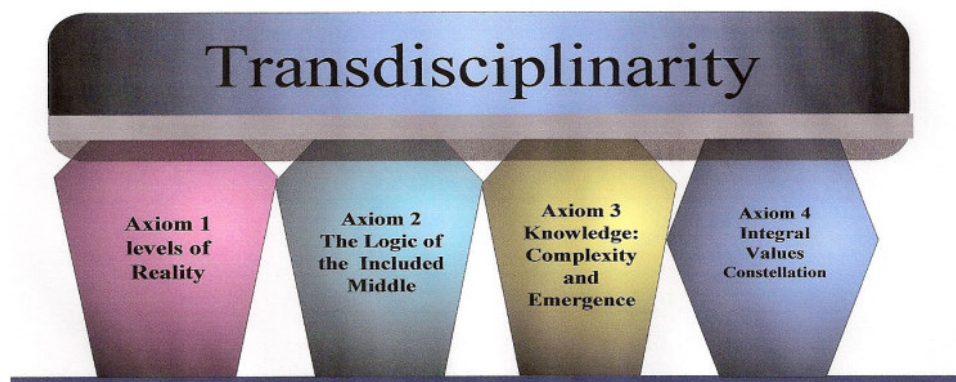
Figure 1

The internal TD subject involves a flow of consciousness across different levels of perception of the world. The external TD object involves the flow of information across different levels of reality. Moments of breakthrough happen, aha moments, when consciousness meets information and they share, what TD theory calls, the zone of non-resistance. TD methodology employs the concept of *The Hidden Third* to refer to the place where people's experiences, interpretations, descriptions, representations, images, and formulas meet. (c) Three levels of reality exist in this zone: culture, religion, and intuition and spirituality (see Figure 2 next page).For consumer citizenship educators, this means a deep shift from focusing on taxonomies, lists, individual theories, definitions and the like to the *processes and energy flows* inherent in deep, complex interactions among people's internal world, their external world and the mediating factors of culture, art, religion and spirituality. CCN is deeply involved with integrating consumer education into education for sustainability, which is predicated on four pillars: economic, social, cultural, environmental (Clugston, 2004; McGregor, 2009c; UNESCO, 2005). It seems like a natural transition for educators to turn to this particular axiom of TD – an ontology of multiple levels of interactive layers of *reality* replete with levels of perceptions and flows of information and consciousness among these

Levels of TD Transreality for Subject and Object, with Hidden, Mediating Zone
(I am grateful to Basarab Nicolescu for his personal contributions to my understanding of this concept)

Levels of Reality for TD Object (External world):
- **Environment** (natural & artificial)
  * **Macrophysical (Newtonian)**
  * **Microphysical (Quantum)**
  * **Cyber-space-time**
- **Economic**
- **Planetary/Cosmic**

The Hidden Third (mediating the S–O interaction):
- **Religions**
- **Spiritualities**
- **Cultures/Art**
(no levels, no resistance)

Levels of Reality for TD Subject (Internal world):
- **Individual**
- **Social/Historical**
- **Political**
- **Philosophical**

Figure 2

layers of reality. The result is a unity of realities, a unity that better reflects the complexity of human issues influenced by our consumption.

Axiom 2 - Logic: The Included Middle

The logic axiom is concerned with the habits of the mind that are acceptable for inference and reasoning. Conventional consumer education is predicated on the logic of exclusion, lived out in our pedagogy as: deduction (cause and effect), linear thinking, r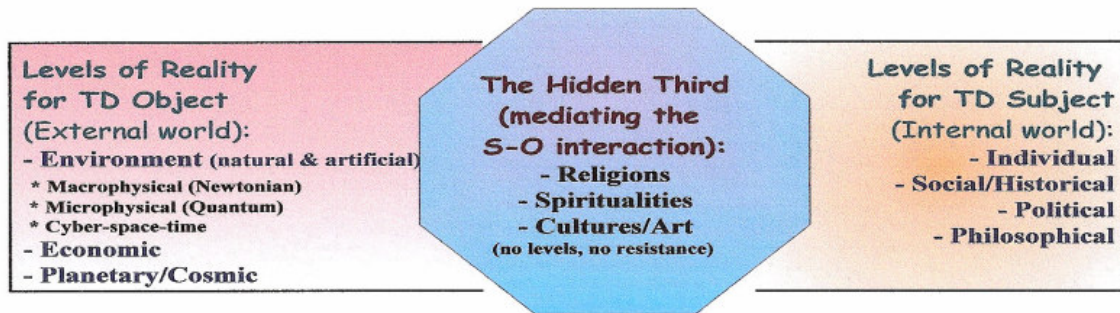eductionism (breaking things down into parts to understand the whole from which they came), and either/or approaches with no room for contradictions. Scholars strive for a complete theory of consumer education, a favourite pastime of people embracing this logic. Newtonian logic (Isaac Newton was a classical physicist) assumes that the space between objects is empty, flat, static and void of life. Consumer educators often hear the sayings, "That student fell through the cracks" and "People need a financial safety net in bad times so they do not fall into the depths of financial ruin." Perceiving this space as empty and void means consumer educators do not have to pay any attention to it – it is not part of reality. On the other hand, a TD methodology embraces the Logic of the Included Middle. This *inclusive logic* enables people to imagine that the space between things (especially between academic disciplines, in the academy (university system) and civil society) is alive, dynamic, in flux, moving and perpetually changing. It is in this *fertile middle space* that transdisciplinary manifests itself. Whereas interdisciplinarity builds bridges between disciplines so ideas can cross back and forth across borders (assuming that a bridge is needed to cross the deep chasm between siloed fields of study), transdisciplinarity has people stepping through the zones of non-resistance (the Hidden Third) onto the fertile, moving floor of the *included middle,* where they generate new transdisciplinary intelligence and knowledge, together (see Figure 2 above).

A useful metaphor for this idea is the lava-lamp (see Figure 3 left). As a soft light source, it is

see-through container in which one watches the slow, chaotic rise and fall of randomly shaped balls of wax. The ever-changing patterns are invigorating, progressive and in perpetual motion. Classical Aristotelian logic (reality as dualities) says there *is no* middle ground. In practice, this means that there are many instances when people from different disciplines or in civil society *cannot talk to each other*; hence, there can be no integration or generation of new knowledge (MacCleave, 2006). The Logic of the Included Middle holds that there *is* middle ground if people accept that different actors have different perceptions of things.
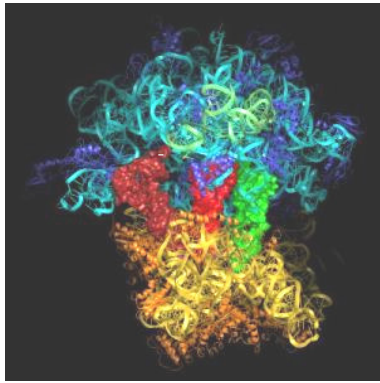
Finding new knowledge in the fertile middle ground is possible when everyone's ideas are heard. For each person, his or her point of view is his or her truth *until* it encounters something else, the ideas from another person or discipline. The balls of wax represent the formation and embodiment of this new knowledge. If people can move about (dance) in the middle ground (on the floor of the lava-lamp), come in contact with each other and get motivated, an energizing force is generated – a synergy is created. A sense of community and belonging is nurtured - a sense that they are part of something bigger than each one of them. At the same time, there is a realization that everyone is a new and different person in each relationship formed in the fertile middle. The strength and potentialities that emerge from this intellectual dance are life giving and transformative. In this space, people would always *wonder,* and seek far-reaching solutions to the world's pressing problems. When people use the logic of the included middle (making a space for contradictions and discontinuities in realities) to move through the different levels of reality, they generate a permanent possibility for the evolution of knowledge. Theories at any given level of reality become transitory theories, which are open to change when confronted with contradictions from other, even new, levels of reality. Knowledge becomes an open, complex structure, rather than *a* completely unified theory (Max-Neef, 2005). When educators design consumer citizenship curricula using the logic of the included middle, they will naturally turn to all of industry, government and civil society and most especially to those implicit in, and affected by, the fall out of unsustainable and unjust consumption. No longer will curricula be designed in isolation, implemented using the logic of the exclusion. Relationships, partnerships, collaborations will be everything, BUT from the logic of the included middle.

Axiom 3 - Epistemology: Knowledge complexity and emergence

From a TD perspective, the problems dealt with in CCE curricula are not the mundane issues of credit, debt, and financial wellness; rather, they are the pervasive problems of humanity that simply cannot be dealt with using the knowledge from one discipline: the human condition, unbalanced energy flows, unfulfilled human potential, hindered freedom and justice, unsustainability, disempowered individuals and communities, uneven distribution of resources, and abuse of personal and political power through human aggression and uneven development. It is because of these conditions of humanity, because of prevailing paradigms and ideologies that people experience the problems they do as consumers (McGregor, 2008). Consumers face the *symptoms* of larger-than-life complex, emergent problems. Therefore, to create transdisciplinary knowledge to deal with these symptoms, educators need to strive for a marriage of environmental sciences, economics, politics, labour laws, sociology and anthropology, health and many other disciplines (multiple levels of realties) in conjunction with the integration and cross-fertilization of insights from the academy with private and public sectors and civil society (logic of inclusion).

To that end, a TD methodology embraces different notions of what constitutes knowledge than do the other three dominant methodologies evident in consumer citizenship education (empirical, narrative and critical). To describe this, we need a new vocabulary, or at least different understandings of familiar words, especially emergence and complexity (as distinguished from complicated). *Complexus* means that which is woven together (Morin,

1999). While complicated and complex have the same root, they do not mean the same thing in a TD methodology. A complicated problem is characterized as hard to solve because it is intricate, tangled, knotty and detailed. A complex problem has the additional feature of emergence (see Figure 4: Knotty complicated problem (www.sciencedaily.com). As an example, poverty can be seen from a conventional stance to be a knotted mess, comprising global and personal security, human rights, universal rights, moral responsibilities, order with justice, and global as well as intergenerational justice. It is one thing to untangle the strings of a complicated problem, but quite another to re-weave them with new strings into a new whole, and in the process gain a better understanding of the world. Emergence comes into play now, referring to novel qualities, properties, patterns and structures that appear from relatively simple interactions, qualities that did not exist when presented in isolation. To continue the example, emergence means people can assume that poverty is *continually changing*.

It is a rich weave of societal structures and functions. This new weave of poverty (and people's understanding of poverty) keeps changing *because* new and coherent structures, patterns and properties *emerge* as a result of the interactions between people trying to address poverty while working within a web of changing relationships (in the included middle ground).

Original perceptions about addressing poverty are left behind or transformed as a new weave and fabric takes shape (the activity within the lava-lamp). The energy created, the information generated and the partnerships formed, also constantly change as understandings about poverty change – everything is in flux and *in-formation* (see Figure 5: New patterns emerging during complex problem solving (carlsoncontemporary-american-artist.com/)

For consumer citizenship educators, instead of just dealing with indebtedness, credit acquisition practices and the like, they could grapple with the human problem of poverty and unequal resource distribution that can play out in consumers' lives as issues of credit, debt and housing issues. Their daily life becomes more complicated (knotted) and complex (presence of order and disorder as things emerge). The TD methodology further requires that people adopt new understandings of order and chaos. They have to learn to conceive of relations between order, disorder and self-organization, rather than relations as empirical determinism. The latter holds that every state of affairs is determined by what came before it and constitutes a link in an unalterable chain of events: get a credit card, misuse it, get in debt, become poor – one thing leads to another in a predictable pattern. In the empirical methodology, chaos and disorder are seen as signs of deep trouble in the system. Not so, from a TD methodology. Wheatley (1999) explains that order and chaos are mirror images of each other. Order is created *through* chaos, through the processes of fluctuations, changes and disturbances. Chaos is order without predictability and very different from the concept of order in the old science - predictable, controllable and consistent.

As well, a TD methodology includes the notion of self-organizing systems. Chaos is a necessary place to dwell if people wish to engage in transdisciplinary inquiry and practice. They have to trust that new insights will appear in this chaotic state, believe that they are self-organizing beings able to change. Being stable, while being open, is foreign to the old science, which assumes that when things wear down, the centre cannot hold and things grind to a halt (even fly apart). In the TD methodology, being stable, while open, happens because of people's deep stabilizing centre where they know who they are, what they need to do and that they are not acting alone (in the lava-lamp). As people mature and develop self-knowledge, they become more adept at this deeper, core stability (see Figure 6). What comes to dominate over time is the internal dynamics of the system instead of the outside influences. Because people are partners *with the system* (multiple layers of reality), they gain autonomy from the system. The more freedom people have to self-organize, the more order there is. The

system and people co-evolve over time. From a TD methodology, consumer citizenship educators would strongly believe in keeping themselves and students off balance so that they can change and grow through an open exchange with the world. It is then that they can behave in ways that defy the normal expectations and move themselves to new states of disequilibrium, knowing that a deeper stability is serving as their foundation.

People would come to welcome chaos, emergence and complexity because they know it is going to lead to personal growth and evolution. Change creates chaos (a lack of order or regular arrangements). People will self-organize (reorganize) when they accept chaos and seek solutions to the lack of order (the problems of humanity). This reorganization leads to renewal. People do not try to maintain the old order but enter into trustful, sharing relationships with others who have the same vision and relevant information and together create a new world and creative solutions to complex, emergent problems. Through rich processes and exchanges, multiple minds can interact and produce a complex knowledge containing its own reflexivity (in the lava lamp). *The knowledge is alive* because the problems the knowledge addresses are alive, emerging from the life world. This is a powerful methodological approach to consumer citizenship education.

Axiom 4 - Axiology: Integral Values Constellation[1]

All of this working together in fluctuating, enriching and challenging relationships necessitates a concern for values. van Breda (2007) explains the world is facing a *polycrisis*, a situation where there is no one, single big problem – only a series of overlapping, interconnected problems. In a polycrisis, there are inter-retroactions between different problems, crises and threats. This complexity infers the need for more than a single expert's solution. However, interactions between multiple actors as they problem solve a polycrisis will give rise to value conflicts and contradictions. These conflicts can result in power struggles. In a TD methodology, power is energy. Power is the capacity generated through relationships. Without relationships, there cannot be power. Because power is energy, it needs to grow. Whether the power people generate as they work together to solve complex, emergent problems is negative or positive depends upon the nature of the relationships. That in turn is predicated on values.

Transdisciplinarity is about understanding the problems of the world (Nicolescu, 2007). By association, transdisciplinarity must be concerned with values. Because TD is deeply influenced by ethical and pragmatical matters, consumer citizenship educators must continue to concern themselves with axiology (the science of values, ethics and morals). One of the intents of axiology is to link thinking (valuing) with action (Giuculescu, 1998). Consumer citizenship is very action oriented. Within transdisciplinary solving of complex, emergent problems, thinking and action are intricately bound, necessitating a key focus on values. Indeed, Bazewicz (2000) affirms that transdisciplinarity holds a holistic vision of the world, and is concerned with the local and global integration of values. So is consumer citizenship (Thoresen, 2005).

Hartman (1967) posits that everyone's value talent is in motion, changing as situations change around them. Consumer citizenship educators can learn from this approach.

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[1] As a caveat, not all TD theorists believe there should be a fourth axiom of axiology. Nicolescu (2007) credits Erich Jantsch (an Austrian) for underlining the necessity of inventing an axiomatic approach for transdisciplinarity and also of introducing values in this field of knowledge. Nicolescu does not see the need for a fourth axiom. He also credits Cicovacki (2003) as saying there is no need to introduce values as a 4th axiom (Nicolescu (2006b, p.154); yet, perplexingly, Cicovacki explicitly says "transdisciplinarity requires the forth pillar as well, a new transdisciplinary theory of values" (see also 2004, p.1). Time will tell how well this idea is received, but it is included in this paper because it seemed salient.

Figure 6 Order emerging from chaos
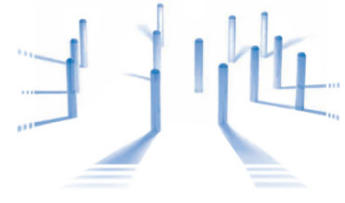(www.chromasia.com)

Figure 7 Integral values constellation
(www.constellations-intensive.de)

Three dimensions of values form the apex of anyone's valuing process, and each person values things in one of these three ways, or in some combination: (a)intrinsic value (personal or spiritual empathy and self-esteem), (b)extrinsic value (practical or situational, including role awareness and practical judgement/thinking); and, (c) systemic value (conceptual or theoretical constructs of the mind including: system judgement (the ability to judge order within a system) and self-direction, motivation and persistence. The result can be tension amongst the three dimensions of values. Bottom line - how people think will determine how they act in a problem solving situation. Consumer citizenship educators can appreciate that *proper valuing* requires attentiveness to all dimensions. To illustrate using sustainable consumption, a person may prefer a particular corporation (intrinsic), but a balanced value attention would also include paying attention to the vendor's performance according to corporate social responsibly sourcing standards (extrinsic), and its performance in a legal manner (systemic).

Van Breda (2007) urges us to keep looking for agreement in the area of axiology, arguing that, in order to develop necessary tolerance of different viewpoints so we can stay engaged in conversations about the complex problems shaping the human condition, we have to respect the role of axiology in transdisciplinarity. I tend to agree. Küpers (2009) asserts that changes in value mixes are a key part of the rapidly changing global village and the profound changes are taking place at all levels. He agrees with van Breda, that values are often the missing link in providing strategic solutions to key, global issues that are informed by a collage of differing worldviews held by individuals, cultures, nations and regional and international groups. He explains further that peoples in civilizations progress naturally through three value systems: (a) collective values (tribal, dictator/power and stability and order); (b) individual values (individual freedoms, private enterprise, free market values, then environmental and ecological values); (c) integrative/integral values (integration of all of the previous values in order to build a stronger integrated approach to global issues).

Consumer citizenship educators need to appreciate that it took centuries for the first two value systems to evolve and the world is only just now approaching any semblance of integral values (Küpers, 2009). That is why it is crucial they continue their focus on values and citizenship (Thoresen, 2005). The transdisciplinary dialogue, by its very nature, will witness the inescapable value loading of every inference and every opinion. Every line of conversation will face a potential clash of values, ethics and morals. Educators need to reconcile the different sorts of knowledge characteristic of the sciences in the academy with the involvement of citizens in an extended peer community (Funtowicz & Ravetz, 2008). They have to redefine and articulate tomorrow's values and reflect on the direction these values may lead humanity (Bindé, 2004). Society runs the risk of bad decisions if the *world of values* (axiology) is not taken into account, and if conflicts cannot be resolved. Given the polycrisis we now face, we cannot risk too many bad decisions, nor persistent conflict. People need to be able to respect the value of the differences between themselves, and build on those

insights. An *integral value constellation* is a laudable goal for transdisciplinary consumer citizenship educators (see Figure 7).

Conclusion

If the conditions needed for the generation of transdisciplinary knowledge are in place (levels of reality, logic of the included middle, complex knowledge and emergence, and an integral value constellation), a platform is created from which to dialogue about consumer citizenship and the power of the transdisciplinary methodology (see figure 1). As noted, the ideas in this paper serve to scaffold future conversations about the possible nature of pedagogical CCE innovations. The contents of the paper should enable CCN participants to *expand on* Thoresen's (2005) CCE interdisciplinary guidelines. CCE can become a transdisciplinary pursuit employing the four-axiom TD methodology.

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An Exploratory Framework for Consumer Citizenship Education in Japans Home Economics Curriculum

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Introduction

Consumerism in Japan is not contained within its geographic boundaries but is global in nature. When we look at the production and supply of one of our basic needs, food, we can determine the interconnectedness of this process. The rate of food production in Japan is less than 40 percent in 2009 and the Japanese import more than half its food supply from other countries especially China. With such overdependence on food imports, it is not surprising to hear news headlines about insecticide-tainted meat dumplings from China that caused severe food poisoning and led to public hysteria against all Chinese-made foods. Japanese health officials were unable to explain how thousands of tons to contaminated meat products were allowed into Japan, which is supposed to have some of the world's toughest checks on imported food. In an ironic twist, the food was imported by the Japanese Consumers' Cooperative Union, the largest consumer group in Japan which regards food safety as its top priority. Economic borders between countries have already disappeared; when Lehman Brothers in the U.S. collapsed it immediately affected Japanese businesses and stocks in Japan took a sharp nosedive. As a result, Japanese companies started lay-offs and eventually the economic crisis spread all over the world. The rapid globalization has increased wealth for some but, at the same time, has contributed to greater economic disparities both at the national and global levels.

Internet transcends information borders. A White paper on Information and Communications in Japan in 2008 indicated that internet penetration rate in 2007 was 69 percent and the cellular phone internet usage accounts for 13-19 year olds was 77 percent and 83 percent for 20-29 year olds. Internet is a way of life for the younger generations. National Consumer Affairs Center (NCAC) of Japan receives and handles complaints and inquiries from consumers and gathers information via an online network which connects local consumer centers across the country and participating hospitals, the system is called PIO-NET (Practical living Information Online Network). According to PIO-NET, the number of consumers' complaints/inquiries in 2007 increased to 1,041,506, of which the five largest complaints/inquiries categories were: (1) phone information service, (2) consumer debts, (3) general commodities, (4) on-line services, and (5) house/apartment rent. Paralleling the penetration of cellular phone and internet use, consumer complaints are increasing. Japan's consumer issues have already crossed its national borders and are becoming global consumer issues. In a converging world, it is imperative that consumer issues be solved with a global perspective because food, energy, environmental, or economic crises are not just other people's problems but are universal problems with far reaching implications.

Consumers who make sound societal decisions are persons who consider other people, other countries, public benefit, future generations, and natural environment before their own personal or short-term gains in their decision-making process. Japan Consumer Education

Academy (2007) pointed out that consumer education develops consumers who "not only make appropriate personal consumer decisions in various economic and social environments but also societal decisions that influence markets and politics." The fact that consumer behavior affects business and the environment is well documented. Consumers execute their economic and environmental vote with their daily shopping choices. However educators must recognize that many consumers are not aware of the power of their vote in the marketplace on the economy and the environment. Consequently, although consumers are unaware of their influence, their decisions affect society. Therefore, greater emphasis and education must be provided to develop consumer competency for the creation of a better world.

Consumer Citizenship Education (CCE) which focuses on empowering consumer action to build a sustainable world is urgently needed in Japan. Consumer Education is taught mainly in Home Economics Education in Japan. The objective of this study is to propose an exploratory framework for introducing CCE in Japan's Home Economics curricula.

Guidelines for Elementary Home Economics	Keywords in textbook (number of pages=100):
Four sections that must be taught: (A) Daily living and family (B) Food and basic cooking (C) Adequate clothing and shelter (D) Daily consumption and environment	**Reuse unnecessary things (2 pages):** frayed t-shirt, cushion, reform, reuse, recycling, used cans and boxes, decreasing food leftovers, recycling markets, flea market, disposable cups and dishes
Contents of "section (D) daily consumption and environment" (1) How to use things and money, and shopping are taught as follows: a) Student understands the importance of things and money, and their planned usage b) Student understands how to choose daily things and if they can purchase them (2) Environmentally conscious a) Student understands the relationship between their daily life and environment, and then consider how to use things responsibly	**Think about shopping (4 pages):** getting money and spending money, prepaid cards, idea of planned shopping, wants, needs, vending machine, internet, mail-order, plan/gather information-select shop-select goods-buy-get feedback, and labels **Think about environment and daily life (2 pages):** resources and waste, garbage and compost, environment mapping, eco-cooking, water in daily life, decreasing energy usage *Checking of food label **(1 page)** is stated in "section (B) food and basic cooking"

Figure 1 *Educational Guidelines for Elementary Home Economics and keywords in textbooks*

Guidelines for Junior High Home Economics	Keywords in textbook (number of pages=233):
Four sections that must be taught: (A) Family, home and child development (B) Diet and self-help (C) Clothing and shelter, and self-help (D) Daily consumption and environment	**Our consumption and environment (2 pages)** process of purchasing commodities, goal is to check resources and gather information, consider alternatives and consequences, consider decision-making process and take action, quality, price, environmental influence and post purchase of commodity **Think about consumption (4 pages)** purchasing commodity, use information, check labels, universal design and barrier free design, store shopping, mail-order, on-line shopping, door-to-door sales, pre-paid card, cash, post payment, watching advertisements
Contents of "section (D) daily consumption and environment" (1)Family life and consumer rights and responsibilities, consumer center, cooling-off period, consumer trouble, contract between two, e-money, characteristics of selling, choosing, buying and using necessities in daily life (2) Family life and environment consumption with consideration of the environment, recycling in society, reduction of garbage	**Consumer awareness (8 pages)** contracts and consumer, 8 consumer rights and 5 responsibilities, consumer fraud, internet fraud, case study of consumer trouble where victims were junior high students, basic consumer act, consumer contract act, product liability act, cooling-off period, National Consumer Center, what to do when one is faced with consumer related problems **Considering environment in daily life (5 pages)** green consumer, container wrapping, recycle act, green buying act, shopping is a consumer vote, decision-making process, environment bingo **A better world (6 pages)** life cycle of T-shirts, reduce, reuse, recycle, effective use of energy, air conditioners, reregister, wasting electric energy, reusing shopping bags *How to buy food **(6 pages)** and how to choose clothing **(4 pages)** are stated in "(B) diet and self-help" and "(C) clothing and shelter "sections. Recycling in society and labels **(4 pages)** of daily goods are covered in the introduction of textbook.

Figure 2 Educational Guidelines for Junior High Home Economics and keywords in textbooks

Guidelines for Senior High General Home Economics	Keywords in textbook (number of pages = 237):
Six sections that must be taught: (1) Human life and family/home (2) Child development and care/welfare (3) Life and welfare of the elderly (4) Science and culture of daily living (5) Consumption and resources/environment (6) Home project and school Home Economics club activity	**Consumption and Decision-making (3 pages)**decision-making process **Consumer as related to society (10 pages)** contracts, reliable information, reliability of labels, credit card, non-store shopping, cashless society, e-commerce, consumer credit, debts, consumer bankruptcy, interest rates, 8 consumer rights and 4 responsibilities, consumer problems, consumer fraud, examples of current consumer fraud, Basic Consumer Act, National Consumer Center, local consumer center, cooling-off, contracts issued to minors, Consumer Contract Act, over indebtedness, consumer bankruptcy, online shopping, information literacy, Product Liability Act
Contents of "section (5) consumption and resource/environment" Personal finance, and consumer rights and responsibilities are explained. Contemporary consumer issues are documented. Resources and environment are considered, and responsible action is taken based to appropriate consumer decision-making. a. Consumer action and decision-making b. Personal finance c. Consumer rights and responsibilities d. Consumer action and resource/environment	**Consumer Action and Resource/Environment (5 pages)**lifestyle and environmental impact, import of mineral water, fair trade, laws that encourage recycling, environmental labels, life cycle assessment, ISO, green consumer, green market, reduce, reuse, recycle, environmental book keeping, environmental issues in developing countries **Future Consumer Life (2 pages)** sustainable society, consumer view is needed for producers, consuming foods which are produced locally, slow food, simple life **Life Design (13 pages)** life design of working, selection of job, full-time and part-time job, balance between work and home, income and expenditure, life stage and personal finance, savings and insurance, social security, financial commodity, mortgage, interest rate, national economy, international economy, inflation and deflation, risk, social insurance, social welfare, tax *Choosing/buying food **(2 pages)** and choosing clothes **(2 pages)** are covered in section (4) Science and culture of daily living section. Eco-cooking **(2 pages)** is an example of section (6) Home project and school home economics club activity section.

Figure 3 Educational Guidelines for Senior High General Home Economics and keywords in textbooks

Present state of Japan's consumer education taught in Home Economics education

Since Japan's Educational System is controlled by the government through the Educational Guidelines which are revised every ten years, the scope and sequence of the Home Economics including Consumer Education lies in their purview. Home Economics was traditionally focused on domestic arts like food, clothing and shelter and consumer education was not included in the curriculum until recently. Terms related to consumer education, such as "consumer attitudes" or "consumer consciousness", were first seen in the Educational Guidelines in 1989. The formal introduction of the field of consumer education in Home Economics textbooks at elementary schools was in 1992, junior high schools in 1993, and senior high schools in 1994. Because Home Economics is mandated as a co-education subject in Japan, technical terms such as consumer center, cooling-off periods or consumer rights and responsibilities are becoming familiar among younger Japanese. The latest Guideline revisions were made in 2008 for elementary and junior high schools, while senior high school guidelines are slated for revision in 2009 or 2010.

After the scope and sequence of all textbooks are checked against the guidelines set by the Textbook Examination Committee, authorized textbooks are published. If the textbook's content is missing the educational guideline or varies from what is specified by the committee, publication of the textbook is not permitted. As a result, although slight variations may exist in the way the content is expressed, the contents of all textbooks are standardized. In 2009, there were 2 elementary textbooks, 2 junior high textbooks and 28 senior high textbooks. The senior high textbooks can be categorized as: Basic Home Economics, General Home Economics and Living Skills. Of the 28 senior high textbooks, 14 are Basic Home Economics, 12 are General Home Economics and 2 are Living Skills. Two companies publish all educational textbooks from elementary to senior high school for Home Economics. A content analysis of Educational Guidelines and keywords was completed for all textbooks published by Tokyosyoseki, the larger publisher of Home Economics textbooks and is presented in Figures 1, 2, and 3.

Home Economics for elementary students is taught for 60 unit hours in the 5th grade and for 55 unit hours in 6th grade. One unit hour is equal to 45 minutes. There are four sections in elementary home economics, these are "daily living and family," "food and basic cooking," "comfortable clothing and shelter," and "daily consumption and environment". As indicated in Figure 1, the textbook titled "New Household" published for elementary students by Tokyosyoseki devotes 9 pages or 9 percent of 100 pages for consumer issues.

Junior High Educational Guidelines were also revised in 2008 and a new textbook based on the new guidelines is in use this year. Standard hours are 35 unit hours in the 1st grade, 35 unit hours in the 2nd grade and 17.5 unit hours in the 3rd grade. One unit hour is equal to 50 minutes. As shown in Figure 2, "Home and Technology" published by Tokyosyoseki in 2009 covers consumer issues in 39 pages or 17 percent of a total of 233 pages. Senior High Educational Guidelines are slated for revision in 2009 or 2010. The current guidelines and contents of General Home Economics are shown in Figure 3. Standard hours are 35 unit hours in Basic Home Economics and Living Skills, and 70 unit hours in General Home Economics. One unit hour is equal to 50 minutes. "General Home Economics including self-help, symbiosis, and creation" are covered in 39 pages or 16percent, of 237 pages. Although the same topics are covered from elementary to senior high, supplementary explanations are included at the higher grade levels. However, some topics are repeated, for example, the eight consumer rights and five responsibilities and the 3R movement - reduce, reuse and recycle are the same in junior and senior high. As shown in Figures 1, 2, and 3, consumer topics which are included in every level may be classified into five categories: consumer decision-making, financial management, consumer fraud, consumer law and environment.

The key component that is missing from Japanese Home Economics education is the inclusion of citizenship education that could strengthen students' competency to build a better world by learning to be active citizens. The current topics focus on improving daily life but do not cover topics on societal improvement and advancement. This is evident when teaching the topic on the decision-making process. Guidelines for the decision-making process state that resources that influence the environment must be considered when choosing alternatives. However, the influence on businesses, government, local economy and other countries are not covered. In order to influence the world, not only must the product information for improving daily life be considered but business information including business contributions towards public good, local welfare, natural environment, market fairness, gender and minority equality, participation of developing countries, and sharing resources with future generations are useful information when choosing alternatives.

Currently, what is lacking in Japanese Home Economics education for citizenship education is the focus on creating a better world beyond just personal benefits by emphasizing individual and societal values. Since the Japanese education system does not mention values in its curriculum it is no surprise that nor does Home Economics education. Secondly, values that provide direction for action for consumer citizens to create global sustainability should be included. Global sustainability is needed to sustain social security. Thirdly, social security is necessary to meet basic needs globally. Social security benefits, education, job training, child care, medical care, pension are essential for all citizens. If these resources are lacking or not distributed equitably, citizens cannot maintain the standard of living expected in a civilized society. Lastly, practical skills to be active citizens, not just homemakers, must be emphasized.

How to introduce consumer citizenship education in Japanese Home Economics curricula?

Consumer citizenship education strengthens students' competency to build a better world by being active citizens. Kodama (2004) suggested addressing both political and career independence in Japanese citizenship education. Without citizen's political participation, a democratic society ceases to exist. Without a career or a job, a person's financial freedom ceases because money is the only medium to buy goods and services in a capitalistic society. Finally, a third aspect that deserves attention is the consumer perspective, a key factor that has been overlooked. Without all three components, citizenship education will not be complete.

Sanuki (2003) stated that action must be two-sided for youth to become independent citizens. On one hand, youth themselves must be motivated to take the initiative to exercise their citizen rights and be a responsible citizen. On the other hand, society must make a commitment to model youth to be responsible citizens. In Japan, governmental involvement to shape youth to be responsible citizens is not stellar; in lieu of government, businesses took on this role.

Figure 4   Influence of Consumer Competency
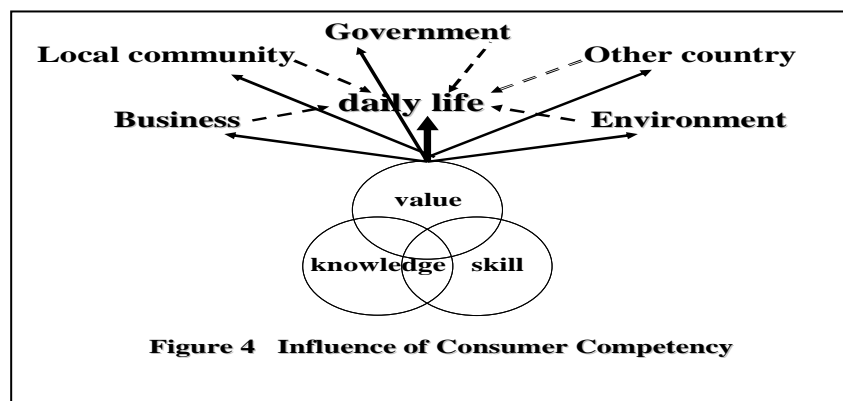
Permanent employment offers not only income and job security, but also job training, housing, health care and pension benefits. This system worked well in the past decades when younger people got a job when they were young adults, and earned money to cope with their daily living, got married, purchased a house, raised children, and had the financial stability of earning a pension in retirement. Therefore, people could be independent citizens and fulfill their rights and responsibilities. However, the role of businesses in the economy is changing. In current times, because of economic and social changes, one-third of Japan's workers are neither formally employed nor employed full-time. As evidenced after Lehman Brothers collapse, even full-time workers in Japan were in danger of losing their jobs.

Government involvement to provide national welfare to maintain the standard of living for all citizens is a focus of CCE. If the cost of national welfare is borne by taxpayers, then CCE should encourage autonomous or independent citizenry who can then shape the direction and state of Social Security. Key concepts, which are lacking in current Home Economics curriculum are: ways to create a sustainable world, cultivating values, sustaining social security and developing skills to bring about societal change. According to CCN guidelines, "training in the art of value-based behavior" is an essential aspect of becoming a consumer citizen. Thoresen (2005) mentions the importance of principles of equity, equality, social justice and human rights. The values of human dignity and equality, human rights, common good, gender equality are reiterated in the Crick report by the Advisory Group of Citizenship (1984). The topic "values and value system" can be introduced in any subject related to citizenship education, however, an important goal is to make sure that these values become a guiding factor for consumer citizen behavior, not mere citizen behavior. Values, especially those related to consumers or consumption are as follows:

Safety of life and health
- Safeguarding of human life. This is an important value for consumers, producers, and the government. Goods and services should be produced to preserve human life and property

Sharing to eradicate poverty
- Acquiring basic needs for global citizens
- Consuming with the purpose of securing human dignity

Equity and equality in marketplace and public service
- Having transparency among key constituents, that is, consumers, producers and government for equity and equality
- Social security system that does not create societal disparity and vulnerability

Stability for local community
- Respecting diversity of consumption
- Contributing to local economy
- Influencing businesses to contribute to local community through consumer shopping vote

Cooperation and solidarity for global and societal sustainability
- Promoting world peace through trade
- Sharing resources globally through fair trade agreements
- Producing commodities using fair labor practices

Safe environment
- Sustainable development in consumption and production

As stated "citizenship education is education for citizenry to behave and act as citizens, therefore, it is not just knowledge of citizenship and civic society; it also implies developing values, skills and understanding" (Advisory Group on Citizenship, 1998). The operationalization of citizenship education is missing in Japanese Home Economics

curriculum. Although the mechanism of the political and economic systems is taught in Civics courses, Ookubo (2006) mentioned that students lack critical thinking, analytical, and communication skills on how to participate in these systems. The ability to think critically and pragmatically is missing not only in Civics course but also in other subjects. In an interview with Hadlston, a representative of the Association for Promotion of Citizenship Education in UK, citizenship education was described as more than comprehending information about politics, law and economics. It is a conceptualized reality which requires competency in skills including critical thinking, discussion, debate, negotiation, investigating, analyzing, and presentation (Arai, 2008). It is possible to introduce these competencies in Japanese Home Economics curricula to promote consumer citizenship.

Currently, the subject, "Sougouennsyu or General Exercise," is cross- curricular and interdisciplinary and focuses on issues such as international understanding, information, environment, welfare, and health. The goal of "Sougouennsyu" is to learn how to live. Although the subject does not cover the consumer perspective, the topics covered are closely related to consumerism and consumption. Therefore, it is possible to modify the subject to include the topics of CCE and introduce the subject in the Home Economics curriculum. "Home Project", one of the six sections that must be taught in Home Economics (See Figure 3), focuses on solving private life problems. In order to introduce the citizenship dimension in Home Economics, it is possible to expand the topic from solving private life problems of a homemaker, to collective life or global problems of a consumer citizen. Since CCE focuses on improving both individual and community life, in addition to a "home project" section, an additional project titled "consumer citizenship project" could be introduced.

Controversial and global issues that are integrated into the consumer, society and environment section can be discussed using a problem-solving approach. Examples of topics to be included in the consumer citizenship project are:

- Human life and consumption
- Earning and spending
- Human life and welfare
- Human life and commodities
- Safety of goods and services and health
- A humanistic view of consumption, basic needs and poverty
- World peace and how I can promote it as a consumer citizen
- Environment and what I can do safeguard it as a consumer citizen
- Global economy and what role I play as a consumer citizen
- Local economy and what I need to do as a consumer citizen to keep it thriving
- Developing countries and my role as a consumer citizen in a developed country
- Internet and my connection to it as a consumer citizen
- Gender and consumption
- Culture in consumption

Students will be able to select from a broad range of topics and develop their project based on their personal and family experiences, social and natural environment, culture and religion. Students can share their projects and discuss their findings in class. By completing the project and class discussions, students will learn how to:

- research issues critically
- gather information
- analyze critically and select useful information

- present, discuss and debate
- investigate scientific evidence and persuasive opinions critically

Critical thinking skills such as cognitive skills, internet literacy, and media literacy are essential for citizenship education along with development of interpersonal, collaboration, and leadership skills. One of the goals in CCE is developing skills to listen, communicate, and be able to work with others who have different opinions. Through dialogue and practice, one can:

- develop an attitude of openness and fairness to opposing viewpoints
- build consensus, especially when there are disagreements
- change previously held beliefs in light of discussion and evidence
- lean how to partner with others, even if they have differing opinions

Skills:
Skill for household management

Skill for judgment:
Investigate, search, gather and analyze information critically
Present information
Investigate and search evidence critically

Skill for consensus:
Generous attitude
Bridge over difference
Be open mind
Enter into partnership

Knowledge:
Consumer rights and responsibility
Consumer decision-making
Financial management
Consumer fraud
Consumer law
Environment and consumption
National Welfare

Consumer Citizenship Competency

Value:
Safety of life and health
Sharing
Equity and equality
Stability
Cooperation and solidarity

Figure 5 illustrates the relationship among values, knowledge and skills in developing consumer citizenship competency.

Conclusion

Consumer issues like food, energy, environmental and economic crises are not solved without empowering consumer citizens. CCE which focuses on empowering consumer citizens to commit to actively building a societal and environmental sustainable world is urgently needed. Since Japan's Consumer Education is taught mainly in Home Economics, the objective of this study is to offer an exploratory framework for introducing CCE in Japan's Home Economics curriculum.

(1) Consumer Education is mainly taught in Home Economics in Japan. The present state of consumer education in Home Economics was investigated. A content analysis was done of Educational Guidelines and keywords in textbooks from elementary, junior high and senior high school levels. As the results indicate, Japan's consumer education in Home Economics was insufficient to develop consumer citizens. Key concepts that need to be introduced are social security and active citizenry.

(2) Creating a world viewpoint and social security are related to another key concept, values. Values are related to consumerism and consumption and hence the following topics are

important: Safety of life and health, eradication of poverty, equity and equality in marketplace and public goods, stability of local community, cooperation and solidarity for global sustainability and safe environment.

(3) Since CCE focuses on improving both, individual and community life, in addition to "home project" section, an additional project titled "consumer citizenship project" could be introduced. Examples of topics for consumer citizenship project are specified.

(4) In order to be a consumer citizen, critical thinking skills such as cognitive, listening, communication, and analytical skills are essential along with development of interpersonal, collaboration, and leadership skills. These skills can be included in "consumer citizenship project."

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Ecological Literacy Level and Meaning of Sustainability among College Students

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INTRODUCTION

Sustainability and going green are the "mantra," a trend, and a cultural movement zeitgeist for today. It is a strategic initiative in 44% of the companies surveyed by Retail System Research (Wilson 2008). However, according to a January, 2007 survey (n=1600) by Hartman Group Inc., only 54% of individuals claim any familiarity with the term "sustainability" and most of them cannot define it. Current perceptions of sustainability are activist and political, fear-based with a focus on environmental elements whereas evolving perceptions are personal and hopeful with a focus on social elements (L. Demerrit, President and COO, Hartman Group, Inc., Power Point Presentation, E-mail communication, November 14, 2008; "The consumer side…" 2008). An attitudinal shift is driving sustainability, defining it as a "cultural phenomenon" ("The consumer side…" 2008).

David Orr, (1992: 86-87) known for his pioneering work in ecological literacy in higher education, coined the term "ecological literacy" providing a comprehensive understanding of ecological literacy as knowledge, values, and actions. Ecological literacy stems from the tenets of human ecology, the study of interrelations among people, their habitat, and the environment beyond their immediate surroundings forming an ecological unit (Lawrence 2005). The ecologically literate person has the knowledge necessary to comprehend interrelatedness among individuals, society and nature, an attitude of care or stewardship, and the practical competence to act on the basis of knowledge and feelings (Orr 1992; Lawrence 2005). Robertson's study (2007) substantiated the interconnectedness of personal, curricular, programmatic, institutional, community, and policy system level bridges and barriers to nurture ecological literacy in environmental education in British Columbia.

Ecological literacy is a path to sustainability and sustainable development. Sustainable development is grounded on three pillars: social (people), environment (planet), and economic (profit), commonly known as Triple Bottom Line (TBL), a term coined by John Elkington (Anderson April 4, 2007; Lawrence 2005; "Principle of..," n.d.). Education is the key to support and develop frequent new initiatives. Ecologically literate citizens will develop when education focuses on a sustainable and green world.

Sustainable and sustainability have been over used and misused (Orr 2005). Jabareen (2008) found a lack of comprehensive theoretical framework with vague definitions of sustainability and sustainable development.

The concept of sustainability is not widely understood, meaning different things to different individuals. Some examples include health, wellness, organics, environmental consciousness, fair trade, simple living, and buying locally.

Scully affirmed:

Several authors have tried to define sustainability including the most popular definition that was coined in 1987 by the *United Nations' World Commission on Environment* and

Development: Sustainability means "meeting the needs of the present without compromising the ability of future generations to meet their own needs (2000: 2).

However, Oskamp (2002: 305-306) stated that this definition is lacking in completeness. She provided a different definition with four key domains: ecological, social, economic, and political/institutional/cultural. She suggests that her definition also needs further development. Terms associated with going green are equally ambiguous. Organic, fair trade, energy efficient, environment, biodegradable, and recycle are terms used in association with ethical and green behavior. However, these terms have multiple meanings and interpretations, with no established definition of them (Connolly & Shaw 2006). Ozone depletion, deforestation, loss of biodiversity, climate change, and global warming are additional terms associated with environmental concern (Dunlop & Jones 2000).

The world is experiencing change in climate, ecology, economics, and society that may be beneficial. According to Merchant (1992) everyone knows that climatic and ecological changes are hitting a crisis situation. General ecological awareness predicts sustainable behavior or action. With higher awareness, an individual is more likely to be environmentally responsible (Kals & Maes 2002). There is an increased awareness of global problems and a realization that human lifestyles harm the environment (Abdul-Wahab 2008; Merchant 1992; Schulz & Zelezny 1998; Sia Su 2008).

Environmental responsibility is researched separately from social responsibility or the terms are used interchangeably. However, sustainability entails both behaviors. Sustainability needs an interdisciplinary and trans[-]disciplinary approach as well as multidisciplinary approaches (Lawrence 2005).

METHOD
This paper focuses on awareness, knowledge, values and attitudes, and behavior components of ecological literacy and sustainability among college students. The literature has been reviewed from multiple sources: journal and magazine articles, newsletters, unpublished dissertation research, market research information, and web pages related to sustainability and ecological literacy. The literature is tied together through broad dimensions: values/beliefs/attitudes, millennial generation, green consumer, colleges and sustainability agenda, and the New Ecological Paradigm (NEP).

REVIEW OF LITERATURE
Values, beliefs and attitudes
Value system in society is contextual; values change over a period of time. A shift in society values appeared in the 1990s toward a focus on quality of life, less being more, re-use/durability, and a "we" philosophy (Ottman 1992). Stern et al. (1995) claim that values are shaped early in life and are less fluid while attitudes and behavior are shaped during socialization. Butler and Francis (1997) found that age and education have limited influence on environmental attitudes or behavior, indirectly substantiating Stern's group's claim. Many researchers believe that attitudes are formed by abstract values and attitudes that influence behavior (Dickson 2000).

A study conducted in the Philippines reported that gender and environment attitudes significantly affect students' environmental concern (Stern et al. 1993; Sia Su 2008). Bodur and Sarigöllü (2005) investigated relationships between Turkish consumers' attitudes and their enviromental behavior and identified three levels of environmental concern: 1) active concern, 2) passive concern, and 3) unconcerned.

Historically environmental concern has been used synonymously with environmental attitudes (Dunlap & Jones 2002:484). Constructs associated with attitudes include affect, beliefs, and

behavior. Attitudes are an outcome of judgments based on prior knowledge, past judgments, and new external information (Albarracin et. al. 2005). A UK case study of household waste management found that the predictors of reduction, reuse, and recycling behavior differed significantly, with reduction and reuse being predicted by underlying environmental values, knowledge, and concern-based variables. Recycling behavior was, in contrast, characterized as highly normative behavior (Barr 2007). Thus, it is important to understand how values, attitudes, peer group, and experience influence ecological awareness, knowledge, values, attitudes, worldviews, and behavior. Studies by Kals and Maes substantiated that ecological awareness is a strong predictor of sustainable behavior in a wide range of action fields (Kals & Maes 2002).

Research based on a psychological modelwith cognitive, affective, and behavioral components will most likely produce valuable outcomes for affecting change. Past research used cognitive perspectives; current research uses emotional perspectives with its stronger impact on individual sustainability behavior. Finding specific conditions both inside and outside individuals will favor sustainable over non-sustainable behavior (Schmuck & Schulz 2002). Degenhardt (2002) found that emotional concern is an essential driving force for the implementation of sustainable life style decisions. Environmental reading and group joining, household recycling, and participation in nature-based outdoor recreation are behaviors studied by Johnson et al. (2004). They found Asian-American and US-born Latino environmental beliefs similar to those of whites whereas African-American beliefs differed from those of whites.

S study among the Omani public found that poor basic environmental knowledge was poor, positive attitudes toward policy change for improvement, and limited environmental behavior (Abdul-Wahab 2008). Azapazic et al. (2005) surveyed engineering students world-wide and suggested that knowledge and understanding of sustainable development is unsatisfactory, finding that knowledge about environmental issues involves much more than social and political sustainability issues.

The Millennials
A private(for profit) consumer research company, Tinderbox, The Hartman Group, Inc. (2008) researched the millennial generation using landscape review, ethnographical background, trend tracking, social network parties, and neuro-linguistic mapping. This research found that *millenials* were raised in the age of Earth Day, grew-up watching cartoons like *Captain Planet* make recycling cool. *Millennials* are tired and bored with consuming, have truly global tastes, and view the world as a social construction. For this generation, sustainability is being community-oriented and supporting socially conscious and small local businesses. They refer to sustainability as "going green" and are extremely aware of local and global environment. Many do not understand the meaning of the term organic but are very conscious of socially responsible companies (L. Demerrit, President and COO, Hartman Group, Inc., A Tinderbox Report Power Point, E-mail communication, November 14, 2008). Millennial live the postmodern culture. Morgado (1996) defines "Postmodern as a body of critical theory about the nature of contemporary society" (41). Contemporary society is a post-industrial society with a focus on social responsibility and professional commitment rather than exploitation and profit ethic (Morgado, 1996). Drucker (1993) refers to contemporary society as postmodern and post industrial, a transformation from the previous modern and industrial adaptation, According to Peter Drucker (1993),

"Every few hundred years in Western history, there occurs a sharp transformation… within a few short decades, society rearranges itself—its worldview; its basic values; its social and political structure; its arts; its key institutions… Fifty years later, there is a new world and the people born then cannot even imagine the world in

which their grandparents lived and into which their own parents were born. We are currently living through just such a transformation" (p.1).

According to the UN, youth [millennial generation] forms almost a third of the world's population ("UN Division of sustainable…", 2004.).. A UN study on youth and consumption surveyed youth from 24 countries; 75 percent of the respondents agreed that the biggest challenges are reducing environmental pollution, improving human health, and respecting human rights (McGregor 2002).

Green consumer

"Green" is not yet clearly defined (Ottman 1992). Sustainability means different things to different people (Lawrence 2005). It can include survivability, greening effort, health, wellness, organic, fair trade, simple living, or buying locally. The level of engagement with ecological thoughts and actions is defined by shades of green. Individuals with a dark green philosophy encompass culture, development, environmental and social justice, equity, health, and peace. "Green" only encompasses only "environmental" dimensions (Selby 2000). In a 2007 sustainability report by the Hartman Group, Inc. a major insight was the inconsistent understanding of what sustainability is and should be. The report divided consumers into three segments: periphery, mid-level, and core. Individuals who fully understand the concept and relate it to greater good are referred to as "core," only 18% of the surveyed population ("The Hartman report..." 2007). The ultimate goal of creating ecological literate individuals would be to transform everyone into members of the "core". In the UK, 80% of the population is aware of sustainability and demonstrate their understanding by buying local food, reducing packaging, and recycling rubbish (Editorial 2008; "Green consumerism: who.." 2007).
Haanpää (2007) stated that Green attitudes and consumption styles are life-style-based expressions of individual concern about the state of the environment. Degenhardt (2002) defines lifestyle pioneers as individuals whose knowledge, attitudes, and behavior considering sustainable development are consistent with ecologically and socially amicable lifestyles. A life-style pioneer is ecologically literate to the core sense and has a clear definition of what is sustainability and living green. Degenhardt (2002) concluded that emotional concern is an essential driving force for life-style pioneers. However, Haanpää (2007) reported evidence of a strong effect of socio-economic and demographic background variables on life-styles. A life-style pioneer is engaged in life-style choices and may act as a role model for others.

Colleges and sustainability agenda

The US Partnership on Decade of Sustainable Development created learning standards that integrate all aspects of sustainability throughout K-12 education. Orr (2004) stated that the education system prepares graduates without any broad and integrated idea of things. According to Bird (2008), individuals should know the target market perceptions and barriers as they relate to sustainability, and address barriers to bring positive life-style change. However, according to Bowers (1996), ecological literacy does not happen just in structured school education, it is a cultural phenomenon reflected in everyday life through assumptions, values, products, technology, and actions.
The Association for the Advancement of Sustainability in Higher Education (AASHE), founded in 2006   an association of colleges and universities in the U.S. and Canada. Its mission is to promote sustainability in all sectors of higher education through education, communication, research and professional development (AASHE n.d.). Several members of AASHE share a common sustainability agenda: increasing efforts to incorporate sustainability issues in the curriculum despite the confusion and debate about what sustainability means and its relevance within the context of the educational system (Calder & Clugston, 2003). Development of learning standards is a step toward preparing students to be ecologically

literate before they enter colleges and universities. The declaration of the Decade of Sustainable Development and Agenda 21, a global action plan for delivering sustainable development, asserts the importance of sustainability and education's role in preparing individuals. Documents prepared by UNESCO suggest several modes to implement the goals of sustainable development. According to Calder & Clugston (2003), "The United States has barely acknowledged Agenda 21, let alone attempted to implement it." Implementation can only be effective if educators understand where pupils are in their understanding of sustainability. Concepts of sustainability must be integrated into all levels of education because today's student will be the future citizens and workforce in the global world (Martens 2006). Universities have a compelling responsibility to increase awareness and knowledge to prepare future leaders and professionals for creating an environmentally sustainable future (Calder & Clugston 2003).

University students have undertaken several sustainability initiatives (Boekeloo 2008; Ruben 1993). Muhlenberg College's students published a sustainable living guide including recycling, reduction in energy consumption, and green cleaning products, (June 2007). Students come to college imagining that they would have the power to change the world for better ("Sustainability from A. . .", 2007). Lipka (2006) states, "On many campuses, students have become watchdogs for sustainability (4)." Students inquire about campus sustainability during admissions (Lipka 2006). According to a Knight's survey, many MBA students try to incorporate green in their personal life by switching brands and using products that have natural ingredients; but in the current economic recession, they are not necessarily looking for a "green" employer (2008).

There is evidence of growing participation in environmentally conscious actions and behavior (Mertig et.al 2002). The millennial generation is the most dynamic and the most willing to take action and bring positive changes in their environment (Boekeloo 2008). Participation in environmental organizations is increasing (Kim & Damhorst 1998) as is membership in student environmental group (Boekeloo 2008). There is little scholarly literature that addresses awareness of sustainability by the public and college students or that addresses the meaning college students attach to the term "green." According to Kim and Damhorst (1998), "there is limited research on consumers' level of knowledge (or awareness) of the impact that apparel products have on the environment."

New Ecological Paradigm

The NEP or New Ecological Paradigm, a widely used environmental attitude scale, is based on an eco-centric belief system (Corral-Verdugo et. al., 2008, Dunlap, 2008). NEP measures key facets of ecological worldview and has been used with diverse population (Caron 1989; Noe & Snow 1989; Dunlap 2000). Dunlap (2000) reported that NEP has group as well as predictive validity. Major assumptions in the NEP are:

NEP1	While humans have exceptional characteristics (culture, technology, etc.), they remain one among many species that are interdependently involved in the global ecosystem.
NEP2	Human affairs are influenced not only by social and cultural factors, but also by intricate linkages of cause, effect, and feedback in the web of nature; thus, purposive human actions have many unintended consequences.
NEP3	Humans live in and are dependent upon a finite biophysical environment which imposes potent physical and biological restraints on human affairs.
NEP4	Although the inventiveness of the humans and the powers derived there[-]from may seem for a while to extend carrying capacity limits, ecological laws cannot be repealed.

(Source: Buttel &Humphrey 2002: 50-51)

Conceptually, NEP measures core beliefs and focuses on assessing worldviews (Tobin 2006; Van Den Born 2008). However, previous research using NEP is lacking social-psychological paradigm (Stern et al 1995). Stern's group (1995) found that NEP measured generalized beliefs. They created a linear schematic causal model of environmental concern with multiple dimensions. This model was further investigated by Johnson and coauthors in 2004. Hawcroft and Milfont (2008) reported a critical review of use of NEP Scale over the last thirty years with variations in samples, number of scale items selected, and the Lickert scale. A study conducted on water conservation behavior by Corral-Verdugo and coauthors (2008) challenged the validity of the NEP Scale and proposed that the eco-centric belief system is interdependent with an anthropocentric belief system. The New Human Interdependence Paradigm (NHIP) may provide a better assessment of environmental beliefs and endorsement of sustainable development. The authors suggest that further research is needed to investigate the broader domain of sustainable behaviors and interdependence of eco-centric and anthropocentric worldviews across different cultural systems (721). In 2007, Milfont and Duckitt developed another scale called Environmental Attitude Inventory (Hawcroft & Milfont 2008). Van Den Berg acknowledged that acceptance of eco-centric ideas is so widespread that new and effective tools are needed to measure these ideas (2008).

CONCLUSION

Sustainability and sustainable development are vital concepts that need to be embraced and nurtured by all individuals to bring positive change to the world. Ecological literacy is the path to sustainability and sustainable development. Research provides evidence that the millennial generation, a third of the world's population, is culturally ready to become citizens who are ecologically literate and taking action to become change agents. Ambiguity about concepts on sustainability and sustainable development impedes clear understanding. Educational initiatives are needed to minimize such ambiguity. Although education for sustainable development needs to be incorporated at all levels in education systems, current college students must be prepared as consumers and professionals. The review of literature demonstrates that clear awareness about sustainability, attitudes shaped by values and culture, and emotional perspectives in behavior are key factors that influence sustainable behavior.

In today's world, there is a strong cultural movement leading to several sustainable initiatives. Education is the key to support and sustain these initiatives. NEP has been very successful in measuring attitudes, but it might be time to develop scales that match the current value systems and other constructs to facilitate more accurate measurement to determine the impact of educational and other sustainability initiatives on individuals.

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LOLA
One of the Creative Approaches to the Consumer Citizenship Educaton

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INTRODUCTION

We live in a fast changing world. Economic and technological unity and diversity in the world, free market economy and globalization are the characteristic features of the modern world. The changes in the society influence schools and the education system on the whole. Today we need people who are able to react to the changes in life and society development. Such people are always active; they offer new ideas and original solutions. Pupils must be ready for life in all these fast changing circumstances. They have to recognize and evaluate the cases of social innovation for sustainable lifestyles. The role of a pupil and the role of a teacher change in this situation. A teacher has to find another approach, other more effective study tools and methods. One of such pedagogical tools for teachers and students is the Looking for Likely Alternatives (LOLA) project.

Consumer citizenship education in Latvia more and more attention is being paid to the combining of theoretical knowledge with the skill to use it when analyzing social innovation phenomena and solving practical sustained everyday life problems.

According to Thoresen and Consuner Citizenship Network (CCN), consumer citizenship education encompasses attitudes, knowledge and skills connected to functioning in today's society. It is responsibility learning which aims to contribute to the individual's ability to manage his own life as well as participating in the stewardship of the global society's collective life. Consumer citizenship education is interdisciplinary and cross curricular (Thoresen 2005, 11).

The project Looking for Likely Alternatives (LOLA) is a pedagogical tool for teachers and students which assists them in the process of identifying, evaluating and documenting cases of social innovation towards sustainable lifestyles (LOLA Looking for Likely Alternatives). It was established in 2005 by Consumer Citizenship Network (CCN).

The Consumer Citizenship Network (CCN) is an interdisciplinary network of educators from 123 institutions in 37 countries includes UNESCO, UNEP and Consumers International who all recognize the pressing need for constructive action by individuals in order to achieve sustainable consumption and global solidarity (Consumer Citizenship Network).

The LOLA project allows teachers and their class to discover approach and give visibility to new sustainable lifestyles in their surroundings. It provides an opportunity to progress beyond the common pedagogical use of case studies and project work which tend to be limited to the immediate classroom context. LOLA core activity is based on scouting for promising cases towards sustainability.

The LOLA project goals are:

  o develop, as a didactic tool to raise sustainability awareness, the process of searching for cases of social innovation;
  o strengthen the processes of identifying social innovation, evaluating promising cases, clarifying the conditions requiring such innovations and reflecting on the consequences of such initiatives;

- o improve the use of ICT and multimedia by teachers and students/pupils in their work of documenting relevant cases of social innovation;
- o facilitate bottom-up social learning as a complement to traditional expert-driven learning;
- o motivate teachers to involve students in learning to learn from real life situations. (LOLA Looking for Likely Alternatives).

LOLA project intends to contribute through education and awareness to a change in the currently dominant models of living, production and consumption, in particular giving visibility to new possibilities, through the examples of groups living their everyday life in a more sustainable way (Thoresen 2008, 7)

Following LOLA main goals the experiment "LOLA in Practice" were carried out and the emphasis was put on LOLA specific tool called "Teaching Pack" which was worked out in the project. It is a didactic tool to approach sustainability by investigating social innovation. The basic parts are "Student Reporter Book" and "Step by Step Cards" which provides and advances the teaching/learning process. "Student Reporter Book" is support the collections of cases by the students. It helps to arrange interviews, pictures, photographs, observations and different comments. "Step by Step Cards" are for both a teachers and student. Cars help teachers in teaching/learning process and organize case collection. They are a strong and immediate reference for students during the whole process.

The author has also used other parts of the tool "Teaching Pack" (as LOLA Exhibition, Work in progress), to prepare for the lessons optimally and to ensure valuable learning process. A didactic process to approach sustainability was carried out within LOLA project activities by researching social innovation in Jelgava Elementary School No 4, Latvia.

The purpose of this article is to determine a students' skill to recognize and define the social innovation for sustained lifestyles, using the pedagogical tools advised in the LOLA project.

METHDOLOGY

The approbation of LOLA didactic tool was done during 2008 during Home Economics lessons and pupils' free time. 48 students aged 11-12 were invited to take part in this research. The different research methods such as: discussions, questionnaire, observations and an experiment were used in the current investigation. The research also included the study of the theoretical assumptions and self-reflection and experience and approaches to defining developing students' creative action in pedagogy and psychology.

Consumer citizenship education is not only about instrumental competences - it is also about the merging of scientific methods and information with social values. Consumer citizenship education is multidisciplinary – its elements can be found in different subjects in the curriculum. Central topics of civic training, consumer education and environmental education provide the backbone of consumers (Thoresen 2005, 8-9).

Creative approach to consumer citizenship education is based on humanistic approach. It is human approach to the content of education and the process of implementation in every lesson considering pupils' interests and abilities. It is based on the development of humanistic values, the increase of self-reflection, the understanding between a teacher and a pupil and an active participation of pupils in the study process. (McInerney 1998; Fontana 1995).

Home Economics is very flexible. The themes of its content include the necessary resources for long lasting human life – physical, economical, biological, organizational, social, cultural and historical. The main didactic principles of Home Economics point out active consumer citizenship education (Līce 2007).

The strategy for the research was carried out taking into consideration the above mentioned. The stress was put on the use of active teaching methods and pupils' creative action. The

research stages were specified taking into consideration terms of carrying out scientific research:

- research of the essence of the project and didactic tools;
- choice of the aim and objectives of the research based on local characteristics;
- possible variants of managing the research;
- pilot research;
- improvements of methodology;
- experiment procedure;
- analysis, conclusions.

Creative action

The maximal self fulfillment of each personality and the development of creativity has become one of the topical features of 21 century. There is a need for creative personalities in all spheres of life.

The inclusion of different creative elements in the study process advances the development of creative personalities. It emphasizes not only the ways of obtaining the vast information as a personal aim but it teaches the skills to use the information in recognizing and solving problems. "A creative personality realizes and follows its thoughts": Sternberg R. (1995) points out. Liegeniece D. stresses that "Inner and outer action unite in a creative personality and it is not characteristic for all people" (Liegeniece 2003, 120).

Creative – creates original ideas, spiritual and material values in the thinking process (Steiner 2002).). Csikszentmihalyi explanes: "In the most diverse cultures, the concept of creativity arises in myths that try to explain the origins of life. The Judeo-Christian tradition is typical in this respect: the Bible starts with an account of how the supreme being created a world from chaos and crowned his efforts with the shaping of human beings" (Csikszentmihalyi 2000, 337). In psychology, creativity usually refers to the production of any ideas, action, or object that is new and valued. A creative person is one who stands out from the norm by producing such ideas, actions, or objects (Csikszentmihalyi 2000, 338). Bohm when characterizing creativity says 'Creativity is, in my view, something, that it is impossible to define in words (Bohm 1998).

Scientists believe that it is possible to develop a creative personality at all ages and in all subjects of the curriculum… It is promoted by creative action. Mental development gained during the creative activities can start highly creative potential development.   LOLA project work is based on pupils' creative action. The pupils' action when collecting the cases of social innovations for sustainable lifestyle becomes personally significant with its experience as a revelation and critical thinking, where the evaluation by the help of reflection plays the role of self evaluation. The pupils are not passive observers. They solve the chosen tasks by advancing their aims. Kostler A. points out that "Original discoveries are as rare in art as in science. They consist of finding new ways of bisociating motif and medium" (Koestler 1964, 393). From the collection of the cases of social innovations in LOLA pupils obtain new experience and they take part in creatively in the further development of the new experience. A pupil takes part in creative action which develops the pupil emphasizing his individual characteristic traits such as: innovation, originality, untraditional solutions, courage, creative intuition. Steiner G. stresses that the creative approach is a kind of energy preservation (Steiner 2002).

Pupils' creative and active participation is one of the main indicators of teaching quality. Wells G. points out its significance and believes it is necessary to emphasize it and include it directly in the curriculum instead of practical activities in lessons (Wells 2004). In this connection it is necessary to mention that LOLA project is based on pupils' activities starting

with observation (e.g.: identifying social innovation) and moving to solution (e.g.: evaluating promising cases), from the activities in the classroom environment (e.g.: aims and criteria in "Student Report Book") to activities in the social environment (e.g.: interviews, photos).

Galperin P. does not deny 'methods of practical activities and mistakes ' being used in acquiring experience because 'mistakes are necessary we learn from them' but he emphasizes that such action not always is rational. 'It mostly happens without a control but conscience takes place as well', says Galperin P. (Гальперин 2002, 256).Pupils' practical action is very closely connected with their intellectual action. The author with her experience of pedagogical work and creativity observed that the pupils' carried out LOLA project work with understanding not only using the method of trial and mistakes. Well G. analyzing Vydotsky's ideas, points out the necessity to move the activities towards scientific approach. (Wells 1994) Taking part in LOLA project gives pupils the sense of community. Communities develop their practice through a variety of activities. Wenger E. defines it as 'Communities of practice'. "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wangler). Communities of practice have been around for as long as human beings have learned together. At home, at work, at school, in our hobbies, we all belong to communities of practice, a number of them usually. Communities of practice are everywhere. They are a familiar experience, so familiar perhaps that it often escapes our attention. Yet when it is given a name and brought into focus, it becomes a perspective that can help us understand our world better.

LOLA in process

Home Economics is one of the subjects where consumer citizenship education is done. The curriculum of Home Economics was restructured to carry out LOLA project successfully. Pupils could choose to participate in the project or not. Most pupils were willing and interested in taking part. Four groups of pupils took part in the project. There were 12 participants in each group, 48 participants in total. Groups were not big and it was possible to see the personal interest, activity and contribution of each member in the common work. The experiment was carried out during the lessons and pupils' free time.

The copies made from the given Report Book helped to organize the further procedure and was the main tool in the systematization of pupils' work. The didactic tool Step-by-Step Cards is divided in 5 steps. The action process moves gradually from preparing work to showing investigation results. The steps are:

1. Prepare the didactic process
2. Organize the Report Book
3. Present potential cases
4. Preparate for the interviews
5. Show investigation results

The structure of LOLA project activities were worked out considering the didactic materials offered by LOLA, the previously determined stages of the experiment and the professional pedagogic experience of the authors (see Figure 1):

subject	aim	activity
Introductory lesson	Explanation of terms: social innovation, sustainable lifestyle, initiative, creative action	New information
Pupils get acquainted with CCN and LOLA project	What is CCN? What is LOLA? Why is LOLA in our school? What is Report Book? What is Step-by-Step Cards?	Report Book are given to pupils
The main steps of Step-by-Step Cards	The important tasks in every step are briefly analyzed. Step *1. Prepare the didactic process* is analyzed	Pupils are divided in groups
Plan Calendar	The length of the project and objectives of every lesson are determined	The plan of lessons is worked out
Step-by-Step Cards	Steps 2.*Organize the Report Book* and *Step 3. Present Potential cases* are analyzed.	Work with Report Book. Work in class
Step-by-Step Cards	Step *4. Prepare for the interviews* is analyzed. Interviews and investigation of social innovations surroundings	The documentation of social innovations. Work out school
Prepare the presentation of LOLA project	Step 5. *Show investigation results*	Preparing work
The presentation of LOLA project	The presentation cases of social innovations towards sustainable lifestyle	Evaluating

Figure1 The didactic structure of work with pupils in LOLA project

The following teaching forms were used in the project process: frontal, group and individual. The teaching methods vary depending on the activity structures of the current project. The main ones are: discussions, brainstorm, the use of the internet, table of ideas, drawing, photographs, design, presentation, interviews, role play, imitation etc (see Figure2).

Figure 2 Students' discussions in group work within LOLA project

The questionnaire was carried out before and after the Project activities. Seven questions included in the questionnaire are the same. Its aim is to compare the pupils' thoughts about cases of social innovation towards sustainable lifestyles before and after the implementation of the Project. There are four direct questions where pupils choose from the given answers:

yes, partially, little, no. When answering these questions pupils give self-evaluation in a hidden form. Three questions are expanded, they ask to specify and justify. The additional questions were included in the conclusion questionnaire of the Project.

RESULTS AND DISCUSSION
Observations, discussions and questionnaires carried out during LOLA project helped to analyze the project from the pupils' and teachers' point of view. The results of the questionnaire carried out twice show the pupils' general impression about LOLA project. The answers to the questionnaire show that pupils' opinion differs in the beginning and at the end of the project.

1. Can you characterize the essence of social innovation?
Only 22.9% of the respondents can characterize fully and 18.7% partially the essence of social innovation. They can do it. 41.7% have little skill but 16.7% cannot characterize it at all. After the Project activities the evaluation is different: 41.7% full characterization skills, 45.8% - partial, 12.5% - little and 0%- no skills. The drastic change in the results proves the significance of the "Instruction lesson". The detailed percentage of answers is presented below (see Figure 3).
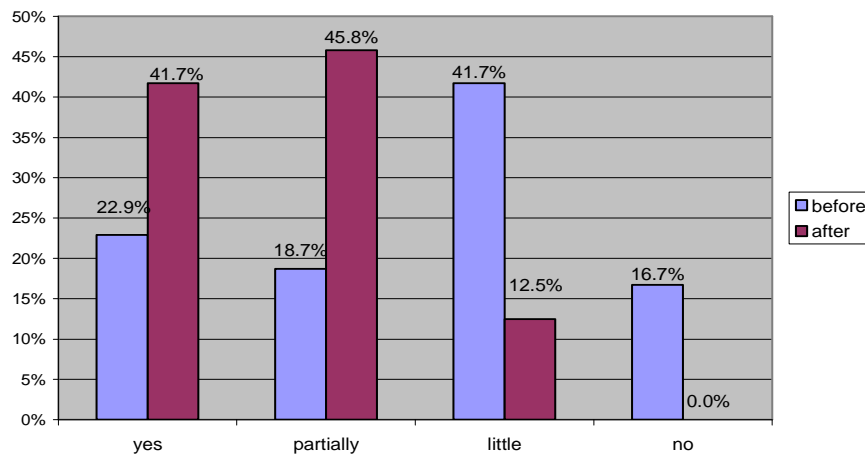
Figure 3 *Characteristics of the essence of social innovation*

2. Have you had any interest in social innovations?
The pupils have not had great interest in social innovations before the Project. Only 25 % pint out having interest before (4.2% have it, 20.8% partially) but 75% - have not had it (35.4%- little, 39.6% - not at all). After the project the result is different: 91.7% have had prior interest (43.8% - have, 47.9% - partially), 8.3% - have not (8.3% - little, 0% - not at all). The results prove that the participation in the project has created an interest about the social innovations. The detailed percentage of answers is presented below (see Figure 4).

Figure 4 *Interest in social innovations*
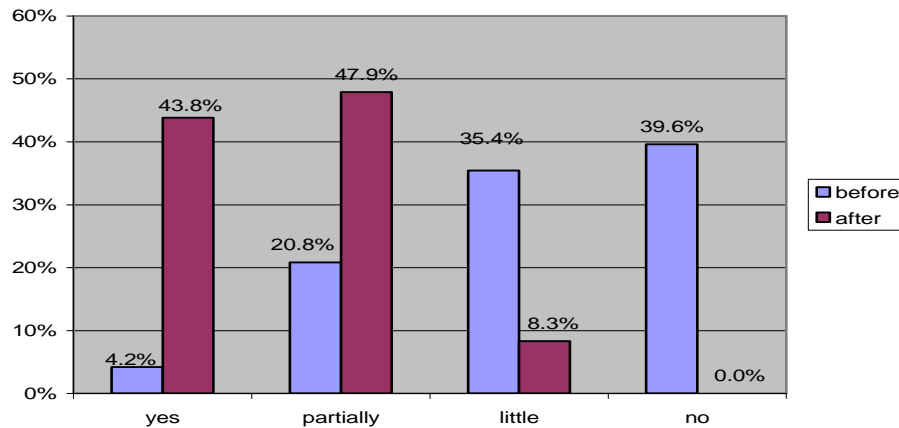
3. Name 1-7 cases of social innovations.

The pupils have difficulties in naming definite social innovations before the project. After the project they were able to name different innovations. Although it was possible to name up to 7 innovations they named only 3. At the end of the project they could name up to 8. The results prove that after taking part in the creative action it is much easier to recognize and name the innovations. The main innovations named were connected with the world globalization, forest cut out, dry grass fire, garbage collection, plastic bags, electricity, cigarettes, vehicles, fires, chemical cleaning devices etc.

4. What are the social benefits of these innovations?

A few benefits in general phrases were mentioned in the first questionnaire. Some respondents were not able to answer the question at all. After the project the pupils were able not only to mention the benefits but also to explain them a little. For example, cleanliness, fresh air, protection of animals and plants, healthy lifestyle, protection, health, warmth, economy etc.

5. Have you ever thought about the social innovations in your surroundings?

Before the participation in the project 29.2% have not thought about it, 41.6% have thought partially, 22.9% have thought a little and 6.3% have thought about it. After the project 39.6% have thought about it, 56.2% partially, but 4.2% only a little. There are no participants who have not thought about it at all. The obtained data show that the interest of the respondents about the social innovations in their surroundings, in real environment and definite situation has grown during the project (see Figure 5).
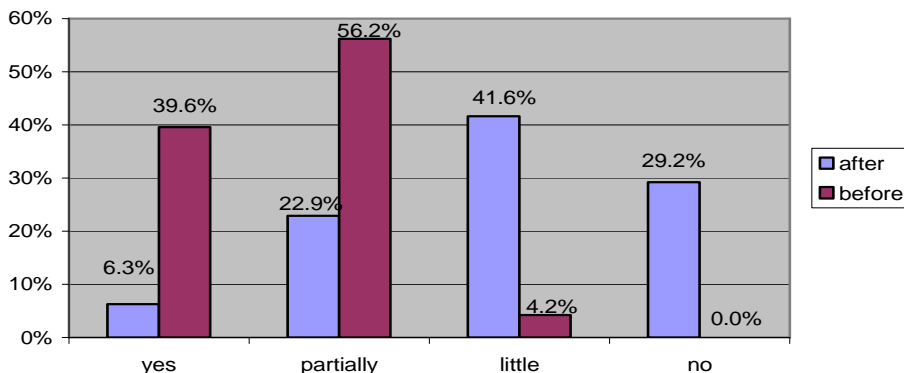

Figure 5 *Students' thoughts about the social innovations in their surrounding environment*

6. Why is it necessary to think about the cases of social innovations towards sustainable lifestyles?
General phrases and no explanations are given in the questionnaire before the project. For example, not to have the globalization, let there be peace, let healthy children to be born, not to have poverty etc. More definite cases are mentioned and explained in the questionnaire after the project. For example, the dry grass fire causes harm to the nature and kills small insects, birds and animals. It causes accidents to people. But still there are people among us who do not understand it.

The questions included in the final questionnaire perfected pupils' opinion about the project.

7. Did you like the participation in LOLA project?
Observations show that the pupils needed many explanations about the cases of social innovations and it took some time for them to understand the necessity of thinking about them. The pupils often were indifferent and showed a little interest. Their interest increased during the project activities (70%).

8. What did you gained from the participation in the project?
The respondents pointed out: closer friendship with the classmates, meeting old friends, visiting friends at home, new and interesting information, getting to know new places in town, recognizing some cases, paid attention to and estimated some things which they did not recognize before etc.

9. Would you like to take part in such project again?
The pupils support such activities at school; they want to participate in them (77.1%). Only 12.5% of the respondents would take part if the activities would be only in the classroom but not out of school.

10. Did your parents show any interest in the project?
The pupils also informed their parents about the project activities. 43.8% of the respondents said that their parents showed interest in the project. They had discussions at home, the presentation was shown, parents helped to prepare and gave good advice. 39.6% only shared information, but 16.6% only has listened without discussions.

11. Which part of the Report book did you enjoy working on best of all?
Best of all the pupils enjoyed working with Story-board (40%), Draft description (38%) and Final description (22%). It was confirmed in the discussions that they did not like to work with Schemes and Personal comments saying that if they have written everything there is not anything to comment. They have had some difficulties with Interview guide because it was unusual and asked for creative action.

12. What parts would you include in the next Report Book?
Students' mentioned - Draft description, Interview guide, Final description, - Story-board.

Figure 6 *Presentation the cases of social innovations*

The carrying out of LOLA project at school was not easy. It asked a lot of effort and well considered work from the teacher. The main stage was the elaborate preparation of the whole teaching process and creative approach to the didactic suggestions. Mainly it was connected with:

- inclusion of the project in the curriculum;
- well prepared first lesson in which the terms 'social innovation', 'sustainable lifestyle' were explained;
- creating of interest in pupils, motivation;
- out of school activities, because the pupils are not of age;
- pupils' perception and interpretation of the use of different side tools: a camera, a computer, different materials of presentation etc. to parents.

Observations and conclusions during LOLA project activities:
- most pupils worked with interest and independently;
- at the beginning it was not clear why the project should be done at Home Economics lessons, why it is necessary, what will be gained etc. The interest was created in pupils, everything was explained and confidence was developed. Pupils found it interesting that the teacher herself participated in the CNN and LOLA and that the project procedure at school will be presented in the international project. The further work was done with pupils' enthusiasm;
- pupils found it difficult to understand the essence of 'social innovation' using different methods - discussions, reading, observations, analysis, visual aids, exercises gave the conceptions of using the definite term. Other terms have been used in every day language. This part is very important and takes a lot of time. There was not enough time dedicated to this stage in the pilot research. The pupils have not understood it. It caused problems in the further project activities. This is a very important teaching part for which the teacher should prepare very well, show the visual aids and give the examples of the case of social innovations;
- the pupils liked the design of the cards – orange colour and cartoon drawings, especially Step 3 'Select most promising initiative' where it is shown how to peg sheets of paper with ideas;
- LOLA project is suitable for 6 form pupils;

- didactic materials are flexible. It can be applied creatively as necessary in the situations (pupils, classroom, time given). For example, not all the Step-by-step cards were used;
- Step-by-Step Cards are worked out skillfully starting from the simple (only recognize) to the complicated (analyze, specify, systematize, estimate) keeping to the principle of the creating approach. Step cards are visually different: The main cards are in another colors – orange and the cartoon drawings are big enough to be seen from the distance;
- the given methodological sample "Work in progress " from the Report Book was very valuable in the management of the procedure;

The pupils' thoughts and opinion expressed in the discussions as well as the personal observations during the project activities testify that the pupils have acquired interest about the social innovations. They have started to think more about the real situation in the surrounding environment. They have increased the skill to recognize and define the social innovation for sustained lifestyles, using the pedagogical tools advised in the LOLA project.

CONCLUSION

- Creative approach to consumer citizenship education is based on humanistic approach. It is a humanistic approach to the content of education and its implementation process in each lesson considering pupils' interest and abilities.
- LOLA project activities are based on pupils' creative action. The pupils' activity collecting the cases of social innovations becomes personally significant with an experience as revelation and critical thinking where evaluation by the help of reflection becomes self-evaluation.
- The research data show that after taking part in LOLA project the pupils can better characterize the essence of the social innovation (before 22.9% can do it and 18.7 partially, after 41.7% can do it and 45.81% partially), their interest in it has grown (before 25%, after 91.7%). It is possible to recognize the cases of social innovation in the surrounding environment. 70% pupils were pleased by LOLA project activities on the whole. Participation in the project encouraged closer friendships with classmates, old friends were met again and new friends were found, different situations were experienced that made the pupils thinks about values. The pupils would like to take part in similar projects. (77.1%). Also some parents showed an interest in the project (43.8%). The pupils best of all liked to work with Story-board (40%), Draft description (38%) and Final description (22%) from the Report Book. They enjoyed looking for the social innovations and describing them. They did not like making interviews.
- The pupils have gained new experience, developed their creative action experience from collecting the cases of social innovation. They have moved towards the development of a creative personality. Being active in their own real environment, investigating the cases and thinking about them, they started to pay attention to their behaviour.
- Report Book and Step-by-Step Cards – the didactic materials made in LOLA project advances the active study process. It emphasizes a creative approach to consumer citizenship education. It is suitable for form 6 pupils.
- The didactic process organized together by a teacher and a student developed students' skill to recognise and define the social innovation for sustained lifestyles.

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Proposal for a European Joint Master in Consumer Affairs "EMICA"

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Introduction

This proposal for a Master course is the result of strong recommendations issued from the Consumer Citizenship Network (CCN), that recognized the necessity for higher education studies in consumer matters as described in the publication ***Consumer Citizenship Education – Guidelines (Vol. 1 Higher Education[24],***. Among the 123 institutions that belong to this Network, a significant number of them are expect to participate actively by several ways and this includes a great number of higher education institutions (HEI's). This Master Course is intended to be a contribution to the citizen consumer's education viewed as broader issue of Consumer Science, especially on the consumer protection and involvement by the consumer's point of view, emphasizing the ethical and ecological aspects of consumerism.

The institutional and political framework of the European Joint Master in Consumer Citizenship (EMICA) lies on the content of successive declarations about the construction of the EHEA – European Higher Education Area and in the sprit that prevails from them, since the launch of the so called Bologna Process.

The main subject of EMICA studies is the Consumer Citizenship, a matter that is gaining importance in the fields of sustainable development and in the European construction, just to mention the most relevant. Consumer citizenship, like societies and business, is dynamic. It must continually evolve in such a manner as to accommodate and satisfy a variety of interests including government, business, society and industry, as well as students.

It is our intention to start the programme in September 2010, with most of the course being taught on-line. This is a very special time for us, as the Bologna Process completes 10 years since the signature of its Declaration and also because the year 2010 is the deadline foreseen to establish the EHEA – European Higher Education Area.

Sustainable development and consumer citizenship

To be able to achieve the balance between personal interests and social welfare is, at the end, to contribute to the generative foundations of the principles of sustainable development, a concept that is increasing its number of supporters among consumers.

CCN has adopted an "official" definition of consumer citizen which is as follows: "*a consumer citizen is an individual who makes choices base on ethical, social, ethical and ecological considerations. The consumer citizen actively contributes to the maintenance of just and sustainable development by caring and acting responsibly on family, national and global levels*".[25]

On other hand, sustainable development requires always the concurrence of three main domains of civil society: the social, the environmental and the economic. The task is carried at a global scale and requires the involvement of international institutions. The United Nations, aware of this problematic, have declared back in 2005, the need for a "Decade for Education for Sustainable Development",".

Consumer citizenship education as proposed and, in some way, implemented by CCN trough its numerous partners, "*is a way of supporting and contributing to the UN Decade and to*

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[24] Consumer Citizenship Education – Guidelines (Vol. 1 Higher Education[24]), The Consumer Citizenship Network 2005, Victoria W. Thoresen, Hedmark University College, Hamar, Norway.

process of transforming «sustainable development» from a concept into concrete behaviour".[26]

In fact, we fully agree that "*education for sustainable development is a life-wide and lifelong endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or will not belong to anyone*".[27] Our proposal for a European Joint Master in Consumer Citizenship, in the framework of CCN activities, bears in mind the institutional propose from the UN. It offers some disciplines dealing with the main issues that concern or is related with the sustainable development process, especially those related with environment and development aspects.

The next figure illustrates the development and independence of multiple sub domains of education, in particular, in the parallel education, which help to explain the urgency of taking into account different approaches of the education agents towards the citizen. The challenge in the education field is to connect all this different contexts to every day practices, in order to implement the *life skill education.*

Consumers education	Media education	Educação towards globalization	Financial education
Education for sustainable development	Educação towards human rights	Citizenship education	Educação towards ICT
Education towards safety	Education towards road safety	Health education	
Environmental education	Sexual education	Educação towards peace	

The main question is how to empower the consumer as a stakeholder in a proactive perspective, especially when we know that everyone are consumers and behaves as a consumer, but not everyone is a citizen or is able to practice citizenship, fully understanding all the implications of his/her attitudes and consequences. So, in order to consider the consumer citizenship approach, it's fundamental to discuss different ways of action, not only promoting the reaction to problems, but emphasizing the prevention in a proactive attitude, taking in consideration not only the individual needs but the needs from the community, in it's multiple aspects: social, economical, environmental,…

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[26] Idem, pages 15-16.

[27] In UNESCO, "UN Decade for Education for Sustainable Developement (2005-2014)", http://portal.unesco.org/education/en/ev.php

Ways of action (basically acting on the defensive and proactive prevention of problems):

Mechanisms
- Legislative action by State
- Statement of Associations of Consumers as social partners

Ways of action (basically reactive acting on the consequences of problems):

Mechanisms
- Provision of information and intervention in the established system
- Resistance and claim movements

Developing education for an active consumer citizenship

Consumer Citizenship Education must be able to provide the so-called *life skill education* in order to attribute tools that could habilitate the common citizen to understand the problems related to consumption and sustainable development in a critical perspective.

Developing active citizenship requires the exercise of dialogue and the civic participation in the democratic process and public activities of our modern and European societies. This may imply the belonging to a particular political community, but mainly and the equitable access to the social goods, like information. How can a consumer become an emancipated citizen? If teachers are readers of non-explicit curricula, what values should they teach? Is the consumer's education the best way to follow?

Since 2003 the Consumer Citizenship Network) is promoting the dialogue between researchers, educators and civil society as well as strengthens cooperation in relation to education, civic training and environmental concerns towards the development of consumer education.

Sustainable development is one of major CCN's activities outcomes, very well expressed in the topics of its annual conferences: "using, choosing or creating the future?", "taking responsibility" and "building bridges". All of these expressions presume an active attitude and behaviour of consumers citizens in contributing for a sustainable development, i.e., for a better world for the coming generations.

The cultural diversity of European citizens reflected in different habits and patterns of consumption must be emphasized, studied, understood and promoted in a way that it will positively contribute to the European construction.

This concern is recognized widely and some recent press articles and academic studies emphasized the need for higher education courses in consumerism. We must refer, particularly, the study carried three years ago by the Academic Cooperation Association (ACA) and the *Gesellschaft für Empirische Studien* (GES) entitled "The need for Postgraduate Education in Consumer Affairs in the European Union".

Based on the conclusions issued from this study, the DG SANCO of the European Commission launched a Call for Proposals for an "Integrated Master Degree Courses in Consumer Issues". The members of Task Group #7, with the strong support of the Core Unit of the Consumer Citizenship Network, immediately felt the great chance of this Call for their purposes and started working in a realistic and affordable proposal for an EJM in this field of scientific knowledge. The content of our proposal is described in the following paragraph.

- The so called "Bologna Process" and the "Lisbon Agenda" will provide the philosophical, instrumental guidelines and framework for the Master Course which main subject is the Integrated Consumer Affairs, taking the individual consumer and his/her life and choices as a central point of departure both at the micro and macro levels of economy. As a particular European point of view, the master course must focus on EU consumer policy, concept and practices of citizenship and recent concerns about sustainability.

The EMICA network seeks to identify partner regions with the scope of intensify the exchange of ideas and experiences with EHEIs and other stakeholder institutions in a well defined strategy to gain external support and dimension. This approach can be summarized as shown in the following graphics.
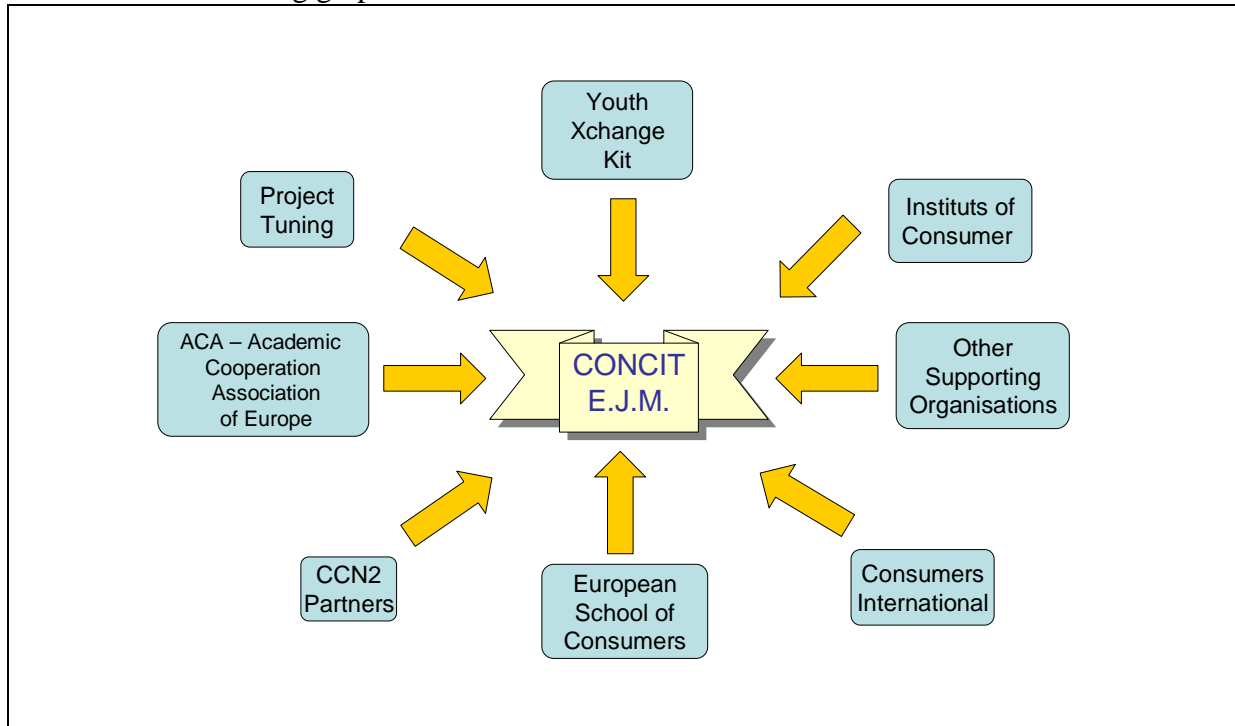
Proposal for a European Joint Master in Consumer Citizenship

The aim of the European Joint Master in Consumer Citizenship (EMICA), proposed by the Task Group #7 of the Consumer Citizenship Network (CCN2), can be expressed as: "*to develop critical understanding of an integrated body of knowledge embracing consumer management and education, consumer advocacy, legal and governance issues in consumerism, rights and duties of consumers and producers.*" To achieve this goal, EMICA will contemplate four integral themes of study:

1) the role of European citizens in a global world;
2) models of sustainable consumption;
3) cultural diversity and interdependence;
4) social responsibility and citizenship.

From an institutional point of view, the EMICA will congregate a consortium of some[28] European high education institutions whom will "supply" the essential of all teaching staff, integrated by being the other ones, "guest lecturers" from institutions outside of the

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[28] In this stage of the proposal we expect that 8 (eight) HEI could actively integrate the Consortium.

consortium, including in this group specialists from the business and public administration sectors and also from consumer associations.

The following schema illustrates the expected relationship between the Higher Education Institutions (HEI's)[29] integrating the consortium, as well as the other institutions of the TG#7, including the associated partner University of Surrey (UK), the mobility of both teaching staff and students is shown through the flux arrows..
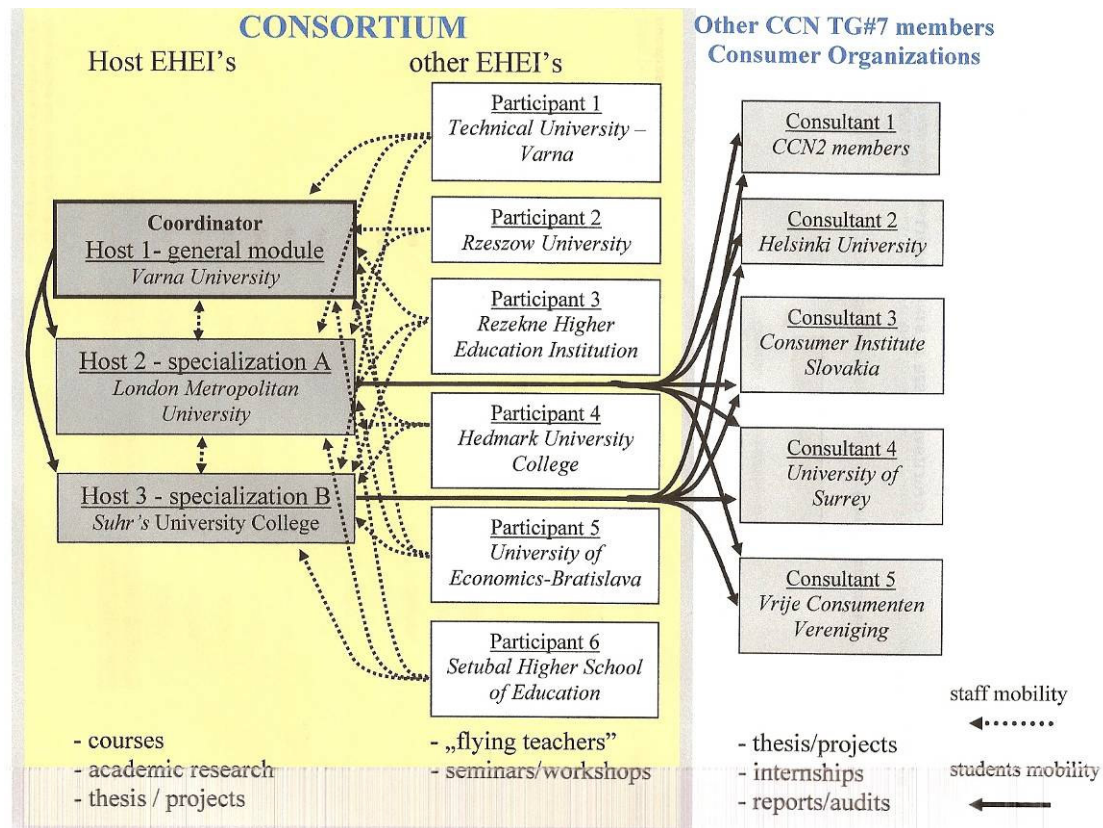
The duration of the proposed Master will be three semesters, where the first one – called *General Module* - will provide a generic knowledge and competences in consumer studies, and the next semester will provide specialized knowledge and skills to students enrolled in. This semester will propose two specialized modules, and the student must elect one of them: module A – *Consumer Protection and Quality Management*; module B – *Consumer Involvement and Innovation*. Finally, the third semester will be dedicated to an internship, to an applied project or to an academic research presented as a thesis.

Mobility, both of the teaching staff – arriving from all the HEI's in the consortium – and the students will be a key factor of the EMICA. To guarantee the effectiveness of mobility a sound financing process will be implanted with the support of the scholarships granted by the EC and donations and/or banking credit on a preferential basis.

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[29] Names of the HEI's must be seen as merely indicatives at this stage of the EMICA's proposal.
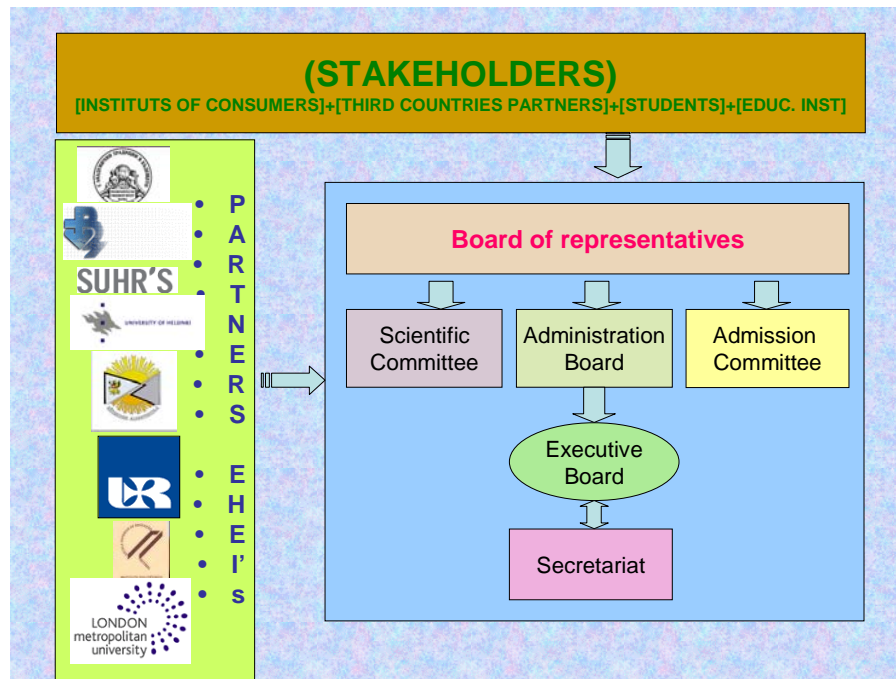
Every year, in April, the EMICA's "Board of Representatives" should approve the *Manifesto Studiorium* that contains the course program of the following academic year. The Manifesto includes the list of available courses, their respective syllabuses, type of teaching and examination, didactic material and administrative information (admission criteria, inscription deadlines, fees, scholarships, …). The degree system, quality assurance and the recognition of degrees and periods of study should also be included in the Manifesto.

It will be possible to begin or end the programme of the CONCIT- EJM study at any of the participating higher education institutions.

Students who successfully study for the total of the established credits are awarded a Master's degree with international legal recognition assured to the diploma, as established by the Diploma Supplement tool of the Lisbon Recognition Convention. The diplomas are likely to be delivered each academic year, at the official opening session of the annual CONCIT EJM, to the students that have completed the full programme of studies (courses + thesis) during the previous academic year.

According to the administrative and academic rules in each partner EHEI, a joint degree or a double degree will be delivered.

In the future website of the Master's course (www.emica.aca.eu) all the information available about the programme, the European Higher Education Institutions (EHEIs) partners, the application form, contacts, etc., can be found.

In brief, there are some issues concerning EMICA that are still under discussion on TG#7, but the above ideas are already been set up and further developments must be achieved on the stage of the creation and implementation of EMICA.

Conclusion

During these two years and a half that we've been hardly working in TG#7 with the goal to set up a proposal for a Joint European Masters in Consumer Citizenship, as assigned by the CCN2 programme. The knowledge and experience of consumer citizenship education is very different from one partner to another, reflecting the stage of development of this scientific area of study in their universities, countries and even in their lives.

Enthusiastic participation however is a common feature of all members of TG#7 and at the end of our task we feel that we've achieved our goal. Now is time to deliver the proposal for EMICA to our institutions and hope that they will take good care of it.

We're aware of the huge difficulties to implement such an ambitious project in the HEI's of ours. Increasing attention required by sustainable development and the multiple initiatives currently running at different levels, with the United Nations leading the most important one. As stated in the document "Here and Now – Education for sustainable consumption" [30], we fully agree that "*education for sustainable consumption is founded on the concept of sustainable consumption* [consumer citizenship, upon CCN concept] *which is based upon the principles of sustainable development*".

With the process of creation and implementation of EMICA we're are not only progressing in curriculum development in our HEI's by enlarging the scientific areas of study but also participating in two major goals of our societies of today: 1. the construction of a new Europe, especially in the field of the Higher Education Area and 2. the contribution for a sustainable development of our world.

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[30] Here and Now – Education for sustainable consumption, Marrakech Task Force on Education for Sustainable Consumption, Ministry for the Environment, Land and Sea of Italy; 2008, page 6.

Consumer Citizenship Education for Sustainable Development in Higher Education in Latvia

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Introduction

Preparing citizens for the life in their own country, in the European Union, and in the world is a significant task of the system of higher education.

Citizenship education plays an essential role within the context of the economic and social development in Europe. Besides, a considerable attention is devoted to it in the discussions concerning the development of knowledge-based society in Europe.

The importance of citizenship education was also emphasized in the Bologna process (2000), where principal guidelines for higher education were determined; it is also an integral part of the European Strategy of Lifelong Learning and the European Youth Policy. It should be noted that the European Commission document a New Impulse for the European Youth (1991) highlighted new forms of the European governance based on youth autonomy and active participation of citizens, while the White Paper defined openness, participation, responsibility, effectiveness, and coordination as the principles of good democratic governance (White Paper, 1998).

The concepts of "the citizen" and "the consumer" dominate major discourses on citizenship and consumption. Consumer citizenship is one such concept that has emerged in the contemporary world. Consumer citizenship can be seen as one important step in a process of sustainable development.

Consumer citizenship is an essencial element of liberal education and is part of the on-going values debate, which institutions of higher education also participate in, to define the "quality of life." Consumer citizenship education encompasses knowledge and skills needed to became independent, critical and aware consumer citizens (Guidelines, 2005: 11).

The United Nations Conference on Environment and Development (Rio de Janeiro, 1992) declared as its most important First Principle that "human beings are at the centre of concerns for sustainable development. They are entitled to healthy and productive life in harmony with nature" (http://www.unesco.org/education/) This principle assumes that humans themselves are responsible for the conservation, protection, and care of the environment. That was a serious warning that the modern society is not sustainable, and the modern society is responsible for that.

The 59th Session of the General Assembly of the United Nations in 2005 reaffirmed the need to ensure a balance between economic development, social development, and environmental protection as interdependent and mutually reinforcing pillars of sustainable development. After Johannesburg World Summit, the United Nations Economic and Social Council outlined educators' role as a key factor for sustainable development (Johannesburg World Summit on Sustainable Development, 2002).

Thus, the actualization of consumer citizenship education is an important function of higher education with a significant moral, political, and legal capacity as it ensures the formation of the citizenship identity and consumer citizenship competency of would-be specialists within the context of sustainability.

In Latvia, the system of higher education, which undergoes continuous development, is one of the opportunities for introducing change. The potential of higher educational establishments,

their resources and capacity in implementing educational reforms (UNESCO, 2005) ensure the development of an institution promoting sustainable development. Academic professionals striving to introduce changes play a key par there involving students in this process as well. Thus, reforms are promoted in a direct way, based on the experience of the participants, active operation, reflection, and formation of the new systems of reference.

The purpose of the article is to analyse the experience of consumer citizenship education in Latvian higher education within the context of sustainable development emphasizing the role of various forms of studies.

The Shared Values of Consumer Citizenship and Sustainable Development

Generally, citizenship education is underpinned by the principle of rights, responsibilities, and participation within a democratic society. It is determined by the particular role of citizens and the specific importance of citizenship in the democratic society. Citizenship characterises the desirable actions of citizens referring to democracy as well as their citizenship virtues.

It has to be noted that the list of citizenship virtues is very extensive nowadays. Along with the readiness to participate actively in the social life and protect the democratic system of the state, it also includes readiness to call into question the actions of the authorities, to take part in discussing serious issues, to take into account opponents' views, to substantiate one's attitudes, and to respect other people's rights.

In general sense, the outcomes of consumer citizenship education could be defined as: - knowledge of one*s rights and responsibilities as citizens, consumers and workers;

   - skills to function as informed and reflected consumers citizens;
  - socially responsible behaviour including:
                         < critical awareness;
                          < action and involvement;
                         < social and ecological responsibility;
                         < global solidarity (Guidelines, 2005: 26).

Similarly, education for consumer citizenship and sustainable development also includes responsibilities, rights, democratic practices and values, and understanding of the interdependence between all aspects of our societies.

There are rights and duties in the centre of the concept of consumer citizenship. The concept of the consumer citizenship demonstrates that consumers obtaining themselves with goods and services will act responsibly. It includes assuming the responsibility both in global and regional, as well as national and local level.

Responsibility is the pulse of human society. It is stimulated by vision, set in motion by awareness, realised through action and regulated by inner values, social norms, and/or legal criteria. There are no simple definitions of responsibility. Responsibility is based on complex processes of initiatives, reactions, interventions and revisions. When considering the question of what constitutes consumer citizenship, it is necessary to first reflect upon the existing explanations of responsibility, subsequently to analyze (briefly thought it be) the present distribution of responsibility, and then to contemplate which modifications appear necessary in order to contribute, individually and collectively, to more sustainable human development (Thoresen, 2005: 18) .

Besides economical, political and ethical consciousness, education for consumer citizenship welcomes ecological consciousness (Hernandez, 2004). Thus, citizenship education for sustainable development (CESD) fosters competencies that are part of citizenship education, and it can be integrated into a wide range of curricula.

Clearly, consumer citizenship education plays an important role in ensuring the stability and sustainable development of any society.

Imbued in the notion of consumer citizenship are the various constructions of consumerism and various notions of citizenship. The scope of consumer citizenship has expanded greatly in recent years. Some researchers even argue that a clear distinction between citizen and consumer roles in public life is increasingly difficult to establish (Scammel, 2000). Consumer citizenship thus goes beyond "the rights of people to be provided with appropriate goods, services and information by both the private and public sectors" (Stevenson, 1997). It also includes social responsibility and the participation of citizens in the public sphere. Consumption is presented not as an option, but as a duty and responsibility of consumer citizen (Zukin S., Maguire, S., 2004). Consumer citizenship education promotes active, rational, and responsible actions of young specialists and their participation in the implementation of democratic values.

Doubtless, an institution of higher education is an environment where it is possible to cognize, develop and promote critical, responsible, and responsive consumer citizenship. This should be particularly emphasized even if citizenship education is a highly contested and complex issue, difficult to define and fraught with difficulties (Bauer et al, 2003).

R. Kroflik (2004) argues that to prepare young people for life in social reality, citizenship education should be underpinned by the focus on the common core values of coexistence. Values such as respect, honesty, self-esteem, trust, courage, and equity would be typical core values, which could be fostered in higher education through different courses. The transmission of such values presupposes a creative environment in the institution of higher education, based on the democratic decision making processes and discussions.

Thus, it can be concluded that the link between citizenship education and education for sustainable development is ensured by the recognition of common values that promote both citizenship and ethical sustainability, focusing on the close link between various values, human life and the environment. From the perspective of sustainable development, there is a need to move from utilitarian and instrumental approaches and towards higher order values of respect and solidarity with the oneness of mankind and nature that supports ecosystems, equitable societies, and a more viable world.

In 1991, the World Conservation Union offered the content formulation of the values discussed above as the principles of sustainable living:

- Respect and care for the community of life
- Improving the quality of human life
- Conserving the earth's vitality and diversity
- Minimising depletion of non-renewable resources
- Keeping within the earth's carrying capacity
- Changing personal attitudes and practices enabling communities to care for their own environments
- Integrating development and Conservation
- Creating a global alliance. (Mulcahi, Tutiauks – Guillon, 2005: 6)

These principles have an important role referring to the sustainable development of citizenship education. An interesting complex diagram of the values of sustainable development has been offered in the academic literature (Figure No 1).
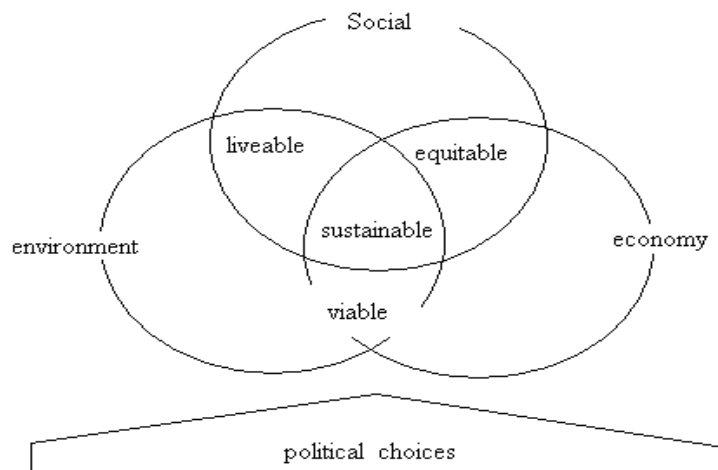
(Mulcahi, Tutiauks – Guillon ,2005,5)

This diagram clearly suggests that sustainable development is a matter of political choice and it comprises various social, legal, economic, and cultural elements. Principle 10 of Agenda 21 also sets out that environmental issues are best handled with the participation of all concerned individuals, i.e. citizens have right to receive information on environmental issues and to have opportunities to participate in the decision-making process.

Throughout Agenda 21, there are also references to the eradication of poverty as an indispensible requirement for sustainable development. It underlines the need to achieve sustainable development and higher quality of life through the reduction and elimination of unsustainable patterns of production and consumption and through the promotion of appropriate demographic policies.

Obviously, the connection between values, human life and the environment is best revealed in the process how people use the environment, manage, protect, admire, worship, and respect it. Hernandez (2004) points to values that can be developed through the study of citizenship and the environment in a scientific perspective. She distinguishes values involved in the search for information, specific values for environmental education, and personal values.

It has to be pointed out that it is even more important to ensure that the principles underpinning CESD were included in all courses of studies and could become an integral part of higher education.

Learning methodologies used in the process of studies should encourage the transmission of various core values through the creation of space for debate, discussion, sharing of ideas, creative problem solving, working in teams, thus developing critical thinking skills enabling future consumer citizens to live in the real environment away from the protection of the safety of the higher educational establishment.

In authors' view, in Latvia the practical integration of the above mentioned triad – knowledge, skills, and citizenship attitudes is shown most clearly in connection with the issues concerning the education of the teachers of social sciences.

A few issues concerning the education of the teachers of social sciences in Latvia within the context of consumer citizenship education for sustainable development
In Latvia, particular attention is devoted to the consumer citizenship education of the teachers of social sciences within the context of sustainability, their training for constructive cooperation both in the local and the European context. In the pedagogic aspect, the task of

consumer citizenship education is to develop an active personality, capable of functioning in a free civil society.

At present, the second level professional study programmes in teacher education have been designed according to the provisions of the Education Law, the Law on Higher Education Establishment, the Constitutions of higher educational establishments, and other normative acts, as well as the Regulations of the Cabinet of Ministers No 347 "Regulations on the Requirements Concerning Teachers' Education and Professional Qualifications" and No 481 'Regulations on the National Standard of the Second Level Professional Higher Education" (www.likumi.lv) , and according to the Direction No 405 of the Ministry of Science and Education of 10.07.2000 "On the professional Standard – a Teacher of Social Sciences" (Professional Standard, 2002).

The purpose of the study programmes is to provide opportunities for the acquisition of professional higher education and obtaining the qualification of a teacher of social sciences, to train teachers for teaching social sciences at schools, thus ensuring their competitiveness in the labour market.

This can be ensured by offering a set of theoretical courses referring to social sciences – economics, ethics, health education, and consumer citizenship education. A particular attention is paid to the teaching methodology in social sciences and offering topical courses promoting students' professional development and enhancing their consumer citizenship competencies, as well as developing students' critical thinking skills and understanding of the diverse values necessary for living in a civil society with a good democratic political system. There should also be provided opportunities for applying the acquired theoretical knowledge, skills, and professional attitudes in the pedagogic practice, involving students in tackling practical tasks (conducting classes, participation in projects, research, etc.).

As regards consumer citizenship education, in the recent years in Latvia there has been more emphasis on motivating students for life-long learning, so that teachers themselves would be able to advance their knowledge in social sciences and evaluate new information and its correspondence to the requirements of modern science and the needs of the educational process within the context of active European citizenship.

When comparing the study programmes of the second level professional higher education offered in various institutions of higher education in Latvia - the University of Latvia (UL), Rezekne Higher Education Institution (RHEI), and Daugavpils University (DU) - the course descriptions available in the accreditation documents of the Higher Education Quality Evaluation Centre (HEQEC) (www.aiknc.lv), as well as the reports of the accreditation committees and self- evaluation reports, it has to be noted, first of all, that courses concerning citizenship education and consumer education problems provided in the curricula of various institutions are different and unique. Generally, all these study programmes provide an opportunity to understand the basic elements of a democratic society and clarify what it means to be an active consumer citizen in a democratic environment within the context of sustainability.

The authors of the article have to note that there is no single best way how to integrate the content of consumer citizenship education for sustainable development in one particular course or study programme.

All in all, it can be concluded that the theoretical basis of professional education is formed in all teacher training programmes in social sciences by four important blocks: citizenship education, economic education, ethical education, and health education. Thus, curricula offered in various institutions of higher education generally consolidate theoretical knowledge in economics, political science, philosophy, law, ethics, etc helping students to combine their understanding of democracy with a democratic approach towards tackling the consumption aspects issues as well.

It should be pointed out that integration of various kinds of knowledge and the versatility of knowledge within the framework of common vision is of particular importance.
Such approach to consumer citizenship education regarding the aspect of sustainability also ensures its transversal role and interdisciplinary character.

Interrelationships in the content of core theoretical courses offered in the 2nd level professional higher education program 'A Teacher of Social Sciences' can be seen in the following diagram:
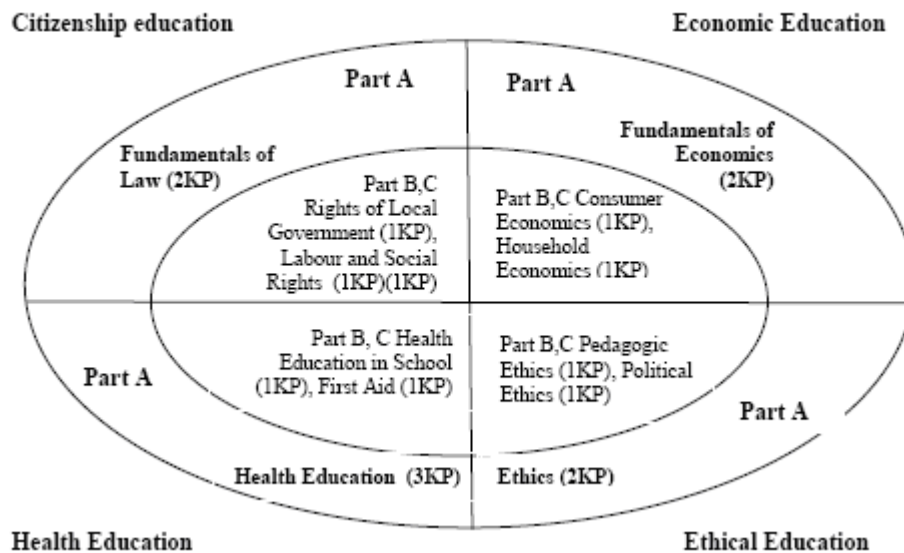
(RHEI accreditation Materials, www.aiknc.lv)

The accreditation materials available to the authors show that the forms of work and teaching methodologies used in the process of studies are not only the traditional ones: lectures, seminars, practical, classes, but also those which promote students' participation: project work, discussions, case studies, the analysis of documents, and research. Students are encouraged to make public presentations concerning the results of their work, do self-evaluation, reflect on their own identity, express a critical attitude, and explain concepts. Various courses include seminars aimed at the development of the skills of democratic cooperation, accepting or clarifying their point of view.
Many of these techniques reflect the humanistic tradition in higher education. This approach is essential as the students need not only to be actively involved in their studies, but also to acquire methodologies which they will have to use when teaching social sciences at school. The future teachers, both as citizens and educators, have to adapt and develop new approaches which will enable them to get involved reflectively and critically in the fundamental social transformations. Therefore, during the pedagogic practice, which takes place after the acquisition of basic theoretical courses   students can:

- consolidate their skills in planning, organising, and assessing the integration between the educational content in social sciences and the process of upbringing, to learn the experience of a particular school and teacher, to analyse topical problems,
- gain a deeper insight into the schools of various types, problems encountered by the teachers of social sciences and their solutions,

- consolidate skills necessary for integrated learning of social sciences and working in a team of teachers; gain understanding on the necessary areas of self-development and the possibilities to implement it.

Generally, it can be concluded that the acquisition of consumer citizenship education in various Latvian institutions of higher education takes place concurrently with the formation of the motivational attitude of students. While studying the offered courses, students acquire theoretical knowledge and practical skills, as well as realise their self-determination in accordance with the professional qualification of a teacher of social sciences.

The participants of the programme are focused on the acquisition and using of new teaching methodologies; however, insufficient level material of material and technical provisions is a serious obstacle. It does no allow the academic staff and the students to fully use computer technologies, multimedia, and the internet, which would enhance the acquisition of the content of studies and its quality.

Conclusions

Consumer citizenship education plays a significant role in ensuring the stability and sustainable development of a society. It promotes active position of young specialists and their rational and responsible participation in the implementation of democratic sustainable values.

Higher education ensures the intellectual potential of the society and trains new specialists who develop and consolidate consumer citizenship values in the pedagogic process.

Consumer citizenship education for sustainable development is an important function of higher education with a significant moral, social, political, and legal capacity. It promotes the consolidation of the principles and values of ethics, responsibility, law and participation in the democratic society.

Consumer citizenship education for sustainable development comprises essential fundamental values and understanding about the mutual dependence and interconnectedness of all aspects of social life. Consequently, it also ensures the formation of consumer citizenship competencies of future specialists.

In Latvia, consumer citizenship education can be acquired as an interdisciplinary system. This process is implemented in the context of changes and development, i.e. in a constructive context.

The analysis of the curricula offered by various institutions of higher education in Latvia shows that they provide most directly the development of the citizenship identity of future teachers of social sciences, the acquisition of the fundamental principles of a democratic society and the key values of the Latvian state and society, as well as the upbringing of competent young consumer citizens.

The Latvian experience shows that the goals and objectives of consumer citizenship education are focused on training young specialists possessing broad professional knowledge, developed critical thinking, ability to organise and manage work in a modern way, understanding of the ethical civic and patriotic values, as well as ability and skills to engage in various social activities.

The link between consumer citizenship education and sustainable development is ensured by shared common values, which reveal the sense and importance of both consumer citizenship and ethical sustainability.

The assumption that various transversal and interdisciplinary approaches play a key role in consumer citizenship education of future specialists is offered for discussion. These approaches make it possible to develop the multi-scale thinking of future specialists and

enhance their ability to analyse critically the main dilemmas created by the processes of social, legal, environmental, and economic development.

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Critical Thinking and Active Learning

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1.0 Introduction

In Norway as in all other countries of the world, we have political and educational discussions about perspectives and Challenges concerning environment, nature and climate. For several decades, the consumer society has made great profits producing and consuming more and very often to a low price. In many different ways, we have consumed and polluted the water, the air and the nature, and *housing, food and cars* are among the most polluted indicators of the world. Today, we discover daily negative effects of our modern lifestyle, and the last news (9.3.2009) from The University Research Center on Svalbard and New-Ålesund reports that there are more metan gas and CO2 in the atmosphere than ever. There is no doubt that we have to handle, but how?

The organization UNEP's (United Nations Environment Programme) objective *"is to guide and promote activities in favour of environmental protection by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations."* (2008:2). On behalf of this background, we are today considering consumption and sustainable development as an important part of the globalization process in both good and bad ways.

The expression '*sustainable development*' means an economic, environmental and social development in a society which meets individual's consumption without disturbing the natural process in the nature. The expression '*sustainable development*' was used of The Bruntland's Commission in 1987. Since then politicians have paid attention to the globalization process and sustainable development as one of the most important political tasks of the world. An important question has to be, have the political agenda been successful?

As a partner of The Consumer Citizenship Network (CCN) it is a pleasure to write that CCN has always forwarded sustainable education as one of this organization's main approaches. Through education, teachers have to try to learn and to influence on both home and school life and try to encourage parents and pupils to learn more about sustainable energy and how to live in pact with the origin, *nature.*

The positive effects of modern times and the globalization process in Norway depends on a high national gross income for years based on an extensive international trade system together with the extract of oil and gas in The North Sea. These *treasures* have brought money and a high life standard to the Norwegian people for years. The negative effects of a rich, western standard, is shortly explained in different ways as over-consumption and too much pollution. As a result of these negative trends in more countries than Norway, the globalization debate has concentrated on environment, nature and climate problems, but how is it possible to bring environmental quality to future generations? I believe this is a question of critical thinking and willingness among human beings and across social groups.

1.1 Political priorities

Norwegian politicians talk today about how to reduce the out-slip from cars, aircrafts, motorboats and from the industry, and our Norwegian prime minister Jens Stoltenberg has promised that Norway will discharge our duties from The Kyoto Declaration (1993/1997) on Sustainable Development. Norway has promised to be climate neutral in 2030, but will we

fulfill this promise? Since 1990 the Norwegian CO_2 contamination has increased with about 12 % according to The Kyoto declaration (Analys Norden 2009). How do we then manage to save the nature, the air and the water reservoir and be more free from the press of consumption and for many an unhealthy lifestyle?

It is also of great interest that The Kyoto Declaration recommended universities and higher education to make its own action plan and strive to:

1. Make an institutional commitment to the principle and practice of sustainable development within academic milieu and to communicate to its students, its employees and to the public at large;
2. Promote sustainable consumption practices in its own operations;
3. Develop the capacities of its academic staff to each environmental literacy;
4. Encourage among both staff and students an environmental perspective, whatever the field of study;
5. Utilize the intellectual resources of the university to build strong environmental education programs;
6. Encourage interdisciplinary and collaborative research programs related to sustainable development as part of the institution's central mission and to overcome traditional barriers between discipline's and departments;
7. Emphasize the ethical obligations of the immediate university community – current students, faculty and staff – to understand and defeat the forces that lead to environmental degradation.

Here are seven out of 10 recommendations for universities and higher education institutions according to the Kyoto Declaration in 1993/1997 (Wikipedia). The Declaration on Sustainable Development has been continued on the Conference in Prague (2003) and latest on the Conference in Copenhagen in 2009. As a result of this, four international organizations founded a Global Alliance to promote higher education for sustainable development (GHESP) in response to Chapter 36 of Agenda 21 (International Association of Universities 1.3.2009)

The CC Network is one good example which fulfills the intentions from the Kyoto Declaration.

1.2 Environmental challenges

The February edition of Le Monde Diplomatique Miljøatlas (2009) describes the environmental challenges for people on the planet Earth. About 80 % of the CO_2 environmentally pollution are related to car transports all over the world, while air transport claims 13 % and boats only 7 %. During the last 20 years the gross production of trade business of the world has increased with about 50 %. At the same time cargo transport has increased with 170 %. The following illustration shows the global trade business in a perspective of environmentally pollution:
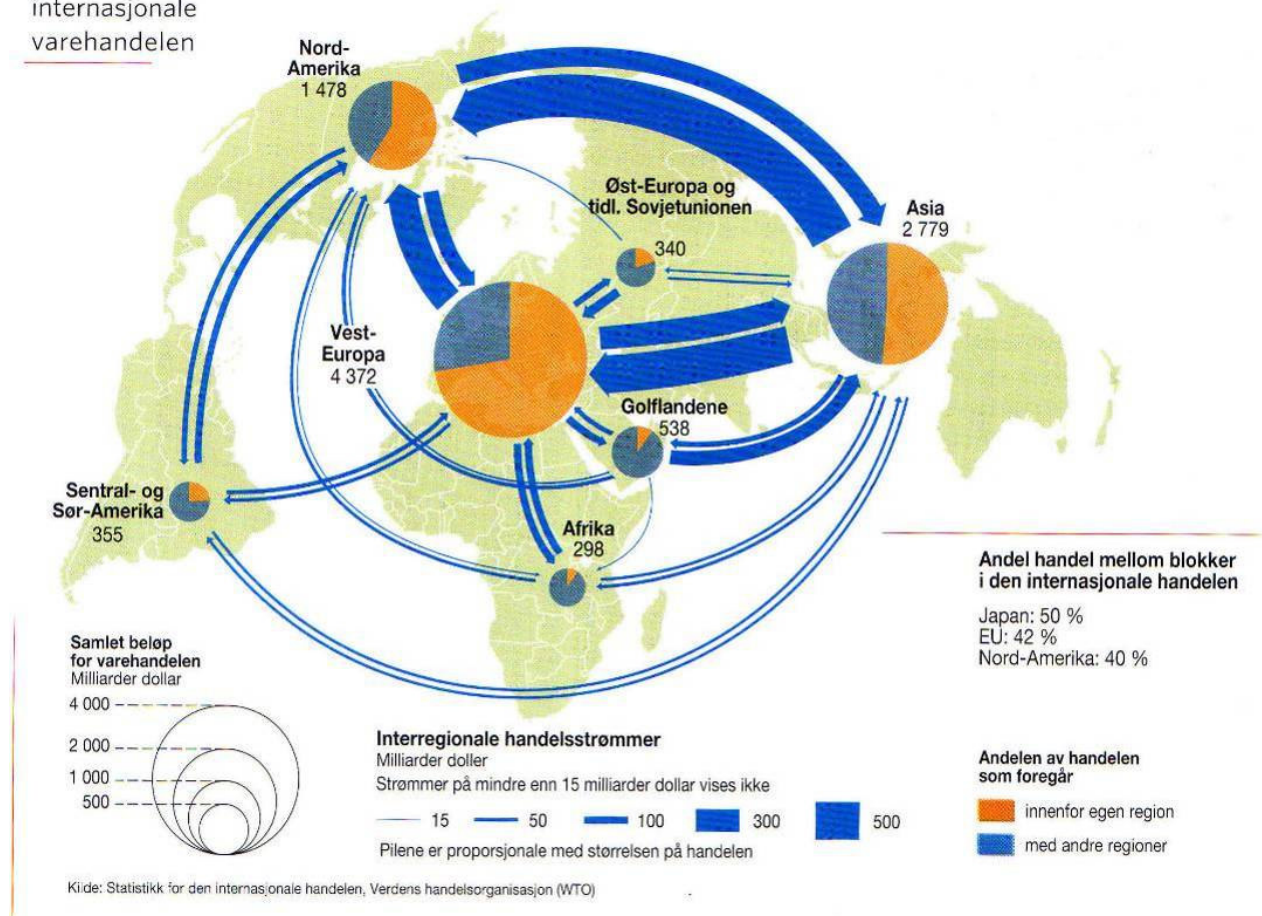
Illustration 1 *The global trade business and CO2 pollution of the world (Le Monde Diplomatique 2009:20)*

The transport along roads is dependent of oil, and gas and oil are today the biggest reasons of environmentally pollution. It would be more environmentally friendly to use electric trains as means of communication, but according to Le Monde Diplomatique (2009), European countries tear down approximately 600 km train tracks yearly. What do we do in the future? Do we choose lambs from New Zealand, burgers from The United States and dresses from Paris, or do we buy lamb and chops from the local farmer and clothes produced in our own home country? These questions will surely promote new questions, and are not always among the most popular questions to ask.

Transport of goods and production are among the most difficult challenges we all have in a society. According to UNEP (2008) even production without destruction are non-problematic:

"All consumer goods, even "green" ones, have negative repercussions on the environment. They are manufactured using raw materials, energy and water. Then they must be packaged and transported to their place of use, before finishing up as waste. Eco-design is a means of minimizing these impacts throughout a product's lifecycle for the same degree of efficiency and utility." (p:4)

1.3. The Nordic profile
In The Nordic countries we talk very often about the Nordic model of living. *The Nordic model* refers to the Nordic Ministry's explanation of a common Nordic social model based on

history, income, family-structure, welfare and similarity in climate and nature. Although, located up north, the Nordic countries have all the same environmentally challenges. None of the Nordic countries are more clever than the others to handle the existing pollution problems, but I can say for sure, that there are a growing enthusiasm for windmills, waterpower, electrical cars, eco-energy, ecological food and agriculture, and a strong will to purify the out-slip of CO_2. In this way the Nordic countries try to meet global demands.

But what about health care in a perspective of sustainable development? We are all born for physical activity, and *to walk does not pollute*. If it is possible, it is good health care even to use the bike, the stairs and the local bus than to go with the private car. Responsible consumption is often synonymous with both environmentally savings and how to live a better life. This means that you have to choose a lifestyle that is the least detrimental to the environment (UNEP 2008).

2.0. Young Consumer in the North

"Young Consumer in the North" is a three yearly real world project based on teenagers' (age 16 – 19) participation. The project is conducted from Oslo University College and is based on experienced partners from Finland, Denmark, Sweden, Island, Tallinn and Riga. Based on the fact that individual does daily different choices which affect the quality of both life and the environment, we want to look for characteristic features for this age group. We want to discuss and compare the outcome and try to find out how it is to be a Young consumer in the North? What about the individual '*footprint*'? This project is a continuing project of the project "*Physical activity, Health and Lifestyle*" which is mentioned in my paper both from Sofia and Tallinn (Eriksen 2008, 2008).

The research method in "*Young Consumer in the North*" is based on quantitative methods. The project has to follow up both national and international intentions contributed for education, sustainable consumption and research in the Teacher Training Program and school.

2.1. The Ecological Footprint

Humans have for years destroyed the rainforest and the air, we have polluted the drinking water, the fish in the sea and made the nature unlivable for many different animals and plants. This is all a result of material growth and over-consumption. Our own ecological *'footprint'* has modified the origin in a catastrophically way. The concept '*ecological footprint'* was introduced in the 90'ies and is an explanation of how human activities and consumption regenerate natural sources on earth. The net based Wikipedia gives this explanation of ecological footprint:

"The Ecological Footprint has emerged as the wold's premier measure of humanity's demand on nature. It measures how much land and water area a human population requires to produce the resource it consumes and to absorb its' wastes, using prevailing technology." (Wikipedia: Global Footprint Network)

The organization *The Ecological Footprint Network* says that humanity today uses the equivalent of 1,3 planets to provide the resources we use and absorb our waste. This means that it takes the Earth one year and four months to regenerate what you and I use in a year. The United Nations says that if our consumption trend will continue, we need the equivalent of two Earths' to support us in 2030s.

The e*cological footprint* will then be a phenomenon regarding to:
- *Footprints for nations*
- *Footprints for cities*

- *Footprints for Business*
- *Carbon footprints*
- *Science footprints*
- *Personal footprints*

(From: Global Footprint Network)

Based on these facts education has a long way to go to try to teach the next generation about consumption and personal lifestyle priorities and guide them for a more eco-green or ecological way of environmental living.

'*Eco*' means the use of more natural and renewable resources as plant origin, fresh and clean air and raw materials. They have all to be biological.

The teaching of personal footprints can in many ways be a project for both young and older pupils. We have to start with ourselves for to fit our planet today and for the coming future.

2.2 Critical thinking and consequence learning

Teaching and learning is the main program for all kind of schools. Although we know that the primary and lower secondary schools have today a distinct focus on Pisa tests, national tests and The Teacher Training Program. It is then very easy to overrule and not emphasize the importance of teaching in cross curriculum themes like critical thinking and sustainable development through a method of personalized and consequence learning.

Pollard et.al (2008) talk about both reflective teaching and consequence learning among school children. He says that this kind of teaching is to support professional engagement in a holistic way of learning.

"Personalized and active learning means taking a more structured and responsive approach to each child's learning, so that all pupils are able to progress, achieve and participate. This will be evident in high quality, challenging teaching that engages pupils and helps them to take ownership of their learning." (p:11)

Critical thinking is a didactical way of personalization in teaching. It is seen as a way of promoting inclusion and better curriculum and social understanding among young children. Knowledge based skills including knowing how to reflect, knowing how to do, knowing how to act and knowing how to evaluate and take responsibility for, has contributed to pedagogic drivers of personalized and active learning methods (ibid.).

Assessment for learning:
coming to a shared
understanding of
learning goals and how
to achieve them

Learning how to learn:
developing the skills
and attitudes to become
better learners

Pupil voice:
establishing the habit of talking
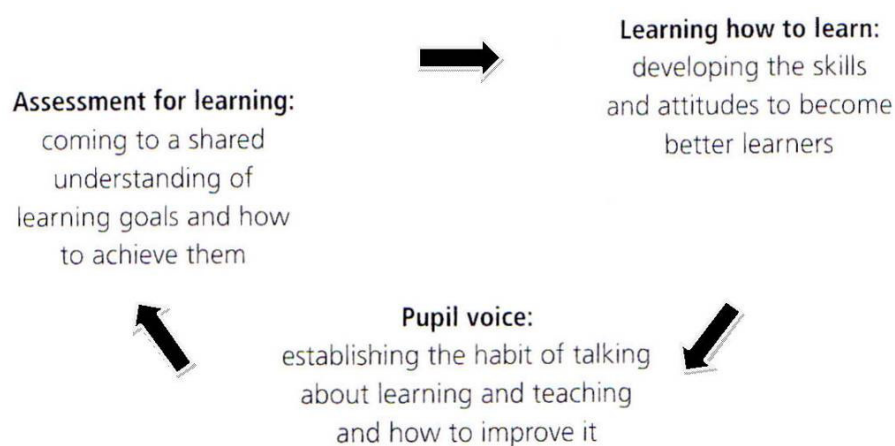about learning and teaching
and how to improve it

Figure 2 Reflective Teaching and taking ownership of learning (DfES, 2006c. In: Pollard et.al. 2008:12)

Reflective teaching and active learning is based on both individual and class dialogue and acting both inside and outside the classroom. A usual way to go through a consequent and personalized teaching can be, to follow up these different stages of consideration in class through investigating expositions like:

a) Who we are?
b) Where we are in place and time?
c) How do we share our planet earth?
d) How do we live?
e) How do we organize ourselves?

It is important to teach pupils to be thinkers, communicators, open-minded, make inquirers, caring takers and to follow the nature of biological principles. Reflective teaching can be followed up by different projects like:

1. To identify different phenomena of pollution and the ecological footprint.
2. To consider the different phenomena of pollution and the personal footprint through indoor and outdoor activities.
3. Take the quiz on Personal footprint's home page:
   www.footprintnetwork.org/en/index.php/GFN/page/personal_footprint/
4. To read about pollution in newspapers, in books or on the web. To look at selected DVDs, videos etc. What is sustainable consumption and what about the future?
5. What is an ecological or eco-green lifestyle?
6. How does the Personal Footprint calculator work?
7. Interview parents and other family persons about their lifestyle, driving, food and housing.
8. How does pollution impact on environment (the nature, the drinking water and the air)?
9. Is it possible today to raise an eco-green baby?
10. A visit to the nearest forest or plantation. Questioning the farmer about eco-agriculture.
11. Make wallpapers and group plays in the classroom.
12. To follow up individual needs through discussions and questioning is useful in school. To get attention and motivate individuals through focus on own family and own life. What do we need? What do I need, and why do I buy this or that? Can I live without it? From where and how was it made?
13. How often do we use our car, and is it possible to use less electricity?
14. What is a windmill, and how do we have sea-power?
15. What do I eat, and from where come my food? What about pollution and my own health concern?
16. How often do I walk to school? Why is it so important to walk or use the bike every day?
12. How is it possible to recycle bottles, boxes, carrier bags and other packaging?
13. Is it possible to recycle own clothes and other components?
14. Write a story about: *How do I live in 2030*?

Mostly all of these given tasks (1-14) are based on teacher's inquiring and discussions with pupils in the class. To guide and learn critical thinking is more important today than ever. Critical thinking will, over age, probably be a tool to encourage individuals for better understanding and a more conscious lifestyle.

2.3 Education, health and environmental learning

A person's ecological footprint includes both personal choices and societies' impact. The footprint is today associated with personal lifestyle as choose of food, chemical use in food and farming, smoking, physical mobility and different social services. According to The World Health Organization (WHO) about 13 millions of people are dying every year because

of environmentally pollution. This means every fourth of the diseases in the world are caused of environmentally problems.
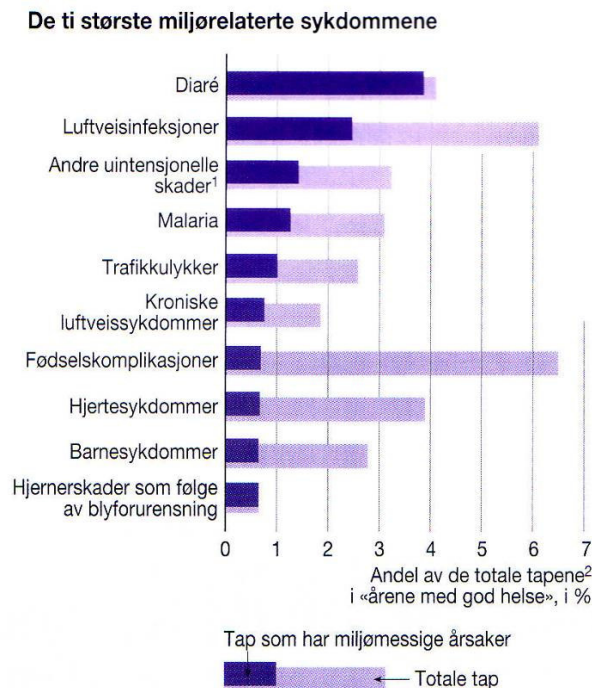

De ti største miljørelaterte sykdommene

Diaré
Luftveisinfeksjoner
Andre uintensjonelle skader[1]
Malaria
Trafikkulykker
Kroniske luftveissykdommer
Fødselskomplikasjoner
Hjertesykdommer
Barnesykdommer
Hjernerskader som følge av blyforurensning

Andel av de totale tapene[2] i «årene med god helse», i %

Tap som har miljømessige årsaker
Totale tap

***Illustration 2** The 10 biggest environmentally caused diseases in the world*
(www.who.int/quantifying_ehimpacts/publications/preventingdisease/en.print.html)

Many young and older people become also allergic or have asthmatic health problems as a result of air pollution. This is specially a problem in cities with heavy traffic.

There is little doubt today that about 40 % of the western population eat too much, walk too little and use the car too often. If we compare this daily misuse to national consumption indicators as food, transport and society, there are clear indications that personal over-consumption affect health and the personal ecological footprint. In this chapter I present some Norwegian school projects with a focus on teaching about lifestyle, health and environmental learning.

A: Use your bike and let the car stay in the garage
In Norway it is quite usual that parents drive their children to and fro school or the kindergarten by car every day during the year. Among pedagogical persons we have often called this family generation for the *turbo-generation* with a glance to a huge family-program and in high speed from school activities to work > to baby swimming > to music school > to different sport arrangements and so on. The expression '*turbo*' comes from the word turbine or a very quick and useful motor.

We have also discussed among sport teachers that too many arranged after school activities have taken the possibility for the free play of children away as an after school activity in the neighborhood. The modern generation parents are scheduling, and they are too clever to use the car in spite of short walking distances.

B: Young and green
Haneberg and Bugge (2008) have written a parent's guide about how to live and how to raise a child in a more green way of living. The authors focus on how it is possible to avoid health-

and environmentally degenerating substances with a focus on food, clothes, creams and diapers made of fabrics or paper. The idea about *young and green* can also be a starting-point for an eco-project for small children in both kindergarten and in school. Both children and parents have to learn consequence thinking about how to repair toys instead of buying new ones, and how to make new clothes out of old ones? How is it possible to raise physically active children walking to school or shopping markets instead of using cars? What about the idea of being a green kindergarten or a green school or to become a *light-house* for green education? There are a lot of challenges for human on every stage in life.

C: The hybrid cell phone
Young people are today occupied of all kind of electronic equipments. The presentation for 9 -10 years old boys and girls on the new *Eco-green Center* on the Southern part of Norway became a success. Everybody understood that batteries   degenerate the nature, and they wanted to try and use this new kind of sun cell mobile also called *a hybrid cell phone*. The new hybrid cell phone is constructed of the Japanese company named NTT DoCoMo.
The use of technological museums and eco centers in education motivate children for new thinking and trying out early in life.

D: How do we construct a water-mill or use the new "pellets"-heater?
Children are always enthusiastic when you learn them to construct a water-mill and have your own power-station. The fascination of power and how to have electricity out of a simple construction is fascinating. Some lessons outdoor give pupils quit a lot to talk about through discussions, evaluations and active learning constructing a water- mill in the nearest river.
One of the latest ideas for heating houses in Norway, is a pellets-heater, but how is this heater constructed and why? Have you ever seen a pellets-heater? Where do we buy one?

E: How do we recycle?
How does the local school recycle? How do the homes and the local society recycle? Talk about recycling, visit recycling places, and learn the pupils to recycling garbage and have new soil the next year.

F: Make a green store at school
Green stores are also known as *earth friendly stores or eco stores*. Why not make a local green store at school? The children will then be occupied with green thinking, green producing and green consumption. To cook without chemical ingredients, is nice to learn for everybody.
It is also nice to sell footballs made of green materials.

G: How do we save the nature, and how is it possible to be a part of a local climate panel?
It is a fact that 16 119 plants and animals were threatened by extermination as announced at the political meeting in Johannesburg in 2002. Probably, is the number much higher today because only 3 % of the total 1,9 million species had been estimated in 2002. The extermination is caused because of human activities, and the different ecological systems are dramatically threatened. During the political meeting in Johannesburg, the politicians announced that the world should have reduced the extermination in a wide scale within 2010. It is only 600 days left when I am writing this paper.
To save the nature should be *a pilot project* for many schools, but how do they handle? One way to go is to make the pupils' own local climate panel on school. Children' fascination of nature is great, and they are eagerly working for projects like this. Direct the project to the local press and the *Foreign Nation's Year of multiple biology in 2010*. This will then be a

good reason for all pupils in school to concentrate on nature, climate and environmental studies *towards a naturally healthy earth friendly living.*

3.0 Summary

In this paper I have tried to focus on selected results from political meetings, research on nature and consumer information with an eye on education. There are no doubt today, that we all have to handle towards a more sustainable society and have The Kyoto declaration clear in mind towards 2030. The modern society gives us all different experiences, and daily individuals make different choices which affect the quality of life as well as the environment.
Educating young boys and girls is one of the most important works to do, and schooling have a big challenge to educate the next generation to be more earth friendly than the older generations have ever been.
Teaching and learning have to be clear and connect human choices to the real world problems about factors as climate, nature, production, lifestyle and health.
We have polluted the Earth for years, and medical experts talk today about new types of bacterial immunity as a result of consumption and air pollution.
It is not difficult to conclude that the growing consumption and the disturbance of nature is a copy of how human have lived. The spirit of consumption has invaded the human mind, and it has been the right moment for years to change the spirit for a more healthy society.
There are many different approaches to go to teach pupils about sustainability through critical thinking and active learning and not to pollute young minds.

"You must be the change you wish to see in the world."
Mahatma Gandhi

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Making a Difference in the Learning Process

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Introduction

As a result of the rapid progress of information technologies the globalization processes, imbalance of growing social, economic and ecological systems destructively influence everything: the lifestyle of individuals, life quality and individuals' life in general. This influence changes the manner of living for both the rich and the poor.

A scientifically based sustainable national development conception is elaborated in order to provide the same level of human development opportunities for the next generations as we have for our generation but not creating economic, social and ecological debts, which next generations would have to pay. It is based on the principle that any nation can develop in the present and in the future only by maintaining and renewing the environment in which it is living. Though the tendencies observed in the modern consumer society are contrary to the requirements set by the sustainable national development conception.

The authors' theoretical research is concentrated on the issue what the possibilities exist for the development of comprehension of the new generation in the educational process encouraging young people choosing a sustainable lifestyle.

The necessity to introduce corrections into the organization and development of the curriculum comes forward in the context of balanced survival and desirable life quality, which are based on the opinion that is implemented into the International report "Education in the 21st Century", which activates learning to be (involving learning to know or to obtain the sources of understanding), learning to do, which involves the ability to collaborate creatively with the surrounding world and learning to live together, which in its part involves the ability to live by participating and collaborating with other people in all spheres of human activities.

Methodology

The aim of the theoretical research is to study theoretical literature and regularities among sustainable society development and requirements set for education in the 21st century. **The aim** of the practical research is to ascertain the life skills of the youth contributing to sustainable development.

1. The Definition of the Sustainable Development Concept

 A sustainable or balanced development concept appeared for the first time in Bruntland Commission Report to the United Nations. This concept gained its popularity and topicality after the meeting of the leaders of the world countries in Rio de Janeiro in 1992, where 179 leaders signed the agreement on the Action program in the 21st century known as "Agenda - 21" (www.bvs.parks.lv).

Proper comprehension of the concept "sustainable development" is essential as currently it is diverse in the society. The authors of the research offer the summary of sustainable development definitions in the table below (see Table No. 1).

Source	Interpretation of the definition	Notes, keywords
Sustainable development policy and guidelines, 2006	Sustainable development is integrated and balanced development of welfare, environment and economics that fulfill current social and economic needs of inhabitants and ensure observation of environmental requirements not endangering the possibilities of fulfilling the needs for the next generations and ensuring the preservation of biological diversity.	Welfare, environment, economics, requirements, development, needs.
Sustainable development policy and guidelines, 2006	Development that ensures satisfaction of the needs today, not causing risks for the opportunities of the next generations for satisfying their needs.	Development, needs, generations, risks.
Sustainable development policy and guidelines, 2006	Sustainable development is an integrated conception that involves all actions of people on the local level: ➢ aiming to improve the life quality of both current generation and next generations, simultaneously preserving and protecting the possibility of land to ensure life in all its diversity; ➢ basing on democracy, law, power and respect towards the fundamental rights and freedoms of people including equal opportunities and cultural diversity; ➢ stimulating a high degree of employment development in economy, whose power is based on education, innovations, social and economic cohesion, people's health and nature protection.	Conception, human activity, generations, life quality, preservation of life, fundamental rights of people, freedom, opportunities, culture, employment, economy, education, innovations, health, nature.
E. Kušners, Latvia's society participation project "Latvia 2030. Your Choice" Zemgale Forum in Jekabpils	Sustainable development is not simply increase of welfare, but preservation of existing resources as long as possible.	Welfare, resources.
www.reclatvija.lv Regional Environmental Centre – project for sustainable development of schools in the Baltics 2001 – 2003	The usage of natural resources increases along with the growth of the living standard of inhabitants. It may lead to the exhaustion of natural resources. In order to prevent this situation, strengthening of environmental awareness is necessary.	Living standard, natural resources, raw materials, comfort, environmental awareness.

Table 1 *Interpretation of Sustainable Development Definitions*

Summing up and analyzing the literature about the definition of the sustainable development concept it can be assumed that:

- ➢ Sustainable development is defined also as the development of the education process, conception, human activity, life quality, welfare, preservation of resources;
- ➢ Several generations of people participate in the sustainable development process;
- ➢ The aim of the sustainable development process is to facilitate common welfare of society and to provide the opportunities of the humanity to live in healthy environment implementing its own potential and abilities.

2. Theoretical Research Results

Sustainable development involves 3 dimensions:

- Environment – it has necessary basis for sustainable development. The ecosystem currently is endangered by human actions. Satisfaction of current needs at the same time decreasing contagion of human activities is great challenge and needs new ideas.
- Economy – an instrument by which it is possible to achieve sustainable development. Economic prosperity is a very significant tool of sustainable development as it helps to put down poverty, to finance recovery of economy, to carry out changes in our development etc. Though economic growth not always means the improvement of sustainable development. Only such economic growth, which does not produce a negative influence on environment, is supportable as a part of sustainable development.
- Social dimension – an aim, which implies provision of sufficiently good life for both current and next generations. Sustainable development can be ensured by the support of civic society. (Our Common Future; The Brundtland Commission, 1987).

Respectively civic education is necessary in order to achieve the aim. It begins in the family and continues at school.

Theoretical approaches were studied in order to find the answer to one of the most topical questions of modern education, how to make use of current experience more effectively in order to make civic education a useful tool for making the future:

- Professor Roberts Ķīlis' approach "We have to do something in order to control consumption and overconsumption. The consuming approach towards the resources is opposed by more sustainable and healthier lifestyle. (Society participation project "Latvia 2030. Your Choice" Latgale Forum in Daugavpils).
- Capital of Latvia's sustainable development is people, their abilities, knowledge, talents, nature and location of Latvia, ability to collaborate and to do together the things that cannot be done individually (Sustainable development policy and guidelines, 2006).
- When carrying out civic education in the family, at school, in the society it is very significant to allow everyone thinking about one's own personal participation in activities, which influence social, economic, political and environmental situations that become the causes of poverty and create obstacles for sustainable development (www.google.lv).
- Sustainable education prepares individuals for changes and life in the society based on knowledge, which would be constructive, in which people would be able to take responsibility, in the society which is tolerant and in which the uppermost one would be an individual and not business, in which individual could feel himself economically independent and enrich his own life with capacities of his creativity and liberty to take risks using new technologies (A. Šmite, 2008). Nonetheless as proved by the research of

leading countries of the world in education, today's negations in the society and in education hinder sustainable development of education and mark crisis in education (A. Šmite, 2008). Within the framework of the school there is a possibility to implement civic education in the learning process as an intermedium of subjects; as a part of out-of-class and out-of-school activities, as an integral part of the whole school policy and culture (www.iac.edu.ls). The Committee of Regions considers that education is the element which unites three pillars of sustainable development – development of economy, environmental protection and society development. Education is a precondition for the fact that an individual develops and participates in modern society as well as the preconditions of society's development (Official Journal of the European Union, 2008).

- Education stimulates the humanity for changes in the lifestyle. Owing to the correspondent consumer education and explanations about the advantages of sustainable development, required changes of the lifestyle have to be created so that they were more acceptable and allowed to prevent a conflict between the old lifestyle and the lifestyle considered as "convenient" and the new ways oriented towards sustainability (Official Journal of the European Union, 2008).

- Education oriented towards sustainability is not possible without corresponding participation of teachers and academic staff, enthusiasm and encouragement of students' skills for life. Education facilitating sustainable development is good especially for children and youth as the next generation because for them such principles would create value systems and basis of the lifestyle. Education in the sphere of sustainable development should be perceived in the family, pre-school institutions, and schools. (Official Journal of the European Union, 2008). Family plays an important role in this education process, but we have to consider that the content of life skills, attitude towards the surrounding world and its preservation are also determined by the corresponding society traditions and customs.

- It must be admitted that the society not always comprehends the concept "sustainable development" nowadays. Therefore the Committee of Regions considers that families need consultations about the application of the sustainable development principle in daily life, because the acquisition of life skills by children is delivered basing on the feelings and practical experience (Official Journal of the European Union, 2008).

- There are several definitions of life skills. The World Health Organization understands life skills as "an ability to act with positive behavior according to the conditions which give an opportunity for individuals to deal with daily life requirements set by life itself". (Bluka I., Rubana I.M., 2002)

The most important skills necessary for life activities are as follows:

- To take responsibility;
- To comprehend and control one's own emotions;
- To collaborate with other people;
- To think critically and creatively;
- To solve problems.
- Education institutions together with families take part in the process of acquiring life skills. The task of school in the sphere of sustainable development is to motivate students through the acquired knowledge, obtained skills and abilities to choose the sustainable lifestyle. The educational process is the most significant way for implementing such civic life values that would promote student's comprehension about sustainable development principles (Official Journal of the European Union, 2008).

- Sustainable school speaks about sustainable development in all subjects, encourages students to evaluate critically how different resources are used, motivates students and teachers to think locally and globally, promotes sustainable development in society and at school with the assistance of common activities:
- stimulates students and teachers, who save resources;
- uses the resources usefully;
- collects paper for recycling;
- appeals to students to evaluate their own personal actions in the usage of resources (www.bvs.parks.lv, 2008).

The measures for sustainable development to make students be able to acquire the necessary life skills, economic thinking and economy could be as follows:

- schools of "Seasons";
- "Green Routes";
- "Open Door Days" and seminars about environmental issues;
- courses that promoted an environment friendly attitude;
- exhibitions;
- "Green Hours" (monitoring of flora and fauna "mini ecosystems", lessons of art and those of technical character using natural materials);
- places that regularly need to be cleaned and taken care of, etc. (Official Journal of the European Union, 2008).
-

The research is based on the learning method offered by Dr. paed. professor I. Žogla, where a student is motivated to choose a sustainable lifestyle through the acquired knowledge and obtained skills (see Figure No. 1).
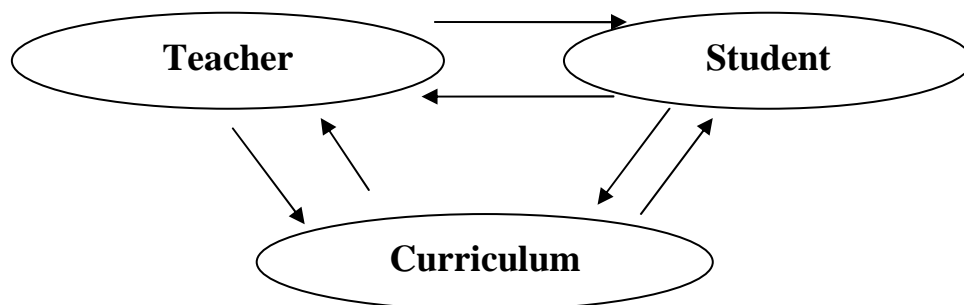
Figure 1 Learning Model for Choosing a Sustainable Lifestyle

The figure reflects relations between the teacher and the student in the framework of the curriculum to encourage choosing a sustainable lifestyle.

3. Research Organization and Grounds
The aim of the research: to ascertain the level of the developed life skills of the youth in relation to sustainable development.
The research was carried out in 3 stages, which correspond to the model offered in Figure 1 about the choice of a sustainable lifestyle and make relations between three components offered by the model: a student, a teacher and a curriculum.
1st stage. In September 2007 the research of life skills acquisition was carried out in 2 comprehensive schools of Rezekne city and 2 of Rezekne district with participation of 35 young people aged from 12-17 years.

2nd stage. During the period of 7 months these young people were **offered a life skills development program** at their schools that was prepared within the framework of the project "JJJ – Youth with Insufficient Social Skills" body of education activities "Youth for Youth".
3rd stage. By the end of acquisition of the program a **repeated survey of 35 young people was carried out** in order to ascertain the dynamics of life skills acquisition.
Theoretically we clarified that since social skills are a kind of skills that ensure the establishment of social relations with other people in order to achieve particular social aims, and then abilities encouraging collaboration and communication with other people are a kind of social skill.

Wherewith we can assume that **life skills** can be divided into 3 groups:

Social skills;
Skills promoting self-exploration;
Problem and conflict solving skills.

These relatively divided groups of skills in their part involve some more peculiar skills. Observation of each of these skills and summarization of the results **can reveal the level of life skills.** Existence of particular skills can be evaluated according to the points system: 1 – skills are observed, 2 – there are skills and knowledge of using them, 3 –these skills are used daily according to a definite situation.
Social **research methods** were used within the research: **qualitative and quantitative.** From qualitative research methods **observation and an interview method** were used, but from quantitative research methods – **a survey method**. Since quantitative methods can provide only statistical research data, the research was supplemented with qualitative methods in order to justify the results with information and verbal research data obtained in observation.
Interview – an interview of teachers and social teachers was carried out aiming to ascertain their opinions about the levels of teenagers' life skills development and possibilities to improve them.
Survey – surveying of the youth was carried out aiming to research comprehension and view of each student to the level of life skills and abilities, their acquisition as well as to ascertain a desire to develop them. After acquisition of the program the survey was also used to compare the levels of life skills of the youth and to ascertain the dynamics of their acquisition (SDTV, 2000).
Observation – information about the group of clients is obtained immediately perceiving and registering factors that influence the observed objects *(Engere L., Gleške L., Kvjatkovska L., Šulce D., 2004).*
Observation was also carried out to ascertain interrelations of the youth in daily life. We can supplement already obtained information as well as gather more genuine data in general with the help of this method.
Mathematical processing of data – the method was used to sum up the gathered data, to obtain their proportion and to reflect the gathered results graphically. *Pearson's correlation coefficient formula* was applied for comparison of the obtained data. The correlation coefficient is a ratio of relations between two variables.
Modelation was used to model and split the stages of the research by setting definite tasks for each stage.

4. The Results Obtained in the Research, Their Analysis and Conclusions
In the first stage of the research exploration and analysis of the situation was carried out as well as identification of problems and exploration of the necessity to search for new ways of

solutions. **In the second stage** a life skills development program for youth within the framework of the project was offered as one of the solutions. **In the third stage** we ascertained whether and what dynamics has occurred, offering the youth to develop life skills by participating in the program.

In the first stage of the research in September 2007 4 respondents were interviewed: 2 social teachers and 2 teachers to ascertain the level of life skills of the youth as well as their view about its development. It was clarified that the level of the majority of the youth life skills development was average or below the average, which was indicated by their inability to solve problem situations starting with the contemporaries, frequently with teachers and quite often with parents. Low communication culture was another indicator, as well as an inability to listen to people, to accept opinions of others, an inability to accept criticism and to express it constructively. Teachers also consider that the youth have a low level of collaboration skills – to establish productive relationship, have no skills of taking responsibility for their own decisions, actions. The provided results are also approved by the information obtained in observation. The youth having unjustified reasons miss school, trespass upon their spare time, they give a way for deviant behavior - use toxic substances, namely, cigarettes, alcohol. Wherewith there is low comprehension of values, they are not established or are distorted. The reason for many problems mentioned above should be searched in the family; in mutual relations among the family members, style of upbringing, socio-economic position of the family as well as the social status, etc. The youth have no motivation to develop; it gives evidence of a shallow specter of needs. The youth do not comprehend the perspectives of the future, they live for today and waste their time unproductively. During the observation it was established that a part of the youth willingly participate in various activities intended to provide the youth skills and abilities necessary in daily life. Those activities, which seem exciting and attractive and where skills are acquired, indirectly are attended more willingly. Teachers propose to offer more time for the youth in purposeful activities aimed at the acquisition of life skills, which would allow organizing spare time of the youth more effectively.

The survey was carried out among 35 respondents – the youth provided opinion about their life skills and the possibilities of their development. The youth evaluated their social skills, self-exploration skills and problem and conflict solving skills using a 10-point system from 1 to 10 in an ascending order, where 1 – underdeveloped, 5 – averagely developed and 10 – well developed skills. The same control questions will be asked them repeatedly after 8 months, which is enough to observe the dynamics of the acquisition of life skills.

The youth consider that the acquisition of life skills in a 10-point system is average or a bit above the average. It most likely shows elevated self-esteem, inability to evaluate the situation critically.

In order to improve skills of solving conflicts, teenagers have to learn understanding himself, to analyze their own feelings and emotions, to learn regulating them, has to acquire an ability to accept other people, to evaluate critically and analyze themselves and their own activities. By analyzing oneself a person learns to comprehend others. When a person realizes own needs and is able to evaluate own strengths and weaknesses as well as is aware of own resources, able to regulate own emotions and to express own feelings, can listen other people and respect opinions of others and finally has an interest to collaborate – positive communication is established. The authors of the research are certain that the development of these given skills has to be noticed in work, first of all with the youth although they are important in all age groups. Since all of us live in society, everyone tries to establish relations with other people, and the higher the development of these skills, the more successful the socialization process that lasts a lifetime would be. This skill is a precondition for a harmonic personality.

Conclusions: In the first stage of the research the problem was identified – the level of the youth life skills is average or low; in youth's opinion it is average and a bit higher than average; 2) the way of solving the problem – organization of a life skills development program for youth.

The second stage of the research: October 2007 – May 2008

35 respondents of the research – the youth from 2 comprehensive schools of Rezekne city and 2 schools of Rezekne district were offered an opportunity to participate in the life skills development program, which was organized within the framework of ESF supported project "JJJ – Youth with Insufficient Social Skills", its measures "Youth for Youth", its activities for the social teacher's work. The youth worked in groups, as communication in a group of peers was essential and natural for the youth at this age. A group is natural environment for the acquisition of life skills: interaction with peers occur in the group with a common aim and a common activity, the group is a place where new experience can be acquired, the most significant issues can be discussed, such significant skills as communication and establishment of relationship, critical, creative thinking skills, emotions and stress management skills, decision making skills, taking responsibility and skills of solving problem situations and conflicts as well as many more practical skills are acquired. The offered program was implemented with the youth – specially trained managers, in the given case the interviewees were special education teachers and comprehensive school teachers.

Third stage of the research. In May 2008 a repeated survey was carried out. The same 35 respondents were surveyed to ascertain the level of the acquisition of life skills of the given youth after the acquisition of the development program (see Tables No. 2, 3).

Kind of skills	Average assessment in points	
	Before the program	After the program
Collaboration with others		
1. Skills of establishing relationship	6.2	8.1
2. Skills of regulating emotions	6.3	7.6
3. Communication with others	7.3	8.2
Communicative skills		
4. Skills to reach a compromise	5.9	7.0
5. Skills to accept and express criticism	7.1	7.8
Self-exploration skills		
6. Accepting the role of the external image and gender of oneself	7.4	8.5
7. Preparation for a professional career	6.8	7.8
Problem and conflict solving skills		
8. Decision making skills	7.3	8.4
9. Time and work planning skills	7.1	8.1
10. Practical skills of life	7.1	8.2

Table No. 2 Life skills

Group of skills	Average assessment in points	
	Before the program	After the program
Collaboration skills	6.6	8.0
Communicative skills	6.5	7.4
Self-exploration skills	7.1	8.2
Problem and conflict solving skills	7.2	8.2

Table 3 Groups of life skills

The obtained data were summarized by calculating the average assessment according to kinds of skills and groups of skills (see Figures No. 2, 3). Pearson's correlation coefficient formula was applied in order to compare the levels of life skills development before and after the acquisition of the program. The correlation coefficient is a ratio of relations between two variables.

Figure No. 2 Average Assessment of Students Social Skills

Figure 3 Average Assessment of Students Social Skills Groups
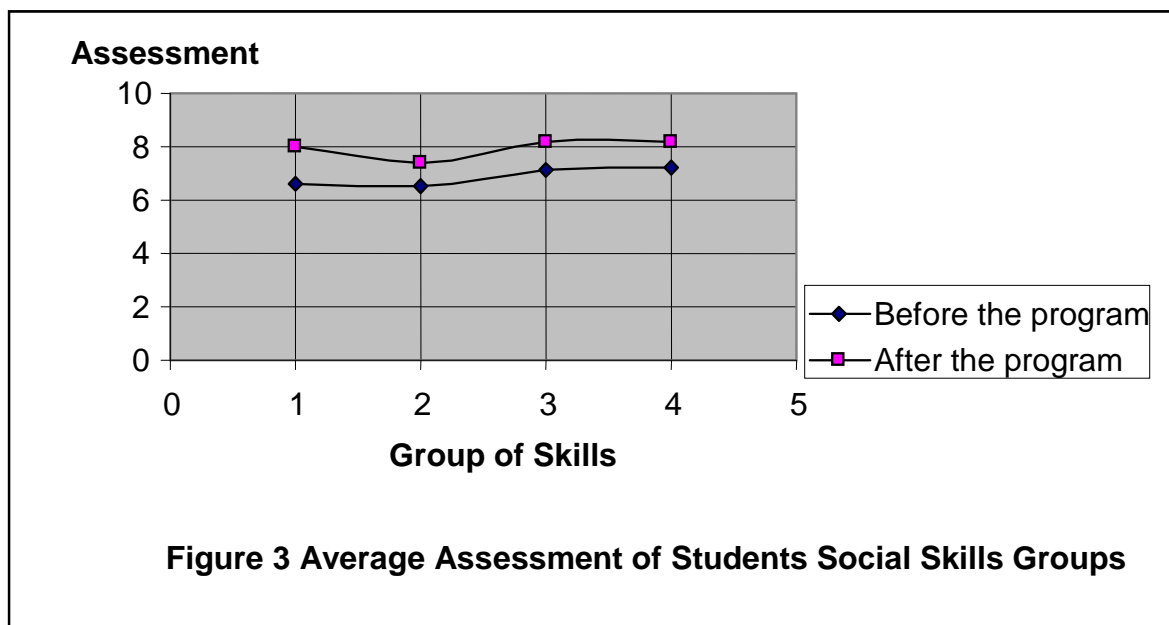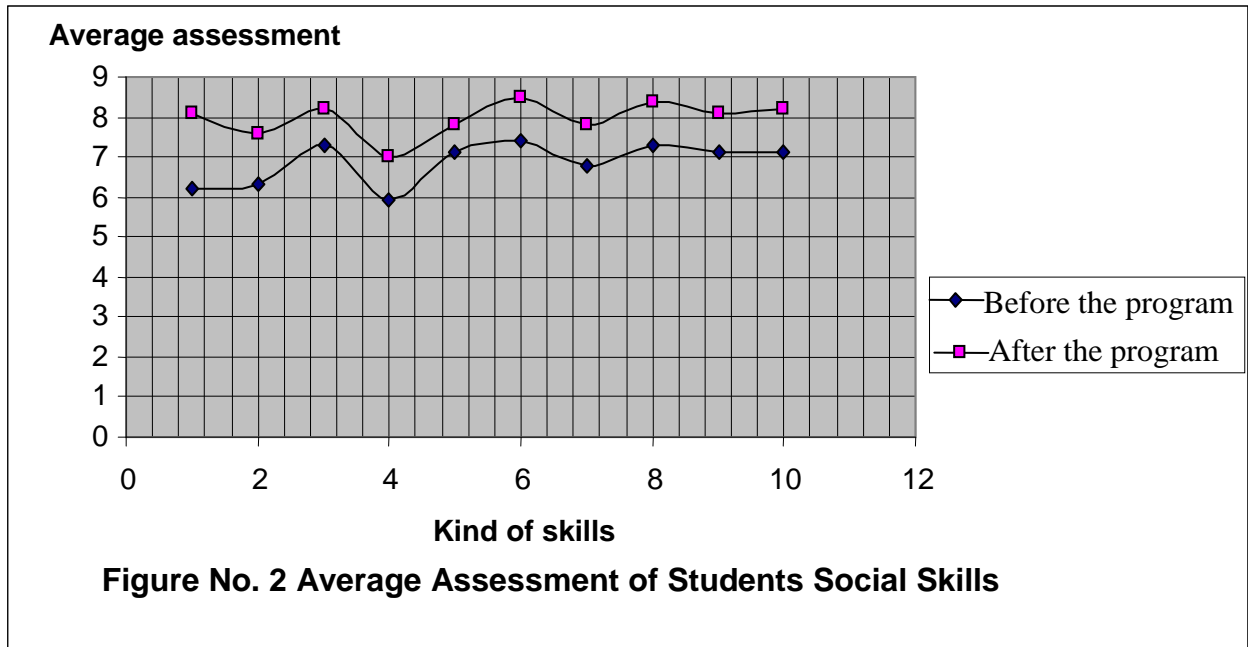
In the given case the correlation coefficient shows that the coherence between the obtained data is tight: correlation coefficient – 0.827330147. With the help of correlation coefficient the relation between the level of the youth life skills before participation in the program and after its implementation was determined.

The obtained results of the survey basing on the youth's opinion with certainty show the dynamics in the acquisition of the youth life skills. It allows considering that in the next generation the system of values and sustainable lifestyle choice will develop these life skills. Within the framework of the given program behavior correction, self-respect and self-esteem development were carried out along with the development of life skills.

Conclusions

The launched work with the youth needs to be continued in order to make these life skills lasting as they need time, consolidation and strengthening in similar programs and activities of different types.

It is necessary to carry out the training of social teachers and general teachers so that they could implement such and similar life skills acquisition programs for the youth, as well as to become moderators for other teachers.

It is necessary to find an opportunity to elaborate new programs for the acquisition of life skills for the youth having different levels of the acquisition of life skills.

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"Fish & Kids" – AN MSC project to bring sustainable seafood to schools and restaurants

Marnie Bammert
Marine Stewardship Council (MSC)

About the MSC
The Marine Stewardship Council (MSC) is an independent charity, set up in 1999 as part of the solution to worldwide overfishing. The MSC's vision is of the world's oceans teeming with life, and seafood supplies safeguarded for this and future generations. We aim to achieve this by using our eco-label and fishery certification programme to recognise and reward sustainable fishing practices, influencing the choices people make when buying seafood, and working with our partners to transform the seafood market to a sustainable basis – more information at www.msc.org.

According to the Food and Agriculture Organisation of the United Nations (FAO), over ¼ of the world's fish stocks are overfished and more than ½ are fished to their biological limit (FAO 2008). Seafood is important to millions of people around the globe and thus encouraging the next generation to eat sustainable fish and understand the importance of sustainable fishing is vital.

MSC's "Fish & Kids" Project
In 2005, the MSC's Fish & Kids project was initiated in the United Kingdom thanks to support from Defra's Environmental Action Fund. It was designed to work with suppliers and school meal providers to encourage and promote sustainable seafood served in schools as well as to educate school children on marine issues.

On the one hand, MSC teamed up with a large foodservice distributor to encourage Local Education Authorities (LEAs) get involved in the Fish & Kids project. Foodservice distributors supply LEAs with meals and are thus key in approaching the school sector. The aim was to get as many schools as possible sign up for Fish & Kids and offer sustainably caught and MSC-labelled fish to their kids. In order to use the MSC label, school kitchens have to become certified to the MSC's traceability standard so they can prove that fish with the MSC logo actually comes from a fishery that fulfils the MSC's environmental standard.

On the other hand, MSC developed comprehensive education material to help teachers integrate basic knowledge about fish, overfishing, sustainable fishing practices and consumption in their lessons. The education pack was developed to match the national curriculum and can be built into various subjects such as English, History and Geography. Activity and discussion sheets help teachers design their lessons. Fish & Kids also features an interactive website holding additional teaching resources and fun games. The website was developed to complement the education pack and can be viewed at www.fishandkids.org.

MSC supported participating schools in launching Fish & Kids through advice on how best to become certified, how to inform their staff and pupils about sustainable options on their menu, though a template press kit, a life-sized mascot called "Murdock, the fisherman's cat" and a launch event for press, staff, pupils and parents.

Through the project, schools put their purchasing on a more sustainable basis and taught their children about the crisis in our oceans and the positive solution the MSC offers.

Capacity building in the UK foodservice sector and the supply chain

In order to be able to offer MSC-labelled seafood to their guests, restaurants themselves need to be able to buy fish from MSC-certified fisheries. In 2005, foodservice and catering businesses like restaurants, pubs and schools had the choice of only five MSC-certified products, all frozen, available from two foodservice suppliers. In 2008, this had increased to around 18 certified suppliers offering a diverse range of more than 140 MSC-labelled products. Many products have been developed especially for the schools market and include salmon fish fingers, plain fish and fish pie mix.

Participation of foodservice outlets, schools and restaurants

Most notably, success has been achieved in the cost sector, focusing on the primary education market through the Fish & Kids project. 18 school meal providers and their 2,600 schools are covered by the MSC's Chain of Custody certification, which ensures traceability of certified seafood from boat to plate and allows schools to use the MSC logo to highlight sustainable lunch choices. At current projections 25% of UK schools will be involved by the end of 2009.

There has been some real progress in the commercial sector, with successful certification of a national chain of sandwich shops and several 'high end' restaurants. 133 'Pret a Manger' sandwich shops sell an MSC-labelled sandwich, three hotels offer MSC-certified brasserie menus and seven independent restaurants promote MSC options.

As raw material increases as fisheries important for the foodservice industry in the UK begin to achieve MSC certification, it will become even easier for foodservice suppliers to provide the relevant products. There has been a change in attitude of the fishing industry in the UK towards the MSC. Voluntary certification to the MSC standard is seen less as a threat, and more as an opportunity nowadays.

Awareness and buying behaviour of Local Education Authority (LEA) buyers

For the purposes of this project, LEA buyers have been classified as the key audience. The buyers make the decisions about what items are listed on the menus and thus they hold the key to millions of fish meals every year. The evidence presented here highlights that the MSC and the Fish & Kids project has offered buyers a real opportunity. They are increasingly aware of and buying certified sustainable seafood. Highlights from a telephone survey of LEA buyers, carried out in 2006 and 2008, are listed below:

- Unprompted recall of MSC as an organisation supporting socially or environmentally sound food rose from 0% in 2006 to 13% in 2008.
- In 2006, 12% of the sample could correctly identify the logo as belonging to MSC. In 2008 this has doubled to 25%, significantly higher than the general population.
- In 2006, 15% of sample had bought MSC products for the schools they supply with meals and in 2008; this had increased enormously to 36%.

MSC logo-ed products now have a secure long term place on menus in the sector, and the continuing support of foodservice distributors will continue to expand penetration and distribution.

Engagement of schools, children and families

Over 800,000 children in the UK are being offered MSC labelled seafood at school and see the MSC logo on their menus. More than 2,300,000 school menu leaflets have been circulated to families featuring the MSC logo to show best practice in seafood sourcing. Seeing the logo

in this way informs families of MSC and may, at the same time, increase the sustainability of fish buying when doing the family shopping.

An online survey was undertaken for the MSC by YouGov in March 2006 to measure the prompted awareness of the MSC logo. This was repeated in March 2007 and 2008 to track the year on year change.

The sample was representative of all Great Britain adults, and there were 2423 responses in 2006, 2352 in 2007 and 2187 in 2008.
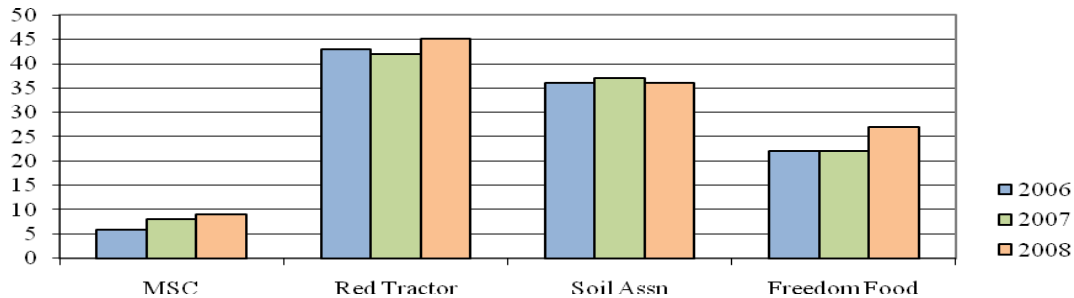
General Consumers – MSC Logo Recognition (%)

The MSC logo was compared against three other food certification marks. Results are shown above. Encouragingly, MSC logo awareness has increased by 50% and in 2008, 9% of the sample recognized the logo from 6% in 2006. Amongst the other logos there has been no consistent positive trend, so although MSC logo recognition levels are still low in comparison, this change is encouraging. It should also be noted that nearly 40% of respondents recognised none of these 4 logos (similar each year).

In terms of the demographic analysis, the key points to note from 2008 survey are:
- MSC awareness slightly higher among women than men (9% vs 8%).
- Variance by age group has increased in the 2008 survey, showing 55+ age group soaring to 10% recognition
- Awareness in London is 15%, highest of all areas, with rest of the south a high 10%. These categories may have been positively affected by Fish & Kids activity, since the project developed quicker in the south of the country.

Next steps

The Fish & Kids project has proven that big steps can be made in a relatively short time scale and that there are lots of opportunities to influence behaviour of the industry and the UK public.

With the help of the PostkodStiftelsen (the Swedish Postcode Lottery Foundation), the project will now be rolled out in Sweden. As well as working with local education authorities and foodservice providers to introduce MSC-certified seafood to school lunches and put the logo on school menus, Fish & Kids' education resources will be adapted to suit Swedish schools. Other countries have indicated their interest in this project and MSC is currently scoping opportunities for a wider adoption of Fish & Kids.

Food Pedagogy
Food Symposium – What is food about?
A new approach for promoting changes in food related behaviour

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Introduction

This paper introduces "Food Pedagogy", a new topic in teacher training and sports programmes in higher education.

Eating habits threaten human development, health and the environment globally[31]. Food and eating are important issues in UNEPs Millennium Goals[132], which means that food and eating habits are a huge global challenge, not only now, but also in the future. Although knowledge about health and environmental hazards caused by food consumption is well known[33], it seems that food related behaviour is difficult to change, and theoretical knowledge (of nutrition) does not necessarily lead to better (eating[34]) habits[35]. Global[36] and national guidelines[37] suggest food related competency in societies as a measure to develop more sustainable eating habits. Food related competency is needed in various areas in societies where the relation between food and eating behaviour and health is in focus[38]. In 2006 the new subject Food and Health[39] was implemented in Norwegian secondary schools, in which food and lifestyle, food and consumption, and food and culture are the main subject areas. Food and Health has replaced Home Economics, and teachers need a wider food related pedagogical competency. There are also many other professionals that might benefit from knowledge of food in a pedagogical context. Food Pedagogy provides an approach to achieve this particular competency.

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Theory and Perspectives

Our interest is focused on food related competency where perspectives as salutary factors[40] and empowerment[41] are emphasized. Our basic question is *"What is food about?"* and we are looking for pedagogical consequences of answering this question.

Our task is to define the concept of Food Pedagogy and give some characteristics of it. Our point is: To change our food-related behaviour we need to find the meaning of it, not only a reason for it. As far as reasoning is concerned, we think in terms of natural science oriented knowledge, which views food and the human body as objects. This kind of knowledge dominates many study programmes concerning the relationship between food and health. Students learn about nutrient contents in foods, and they learn how these nutrients function in the human body. The main focus is to explain good health by an optimum supply of nutrients, as well as health damage caused by failed quantity or quality of nutritive substances or other dangerous substances in foods. Medical diet related health risks, which are measured by indicators such as quantity of glucose in blood, are important pieces of theoretical knowledge (facts) and evidence of food related health risks, and give good reasons for change of food-related behaviour. It is reasonable and intelligible. Such an approach is both reasonable and intelligible, and the quantative methods of natural science are usually used in research as well as teaching. In this approach of natural science quantitative methods usually are used in research as well as in teaching.

By "meaning" we indicate cultural factors, for example the values a person gives to his own health benefits and food in general, feelings, skills, thoughts, or ones social roles linked with food and eating habits. To find meaning in changing behaviour or habits requires another type of knowledge, tacit knowledge[42]. This kind of knowledge is subjective, contextual, bound into body, and expressed by concrete practical actions and experiences[43]. We are querying whether increased use of cultural account in learning situations will help the individuals to understand ones relationship to food and eating, and also realize what is needed to make changes take place in a given situation. This approach of qualitative methods as used in social sciences is used in teaching as well as in research.

Method

The Norwegian Action Plan on Nutrition (2007-2011)[44] and the National Curriculum in Food and Health[45] challenged us to construct a new teaching programme for our students.

We started our research by using literature within the field to find out what concepts of nutrition, food, knowledge and behaviour are common. We searched for an answer to a simple, but significant question: *What is food about?* We proceeded to investigate the concept of "food culture". Based on our findings, we conducted a pilot study called "Food in a Cultural Perspective". This teaching programme and the written work of the participating students gave us valuable insight and assured us that a new approach in learning about food-related behaviour is needed.

We constructed a teaching programme for study Food and Health (60ECTS)[46] with four equal units in terms of size, but four different and complementary units in terms of concepts of

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[45] = reference 8

food. We are now working on evaluative research[47] on this study from an action research perspective[48]. Data are collected from students` written, individual reflections (N=20, so far), students' description of their experience of processes where food pedagogical action competence is assumed to be developed. Data is being analyzed by qualitative content analysis[49], and focus group interview[50] is still a possibility and being considered.

Results

Our experience with students indicates that an understanding of food as a phenomenon, rather than emphasizing nutrition in pedagogical sphere of activities, makes a difference in learning of the complexity of food related behaviours.

Literature research[51] persuaded us that the concept of food is complicated. Food is an equivocal concept encompassing nature as well as culture[52], object as well as subject[53], a biological need as well as a source for pleasure[54], and substance as well as symbol[55], [56]. Relations between food and health cannot be explored or taught / learned by the terms of natural science alone. Also terms of social science are needed. If we acknowledge and concede this particular matter, we need to face the pedagogical consequences too. This is why it is important to point out a particular, unique and special pedagogical approach to understanding the relation between food and health. We call learning situations *"Food Symposium"*. This refers to learning where students meet

- each other and their mentor to share their food related knowledge and experience,
- theoretical knowledge of food as an equivocal phenomenon
- food as a matter based on bodily sense perception, while working with /preparing, eating and consuming food.

Further construction of new knowledge demands both oral and written dialogue and reflection between students, moderator, and between students and literature. Successfully acquiring results in several food symposiums connected to essential and functional pedagogical theory is a base for developing pedagogical action competence. This is the founding platform for coining the term querying Food Pedagogy.

It seems, so far, that students' experiences of Food Pedagogy support our emphasis on the necessity of coherence: *"I cannot imagine the subject of Food and Health without the practical part of it"*

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Conclusion

We are arguing in favour of a wider and more interdisciplinary understanding of food as a phenomenon to increase our understanding of food related behaviour. Food Pedagogy is based on existential philosophy, inspired by phenomenografical didactics[57] , co-operative inquiry[58], and Dreyfus & Dreyfus`s description of The Cultural Master as ideal for learning processes[59]. We assume that Food Pedagogy can provide some tools to promote changes in eating habits, and that increased foodrelated competency will contribute to a global improvement of health for citizens and environment.

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Psychometric Evaluation of Child Eating Behaviour: A Tool to Improve Education Regarding Children's Food Consumption

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1. Introduction

Several recent surveys have suggested that significant numbers of European school-age children are suffering overweight and obesity (Lobstein, Baur and Uaut, 2004¸ Lobstein and Frelut, 2003). Within the enlarged European Union of 2006 (EU-25), there are estimated to be almost 22 million overweight or obese children (about 30 % of all children) and this figure is increasing by around 1.2 million each year. Of these children, 5.1 million are obese and that figure is rising by some 300.000 children each year (Jackson-Leach and Lobstein, 2006). However, these risks are not uniform between European member states with children at particular risk in the countries around the Mediterranean and in the British Islands, although rising prevalence rates are occurring in all countries. Using International Obesity Task Force (IOTF) criteria (Dietz and Bellizzi, 2003) rates of overweight and obesity in childhood are currently estimated at 10-20 % in northern Europe, and 20-40 % in Mediterranean countries of southern Europe (Lobstein and Frelut, 2003). In Portugal, particularly, the prevalence of overweight and obesity children has been reported at 31.5 % (of these, 11.3 % were classified as obese, Padez et *al.*, 2004). The study shows that the prevalence of overweight/obesity in Portuguese children (between the ages of 7 and 9 years) following the IOTF cut-offs is high when compared to other European countries, following the trend of other socio-cultural similar countries such as Spain, Italy and Greece.

Obesity is associated with significant health problems in children, posing an increasing risk of them developing chronic disease with a significant likelihood of some children having multiple risk factors for cardiovascular diseases, Type 2 diabetes and other co-morbidities before or during early adulthood (Dunger et *al.*, 2005; Reilly, 2005; Weiss and Caprio, 2005; Sorof et *al.*, 2002). However, the damaging consequences for children with obesity are not confined to coping with physical symptoms; there are also implications for psycho-social development and well-being. Children and adolescents with obesity have moderate levels of body dissatisfaction (Wardle and Cooke, 2005) and are depressed or have low self-esteem (Strauss, 2000). In this context, childhood obesity research and interventions should therefore be a priority for the public health agenda.

2. Eating behaviour and obesity: the emergency of measuring behavioural susceptibility to obesity

Obesity develops when unconsumed energy, cause by excess intake, reduced expenditure, or most likely both, gradually accumulates as fat tissue (Rennie et *al.*, 2005). Obesity in children arises from a complex interplay between genetic susceptibility and behaviour, relating to

dietary habits and physical activity. Genetic susceptibility helps to explain inter-individual differences in weight gain (Wardle et *al.*, 2008; Farooqi and O'Rahilly, 2007; Farooqi, 2005; Snyder et *al.*, 2004). However, the rapid recent increase in the overall prevalence of obesity in children demonstrates that environmental factors are central to the causation of obesity (the "obesogenic environment"). In fact, over the last few decades, there has been a radical change in how people obtain their food as well as in the composition of food itself (Cunha and Moura, 2004) and in how people decide their food choices (Moura and Cunha, 2005). Food technology, food availability, variety, price, manipulation of taste, packaging, and aggressive marketing (supply perspective) and changes in lifestyles (greater number of women in the labour force, the downfall of family meal occasions and increased snacking), urbanisation and socioeconomic development are contributing to the creation of what is termed "obesogenic environments" that are nurturing over-eating and inactive lifestyles (see figure 1). In fact, children are vulnerable to the social and environmental pressures that raise the risk of obesity (Lobstein et *al.*, 2004). The food preferences among children have shifted to those that are more energy dense, such as, cereals, French fries and soft drinks, which is not surprising , these higher energy density food are described as more palatable (Drewnowski, 1998), leading to overeating in children and adolescents. In order words, children are faced with convenient, cheap and tasty food products backed by massive marketing campaigns that equate food with fun and happiness in order to generate sales. On the other one, considering the energy expenditure, it is generally accepted that activity patterns of children have changed dramatically worldwide, shifting to sedentary behaviour. Various factors contribute to inactive children lifestyles such as increasing television viewing and other media (computers, video games), extensive school curricula, neighbourhood structure and safety (insecure streets and gardens to play and walk) and parental perceptions and time (Maziak et *al.*, 2007; Rennie et *al.*, 2005; Lobstein et *al.*, 2004).

As a result, there is a need to identity aspects of behaviour that underpin the proneness to excessive energy intake or inadequate energy expenditure. These include physical activity and inactivity, dietary choices and eating behaviour (Rennie et *al.*, 2005). In this context, the Children's Eating Behaviour Questionnaire (CEBQ) developed by Wardle et *al.* (2001) was been designed as an instrument to capture individual differences in aspects of eating style that have been hypothesised to contribute both to underweight and overweight. The CEBQ is a multi-dimensional, parent-report questionnaire measuring children's eating behaviour containing eight sub-scales (35 items on a 5-point scale: 1 = "never" to 5 = "always"): *Satiety responsiveness* (SR) *Slowness in eating* (SE); *Food fussiness* (FF); *Food responsiveness* (FR); *Enjoyment of food* (EF); *Desire to drink (DD)*; *Emotional over eating* (EOE) and *Emotional under eating* (EUE), as presented in table 1.

The scales EF and FR address children's general appetite for food or desire to eat. The EF scale aims to capture normal variation in general appetite whereas the FR items are designed to detect levels of appetite which could be viewed as maladaptive (e.g., "given the opportunity, my son would eat most of the time"), and have been associated with overweight. The FR also captures the more pronounced responsiveness to environment food cues (a palatable ice-cream). On contrary, the sub-scales SR, SE and FF reflect a lack of enjoyment and interest in food and have been associated with underweight. Responsiveness to satiety has been hypothesised to be low in obese individuals leading them to fail to regulate their energy intake and consequently to overeat (Carnell and Wardle, 2007). EOE and EUE represent emotionally reactive eating behaviours that would theoretically have opposing weight outcomes: an increasing (or decreasing) in appetite in a range of emotional states (e.g., parental feeding style characterised by restriction of palatable foods, and pressure to eat healthy foods may be linked to EOE). Finally, higher consumption of soft drinks (sub-scale:
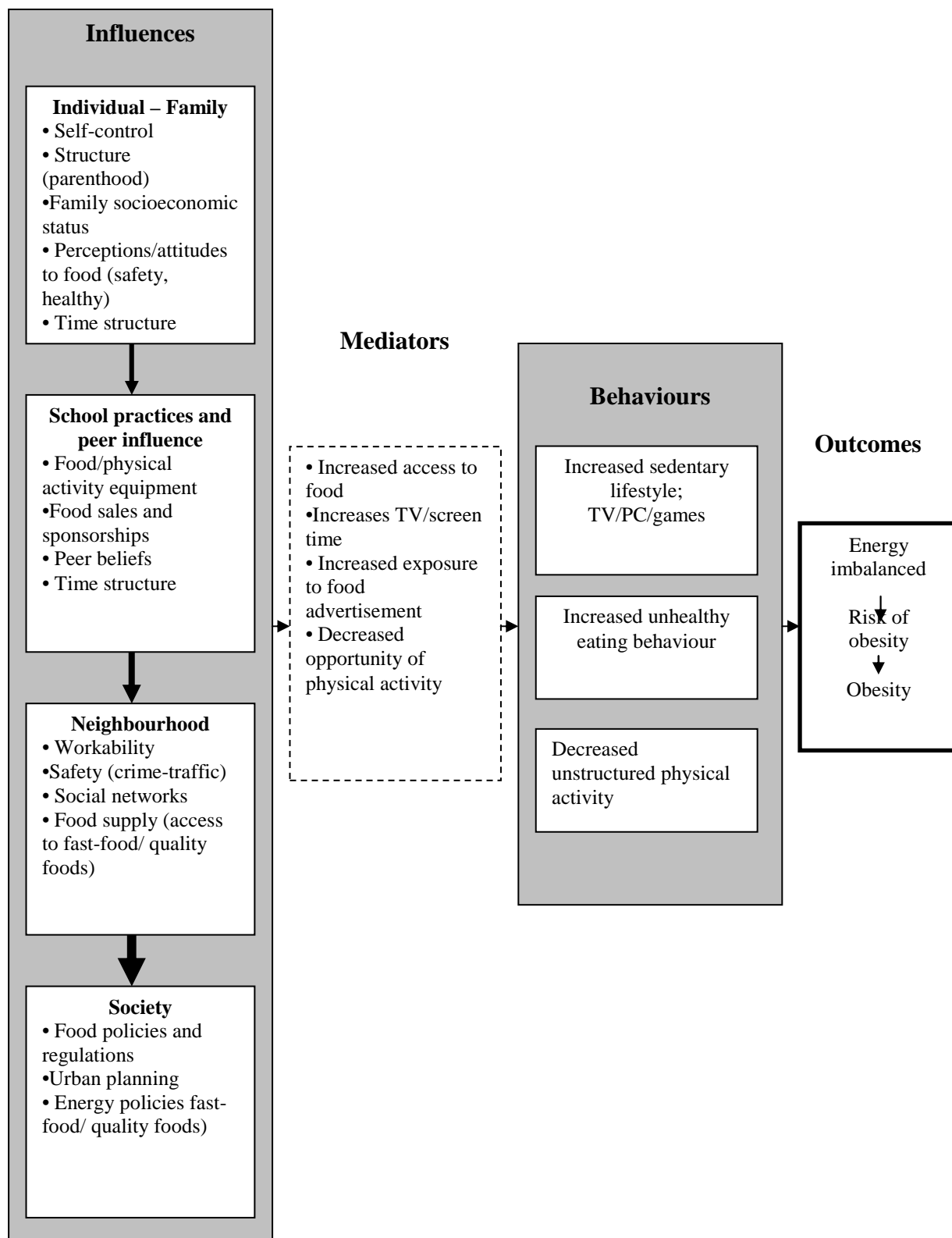
Figure 1 *Child's environment influences on obesity.*
Source: *Adapted from Maziak et al., 2007.*

Desire to drink , DD) has been found to be associated with higher total energy intake, suggesting that children who frequently drink soft drinks may be at higher risk of developing obesity (Carnell and Wardle, 2007). In sum, the obesogenic environment to which children

are exposed enhance their individual responsiveness to food and eating (Viana et *al.*, 2008; Carnell and Wardle, 2007; Wardle et *al.*, 2001).

The aim of this study is to measure behavioural traits conferring susceptibility to the obesogenic environment in Portuguese children at form 4 (age 9-10 years) and associate them to the children characteristics such as sex, age or BMI.

3. Methodology

From a number of psychometric tools available to assess children's eating behaviour the Portuguese translated version of the Children's Eating Behaviour Questionnaire (Viana *et al.*, 2008) was chosen and applied, from April to May 2007, to 518 children, aged 9-10 years and answered by their mothers, while registering their weight and height. Children were chosen through multistage cluster sampling (Malhotra, 2004) by randomly selecting 29 primary schools, out of 97 from the Council of Vila Nova de Gaia, Portugal. In each school one class from Form 4 was randomly selected and all attending children were evaluated.

Regarding the validity of the different CEBQ scales, although an underlying structure different from the original work by Wardle et *al.* (2001) was obtained (data not shown), the original structure was applied following previous studies (Viana *et al.*, 2008; Sleddens, *et al.,* 2008), for future ease of comparison. Overall, the structure and internal reliability of the final model, and the correlations between the sub-scales, corresponded very closely to the original CEBQ, which confirms the suitability of using this questionnaire in the present sample.

From reported children's weight and height the Body Mass Index (BMI, kg/m^2) was calculated. BMI values were converted into BMI z-scores following the American Centers for Disease Control reference data (CDC, 2000) adjusted for age and sex. Further, resulting values were classified into four groups according to their position on the CDC's BMI distributions: "underweight" ($< 5^{th}$ centile), "normal weight" ($\geq 5^{th}$ to $\leq 85^{th}$ centile), "overweight" ($> 85^{th}$ to $\leq 95^{th}$ centile) and "obese" ($> 95^{th}$ centile).

4. Results and discussion

Out of the 518 distributed questionnaires 459 were collected. However, only 321 were analysed due to lack of answered questions. The later correspond to 9 % of all children attending Form 4 at the Council public schools. Table 2 presents demographic data of the sample.

Characteristic	Values		No.	%
Sex	Girls		165	51.4
	Boys		156	48.6
Age (years)	9		196	61.1
	10		107	33.3
	11		16	5.0
	12		2	0.6
Average age ($\pm$ s. d.)	9.4 years $\pm$ 0.6 years			
Maternal education		Primary education or less (up to age 9 years)	77	24.3
		Second and third level of basic education or less (9 to 15 years)	130	41.0
		General/vocational secondary education or less (15 to 18 years)	70	22.1
		University/polytechnic degree or frequency (> 18 years)	40	12.6
Maternal occupation*	G01		10	3.1
	G02		38	11.8
	G03		67	20.9
	G04		63	19.6
	G05		143	44.5

Household dimension			N	%
	2		14	4.4
	3		32	10.0
	4+		80	24.9
	n.a.		195	60.7

Table 2 *Social-demographic characteristics of the sample (n = 321). *Occupational groups (GO1-highest to GO5 – lowest) according to the Portuguese National Bureau of Statistics – INE. n.a. – not acquired.*

Calculation of BMI z-scores and application of the CDC classifications has shown (see table 3) a total of 112 (34.9 %) children with excessive weight or obese, which is slightly higher then the value reported by Padez *et al.* (2004) for the Portuguese children aged 7-9 years. It is worth of notice the strong unbalance regarding boys with excessive weight in comparison with girls.

BMI classification	N	%	Sex	
			Boys	**Girls**
Underweight	5	1.6	57.1 %	72.7 %
Normal weight	204	63.6		
Overweight	61	19.0	42.9 %	27.3 %
Obese	51	15.9		
Total	321	100		

Table 3 *CDC's weight classification (CDC, 2000) according to BMI z-scores*

Regarding children with excessive weight (overweight and obese), there is a tendency for their mothers to present lower educational and occupational levels (see table 4), which is in line with Drewnowsky´s (2004) findings for the U.S. population that obesity is strongly correlated with poverty and lower education.

Characteristic	Values	Child weight group											
		Underweight (n = 5)			Normal weight (n = 204)			Overweight (n = 61)			Obese (n = 51)		
		Mean	s.d.	N (%)	Mean	s.d.	N (%)	Mean	s.d.	N (%)	Mean	s.d.	N (%)
BMI (kg/m^2)		13.60	0.50		17.15	1.46		20.47	0.76		24.09	2.02	
BMI z-scores		-2.10	0.40		0.11	0.74		1.30	0.14		1.88	0.22	
Weight (kg)		27	2.10		33.48	4.47		40.13	4.04		50.78	7.78	
Age		9.80	0.45		9.51	0.66		9.25	0.43		9.43	0.61	
Sex	Boys			2 (40)			87 (42.6)			36 (59)			31 (60.8)
	Girls			3 (60)			117 (57.4)			25 (41)			20 (39.2)
Maternal education	Primary education or less (up to age 9 years)			-			45 (22.3)			13 (21.7)			19 (38.0)
	Second and third level of basic education or less (9 to 15 years)			4 (80)			85 (42.1)			22 (36.7)			19 (38.0)
	General/vocational secondary education or less (15 to 18 years)			-			44 (21.8)			17 (28.3)			9 (18.0)
	University/polytechnic degree or frequency (> 18 years)			1 (20)			28 (13.9)			8 (13.3)			3 (6.0)
Maternal occupation*	G01			-			8 (3.9)			1 (1.6)			1 (2.0)
	G02			-			28 (13.7)			8 (13.1)			2 (3.9)
	G03			2 (40)			45 (22.1)			13 (21.3)			7 (13.7)
	G04			3 (60)			38 (18.6)			12 (19.7)			10 (19.6)
	G05			-			85 (41.7)			27 (44.3)			31 (60.8)

***Table 4**: Anthropometric and social-demographic characteristics of the sample, according to BMI classification groups*

*Occupational groups (GO1- highest to GO5 – lowest) according to the Portuguese National Bureau of Statistics – INE.

Table 4 (continued)

CEBQ sub-scales may be divided into two major groups: "food approach" sub-scales and "food avoidant" sub-scales. The first will include FR, EF, EOE and DD, while the second will include SR, SE, EUE and FF. As depicted on figure 2, "food approach" sub-scales are positively related with weight group.

Figure 2 *Mean "food approach" scores by CDC's BMI category, regarding CEBQ sub-scales: FR, EF, EOE and DD. Vertical lines represent standard error of means*

Inversely, "food avoidant" sub-scales tend to correlate negatively with weight group (see figure 3). Moreover, hierarchical linear regression analyses relating each CEBQ sub-scales with BMI z-scores, while controlling for sex, age, maternal education and maternal occupation, was performed. Has expected, there were significant positive associations between all "food approach" sub-scales and BMI z-score, with FR accounting for over 10 % of the variance, while "food avoidant" sub-scales showed significant negative associations, with SR and SE emerging as the most significant explaining each 13 % of the variance in BMI z-scores.
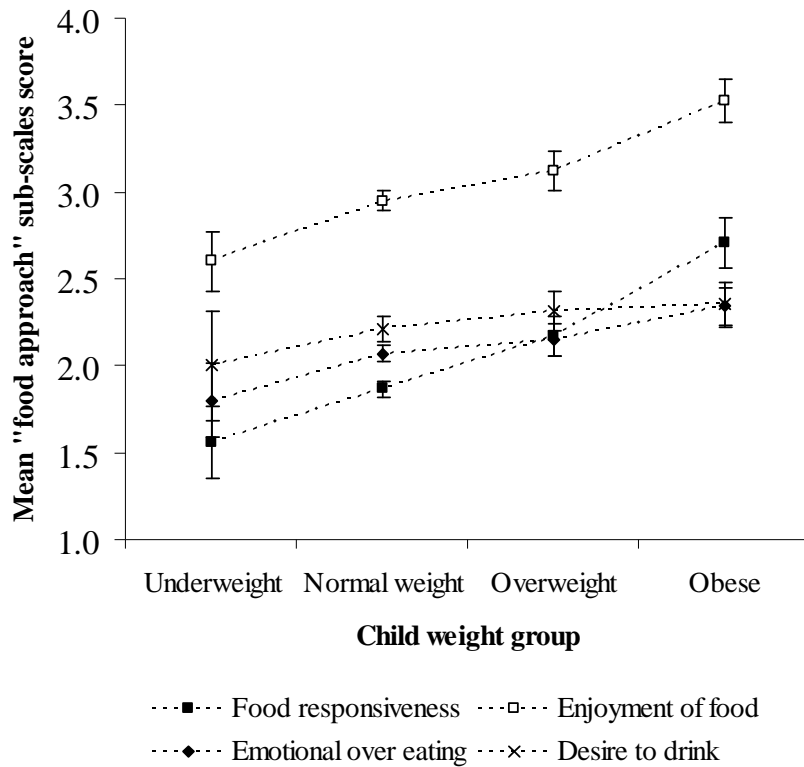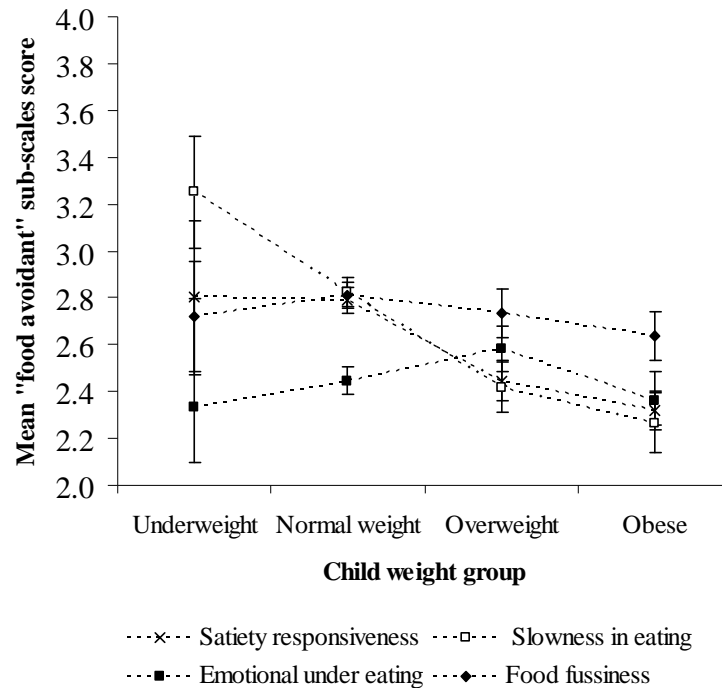
Figure 3 *Mean "food avoidant" scores by CDC's BMI category, regarding CEBQ sub-scales: SR, SE, EUE and FF. Vertical lines represent standard error of means.*

When contrasting the way children perceive their own body weight with the CDC' BMI distribution (see table 5) there is a clear tendency for heavier children to consider themselves as with excessive weight. Nevertheless it is important to notice that 38 % of the obese children answering this question consider themselves as normal or underweight, while the majority (77 %) of overweight children consider themselves to present a normal weight.

Child own weight perception	Child weight group			
	Underweight (n = 5)	**Normal weight (n = 197)**	**Overweight (n = 60)**	**Obese (n = 45)**
Excessive weight	-	14 (7 %)	14 (23 %)	28 (62 %)
Normal weight	4 (80 %)	166 (84 %)	46 (77 %)	16 (36 %)
Underweight	1 (20 %)	17 (9 %)	-	1 (2 %)

Table 5 *Relationship between child's perception of weight and their weight group classification according to CDC' BMI z-scores*

No significant association was found between CDC' BMI groups and the practice of sports out of the school.

5. Conclusions and further research
'Food approach' sub-scales and 'food avoidant' sub-scales were related to Body Mass Index, child's eating habits and TV viewing, Results were evaluated according to children sex, socio-economic level and maternal education level. Major results have shown a strong relationship between child eating behaviour and overweight or obesity.
The findings of the present study are in line with previous ones, suggesting that the CEBQ is a valuable instrument for identifying specific eating styles, which can be seen as important and modifiable determinants implicated in the development and maintenance of overweight and obesity.

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What kind of research is necessary for the development of consumer citizenship education and education for sustainable consumption?

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Education is essentially about two kinds of activities. The first and basic one deals with transmission of culture, i.e. the knowledge and values shared by a given society, in order the patrimony accumulated in time is maintained and widened; our societies, and the more in recent times, developed a vast array of tools to ensure the conservation goal and individuals' capacity to elaborate inside its paradigms. The second kind of educational activity deals with forming individuals that – building on the former - have the capacity to make culture to evolve in accordance with the actual needs imposed by a continually changeable (natural, anthropical and social) environment; that task involves a deeper level of symbolic thinking and own tools that need continual innovation. What is mainly needed at present is adding to the latter.

As far as consumption is concerned, we should first of all recognize that our culture in the field was built - for obvious historical reasons - on the base of poverty as the fundamental human condition: a fact that turned to emphasize the importance of possession and to establish an (even linguistic) equation between possession of goods and feeling good (or better). In parallel, science and production techniques would conceive "progress" as limitless defeating nature.

An impressive amount of past and present culture proceeds from and keeps alive this framing: which cannot be cancelled but should instead be better balanced, since consumers are now aware of other humans' condition in the production-delivery chain, whilst humanity has already reached the potential capacity to overcome the lack of basic needs satisfaction, from one side, and on the other side we start experiencing serious problems carried in by overconsumption.

Two first directions for research should then inquire happiness in itself, and address ways to disembed satisfaction - the feeling consumption is claimed to convey - from material possession, e.g. analysing enjoyment deriving from *access* to what is desired (i.e. turning to a service), highlighting common goods, etc…

Several studies on happiness have been carried on already: their findings, which are promising for common good is achieved in sustainable ways, should be deepened and widely diffused. Nevertheless, a wide gap is likely to stay and keep apart theory from individuals' practice for a long period, in a field where - because of its complexity - only socially shared and approved personal experience may probably turn to modify original behaviour ("I will if you will"). Where attempts are made to let people experience issue by issue more sustainable behaviours, *conceptualisation* of such best practices is still badly needed as much as understanding of that practices' reverberation on the individual and community's consumption system.

Conceptual disembedding and common goods' impact evaluation are under scrutiny too, of course: deserving popularization by formal and not formal operators is increasing and

successful, but it has not really entered in education – which is the proper field people derive their knowledge from, apart from experience.

Education essentially bases on information, which is transmission of descriptions of reality through symbolic – and mainly linguistic – means: i.e. it bases on the categories adopted and their architecture; new ways of categorizing reality may always be invented, an need to be, but they sometimes struggle with the previous order and classification.

A great and deserving effort has been made in the "Consumer citizenship education Guidelines" but the very name that we created: *consumer citizenship* denounces two formerly distinct categories (consumer, citizen) have been melted and are now considered as joint in a single one. Everybody can understand the definition "*a consumer citizen is an individual who makes choices based on ethical, social, economic and ecological considerations. The consumer citizen actively contributes to the maintenance of just and sustainable development by caring and acting responsibly on family, national and global levels*" but what relation it entails with "consumer" as it is commonly understood in economic and marketing literature and in the general practice? Categorical inconsistency may be solved and cultural clash be avoided, going back to the origins of the conceptual organisation. Looking backwards, "consumer" is a category arising as a sister category of "worker" from the common people's use of day-time in the industrialisation period, the former figure depending from the latter *via* the salary: perhaps it is high time this pre-globalisation scheme is put under scrutiny, and research delivers a more appropriate scheme that would describe existing/possible links between different kinds of human activity and their ways of (monetary /non monetary) remuneration, daily and life-time organisation, ways of receiving and enjoying the fruits of the activity.

The "consumer" concept directly addresses people as individuals, whilst by "citizen" we highlight and give priority to one's social group; moreover, that group is institutionalised on a defined and circumscribed territorial base, whilst - *via* the market – consumer citizens are supposed to access goods that are territorially indefinite: under the latter aspect, *consumer citizenship* appears to disregard the "territory" dimension, in spite of the fact that it is unavoidable as far as the behaviour it explains needs to be integrated with many other social institutions, the majority of them being based on geographical borders. The notion of "responsible territories" - that is already in use – makes one step in a direction that is consistent with *consumer citizenship* but is not even half-way to conciliation; "glocal" on the other hand makes sense in application to organisations and movements, not to persons in flesh and blood. The idea of extension in space *consumer citizenship* seems to bring in, may possibly find connection with the ecological concept of "areal": an interesting path research might embark on and explore, in order it gives life to an own and wider description system drawing inspiration from a science that is near to nowadays sensibility. Would that lead to a notion of the areal inhabitant "species" be persons characterized by value-based consumption choices? one should not have prejudices limiting symbols' borrows (so frequent in language) when they prove to be useful. The more an idea is complex the more its representation needs to approach completeness: the free and creative use of assessed metaphors, tentatively, may highlight unforeseen aspects and connections in a field that is still new to research.

Sustainable behaviour in life and consumption needs to become a current practice the majority of people adopt daily, as soon as possible. The problem is time that is left for change appears to be short: education by traditional means will prepare new generations,

part of the young will teach the adults and vice versa; nevertheless, internalizing sustainability will be hard to the majority. For that reason, "cultural studies" need to be strongly encouraged and information derived should turn and become the input for a special kind of research focusing on very synthetic tools, capable to convey by popular ways those complex contents that are involved in sustainability and consumer citizenship. Something like the "visualthesaurus", to give an idea of what we mean.

To put it straight, product labelling will never solve the pending necessity people change their relation with "goods". It may (perhaps) help companies that behave better stay in the market, which is a good thing – of course – but addresses a different actor; an actor that can in fact give a much more incisive contribution disclosing the "black box" and sharing its knowledge on the production chain: the most promising new research track departs from that.

Experience of promoting consumer education in Estonia

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INTRODUCTION

Our everyday lives are filled with different product commercials and offers, which lead us into increased consumption. Day by day it becomes more difficult to choose one product or service over another. We all, adults, youth and children, are consumers. Many commercials are especially directed to children, who by influencing parents can attain the purchase of the product. How is it possible in the midst of all the advertising and special deals to remain in the area of „reasonable consumption" rather thanpurchasing a product that at the moment seems important in the commercial, yet within few days is of no use at home? As with all other capabilities, responsible consumerism must be studied and practiced. For this reason, the words "consumer training" are gaining more and more importance in Estonia.

CONSUMER TRAINING IN ESTONIA

Consumer training in Estonia has been striving towards influencing the teacher training curricula and general education. This effort has received a helpful push from examples of other European countries as well as the willingness of the Estonian Consumer Protection Board to cooperate and offer sufficient support.

A considerable proportion of consumer training in teacher training programmes can be noticed especially in the Nordic Countries. The course *Consumer Citizenship - towards sustainable development* (3 ects) is part of the the intermediate studies of Home Economics teacher training programme in the University of Helsinki. The course covers legislation, different institutions and cooperation programmes and opportunities for further knowledge. (University of Helsinki) In Tallinn University in Estonia the home economics teacher training programme's specialty subjects include the course *Family Economics and Consumer Education* with the volume of 3 ects (Tallinn University), during which the future teachers receive information on consumer education and readiness to develop interesting and variable teaching methods and topics in the consumer training area which can be used later in on the job.

Consumer education offered by different insitutions has been in the national curriculum in Estonia of primary and secondary education since 1996. The need for consumer education has been formulated explicitly in the current curriculum (from 2002), where general aims include: the student honours and obeys legislation, is informed about his/her obligations and responsibilities as a citizen; sees himself/herself as a member of his/her nation, citizen and tied to Europe and all human race. Given general aims are put into practice in three curricula – Estonian language (mother tongue), social studies and home economics; in the two former curricula mainly on a theoretical level, in home economics also through practical studies.

Despite the fact, that the need for consumer education is justified in the national curriculum and universities hold courses respectively, the Estonian Consumer Protection Board – a national institution - has been the main initiator and deliverer of the practical consumer education. The main goal of the Board is to help the consumer protect his lawful rights

allowing him to be smart participant in market relations and a qualified opponent to the offerors of services and products – merchants. In addition to the main aim, the Consumer Protection Board is obliged in accordance with European Union Amsterdam Treaty, article No 153, to furnish information and offer training courses, i.e. to train independent critical and informed consumers by giving them basic knowledge on consumer education and the topics related, so that the students might be aware of the influences they face during different lifestyles, having specific consumption habits, values and patterns. (ECPB)

Estonian Consumer Protection Board has initiated many different consumer education projects, aimed at school students and has issued the necessary study materials. In developing consumer education the Consumer Protection Board is cooperating with institutions and specialists from different areas of society. For example the competition for pupils called „Let's Manage" was developed and is carried out in cooperation with students and faculty members of the Tallinn University. The aforementioned project creates possibilities for cooperation between general education school, university and Consumer Protection Board i.e. between pupils, teachers, students, faculty members and government office.

PUPIL'S COMPETITION „LET'S MANAGE"
Since 2001 the Estonian Consumer Protection Board has been organising the competition „Let's manage" initiated by the *Phare twinning* project, for pupils in order to raise knowledge of consumer protection and gain wider public attention. The idea of the project originates from the cooperation partner Swedish Consumer Protection Board (*Konsumentverket*). The target group of the game is pupils from 8th grade (from 14 years of age). (ECPB)

Project-based learning was selected for „Let's manage", which creates opportunities for integrating different subjects (home economics, handicraft, studies of art, social studies, civics, economic studies etc) and strengthens cooperation among different subject teachers. This is also emphasised in the national curriculum, drawing attention to the fact that the use of project-based learning creates possibilities for integration within other subjects, because problem solution requires knowledge and skills from different areas. (National Curriculum) Kärpijoki, in the collection of working methods, also emphasises the suitability of project-based learning in consumer education. (Kärpijoki, 1999) „Let's manage" competition initiates a study-project for the students of Tallinn University as well, who will implement their knowledge in the study-project when preparing and holding the final competition.
The structure of the project „Let's manage" in Estonia:

- Beginning assignment is posed to the participants of the project by the officers of the Consumer Protection Board, home economics specialty faculty members of the Tallinn University and by the working group including the specialists in the field of the project topic.
- Information about the upcoming project is disseminated in different media channels.
- A minimum of two seminar/workshops are held for the advisors of the pupils participating in the project, during which didactic knowledge concerning the topic of the project and materials for using the lessons are given. Teachers receive written material including useful information and presentations from the seminar.
- Pupils formulate teams and produce a written report, according to the beginning assignment. Depending on the posed assignment visual materials (videos, drawings, games, pictures etc) may be added to the report. Final report will be submitted to the Consumer Protection Board on a given date.
- The working group carrying out the project and the students of Home Economics in

Tallinn University choose 3 finalists from among the submitted projects, and two teams for the special award. Other teams receive written feedback on the positive and negative aspects of theirprojects.

- The working group prepares the final competition, where teams have to tackle different theoretical and practical assignments.
- The final competition is held in which the teamwhich covers the given topic best, wins. Sponsors who are supporting the project present financial awards for the teams taking part in the final competition.
- The project is closed with a summarising analysis, teachers receive feedback forms

Overview of the competition topics throughout the years

The topic of the first competition, which took place in 2001, was „*We'll manage healthy and economically*" with the goal of giving pupils knowledge on consumer protection and teaching them to consume economically and with concern for the environment. The jurisdiction of the national curriculum supported the choice, as it is written: a student values healthy living standards, develops his/her spirit and body. (National Curriculum) One of the assignments was managing a four-member family within a given budget for one week. Different aspects of the beginning assignments required pupils to use theoretical knowledge, practical skills as well as skills for using creativity and cooperation.

The next year the project was entitled „*We'll manage a fun and cool party!*". The following topics were discussed: consumer protection (including signs on textile and dry cleaning), healthy food, etiquette, fire safety, budget preparation, and environment protection. The goal of the project was to teach pupils to plan their income and expenses through role games, using fantasy and experience and knowledge on consumer education. For example, pupils had to draft a rental agreement in accordance with the legislation.

In 2003/2004 the topic of the project was „*We'll manage a nice field trip in Estonia!*" The importance of the topic can be seen in the Estonian National Curriculum, where environment and the economical use of natural resources and healthy living standards are emphasised. (National Curriculum) Through the chosen topic pupils were directed to discover various new hiking opportunities in Estonian nature. As a part of the assignment, pupils had to plan a three-day field trip. Through feedback it was found that some of the teams even carried out their ideas by organising an actual trip.

The goal of the next project (in 2004/2005) entitled „*We'll manage furnishing the kitchen and prepare a healthy dinner*" was to teach pupils to manage in a home environment by using their fantasy and skills. The assignment was to furnish a cosy kitchen with necessary equipment, buy cleaning aids for cleaning the house and plan a fancy dinner with the family. In addition, the youth had to think of an educational game that would be interesting and useful for other young consumers. A board game entitled "Consumer Awareness" prepared by one of the finalists, proved to be very resourceful and good didactic material for consumer training. The game was printed by Consumer Protection Board and has been sent to all Estonian schools of general education.

The fifth competition from the series „Let's manage!" was carried out in the school year 2005/2006. It was entitled „*We'll manage a national evening!*". The choice of the topic was influenced by the keyword „Estonian cuisine" in the Estonian food culture of 2005. The goal of the competition was to present our food culture, national meals, food products and tradition, including the specifics of each location of the youth, to the visiting foreign sister-

class. The topic was again supported by the National Curriculum: the student acknowledges himself/herself as a member of his/her nation, feels the connection to Europe and all human race, knows and respects his/her national culture, is informed about and has knowledge of different world nations' cultures, and respects them and treats them without bias. In addition to the planning of the three-day visit for the guests, they had to address the challenges of the border crossing.

The sixth competition entitled „*We'll manage creating an advertisement!*" is being organised at the moment. Teams must analyze two Estonian commercials and must create a commercial for youthintroducing consumer rights and obligations.

These project descriptions give a clear overview of the wide scope of the topics covered. Variability has been the goal for choosing topics and opportunities for uniting different subjects have created a good challenge for subject teachers to pursue closer cooperation. Due to active subject teachers, 24 schools from different Estonian counties have been participating in one competition within a topic, and the maximum number of teams per year has been 31. (Table 1)

Year	Topic	Number of schools	Number of teams
2001	We'll manage healthy and economically	13	31
2002/2003	We'll manage a fun and cool party	14	24
2003/2004	We'll manage a nice field trip in Estonia	11	19
2004/2005	We'll manage furnishing the kitchen and healthy dinner	24	24
2005/2006	We'll manage a national evening	14	22
2008/2009	We'll manage creating an advertisement	unkown	16

Table 1 *The number of schools and teams participating by year*

Teachers' seminars
Seminar/workshops for advising teachers have been part of each project. The competition conditions, evaluation criteria and working methods are introduced in the seminars and theoretical lectures (on consumer protection, environment protection, eating and media) are held. Also helpful materials, including teacher's handbooks (summarizing all materials discussed in the training) and informational booklets by different institutions, are distributed to the teachers and pupils for successful participation in the project.

In the workshops didactic tips are shared by faculty members of the Home Economics subject in Tallinn University. For years, gaining theoretical knowledge through active study assignments has been the ground for choosing didactic solutions, the former being nowadays the most motivating method for guiding students in obtaining knowledge. Knowledge gained through personal experience and/or practical activity will be affirmed and is most likely to be used again. (Hitch, Youatt, 2002) An important aspect while choosing didactic examples and assignments, is their compatibility with pupils age andtheir relevance and appropriateness in the society. For example, the marketing strategies of the products carrying a brand of the Estonian cartoon hero „Lotte" were analysed during the workshop held within the present project (*We'll manage creating an advertisement*).

The seminar/workshops are promote various parties (teachers, faculty members, specialists) by giving the opportunity to learn from each other and use the co-produced methods in advancing the consumer education. The teachers emphasize the positive seminar/workshops in their feedback. Many participants find this training very useful and interesting and have discovered topics for carrying out other subject classes, even for the homeroom teacher class. (Aruste, 2004)

Throughout the years, feedback given by the teachers has allowed the project working group to develop the competition and make it more pupil-friendly, to choose relevant challenges, and to correct the volume of the work.

CONCLUSION

The consumer education pilot project initiated in the 2001 has become an annual project that reaches its goals by cooperating with various institutions and educating well-informed and responsible future consumers. Experience over the years shows that the form of the competition (project-based learning) has proved itself. Pupils are glad to gain knowledge through practical experiences, learning outside traditional lessons and school rooms. Faculty members find it practical in developing and varying their work while gaining experience working with the pupils other than their own students. For students, participating in the project is a unique with a new study method that requires fitting into a working group and offers a refreshing alternative to academic study. Long-term sponsorship by different Estonian companies shows that businesses recognize the need for educating future consumers and are ready to continue the investment. Opinions of the different institutions who have participated in the projects, allow suggesting similar competitions for other countries in order to advance consumer education.

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The Application of games in Pedagogical Process

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Learning is sometimes not an easy task and it requires effort, concentration and interest from students. It´s useful to use various approaches and to involve students into the pedagogical process. Carlos M. Zapata J. and Gabriel Awad – Aubad from the Univesidad Nacional in Colombia point out: pedagogical processes should focus not only on the field of knowledge, but on conceptual elements belonging to other knowledgeable fields, specially those related to the development of social abilities (team work, leadership, communication, …).

Learning models have evolved from teacher- centered models to student-centered models. Student-centered models have more chances to face the challenge of current teaching, and the reason is that effective learning – and we can assume that learning is the process of generating a permanent change in knowledge or behavior by means of experience – involves logical issues (analytical or verbal processes) and creative activities development (for example patterns or relationships).

There are several ways which can make learning process meaningful and interesting. These ways have one common feature: involving students actively. Learning by using games is considered a modern pedagogical tool and it comes out from the idea that experience is a very good teacher. Bushell (in: Zapata – Awad-Aubad) wrote about games: "Game is an interactive activity for simulating real world conditions in order to stimulate decision making learning. Games are competitions where people agree with certain rules of behavior, and where people make decisions for changing self and each other states."

Games can offer an opportunity to simulate the real world, competitive environment and to confront students with everyday problems or challenges. According to various authors (Zapata - Awad-Aubad, Lee Su Kim 1995, Yin Yong Mei - Jang Yu-Jing 2000, Lengeling - Malarcher 1997) using games in peagogical process may have following benefits:

Games can
- offer students to experiment, discover, and interact with their environment
- improve cognition
- improve verbal and social skills
- reinforce self esteem
- help to sustain students interest and the effort of learning
- develop critical thinking
- have impact of emotions in learning
- encourage students to interact and communicate
- develop a teamwork abilities
- build class cohesion
- encourage shy students to participate positively
- be welcome break from the usual routine
- be fun and students like to play them.

Using games may have a lot of benefits but there are also weaknesses. Games can only reproduce a limited amount of relations and influences coming from real surroundings. Students play in specific environment (classroom, peers) which does not correspond to real

conditions. Their behavior by playing game could differ from behavior under real conditions. Students know that implications from a game are not significant as it is in real life. They do not make their decisions under stress and results (good or bad) do not influence their personal situation. The role of the teacher is very important. It´s on him/her to show and demonstrate the meaning and application of the game to real life. Here is an example of the game:

Mining
Rules
There is a mine with some pieces of jewel. The amount of jewels in the mine represents 5 times of amount of students in the classroom. Students are miners. They can go into the mine for 10 times and take some pieces of jewel. After each mining the rest of jewels will double. The winner is that one who has at the end of the game the most pieces. But if there is no piece of jewel after any mining the game is over and all students are losers.

Practice
At the beginning teacher will inform students about rules of the game and prepare the flipchart or the board. When teacher works with 12 students then there are 60 pieces of jewels in the mine (12x5=60). Students can go mining for 10 times, it means the game has 10 rounds.
Each student can take some pieces of jewel in each round of mining. * It means he/she will write on the paper the number which represents the amount of taken pieces. This number is known only for the student. After all students wrote the number on their paper they give papers to the teacher and he/she will write the numbers on the flipchart. Students can realize now who has how many pieces.
The teacher will count up how many pieces are taken together from all students and will calculate the current number of pieces in the mine. If the mine is empty, the game is over. Nobody is winner and students are losers.
If the mine is not empty the rest pieces will double and teacher will inform students about current amount of jewels. Next round can start (go to *).
After the tenth round the teacher will summarize for each student the number of pieces he/she has mined. The student with the most of the pieces is the winner.

Connection to the sustainability
Resources
As you can realize the mine in this game represents our earth and jewels represent resources. Even if you are not good in math you can see the consequences of mining in this game. More you take from the mine less you have for the future. If students would not mine for 9 rounds they could reach the maximum of jewels in the final.

Winners
There are 3 possibilities of victory

a) no winner
If there is no cooperation or no dialog among students it is possible there will be no winner. Students mine separately (without limitations) but together they may exceed resources in the mine and all of them became losers.

b) one or more winners
If there is no cooperation or no dialog among students possible result of this game is: there will be only 1 winner or few winners. But this victory is random and it is impossible to advise

student what to do to ensure the victory. It is because we can hardly predict the behavior of the rest of students.

c) all winners
If there is cooperation or dialog among students it is possible that all of them will be winners and will reach potential maximum of jewels. It is in the case all of them will not mine for 9 rounds. But cooperation, dialog, agreement and trust are necessary conditions.

Dialog and cooperation
The teacher can decide whether students can communicate during the game or not.

A) Students can not communicate
Each student is separate individual and he/she can not talk to others. His/her goal is to gather the most possible jewels. May be he/she realizes the best way how to reach the goal (not mine for 9 rounds). But what about others? Did they realize it too? He/she can not inform others what is the best solution. The student do not know what will do others and it is very hard to predict their behavior.

B) Students can communicate
Each student is a part of a group and he/she can talk to others. His/her goal is to gather the most possible jewels. May be he/she find out the best way how to reach the goal (nobody will not mine for 9 rounds). He/she has possibility to inform others and to open dialog. Students could promise not to mine until the last round. But there can be problem too. Someone can break the word and mine out all jewels in the ninth round. Then he will be winner. Really?
But what could happen if nobody does not realize the best way? It means nobody knows how to reach the maximum. It is the situation under uncertainty. Here students can behave like independent individuals or like a part of a society. And this will influence their next steps.

Feedback
After finishing the game the teacher may ask students following questions:

A) Students could not communicate
- What is better: to communicate and have dialog or not? Why?
- Had you change your first decision (to mine a lot, a few or something in the middle) during the game? Why?
- Did you think about consequences of others behavior?
- Did you think about consequences of your behavior?
- How was your behavior influenced by others behavior?
- How could better decisions have been made?
- What would you do differently if you would play the game again?
- What situations in your life do you think are like this game?

A) Students could not communicate
- Who speak the first. Why?
- Who realized the first how to reach the best solution? Why it was he/she?
- How open were you to listen? Why?
- How open were you for cooperation? Why?
- What is better for you: to be independent individual or a part of a society. Why?
- How were decisions made?
- Who influenced the decisions and how?

- How individuals persuaded other students?
- Did you try to predict the behavior of others? Was it easy?
- Was there a conflict? How was conflict managed?
- How could better decisions have been made?
- If all of you have made agreement how to behave in the rest rounds, how strongly did you believe all will meet the promise? Why?
- What would you do differently if you would play the game again?
- What situations in your life do you think are like this game?

And how can be used this game for learning about consumer citizenship or sustainability?

Sometimes you can teach about serious issues by having fun and playing games. There are certain situations in our lives when we need to decide between two or more alternatives and we are not sure if our decision is the right one concerning sustainability. One can be confused and it helps when he talks to his friends, family or authorities. It helps one to be more informed and the probability of making the right decision gets bigger.

By playing this game students can realize:
- People can be influenced (in both good and bad way)
- Students can participate in influencing others
- Some people can sell out others
- Cooperation and dialog results in better outcomes
- People should share knowledge or experience with others

THE POPULATION SHOULD COOPERATE, HAVE A DIALOGUE AND THAT IS THE WAY TO SUSTAINABILITY.

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The Consumer Abilities and the Themes of Consumer Education 2009

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NORDIC CONSUMER EDUCATION CO-OPERATION

The Nordic consumer government agencies and organisations have collaborated on educational issues since the 1960s. In year 2000 the Nordic Council of Ministers (Consumer Sector) published the policy document "Consumer Education in the Nordic Countries. Proposal of objectives for and content of consumer education in the compulsory school and at upper secondary school level in the Nordic countries".

The updated policy document has been funded by Norway and Finland, with expert input from Estonia, Sweden, and Denmark. Themes and objectives for consumer education are changed as follows:

Proposal of objectives for and content of consumer education in the compulsory school and at upper secondary school level in the Nordic countries 2000	*The Consumer Abilities and the themes of consumer education - 2009*
Personal finances Pupils are able to economize with resources and manage their finances	Media and technology ability The ability to evaluate the personal choices and use of technology and media as well as the ability to act with sufficient criticism and responsibility in the modern environment, which is saturated with new innovations.
Rights and obligations Pupils are able to make use of their rights and know their obligations as consumers	Sustainable consumption ability The ability to evaluate the short- and long-term impacts of individual consumption and daily choices and contribute to sustainable development
Commercial persuasion Pupils are able to cope with the commercial persuasion they are exposed to	Personal finances The ability to obtain and use information in economic life, use resources economically, manage personal finances
Consumption, environment and ethics Pupils are able to be able to assess the effects of their own consumption on the environment and for production/consumption in a global perspective	Consumer rights and obligations Awareness of one's own rights and responsibilities as a consumer, and the ability to learn to assess the safety and quality of different products and services and utilize useful information such as various warnings.

Food Pupils are able to choose and cook nutritious food which is beneficial from an environmental point of view, and to work rationally in the home	Marketing and commercial media The ability to participate in one's own media environment as a critical and responsible consumer and to cope with the commercial persuasion, to which each individual is exposed.
Safety Pupils are able to make use of product information, and to assess the safety and quality of different products	Home management and participation The ability to manage a home and participate in an ethical and rational way in everyday life

THE PURPOSE OF THE POLICY DOCUMENT

For consumer organizations and agencies, the purpose of the documents is to contribute to clarify the substance of the cooperation with international, national and local school authorities. The guidelines can also act as a tool for teaching and consumer authority co-operation, as well as clarifying and presenting the status of consumer education in school teaching. The document can be used e.g. to prepare teaching curricula, carry out teacher basic and continuous training and develop teaching materials. This renewed version has been especially designed to assist those preparing teaching curricula, so that the core of the wide scope of consumer education is described as clearly as possible. The aim is to make the entire process clearer to grasp and to present how well consumer education contents should be included in an open teaching curriculum. At the same time, modern and activating learning methods can be described. Further more, the classification of consumer education contents can be used to carry out analyses, e.g. when comparing teaching in different countries or analyzing the implementation of consumer information teaching and the amount of consumer education in textbooks. The goals and content can also be used for material planning, in turn allowing for the main messages to be clearly defined for teaching materials or presentations.

Consumer education is a part of the educational system. Its purpose is to provide everyone with the opportunity to obtain the basic skills needed to understand and cope with the market and to give guidance in how to maintain a sustainable lifestyle to protect privacy and foster critical thinking. Consumer education is based on values that are generally accepted in society. Local education sheds more light on the values that form the foundation of the education.

Consumer abilities are crucial for an individual who operates in the realm of the market and public services. Everyday skills such as economic skills and media literacy can be seen as areas encompassed by the concept of consumer competence. In the core of consumer competence are the empowerment of the individual and his/her role as an active citizen who can cope with various consumer environments and situations. In part, consumer abilities are seen as an area of civic skills in our information- and technology-oriented society.

Consumer abilities represent the individual's understanding of consumer rights and obligations, legislation, private economies, commercialism, and the workings of a home management as well as the role all of these things have in society and each individual's personal life. Persons with good consumer abilities possess sufficient attitudes, knowledge and skills in key areas and can apply them in practice to cope with most situations.

Everyday life is the frame of reference that learners know best. To make consumer education relevant to learners, teaching methods needs to be based on learner's personal experiences and everyday phenomena. Consumer education encompasses attitudes, knowledge and skills connected to functioning in today's society. It is responsibility learning which contributes to

the individual's ability to manage his own life, home and participation as well as contributing to the management of the global society's collective life.

METHODOLOGY AND EVERYDAY LIFE
Qualitative study focused on young consumers' ways of consuming in three different worlds: those of the home, school and peer groups (Phelan et al. 1993).
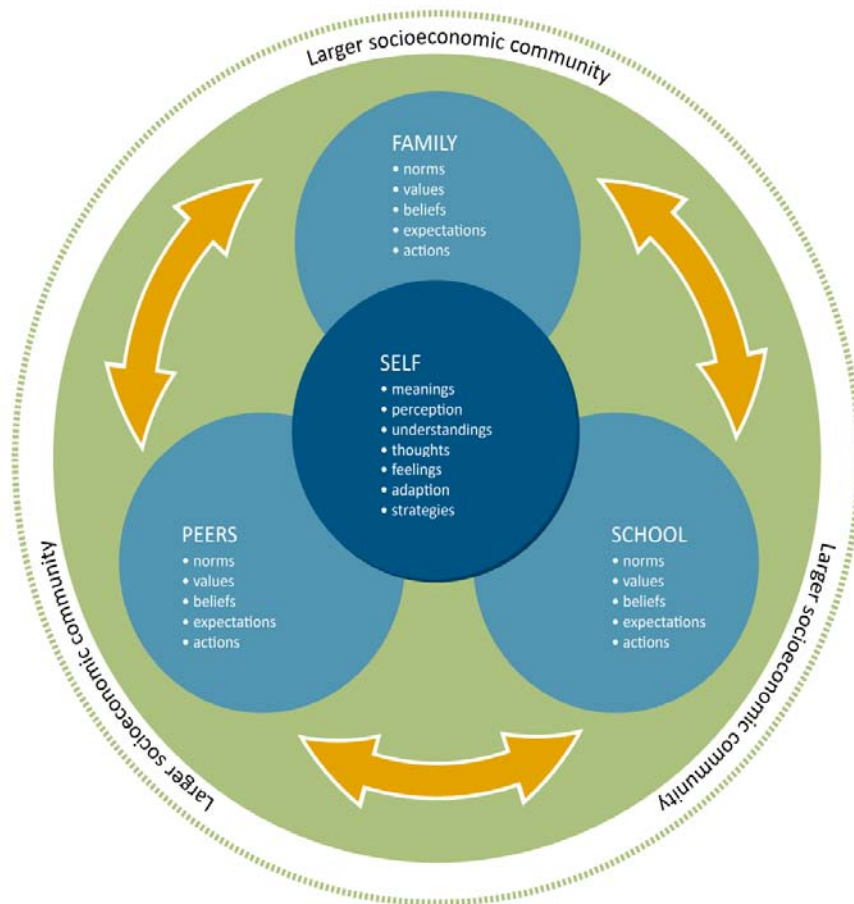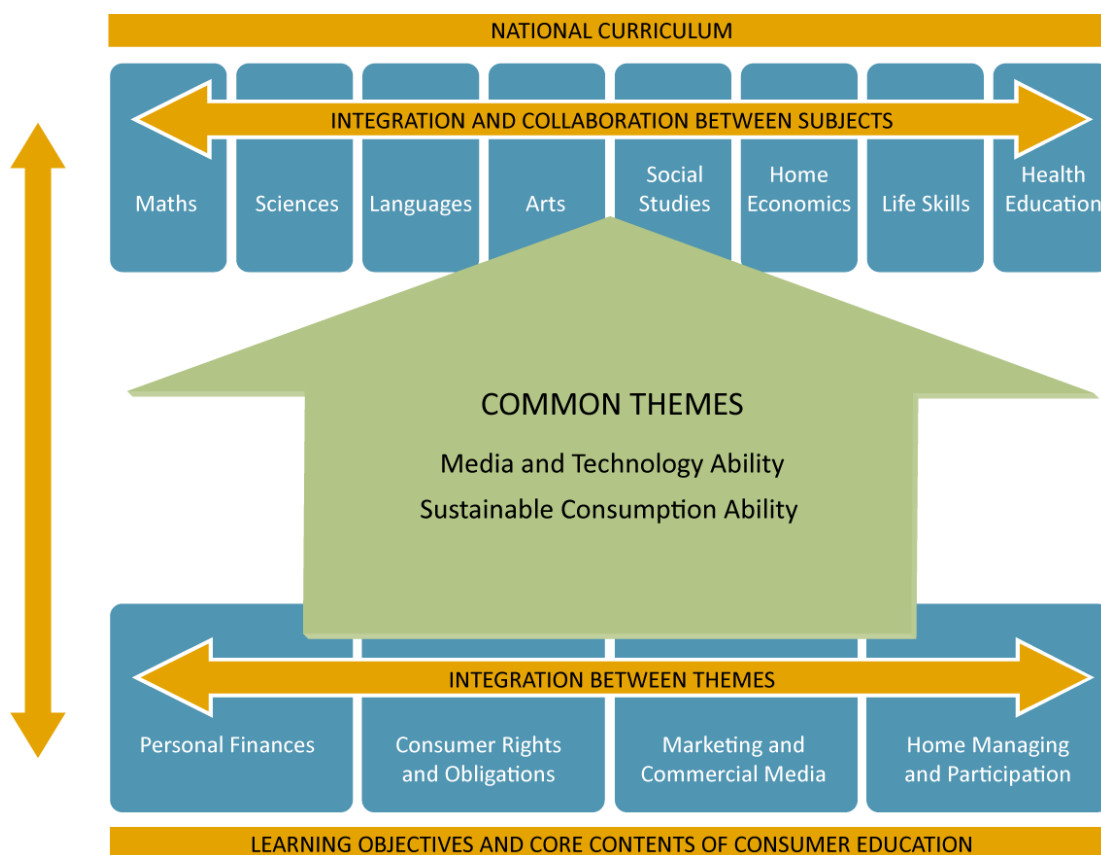

The Phelan model

Young people find themselves in a centre of expectations concerning consumer norms, values and beliefs from their local environment. Within the common surrounding of a larger socioeconomic community, where e.g. media plays an important part, family, peers and school sometimes have different expectations of how to act as a consumer. It is from the interrelationship of these three worlds, youths both build their own meanings and understandings of how to behave as a consumer, and develop strategies to use when moving from one context to another.

From the pedagogical point of view it is important to renew consumer education to be based on needs of the young consumers and special features of their consuming. Content of consumer education should have better correspondence with everyday demands. It means development of curriculum and syllabus. In developing methods of consumer education learner needs and internal/non external motivations is in focus.

It is needed aims and objectives which guides from teaching bits and pieces to understanding structures and conceptual relations. Education should enhance positive motivation, foresight, systems thinking and product life-cycle consciousness. And the conception of learning should be collective in which learning is in focus.
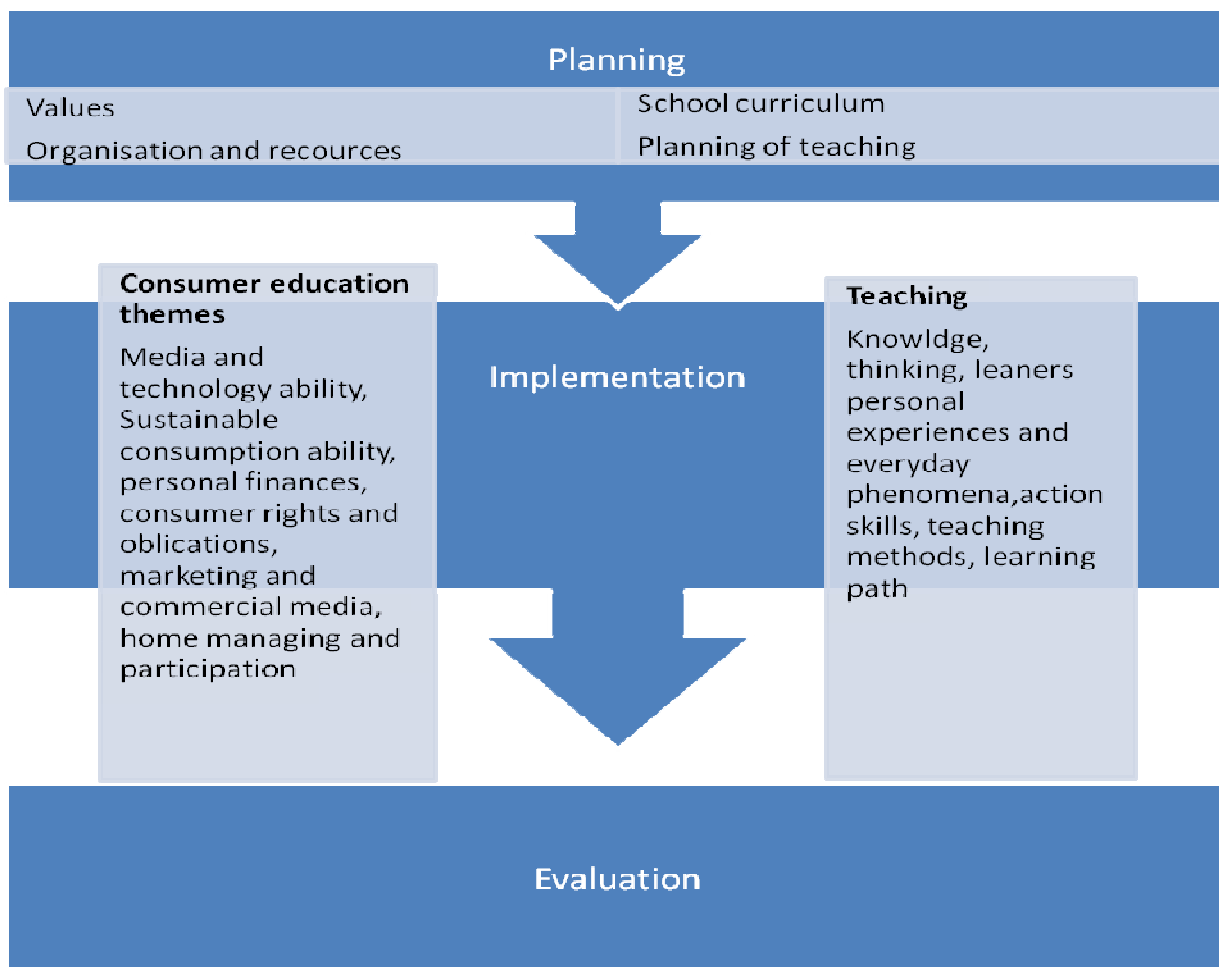
In practice educational methods should be inspired by these conflicts of the young consumer's everyday life. Conversation, drama, storyline, roleplay, art-pedagogy, media-pedagogy and simulation are important. Project work includes the possibility of dealing with learner-initiated issues. Practical, concrete tasks help the learners to understand the significance of consumer education. They need to be involved in the design and evaluation of activities. Further education and up-to-date information must be made easily available to the learners. More open learning environments, integrative projects and better integration between different subjects may also help to link theoretical knowledge with real life experiences.

Consumer education means taking the consumer point of view into account as a dimension in all the taught contents and subject matters, as well as the school practices. The themes of consumer education are included in the teaching curriculum goals and contents, but they are distributed inside several different subjects such as Ethics, Home Economics, Languages, Environmental Science, Social Sciences, Arts and Crafts, Natural Sciences, Psychology, Mathematics, Technology, and Media Sciences depending of education system.

NATIONAL CURRICULUM

INTEGRATION AND COLLABORATION BETWEEN SUBJECTS

Maths | Sciences | Languages | Arts | Social Studies | Home Economics | Life Skills | Health Education

COMMON THEMES

Media and Technology Ability

Sustainable Consumption Ability

INTEGRATION BETWEEN THEMES

Personal Finances | Consumer Rights and Obligations | Marketing and Commercial Media | Home Managing and Participation

LEARNING OBJECTIVES AND CORE CONTENTS OF CONSUMER EDUCATION

CONCLUSIONS AND SUGGESTED ACTIONS

Nordic-Estonian working group suggests that nationally there could be set targets according to the consumer education plan. In the plan presents actions on how to coordinate consumer education

- in the management, teaching and maintenance activities of educational establishments
- in supporting material for the educational institutions
- teacher training courses supporting the construction of consumer education programs

Planning

Values	School curriculum
Organisation and recources	Planning of teaching

Consumer education themes

Media and technology ability, Sustainable consumption ability, personal finances, consumer rights and oblications, marketing and commercial media, home managing and participation

Implementation

Teaching

Knowldge, thinking, leaners personal experiences and everyday phenomena,action skills, teaching methods, learning path

Evaluation

Teaching Student Teachers and High School Students on Education for Consumer Citizenship in Greece

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Abstract
In the frame of the Greek educational system, education for consumer citizenship is provided to thirteen-year old students who attend courses on Home Economics in Junior High School. Students' training is focused, among others, on their acquaintance with the notion and the basic principles of consumption, primarily within the frame of family running, and, secondly, in the frame of narrower or broader social settings. Students are consequently expected to actively develop styles of mature consuming behaviour in family, school, and society.
In the Faculty of Home Economics and Ecology at Harokopio University of Athens, student teachers attend special courses on consumer citizenship and are systematically trained to use effectively alternative instructional strategies during the teaching of subject units that refer to consumer citizenship.
The present study aims at presenting, firstly, how Greek student teachers are trained through University Syllabus and Practicum in order to be qualified as educators for consumer citizenship, secondly, how they diffuse this specific knowledge to their students during their years of in-class service and, thirdly to examine the career satisfaction of the graduates of Home Economics and Ecology at Harokopio University of Athens. The result of the present study showed that the great majority of graduates were promptly appointed as teachers to Greek High Schools and today they are considered to play a major role in the conveyance of the education for consumer citizenship's principles in Greek society, since Home Economics is the only Junior High School subject that promotes and develops consumer awareness in Greek Secondary Education.

Key words: Consumer citizenship, education, training, instructional strategies, consumer awareness

Introduction

As it usually happens with most complex social phenomena which need to be brought under consideration within the framework of education in order to be faced effectively by present students and future citizens, consumerism increasingly tends to be considered by educational systems as a problem which is *per se* insurmountable, given the fact that material goods' abundance and consumption are supposed to be an only and definitely irrevocable way to individual welfare and consequent global development through the strengthening of economic growth (Davis & Sumara 2006). It is, therefore, much easier for contemporary educational systems around the world, which somehow or other protect social dogmas and convey society's fundamental values to younger members, to accept consumption's superpower and to deal merely with consequences and impacts of consumerism by highlighting the responsibility of present consumers' decisions and behaviours for the future generations, than to challenge modern society's orientations and, if possible, to refute an almost solidified fallacious creed that human happiness is unbreakably connected with excessive, or in some cases even with rational, consumption (Doyle 2006). It is obvious, however, that the more

financially developed the country is, the more difficult for its educational system is to serve a sincere anti-consumerism ideology, especially in cases where the education is expected at the same time, but rather to the opposite direction, to boost a rapid technological growth and mould characters who, in the future, will participate more actively, effectively, restlessly in the process of production – and inevitably, after that, in the process of consumption (McGregor 2008). Humanistic ideals, of course, are not absent from the objectives of most western countries' educational systems; repeatedly, however, the outcomes of educational processes are evaluated in terms of quantity, not of quality. Financially developed societies provide to their students/citizens more schools, wider education, broader knowledge, numerous opportunities for participation in cultural creation, even a wide, rich range of socially proposed features (adaptability, effectiveness, self-development, self-realization, solidarity and so forth) from which a young person is expected to choose the ones s/he wants to adopt and develop in order to be more flexible, more adapted to the requirements of an excessively materialistic and minimally humanistic society. In other words, most educational systems adapt people to the needs of a commercial society instead of questioning the very orientation of such a society and struggle for a meaningful change (Peters, Britton & Blee 2008).

Conversely, for a country such as Greece that is not yet fully developed in terms of economy, a very persistent humanistic orientation can be detected throughout its educational framework, despite the fact that free market economy's rules and values tend to be dominant after the Greece's participation as a full member in the European Economic and Monetary Union (2002) (Gamble 2006). Motivated probably by its humanistic past, the education in Greece, especially primary and secondary, still lays stress on the students' development of qualitative features without, however, putting analogous emphasis on the contribution of this development to the future growth of country's economical welfare and affluence. Creating physically, cognitively and emotionally balanced personalities remains, to a certain extent, a main objective, while social sensitisation and solidarity are expected to be developed through students' multifaceted contact with texts rich in authentic humanistic values, and socio-educational activities related to modern and ancient culture and tradition. The majority of school subjects do not only aim at promoting humanistic ideals, but also at revealing the impact of several negative modern phenomena. In such a framework, phenomena like consumerism in the form of agonized massive accumulation of goods and services is stigmatized through sporadic mentions incorporated in school subjects such as Greek Literature and Culture, History, Citizenship Education, Religion Issues, Sociology and Philosophy. An aggregate and thorough-going review, however, of consumerism is realized in Greek classrooms during the teaching of Consumer Citizenship, which is the pivotal core of Modern Home Economics, an interdisciplinary school subject attended by thirteen year-old students and constructed on the basis of cross-thematic school Curricula's principles and experiential learning's objectives and instructional methods (Georgitsoyanni, Koutrouba & Goussia-Rizou 2003).

The aim of the present study was to present, firstly, how Greek student teachers are trained through University Syllabus and Practicum in order to be qualified as educators for consumer citizenship, secondly, how they diffuse this specific knowledge to their students during their years of in-class service and finally to examine the career satisfaction of the graduates of Home Economics and Ecology at Harokopio University of Athens.

Materials and Methods

The current University Syllabus and Practicum of Home Economics and Ecology Department were recorded in order to describe how Greek university students are trained as educators for consumer citizenship and how they diffuse this specific knowledge to their students. Also, a

survey was conducted in 2007, in order to examine the career satisfaction of the graduates. The statistical frame of the survey was based on the 1998-2000 graduates of Home Economics and Ecology at Harokopio University of Athens. This specified period was selected because Harokopio University was established in 1993; therefore the first students graduated in 1998. In addition, the survey was interested for alumni/alumnae who had completed all their post graduation endeavours or obligations, such as postgraduate studies or compulsory military service for men and had settled professionally. The size of the sample used in the study was 150 graduates. Data on the characteristics of the graduates were collected through a questionnaire survey.

The data collected were analysed by using descriptive statistics for calculating the means and standard deviations of continuous variables and the frequencies and percentages of discrete variables.

DISCUSSION

How Greek student teachers are trained in order to be qualified as educators for consumer citizenship:

Since Home Economics is the main Junior High School subject that methodically promotes and systematically develops consumer awareness in Greek Secondary Education, the education and training of Home Economics' teachers is considered by the Greek State as a matter of prime importance. In the Faculty of Home Economics and Ecology at Harokopio University of Athens, student teachers attend special courses on consumer citizenship and sustainable development and are scientifically trained to use effectively alternative instructional strategies during the teaching of subject units that refer to relevant issues. Given the fact that, since 1998, when the first teachers completed their studies in the new autonomous University, all graduates have been promptly appointed as teachers to Greek High Schools, today they are considered to play a major role in the conveyance of the education for consumer citizenship's principles in Greek society.

Student teachers at Home Economics University are educated to regard over-consumption primarily as a matter of ethics and secondarily as an economical issue. An obvious objective of such a perspective is Greek education's intention to reveal the intimate motives hidden behind consumerism and, therefore, to help students strike at the root of the problem instead of fighting against its consequences. Students probing deep into the mechanism of ancient Greece's socio-financial and political function and development, realize that over-consumption was considered as an index of the city-state's prosperity. From an archaic Doric ideal of self-restraint, abstinence and frugality in the eighth century B.C. Greeks moved gradually through the centuries to an almost overweening stance against simplicity in the early third century B.C.; kings, tyrants and even democratic political leaders and orators tried to attribute their city's advancements and political dominion over the Mediterranean and Minor Asia world to the Greek affluence of goods, not only of material but also of cultural ones (Pomeroy *et. al.* 2008). Colonies and conquered regions, triremes, soldiers, slaves, friends, allies, provisions, theatres, stadiums and temples, feasts and symposia, works of intellect, political and philosophical speeches were estimated in terms of quantity and as an evidence for luxury and affluence, despite the fact that only few prudent thinkers were concentrated in the pursuit of happiness through the seeking of quality (Koutrouba & Apostolopoulos 2003). The richest and more consumerist the ancient Greek citizens were becoming, the fastest their transition from self-sufficiency to greed and loss of all sense of proportion was progressing. From an ethical point of view modern Greek students can discern an apparent distortion of values; their ancestors in the course of time started valuing 'having' more than 'being', turning consequently to an unleashed expansionist policy and despotic attitude towards others. Greek states' decline, as a result of a luxurious life and insatiable wish

for more goods and amenities, provides modern students with a clear understanding of consumerism's deeper origin and consequences. Looking back into history Greek student teachers also review Byzantine Empire's decline after a long period of one thousand years of powerful domination over the medieval world, that came as a result of spiritual values' fading due to society's turn to seductive materialism.

A thorough research of consumerist phenomena is completed for Greek student teachers with an extensive examination of Industrial Revolution in the late eighteenth century and its contribution to the shaping of modern consumerist society. Students pore over the consequences of goods' massive production and consequent natural resources' exhaustion, as they are historically linked to the Great Powers' conflicts and wars and to the people's destructive steps to over-consumerism that alienated them from the humanitarian principles and values that Renaissance and the Age of Enlightenment had proposed and developed in the past centuries (Sassatelli 2007).

This historical review on values, however, does not really aim at strengthening student teachers' cognitive background on history. It is rather used as a means of clear examination and explanation of a phenomenon and a feature that is so compactly connected to the very nature of modern man that any effort to detach it from modern man's personality looks rather futile. Yet, the planners of Home Economics' Curricula, by familiarizing student teachers with the roots and the developing and changing forms of a very complicated socio-economical but primarily ethical problem, which can be historically examined 'in vitro', tend to believe that for a society that reconsiders its values and orientations, a rational blunting of this problem is not unfeasible.

How they diffuse this specific knowledge to their students during their years of in-class service:

Teachers of Home Economics, having themselves realized the ways that affluence allures and, in the long run, captivates and enslaves the conscience of a society that over-consumes, prompt their students, firstly, to get familiarized with the contemporary mechanisms that promote the ideology of consumption and, secondly, to develop personal strategies of resistance by reacting consciously and effectively within their narrow or broader social settings.

Discerning and separating fictitious from real needs constitutes the first step in developing a deeper understanding of over-consumption phenomenon. Teachers utilize the main principles of experiential learning, since students' everyday experience can be effectively used in order for their awareness to be stimulated and developed (Carroll & Reichelt 2008). Students, working in small groups, are prompted, on a daily basis and for a period exceeding one month, to draw up lists where all emerging needs are recorded. Every need is examined in connection with a defined social frame and, at the same time, with a distinct domain of human nature (physical, affective). Buying, for instance, a nice blouse fulfils primarily a physical need, but, simultaneously, the blouse's firm name reflects the social stratum where the buyer belongs. A consequent affective need is therefore satisfied; by showing off our belongings we affirm our place in this particular stratum, strengthening thus our self-esteem and confidence (Williams 2002). Students are expected to realize that affective need is not prime or imposed by nature; it actually follows a social need that, despite its importance, can be reconsidered and belittled with minimal consequences, on condition that one earnestly wants to take control of one's behaviour. Family income or other differentiating factors, such as gender, profession or level of education can affect the final choices of the consumer, but the over-consumption's core objective (affective relief within a highly demanding social environment) seem to be common for the majority of human beings (Frank & Enkawa 2009). A needs' classification reveals how many secondary requirements and corresponding products have been invented in

order to fill a life vacuous in terms of meaningful and substantial values, in deed regardless the social stratum and the economic power of the consumer. During consumer citizenship education of the Greek student the main interest focuses, therefore, not on what or, even, how much one finally buys and consumes, but rather on the values one embraces during consumption and on the objectives one pursues; if education manages to prove the insufficiency, superficiality and vanity of current material objectives, and to propose different ones (such as self-restraint, self-knowledge, balanced social interaction, solidarity and so forth) that can be attained with more spiritual ways and means (cultivation and fostering of humanitarian ideals, strengthening of social virtues and unity through education), then the problem is expected to have been struck at the very root of it. Students are prompted to construct simple questionnaires or to review members of their family environment in order to record their consuming objectives and values as well as the degree of satisfaction they experience due to consumption. Afterwards, under teacher's supervision and assistance, they elaborate the data collected, and draw their conclusions focusing mainly on the similarities of fundamental human objectives (fulfilment of physiological, safety, belonging, self-esteem and self-actualization needs, as they have been formulated by A. Maslow), which however are satisfied through the consumption of different products. Students collaboratively produce written essays where, after a guided research on social history and thought, they examine whether these main objectives can be fulfilled in different, less consumerist ways. Their conclusions and proposals are then communicated to all participants and fellow-citizens during school's interaction with local society.

The second step for students is their familiarization with the techniques of advertisement and goods' promotion. Students are prompted to collect, over a period of two months, different types of advertisements, to decode obvious or hidden messages, to analyze the means used, to define the consumers' target group, and to realize *the new values founded*, namely to realize that, despite the fact that projected values (such as beauty, happiness, success, acceptance) are already known to the target group, their linking to and dependence on the use of a particular material product produces a new kind of value without idealistic, theoretical or ethical connotations, a 'value' that can be easily reached and obtained through marketplace procedures as it happens with all other material products (Carey, Shaw & Shiu 2008). Students also analyze the background or complementary life and behaviour models projected by advertisements; expensive houses, cars, jewels, modern conveniences, ambitious executives, desirable women, smartly-dressed and successfully raised children, sincere reciprocal feelings, all achieved and accomplished through the acquisition of goods, all picturing to consumer's imagination a model of sought-after life and, even worse, a model of being. Students are prompted to download advertisements from commercial websites, to collect television, magazine and newspapers' advertisements, where different messages and models of thinking and feeling are expressed. They especially examine (during an interdisciplinary approach through Language and Literature, Religion, History and Social Studies) the powerful attraction of language and picture, the ways that symbols are used and feelings are manipulated, and, finally, the means used in order for the market's intentions and rules to dominate over consumer's will and consciousness. Roundtable and panel discussions, debates and role playing are actively used as a means for students to fully develop a personal stance against over-consumption. Moreover, in many cases, students, encouraged by their Home Economics' teacher, come in contact with national and international non-profit organizations for the protection of consumers' rights, they are informed, among others, about their rights against misleading advertisement and participate in short-range campaigns for the information of local community.

In a third step of profound awareness students scrutinize consumerism's consequences firstly on human personality and secondly on natural resources and environment. As far as human

personality is concerned, students examine how consumerist objectives alter one's behaviour in daily life. Consumers are convinced that, if they are to be free and avoid falling short of personal, family and social environment's expectations, they must satisfy their endlessly growing needs, by working longer and harder, by possessing and spending more, by adjusting and subjugating, in fact, his/her personal aspirations (physical, psychological, affective, social) to the illogical demands and for the benefit of a highly seductive but virtually impersonal industry that eventually can enslave any unsuspecting consumer. Moreover, as far as consequences for natural resources and environment are concerned, students are prompted to correlate consumerism with the exhaustion of unsustainable resources and with its impact on other peoples and future generations' life (Hicks & Holden 2007).

During this two-direction step of action students are prompted to bring about gradual changes and effect improvements in their personal daily lifestyle, especially in cases where family environment is helpful or susceptible of change. Collaborating in big groups and with the co-operation of Religion and Philosophy teachers, they are prompted to reduce excessive consumption and save up money not in order to buy later more products but in order to provide weak social strata with primary necessities or other humanitarian aid. What is mainly expected is students' realization that needs and values of higher rank in A. Maslow's Pyramid do not actually need material goods in order to be fulfilled. On the contrary, an energetic, dynamic students' presence and participation in social actions can produce stronger feelings of self-actualization, self-esteem, belonging and safety.

Students' sensitization about environmental issues, such as the climate change, the greenhouse effect, the ozone depletion, the exhaustion of resources and the exploitation of poorer countries' resources and economy by industrialized world, is accomplished through interdisciplinary teaching with the participation of teachers of Biology, Physics, Chemistry, Geography and Sociology. They examine thoroughly the consequences of environmental change by observing and recording national and international data on environment deterioration and they are actively involved in local programmes for wastes' recycling, reforestation, wildlife observation, and conservation of flora and fauna through the preservation of their habitats. They contribute in local community information and sensitization by publishing articles in local or school newspapers and by distributing relevant handouts, where a systematic effort is made to highlight the connection between consumer choices and environmental change.

Career satisfaction of the graduates of Home Economics and Ecology at Harokopio University of Athens: Results of survey.

Given the fact that 97% of the graduates of Home Economics and Ecology at Harokopio University of Athens, were promptly appointed as teachers to Greek High Schools, today they are considered to play a major role in the conveyance of the education for consumer citizenship's principles in Greek society, since Home Economics is the only Junior High School subject that promotes and develops consumer awareness in Greek Secondary Education.

More specifically, the 97% of Home Economic and Ecology Department graduates of the years 1998-2000 are now (2007) appointed as teachers in different junior high schools of their preference and the rest 3% have found a job in the private sector, having, however, an occupation related to their studies. Ninety one percent of the graduates are very satisfied or satisfied from their studies and 97% are very satisfied from their occupation.

Conclusions

In the Faculty of Home Economics and Ecology at Harokopio University of Athens, student teachers attend special courses on consumer citizenship and are systematically trained to use

effectively alternative instructional strategies during the teaching of subject units that refer to consumer citizenship.

Students are prompted to examine how personal choices and attitudes towards consumption have a multileveled impact on others in the present and, also, in the future time. Students look deeper into consumption complicated problems by examining them in the frame of modern economic ethics in order to reveal the degree of personal responsibility for political, economical, social and environmental situation in world places that, at first sight, seem to be quite far-off. Strengthening peoples' solidarity through the projection of 'participatory consumerism' constitutes an ambitious objective.

Apparently, for Greek educational system, consumer citizenship education should primarily aim at a radical shift in personal and national values, moral perspectives and ethics, given the fact that a sincere and effective change in behaviour can only be expected where and when people act first as humans and then as consumers.

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Evaluation of the Presence of the Decade of Education for Sustainable Development in Awareness of Agriculture and Economy Students in Poland
(This paper was presented at the CCN fifth international Conference in Tallinn, Estonia May 2008.)

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Key words: Decade of Education for Sustainable Development, awareness, students in Poland

INTRODUCTION

A Sustainable Development is a concept of a meaning for saving the world for humans. Using its principles was, once again, accepted in Johannesburg (2002), where the concept was considered crucial for the safe development of humanity and restricting the environment degradation.

The concept is young and, therefore, it is difficult to identify the research methods and the details of strategies and implementation into everyday life. In its classic form it is being developed since the Brundtland Commission[60], but it is still common not to recognize or understand it[61]. We are presently witnessing the Decade of Education for SD, announced by UNESCO for the years of 2005-2014 [62],[63].

The aim of the research was the evaluation of the sources of information about the Decade and its presence in the awareness of Polish students of agriculture and economy.

MATERIAL AND METODS

The survey was the tool used in the conducted research (table 1). It was carried out in March 2008, with randomly chosen groups of 50 people (students of the fifth year of Agriculture at University of Rzeszow and students of Economy at the Technical University in Białystok).

Students of Agriculture taking part in the research were practicing Catholics (32 women, 18 men). Examination of economy students involved 44 Catholics (29 women, 15 men), and 6 persons declared themselves to be the Orthodox Church believers (4 women and 2 men).

1	What is indispensable for your life (choose 5 factors putting "1" to the most important, "2" to second most, etc.)	
	health	
	money	

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	owning things of the new and best quality (f.e. electronic equipment)		
	love		
	power and authority		
	familly		
	healthy environment		
	proper social relations		
2	Show the main source of information in your favorite subject (which is your passion)		
	Internet		
	specialist literature		
	mass media		
	other		
3	Are you familiar with the theory of sustainable development?	Yes	No
4	How did you gather information in that subject?		
	the primary school curriculum		
	the high school curriculum		
	the university curriculum		
	radio/television information		
	paper report		
	conversation with friends		
	conversation with familly		
	Internet		
	other source		
5	Do you know the term: *Decade of Education for Sustainable Development 2005-2014*?	Yes	No
6	Which definition does fit DSD best?		
	a/ actions undertaken to promote a Sustainable Development ideas with a focus on people's choices and principles		
	b/ actions undertaken to promote a Sustainable Development ideas with a focus on changing „growth economy" rules (growing goods and service consumption)		
	c/ actions undertaken to promote a Sustainable Development ideas with a focus on changing food consumption and cities grow		
7	Did you notice various aspects of it in public life ?	Yes	No
8	A source of DSD information; where did you notice it?		

Table 1 *Questions for respondents*

RESULTS

Question 1: What is essential for your life?

Catholic women

On the question: what is essentials for your life, both students of agriculture and economy, as first choice elected heath (table 2). Next choices were connected with family and love.

All students of agriculture as fourth choice (seldom as fifth) pointed out healthy environment. The proper social relations, students of agriculture selected usually as the fifth choice (although in that place, instead of the proper social relations could be found also: money (7 persons), power and authority (only 2 persons) and owning things of the new and best quality (2 women).

Students of economy showed to select money as fourth choice and on a fifth place – the proper social relations. The healthy environment was chosen only by 16 students of economy, (8 women showed it as fifth in the scale from 1 to 5, where 1 was most important, 4 students as fourth and 2 person as first (most important and essential for their life)).

The healthy environment did not found the place between inside 5 choices being essential in life, for woman Catholics- students of economy.

Students of agriculture	Students of economy	Students of agriculture	Students of economy
Woman Catholics		*Man Catholics*	
Health	Health	Health	Health
Family	Love	Family	Family
Love	Family	Love	Love
Healthy environment	Money	Healthy environment	Proper social relations
Proper social relations	Proper social relations	Proper social relations	Money
Women - the Orthodox Church believer		*Men - the Orthodox Church believer*	
–	Health	–	Family
–	Family	–	Health
–	Love	–	Proper social relations
–	Money	–	Love
–	Proper social relations	–	Money

Table 2 *Factorization of the values being essential in life, for respondents in the groups researched*
Source: Own results from the research

Catholic men
Future agriculturists and economists were speaking with one voice inside the first three values being essential in their life: as most important, very often recognized health, on a second place set family, and as the third selected love. They differed relatively to fourth and fifth values. Similarly to female student also future agriculturist men, as fourth and fifth pointed the healthy environment and (more often as fifth) the proper social relations. As fifth essentials value agriculture students chose also power and authority.
Future economists, as the next to last valuated the proper social relations and as last – money. The healthy environment was chosen only by 2 students of economy (at the four and fifth place).

Women - the Orthodox Church believers
In the question 1, Orthodox women lined the answers as follows: as the first choice pointed out health (all of them), as a second – family, and as the third – love. Money were on the fourth position and as the fifth one they chose proper social relations (tab. 2). Not any at that group did not point the healthy environment as essential in the scale from 1 to 5.

Men - the Orthodox Church believers (practicing and not practicing)
A family and health were chosen ex equo for the first two places. Next in the ranking were: correct social relations, love and money. A healthy natural environment was not chosen by anybody as important.

Question 2: Source of information in areas students were interested in
Catholic and Orthodox women, Catholic men
The Internet was a main choice of Catholic students of agriculture and economy. Then came specialist literature, and mass media. Orthodox female students get knowledge from specialist literature and Internet.
Orthodox men chose Internet as the main source of information.
Questions 3 and 4: Are you familiar with the theory of sustainable development and How did you gather information in that subject

Catholic and Orthodox women

Knowledge of the sustainable development idea was declared by every student of Agriculture. 20 of Catholic students of Economy were familiar with the idea, 9 were not aware of the term. 3 Orthodox students confirmed their knowledge of sustainable development, one declared otherwise. The three aforementioned persons had their SD knowledge from their studies.

All of Agriculture female students declared that studies, the Internet and mass media were their source of information on SD (table 3). Families and friends were also mentioned as sources of information. Economy students got their knowledge from: study courses (18 persons), radio and television (7), Internet (7), press (5), families (4) and high school classes (2).

Catholic and Orthodox men
Male Agriculture students declared their familiarity with the SD idea. Of male Economy students 9 confirmed their knowledge and 6 did not.

As a source of their knowledge 9 of asked declared studies, other mentioned: high school (1 person), radio and television (1), friends (1) and Internet (1). Orthodox students also confirmed their knowledge of SD (gained during studies and also from press).

Source of information	Women			Men		
	A	B	C	A	B	C
the primary school curriculum	–	–	–	–	–	–
the high school curriculum	3	4	–	–	2	–
the university curriculum	100	36	6	100	18	4
radio and television	22	14	–	–	2	–
the daily/weekly press	16	10	–	10	–	4
talks with friends	16	6	–	11	2	–
talks with familly	15	8	–	–	–	–
Internet	66	14	–	89	2	–
other source	–	–	–	–	–	–

Table 3 Source of information in sustainable development [in %]
A- Catholic agriculture student B- Catholic economy student C- Orthodox economy student

Questions 5, 6 and 7: The DSD idea knowledge and its sources
Catholic and Orthodox women
All of female Agriculture students declared their knowledge of "The Decade of Education for Sustainable Development" idea (90% of them chose the answer "a" for the question 6, 10% chose the answer "B"). However, only 4 of 29 female Economy students declared that knowledge. Of this 4, 1 chose the answer A for the question 6, 2 chose the answer "B", and 1 chose the answer "C". Only one person answered "yes" to the question number 7 (visible aspects of the Decade in public life). That person chose television and study courses as a source of the Decade information (question 8).

70% of female Agriculture students had noticed visible aspects of the Decade in some song lyrics, in radio programs, television educational programs, children shows, television series, advertising of a new size of "Rzeczpospolita" newspaper, and their study courses subjects. None of Orthodox Economy students confirmed any visible aspects of the Decade.

Catholic and Orthodox men
Male Agricultural students confirmed their knowledge of the idea of the Decade of Sustainable Development (90%) by choosing for the question 6 the answer a (70%). 7 of Economy students knew about the Decade, 8 did not. 5 of those 7 chose for the question 6 the answer a, 2 chose the answer b.

80% of male Agriculture students answered "yes" for the question 7 (press was a major choice). However a positive answer for that question was chosen only by 1 of 15 of Economy students. That one declared getting that knowledge during studies.

Orthodox males knew the Decade idea. One of them chose the answer a in the question 6, other chose the answer b. One of them can see visible aspects of the Decade in public life and declares that knowledge comes from his studies.

Some of the visible aspects of the Decade, provided by the students are shown in the Table 3.

Where any aspects of the Decade can be seen	Details
Popular music lyrics	Chosen artists: Michael Jackson, Dezerter, Tint, Lacrimosa, SDM
Radio programs	the natural environment stories by Simona Kossak
Television programs	"Agro-business", "Sprawa dla reportera"
Television series episodes	Most popular TV series : "L for Love", "The Clan"
Advertising and commercials	"Rzeczpospolita" newspaper, ecological/organic food
University courses	Agriculture students (ecology and environmental protection, waste management, nature protection, economical basis for SD, ecophilosophy) Economy students (Ecological aspects of economic development)
Regular article in the mass media raising important SD issues	Aura, Newsweek, Zielone Brygady, Ekopartner, Ekonomia i Środowisko
Other	A city clean-up campaign, hazardous waste campain, a papal encyclicals on nature, www pages of consumer groups and other associations

Table 4 Visible aspects of the Decade for Sustainable Development

DISCUSSION AND CONCLUSIONS

European people have to overcome a lot of environmental problems. They are: greenhouse gases and climate change, ozone depleting substances, transboundary air pollution, water stress, soil degradation, waste generation and management, natural and technological hazards, the release of genetically modified organisms to the environment and dispersion of hazardous substances[64]. These factors are connected with *Homo sapiens* health[65].

Values indicated by respondents, although ranged by them in a different way, stayed the same. They have included as the most important health, family and love. Students of agriculture (the final year – post graduated course – *Environmental Management*) have valued also **healthy natural environment** and **proper social relations**. It seems that it results of 5 years of work on their profile as agriculture abiturients, who are prepared to fulfill agricultural region supervisor's role. The contents of consideration on sustainable development from all angles were frequently repeated each year at their studies (during subjects such as ecology, environment protection, waste management, ecological aspects of economic development, and eco-philosophy).

It was confirmed by the research that in the economy students groups healthy natural environment was not indicated as one out five most important values indispensable for life. ***It seems to be surprising that "future economists" do not notice the relation between health and family – which they assess to be most important – and healthy natural environment****. It causes the fear of them not undertaking the correct decision in the case of conflict relating to*

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[64] Environment in the European Union at the turn of the century. Appendix to the summary. Facts and findings per environmental issue. European Environmental Agency. Copenhagen 1999.
[65] Environmental Health and Toxicology. SIS. Specialized Information Services. http://sis.nlm.nih.gov/enviro.html

the motorway construction by the Rospuda Valley[66], similar to other inhabitants of "Green Lungs of Poland"[67],[68].

As the result of above mentioned contact between agriculture students and the concept of sustainable development, freequently repeated during studies all of them confirmed that they know it. **Among economy students (1ˢᵗ and 3ʳᵈ year of studies) half of questionnaire respondents never met the idea of sustainable development**. *And those who confirmed to know it, 5 met it only during studies (while attending* Ecological aspects of economic development*). They have never heard of that idea on TV, radio and have never read about it in the press. This could suggests that the issues of sustainable development are not widely spread in the region or the students do not perceive them. They were not equipped with that knowledge in primary or high school. The concept is neither the subject of conversations with friend nor with family.*

The awareness of Decade for Sustainable Development was confirmed by 90% of agriculture students while more than 66% of economy students did not know it. This may mean that only for 1/3 of the students from economy groups the concept was not new.

Among those who have heard about the concept of sustainable development only 3 students perceive it in every-day-life. Yet it was not true that those actions have not be undertaken – students of agriculture have noticed them in mass media. It should be stressed that in spite of underestimation on the environmental issues by the majority of Poles, polish thought on nature protection has a big and long tradition[69].

We should seek to obtain the issue become an essential part of value systems of the whole society. The results of the research have proved how important in that field the Internet could be since it is said to have a dominant position as a source of seeking and gathering information.

But how to stimulate a quick growth of need for information about sustainable development?

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[66] Bzura W., Scherbuk P. 2007. Dolina Rospudy. Rospuda Valley. Wydawnictwo Biały Kruk

[67] http://www.polandforall.com/the-green-lungs-of-poland.html

[68] http://www.wrotapodlasia.pl/en/Environment/The+Green+Lungs+of+Poland

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Consumer Citizens as Leading Innovators Enhancing Value Creation Potential through Consumer-Consumer-Interaction

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1. INTRODUCTION

We base this conceptual paper on the assumption that sustainable consumption can be enhanced, facilitated and accelerated by service and product innovations in the sustainability context[70] and that the success factors of innovation management, namely a) strong market-orientation and b) heigh creative potential are promisingly realized by integrating users in the innovation process (Lüthje/Herstatt 2004; von Hippel, 2005; Franke/von Hippel/Schreier 2006).

We understand sustainable consumption – directly referring to the World Commission of Environment and Development (1987) definition of sustainability – as the use of goods and services, that satisfies consumer needs, preserves the environment and natural resources by also being socially responsible and economically stable.

This concept is obviously closely related to the definition of a consumer citizen, understood as an individual who makes systematic choices based on the above mentioned sustainable considerations (CCN 2005).

We argue very much in line with the priorities of the Agenda 21 (UN 1992), namely the need for action a) to change patterns of consumption and production that contradict the idea of sustainability and b) to deepen our understanding of consumer behavior and to enrich our knowledge about how to foster sustainable consumption more effectively.

Defining a) as the invention, development and use of sustainable technologies and b) as an innovative way to identify special consumer needs as well as the diffusion of products and services that enable sustainable consumption patterns on the mass market, we directly come to the main objectives of this paper, i.e. clarifying the importance of innovations in the sustainability context in general and the promising concept of user integration in innovation processes in particular.

2. SUSTAINABILITY INNOVATIONS THROUGH USER INTEGRATION
2.2. Relevance of Sustainability Innovations

When aiming at enabling, facilitating and accelerating sustainable consumption, innovations of products and services in the field of sustainability have to meet or even exceed existing standards concerning usability, convenience, affordability and amortization.

Here the central role of companies that develop and promote these innovations becomes overt. But why should companies engage in such an "open-(for-sustainable)-innovation" behavior? We state that there is an enormous push factor for corporations to be sustainable and to be

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[70] The basic idea behind this contribution is closely linked to our conjoint research project NaNu! (www.nanu-projekt.de), in which we are responsible for the project part "passive houses" (www.energiecomforthaus.de).

innovative accordingly, namely the economic dimension. Sustainable innovations should not be considered as optional activities any more but strategic necessities.

Innovations in general became the essential success factor on globalized and mostly saturated markets. Facing a market situation in which physical-technical quality characteristics of products are often not substantially distinguishable anymore, innovations can proactively counteract this complex problem of product-differentiation by making use of opportunities resulting from evolving consumer needs and additional product requirements (Trommsdorff/ Steinhoff 2006).

Management and its R&D-departments have to focus increasingly on innovations, meaning a) radical new product- and service-developments to fill out a market niche or b) innovation processes that concentrate on the diffusion of former niche products to the mass market. In the context of enhancing diffusion of products, we also observe a general increase of importance concerning new and competitive communication-strategies on modern markets that enable products and services to be distinguishable on the market, e. g. by experience-oriented marketing approaches or by integrating dialogical communication-platforms to meet consumer needs better and directly (Chaudhuri/Holbrook 2001; Reichwald/Piller 2006).

These observations result in following questions that are closely related with each other: Firstly, how to get a detailed insight of consumer needs and their demands on new products? Secondly, how to foster a successful diffusion on the mass market?

Coming to the first question: Are there new, evolving consumer needs? We observe societal changes in regard of values and norms related to consumption behavior, based on a sensitization for ethical and sustainable themes. Promoting sustainable innovations is therefore not restricted to special interest groups anymore but should be positioned as socially and ecological responsible alternatives on the mass market (Fricke/Schrader 2009).

Are there special product requirements? There is not only demand for sustainable products themselves, but furthermore the need to facilitate their use in everyday life (Heis-kanen/Kasanen/Timonen 2004). Facilitation includes striving for technical maturity, easy application as well as providing all necessary information about production and handling. Especially concerning sustainable consumption there is still insufficient knowledge on the consumer side; which is essential, because even the most sustainable products can only unfold their full impact if they are used correctly (Hoffmann et al. 2004).

Now coming to the second question: How to foster a successful diffusion on the mass market? The latter points already highlighted necessary basics for a successful introduction, pro-motion and finally diffusion of sustainable innovations on the mass market. But today's marketing research and advertising agencies still cannot prevent flop rates of up to 90%. In this context again „customer or market orientation is amongst the most important success factors for new products" (Hoffmann 2007: S. 352). New attempts to enable companies to get a detailed insight in consumer needs will be necessary.

To sum up this paragraph, we can state that taking sustainability and innovation together evolving "sustainnovations" offer great potentials to foster socially and environmentally responsible behaviour by enabling companies to be successful on high competitive markets. Sustainability can be seen as one of the major drivers of the so called competitive innovation advantage (Trommsdorff/Steinhoff 2006) nowadays, namely by successfully meeting demands concerning the fulfilling of certain consumer demands, corresponding recognition as satisfying by consumers and –by its inner most meaning- especially not being seen as running risk to be invalidated by its environment.
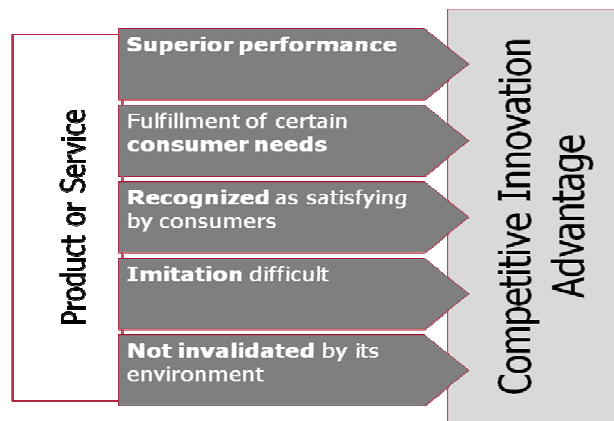
Figure 1 *Competitive Innovation Advantage (Source: own illustration, referring to Trommsdorff/Steinhoff 2006, p. 76)*

2.2. Types of User Integration

Both on the level of product development and in the area of communication the transparent and dialogical integration of consumers in the innovation process has some important advantages. When the users' experiences and everyday knowledge concerning specific products are put together with the expertise of companies, processes of mutual learning, divergent thinking and the revealing of implicit, "sticky" information can be successfully activated (Kristensson/Gustafsson/Archer 2004; von Hippel 2005; Hoffmann 2007).

The different value creation potentials of this user integration can be linked to certain phases of the innovation process, e.g. product-development, design or promotion (Reichwald/Piller 2006). Advantages that are especially important on the high-competitive consumer goods market are: a) increased market acceptance by attending to consumer needs at an early stage, b) reducing the risk of a flop by the identification and the avoidance of barriers impeding (regular) consumption patterns, c) successful diffusion on the mass market and d) betimes evaluation of socio-ecological effects resulting from sustainable consumption (Lüthje/Herstatt 2004; Hoffmann 2007).

Still not all users can be comparably effectively and efficiently integrated in the innovation process. In the innovation management literature especially the concept of the so called lead user became of central interest (von Hippel 1986; Lüthje/Herstatt 2004; Franke/von Hippel/Schreier 2006).

2.2.1. Lead User

The term "lead user" was introduced by Eric von Hippel (1986). He stated that concerning the innovativeness there is a progressive segment of users who are well ahead of ordinary users. Lead users are highly valuable persons in the innovation context, because they actively initiate inventions and are -with their special knowledge and motivation- driving forces throughout the different innovation phases. Their working results are consequently product inventions with high market potential (Lüthje/Herstatt 2004; Franke/von Hippel/Schreier 2006; Hoffmann 2007).

These lead users can be identified by two characteristics:

1. They are ahead of a certain trend, this means, they have new needs –not yet satisfied by existing market offers- significantly earlier than the mass market.

2. Consequently they expect high benefit from inventions that provide a solution to those identified problems and needs.

Especially for the consumer goods market, these characteristics can be differentiated in more detail. We define lead users by scoring high on the dimensions 1) new needs, 2) opinion leadership, 3) dissatisfaction with existing products, 4) use experience, 5) know-how concerning materials and technologies and 5) high involvement (Lüthje 2000; Walcher 2006).

2.2.2. Consumer Citizens as Sustainability Lead Users

We would appraise corporate citizens as lead users in the sustainability context, because they act intentionally according to sustainable categories, realizing that there is a strong need for action concerning socio-ecological grievances worldwide. Their capability to make consumption choices in line with sustainable and ethical considerations has its foundation in their profound consumption related experiences and knowledge. Thereby consumer citizens can be classified as progressive and leading compared to the mass market. Additionally we assume a pronounced involvement of consumer citizens, resulting from a high identification with sustainability-endeavors and obvious dissatisfaction with existing consumption patterns, products and service offerings. Therefore consumer citizens very much qualify themselves for being role models and opinion leaders in their surroundings in the context of sustainability. Corporate citizens have consequently the capability and basic motivation to adopt central roles in the invention, introduction and diffusion phases of sustainable innovation processes.

2.3. Methods of User Integration

Looking at the different methods of user-integration in the context of sustainability innovations, we can classify these methods following the structuring of Pobisch, Eckert & Kustermann (2007) along two dimensions, namely interaction and integration (see figure 2). These dimensions focus exclusively on the dyad consumer-corporation. Especially innovation-workshops but also communities, enable high integration and high interaction of both players. If the influence on consumers as co-designers (mass customization) or co-producers (open innovation) is taken seriously, high integration in corporate processes has to be given, but especially the dimension of interaction has to be focused on.
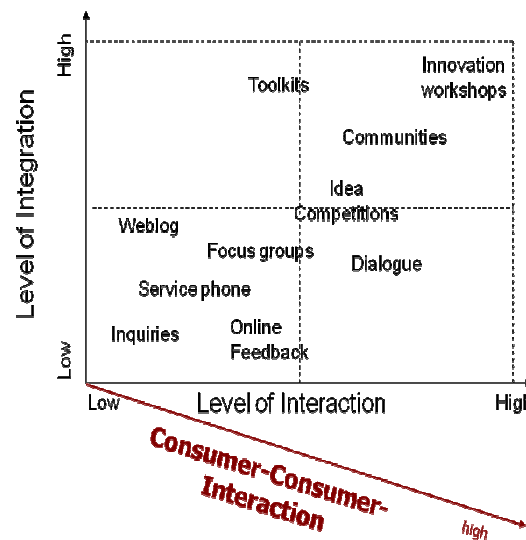

Figure 2 Extended model of the methods of user-integration (Source: own illustration, following Pobisch/Eckert/Kustermann 2007, p. 6)

3. Consumer-Consumer-Interaction as Key Element of User Integration

We state that the two dimensions considered in figure 2 do not capture the phenomena of user-integration-methods on a central point: The great potential of a community or an innovation-workshop does not exclusively stem from the interaction of the corporation and the user, but especially lies in the cooperation, social exchange and collaborative idea generation of users with each other. They create a myriad of ideas, motivate each other and use synergistic effects to perform more effectively and efficiently as a group as they could

have done as individuals. Therefore, the central extension of this concept is the introduction of consumer-consumer-interaction as third dimension.

Extending the model of methods of user integration (Pobisch et al. 2007) and analyzing the concept of interactive value creation (Reichwald/Piller 2006) on a new dimension is a promising supplement of current research approaches mainly focusing on individuals and their bidirectional exchange with companies. However, to make use of consumer-consumer-interaction, certain success factors have to be considered.

3.1. Success Factors of Consumer-Consumer-Interaction

In this context especially one enabling and therefore basic success factor is the Worldwide Web, which makes user integration and interaction possible that is not restricted by time or place. These aspects are already represented in the dimensions of Pobisch et al. (2007). But in the context of fast IC-technical advances -especially in the field of the so called Web 2.0 and its social software- the newly introduced third dimension of consumer-consumer-interaction has become increasingly interesting for internet users worldwide as an opportunity to represent themselves, to form groups as well as to generate and upload own content. In this context again, the focus on group dynamics evolving through these newly established online-interaction-tools is a promising and up-to-date research topic (Hagel/Amstrong 1997; Kozinets 2002; Füller et al. 2006).

We then propose to differentiate the success factors and their value creation potential to three phases (see figure 3). Firstly, we analyze the ex ante factors of participating in an interaction in the innovation context: What do we expect by participating in a group? Which social needs can be satisfied through group membership? Secondly, we concentrate on the process phase and the underlying group dynamics from an holistic perspective: Which synergistic potentials evolve, when people with different competences, creative potentials, vocational backgrounds, ages and needs work together? What will be the difference for a company to work with a group of voluntary innovators and not concentrating on the single individuals? And ending with the questions, which subsequent phenomena and productive outcomes of cooperating individuals can be expected (ex post factors)?
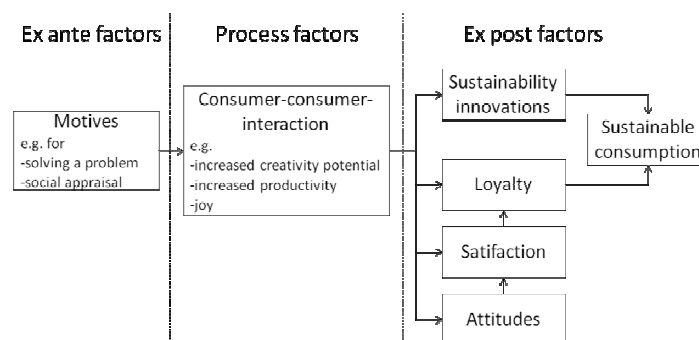

Figure 3 Research Model of Consumer-Consumer-Interaction Potentials

3.1.1 Ex Ante Factors

One focus is to identify the fundamentals and substructures encouraging non-paid participation and voluntary engagement. Basic psychological motives like achievement, affiliation and power (McClelland 1985) have to be applied on participants and complemented by motives special for group memberships, like need for social appraisal, peer recognition and identification with the in-group as well as just enjoying to be socializing (Hennig-Thurau et al. 2004; Füller et al. 2006). The special extension of our research will be a strong focus on potential differences of participation motives in the context of sustainability in contrast to participation in "ordinary" innovation areas, assumingly foremost a) realization of

a strong need for action, b) expecting high benefit from solving the "problem" and c) social appraisal.

3.1.2. Process Factors
This aspect is the focal point, because it reflects best the substantial extension of the structuring of user-integration-methods mentioned before (Pobisch et al. 2007). Many success-factors of people working together as teams and groups are well known in the literature of the occupational- and organizational psychology. Therefore, modern businesses are grounded on working groups (Benders/Huijgen/Pekruhl 2001). Groups are successful for improving decision making, facilitating the solving of problems, enhancing productivity by combining complementary abilities and competencies, and last but not least, working in groups is more enjoyable than working alone (Diehl/Stroebe 1991; Glassop 2002). Additionally cooperating individuals can enhance their creative potential (Perry-Smith/Shalley 2003; Baer/Jacobsohn/Hollingshead 2007). These findings have been widely neglected in the context of innovation management but we believe they are crucial here as well.

3.1.3. Ex Post Factors
The central thesis states that through consumer integration, sustainable innovations and con-sequently sustainable consumption is going to be realized, improved and accelerated. Following the credo "From knowledge to behavior", we could appraise consumer-consumer-interaction enabling platforms as interactive knowledge-oriented techniques, which are impactful instruments for "sustainability education" of consumers.
On the other hand, they could also be classified as norm-oriented techniques. When defining these interacting and cooperative consumers, especially online communities, as defined groups, important psychological phenomena can evolve that would be helpful to foster sustainable consumption behavior: By offering a chance to identify with, groups build up a collective identity, commitment to the cause and a certain shared attitude, which will foster corresponding behavior (Ajzen 1985; Sewell 1998; Thøgersen 2004).
Loyalty and group-approved behavior will be important in the context of fostering sustainable consumption but also essential in the context of a successful relationship management of companies. The consumers' attitude, satisfaction and loyalty related to certain products should be partly transferable to the company. Especially loyalty is seen as the key driver of managerial success on consumer markets (Chaudhuri/Holbrook 2001).

4. Conclusion
Sustainable innovations offer a great potential to foster socially and environmentally responsible behaviour of consumers and enable companies to be successful on high competitive markets. By integrating users, the priorities of market-orientation and high creative potential can promisingly be realized. Especially in the context of sustainability, consumer citizens qualify themselves very much -with regards to their capabilities and basic motivation- as sustainable lead users.
Beneath the characteristics of the individual who should be integrated, we emphasized the importance and the essential impact of cooperation and social exchange in the context of innovation, extending existing research on methods of user integration and interactive value creation in open innovation processes by the newly introduced consumer-consumer-interaction dimension.
We then proposed to differentiate the success factors and their value creation potential of interaction to three phases. Firstly, the ex ante factors, namely motivational aspects of participation, which in the context of sustainability is determined by the strong need to act and

the expectation of beneficial outcome if realized successfully. Secondly, process factors concentrating on group dynamics from a holistic perspective, especially heightened efficiency and effectiveness known from modern organizations based on working groups, now transferred to voluntary and autonomic groups of users in the open innovation context. Thirdly, ex post factors, meaning the influence of interaction on the attitude and behavior of the individual, focusing on its relevance for fostering sustainable consumption and enabling companies to be successful on the economic dimension.

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New Communication Technologies and the Co-operation Between Producers And Consumers

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The new information and communication technologies (ICT) support the exchange of information and ideas not only between consumers but also between consumers and producers while the consumers are not only a channel for information but also a supplier for ideas and information. Digital technologies offer both a way to establish a dialogue and the convenience of co-operation between consumers and producers during the processes of developing, distribution, exchange and consumption. They create preconditions for the consumers to organize themselves in groups of citizens (Hermes 2009) and to share control over the access and the contents of the message. Structure of society including the producer-consumer relation can not develop freely from   the impact of the new ICT. On the basis of the thesis stated above, the aim of this report is to study the way communication technologies like Internet, TV, mobile devices and social networks affect the co-operation between consumers and producers.

Development of new communication technologies is on different levels around the world which determines the different   possibilities for consumers to act as citizens. Thus we subscribe to Beynon-Davies' and Hill's opinion that increased usage of ICT in the private and public enterprise can be considered as potentially creating a "digital divide" between those who have access to technology and those who do not. For the purpose of surveying the differences in gaining access, calculating a "digital divide index" (DDIX) is offered, based on gender, age, education and income segmentation of citizens (Beynon-Davies and Hill 2007). According to Euromonitor data, Internet users in Eastern Europe are increasing rapidly (fig.1) for the period 2003-2008 but Internet purchases over the Internet from end clients or end transactions remain comparatively low.
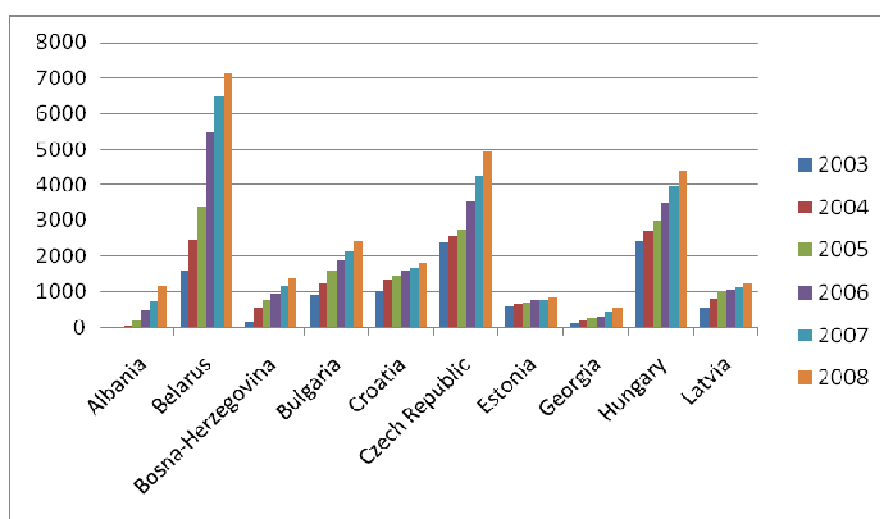

Fig. 1 *Internet users (thousands of users)*[71]

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[71] Calculated on the data on http://portal.euromonitor.com, Euromonitor International - Global Market Information Database.

In Bulgaria, for example, it is observed that the difference in types of enterprises using Internet, according to the scale of their activity, is decreasing. (fig.2, fig.3)
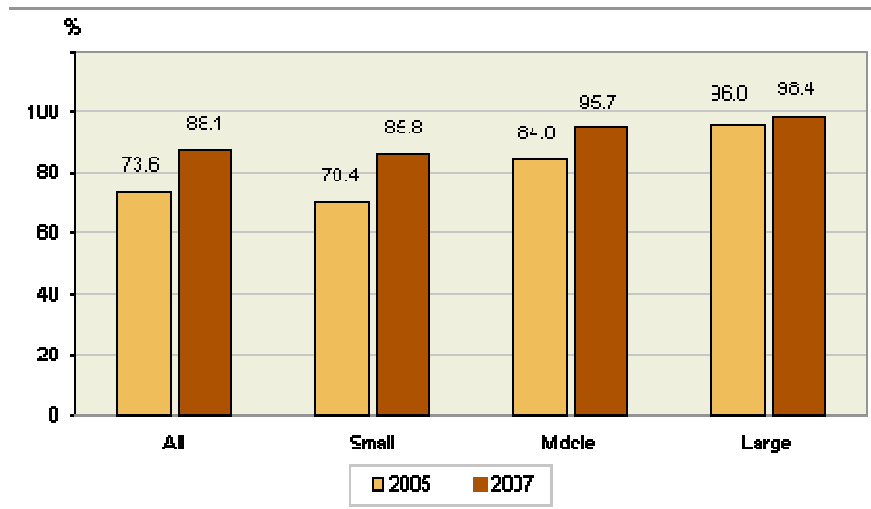

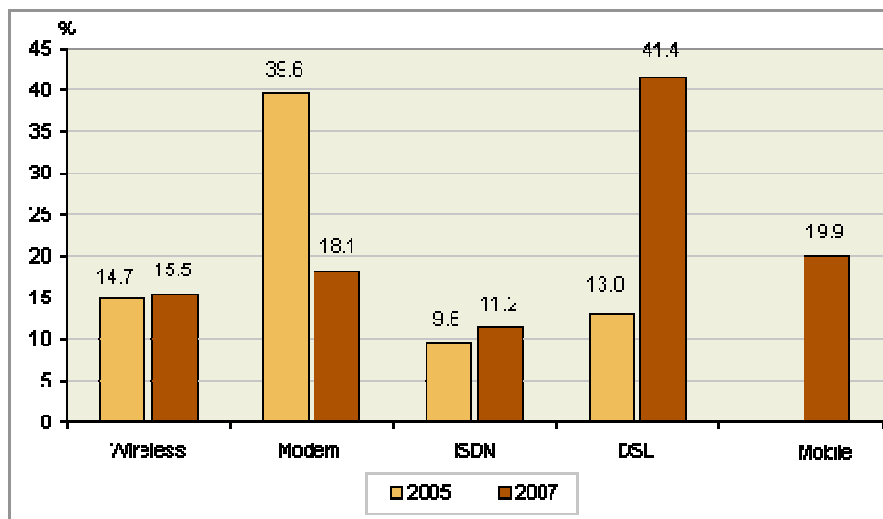**Fig. 2** *Share of enterprises using Internet in 2005 and 2007*[72]

Fig. 3 *Usage of IT networks in enterprises in 2005 and 2007*

Internet Personal TV (IPTV) integrates the best between Internet and TV. Two-thirds of IPTV subscribers in the world are European. Personalized TV allows the producers to view statistics of consumers' behaviour when they are watching advertising, to choose target groups, to set limitation of advertise frequency, to view requests for more information, etc. The consumer chooses what and when to view. This way they can quickly multiply the effect of what has caught their attention. Digital TV implication changes the consumption framework (fig.4).

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[72] www.nsi.bg

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Analogue TV		Digital TV
Limited choice	⟹	Wider choice
On schedule	⟹	On demand
Linear broadcast	⟹	Multi-stream broadcast
One-way	⟹	Two-ways
Full screen	⟹	Multi-part screen
Within the sweep of programs	⟹	Without the sweep of programs

Fig.4 The new Digital TV framework

Video Sharing refers to websites or software where users can distribute their video clips[73]. Video Sharing services can be classified into several categories, such as:

- user generated video sharing websites;
- video sharing platform;
- web based video editing.

The Video Sharing Platform allows building Brand Awareness. Company's unique message (logo) will receive full expression in/on a video platform. It will put the consumer/user in complete control of his/her Video Content. He/she decides which related videos appear alongside his/her video content. Consumer's content will be completely protected from sites that want to lift his/her material. The Video Sharing Platform allows posting videos that conform to consumer's desire for quality.

The penetration of mobile TV is currently small for Europe but it is more advanced in Asia. The causes are the limited number of available channels on mobile TV networks, the debate over technological standards and the search for a good business model, etc. Mobile TV may be watched not only on mobile phones, but also on other portable devices.

Social Networks appear around 2002-2003 year to allow users to make personalized profiles and organize their friends' connections. They are centered on a person and his/her friends. (Examples: LinkedIn (US), Viadeo (Fr), Xing (G).) In 2004-2005 year they turned into advanced socializing tools such as social media sites. They allow multi-dimensional on-line connections between users. (Examples: MySpace (US), Facebook (US), Bebo (UK), etc. Facebook is the striking phenomenon of the 2007- 2008 year[74].) In the recent years we may observe the following developments:

- Specialization and creating professional networks;
- Erasure of the borders between professional and private areas.

Social networks are radically different from traditional media. They are private environments and require communication through relevant to users services and content. It is necessary to ask for permission to advertise, learn from what people are saying and place it in marketing approaches. Quality of contact and relevance are required more than frequency and impact (fig.5).

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[73] http://wapedia.mobi/en/List_of_video_sharing_websites
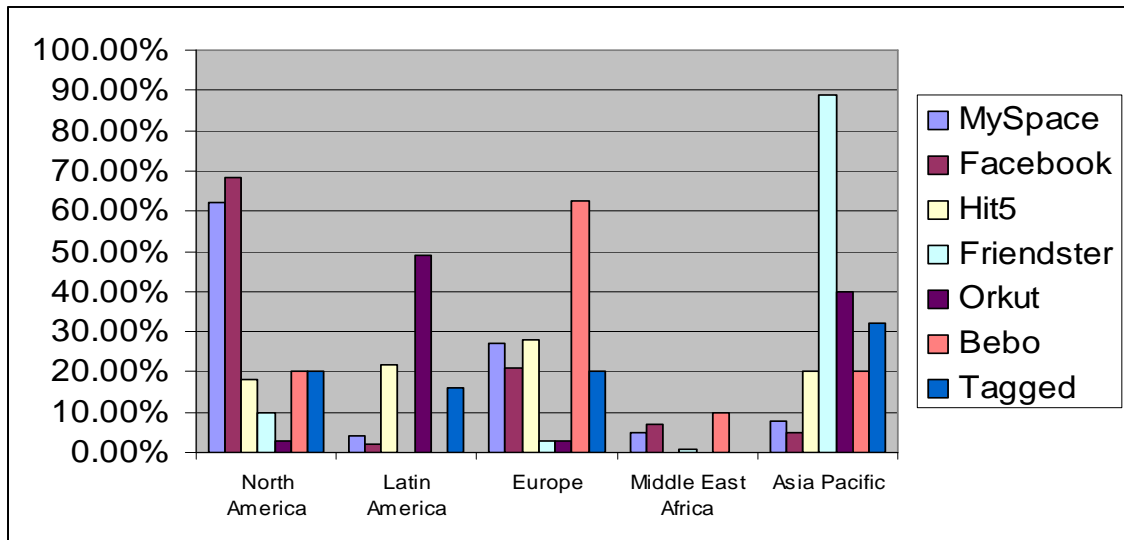[74] http://en.wikipedia.org/wiki/List_of_social_networking_websites

Fig. 5 *Popular social networks users by region* [75] *(2007)*

The following developments of the social networks are expected:

- More interoperability and openness between networks. This service would allow users easily to transfer profile information across social sites.
- Increasing competition will lead to geographic and demographic expansion.

Measuring the impact of communication in social media is technology-based and survey-based. The traditional available metrics today are:

- activity of the users such as time spent, frequency of visits, etc.;
- socio-demographic metrics;
- number of downloads, comments, etc.

One of the questions we try to answer is: *Has the media interactivity been used more in public interest or rather for the productive activity of marketing of producers and commerce?* On one hand, new information technologies help people to express themselves, create and share content, communicate and socialize. In this way they allow the increase and fostering of consumer power and involvement. Therefore, if the technology is created for open communication, it will have the characteristics allowing free access to information. This aids users not only as consumers and observers, but also as participants in business processes. Consumers have the opportunity to take part in discussions and also to give suggestions (even specifications like determining the design of the product) which supports their interest rights as citizens.

On the basis of the above mentioned, the possibilities provided for consumers by the new ICT can be summarized:

- Gaining control over access to information;
- Access to discussions and the possibility to set topics;
- Changing the contents of the message;
- Giving opinions and ideas about products and helping other clients;
- Increased effectiveness in the consumers' process of choosing;

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[75] 2008 market trends, Our vision on major communication challenges, Mediaedge:cia, Paris, 2008

- Taking part in the specification of products and services, designing and advertising them.

All this leads to the increase of consumers' influence, which compels producers and dealers to adjust their offers with the individual preferences. Hence for the producers becomes a crucial point the identification of the overlap between a brand message and community needs and to invite the public to participate in corporate creative strategy. On the other hand producers strive for maintaining corporate control over messaging. (Weiser and Lapsansky 2008:1251)
New ICT provide new possibilities for producers:

- Provide user tracing and measuring the effectiveness of the advertisement (click-through);
- The advertisement does not cause the user's indignation like the aggressive advertisement, they turn into a process of publishing/subscribing focusing on the contents (Bloor 2000:105), transition from "interruption marketing" to "permitted marketing";
- Companies take advantage of the users' interactive communities in order to get in touch with their clients (Kotler, Dirak and Maesincee 2003:139) to gather information about their interests, activities and needs and to adapt their offers better;
- Feed-back gives the opportunity for producers to evaluate reality accurately and quickly adapt to changes, which increases their competitive power.

Profiling becomes easier because all the time people scatter digital traces of themselves on the Internet. The companies are engaged in profiling in order to better target customers for products and services (Wright 2008). In this way governments and industries accumulate more power at the expense of citizens-consumers and with the following risk of citizens' behaviour to be manipulated.[76]
The National Statistical Institute (NSI) of Bulgaria surveyed the use of software for managing information about clients (Consumer Relationship Marketing - CRM) for the first time in 2007 (fig.6).

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[76] In principle, the EU's Data Protection Directive (95/46/EC) applies to profiling, as it involves the collection and processing of data about individuals. However, some question whether group profiles can be regarded as personal data when the data are anonymised and abstracted, and when profiles can be applied to individuals without identifying them.
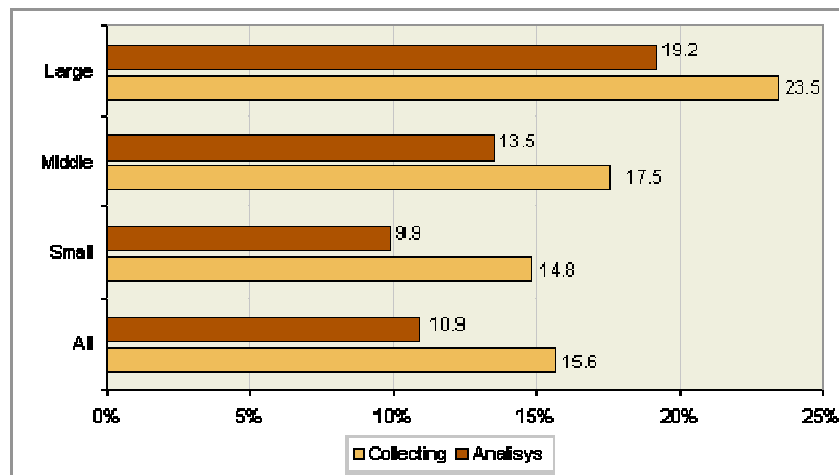
Fig.6 *Share of enterprises using software application for managing information about clients (CRM)*[77]

As the ICT are developing, producers are increasingly realizing the necessity of co-operation with clients due to the lowering of entry barriers for new competitors, which increases the intensity of the struggle between producers for the limited resource – clients, and determines the need to make every offer individual and to reduce transaction expenses. New competitors are finding it easier to make their way into the market by means of spreading information.

Clients grow increasingly informed and their adherence to trademarks yields to the search for functional usefulness. They are also increasingly aware of the prices so intensity of competition in branches, aimed at end consumers is growing. In other words, ICT are fostering the role of intellectual capital as a source of competitive advantage for business organizations – human capital, customer capital, intellectual property, social capital.

On this basis we can seek the possibilities which new ICT secure in the field of co-operation between producers and consumers in transactions' area. Internet contributes for the reduction of the transactional costs while intermediary service is secured by e-brokers (portals) or some operations are transferred to the consumer (searching, transmission of information and opinions to others, use by consumers of information filtering agents, participation in creation of advertisings[78]) .

Secondly, new digital technologies allow individualizing product production (decreases cost price of small series or single items of the product) and thus producers start to look for ways to adapt their offers to the client's individuality. Mass means of communication were needed for industrial production. Postindustrial production requires information about the demands of a single client, which is provided by the new ICT. The *pull* strategies are applied increasingly in production and distribution, which requires active interaction with customers.

Information integration efforts between manufacturers and customers, in the form of information sharing, syn-chronized replenishment, and collaborative product design and development, have been cited as major means of improving the supply chain performance (Kulp S, H. Lee and E. Ofek 2004). Improvement of the co-operation between producers and consumers can be searched in the field of the possibilities which new communication technologies secure for the consumers - not only to be better informed in making choices but

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[77] www.nsi.bg

[78] Banet-Weiser S. and C. Lapsansky. RED is the new Black: Brand Culture, Consumer Citizenship and Political Possibility. International Journal of Communication 2, 2008. In 2006 General Motor invited consumers to make their own online 30-second commercial for the car company's new SUV, the Chevy Tahoe. In that same year, global pop star Bono and California politician and activist Bobby Shriver launched RED – a cause-related marketing campaign that donates a portion of profits made from sale of consumer goods such as iPods, Dell computers, an Gap clothing to the Global Funds to Fight AIDS, Tuberculosis and Malaria.

to participate in the development or improvement of the product, to create and disseminate not only communicational messages, but to alter their meaning, to reject products and activities which are not in public interest.

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9. 2008 market trends,Our vision on major communication challenges, Mediaedge:cia, , Paris, 2008

10. www.nsi.bg

CSR-Mainstreaming and its Influence to Consumer Citizenship

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Introduction

CSR has become mainstream. No matter if stated in company brochures or business press: nationally and internationally acting companies avow themselves to CSR. By now the acronym is frequently used self-evidently omitting further explanation. The spreading of the notion is surprising, taking into account that CSR is actually quite demanding. The European understanding of CSR is based on the definition of the European Commission (EC 2005) as a voluntary commitment of companies complying with standards which exceed the mandatory regulations. The aim is to balance the three pillars of sustainability through integrating social and ecological aspects along the entire value chain integrating corporate responsibility into the core business of companies (CSRI 2008). This transfer of responsibility is ideally developed in collaboration with the respective stakeholder and communicated and implemented transparently. Many nationally and internationally well known associations like the *World Business Council for Sustainable Development* or *BAUM e.V.* and *econsense* in Germany strive for this commitment. At the same time a growing number of smaller and larger companies commit themselves to CSR.

This recent development has influence on private consumption. Products and services with added CSR value which were formerly only available in niche segments and companies that claim to act socially and ecologically sound can increasingly be found in the mass market. E.g. organic products are presented in supermarkets and discount shops offer their own fair trade product line.

This proliferation is described here as CSR mainstreaming – a process that accumulates activities of companies and their stakeholders to implement sustainability and products with added CSR value to mainstream markets[79]. Hence, CSR mainstreaming enables mainstream consumers to participate in sustainable consumption. Sustainable consumption has entered the mainstream and is there to stay (Smith 2008). In the following we will discuss the ways leading to CSR mainstreaming and the resulting risks and opportunities for sustainable consumption and consumer citizenship (CCN 2005).

CSR mainstreaming: Two ways towards a sustainable mass market

Generally, the road toward a sustainable mass market is twofold: arising from sustainable "Davids" as well as from conventional "Goliaths" (Wüstenhagen et al. 2001) (see figure 1).

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[79] Notwithstanding our definition, "Mainstreaming CSR" is also used in the literature as the strengthening of CSR within the core business of companies (Berger et al. 2007).
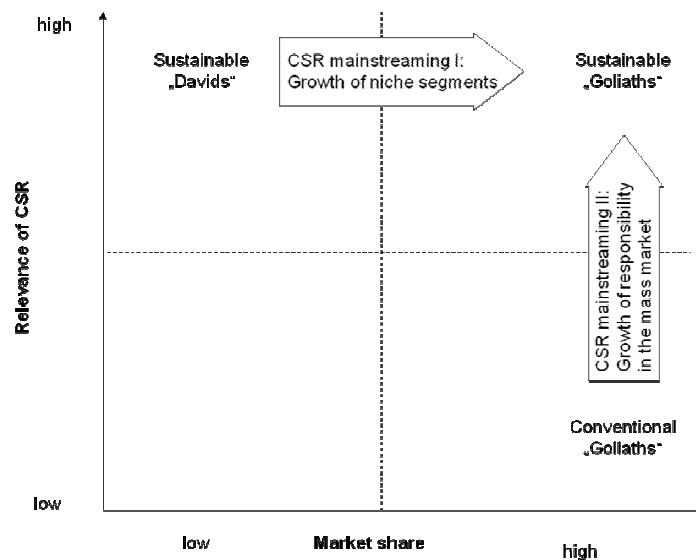
Figure 1 *Two Directions of CSR mainstreaming*
Source: Following Wüstenhagen et al. 2001

The first direction (CSR mainstreaming I) describes the development of socially and ecologically responsible niche market providers that have grown and spread their market share until becoming relevant providers in the mass market (sustainable "Goliaths"). A best practice example for this type is e.g. the German organic food provider *Alnatura*. The company sells its products via mass distribution in cooperation with the German *dm*-drugstore chain, *tegut* supermarkets as well as an own supermarket chain for organic food. Also active within the food sector is *TransFair e.V.*, the *Association for Supporting Fair Trade within the "Third World"*. *TransFair* can claim binary growth-rates within the last years. Its label for fair trade products is meanwhile available in nearly all German supermarket chains and spread widely across Europe. Other examples can be found in the sector of primary energy. German companies like *ENERCON* or *REpower* as producers of wind energy plants or solar companies like *Solar World AG* or *Q-Cells SE* are participating successfully at the growing demand of renewable energies and thus could spread their global market share overcoming the status as a niche market provider. The same road of CSR mainstreaming is also used by suppliers of "green" energy that have widened their former niche customer segment due to cooperation with mass market provider (e.g. cooperation between *LichtBlick* and *Postbank* as well as with the tabloid newspaper *Bild-Zeitung* or the cooperation between *Naturstrom AG* and various conventional public energy suppliers).

The second road (CSR mainstreaming II) is taken by economically successful mass market providers that have developed from conventional to – relatively – sustainable Goliaths. This trend is prevailing in the public discussion on CSR. Nearly all corporations avow themselves to CSR on their internet presence. To what extend the statements are primarily "rhetoric" or relevant "reality" needs to be identified individually (Barth et al. 2007). Among the companies that have exposed themselves in a responsible manner is for example the German distance seller *Otto*. Its´ suppliers are audited with special ecological and social criteria. In their catalogues as well as in the internet a small assortment of products made out of organic cotton can be found. Furthermore, *Otto* is engaged in industry wide responsibility activities e.b. by co-initiating the *Business Social Compliance Initiative* (BSCI). In the coffee sector conventional corporations have also co-organized an association that seeks to implement sustainability along the entire coffee chain. The so called *Common Code for the Coffee Community* (4C) was developed jointly between coffee traders and roasters (e.g. *Neumann Group*, *Sara Lee* and *Tchibo*), the civil society (e.g. *Oxfam*) and governmental institutions. In

the energy sector market dominating corporations also take up CSR as an important topic. Through vast investments in solar energy the energy company *BP* can claim to be the world´s largest solar energy producer. At the same time this engagement was internationally announced through the communication campaign that puts the future business "Beyond Petroleum" as slogan in front. Others like the German company *RWE* communicate through the slogan "vo-RWE-g gehen" (going ahead) to the public that they consider themselves as a role model in climate protection.

The described proliferation of CSR in the mass market does not stay without affects for sustainable consumption and thus consumer citizenship. Opportunities as well as risks arise.

Opportunities of CSR mainstreaming for sustainable consumption and consumer citizenship

CSR mainstreaming can facilitate sustainable consumption especially when corporate responsibility in the mass market has real impact on the product range, price arrangements and/or distribution patterns rather than placed as mere communication. Sustainable systems of benefits in the mass market imply an expanded product range and thus consumers have the opportunity to purchase products with an added social and ecological value which meet their expectations. When produced at higher quantities, the manufacturing costs decline und thus the consumer price. Hence, monetary and non-monetary transaction costs for products and services with added CSR value decrease for consumers in the mass market. Furthermore, customers will save time for information and distances as well as psychological energy for adjustments when organic and fair trade products are not solely offered in unfamiliar organic stores but are available in the known supermarket around the corner. A wider, more attractive range of choice enables "an individual [to make] choices based on ethical, social, economic and ecological considerations" (CCN 2005, p. 7), i.e. to act as a consumer citizen on the basis of improved consumer rights (Schrader 2007). In this respect CSR mainstreaming activates a CSR push towards spreading sustainable consumption and consumer citizenship (see figure 2).
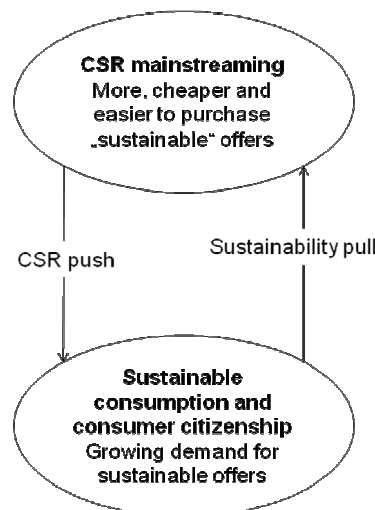

Figure 2 *Positive feedback between CSR mainstreaming and sustainable consumption & consumer citizenship*

Moreover, CSR mainstreaming has not only the potential to facilitate consumption of previous consumer citizens. It also stimulates the diffusion of consumer citizenship to new parts of the population. The target-group that can be well addressed through CSR mainstreaming is internationally known as *cultural creatives* (Ray/Anderson 2000) or LOHAS ("Lifestyle of Health and Sustainability") (e.g. Ax/Wohlers 2008). Whereas consumers of products with social and ecological added value were hitherto a marginal group,

the recent trend coming up with key words like LOHAS and CSR has created a broad publicity locating sustainable consumption in mainstream markets. Societal topics like climate change, the decline in resources or human rights which dominate the global agenda are increasingly connected to the mass market consumers' daily life (Hira/Ferrie 2006). Thereby, taking responsibility is not seen as antipode to lust for life and quality of life. Hence, sustainable consumption gains a new image, an improved public attention and is thus generally strengthened.

Certainly, the effect of CSR mainstreaming on sustainable consumption is not a one-way street as sustainable consumption stimulates a sustainability pull towards a further strengthening of CSR mainstreaming. Consequently, this feedback loop of supply and demand, typical in market economies, can function as a self-energizing process towards sustainability. It becomes easier to act responsibly and use consumption as a new way of democracy (CCN 2005).

Next to the illustrated opportunities, mainstreaming of CSR holds risks for sustainable consumption and hence for the common goal of sustainable development (see figure 3).
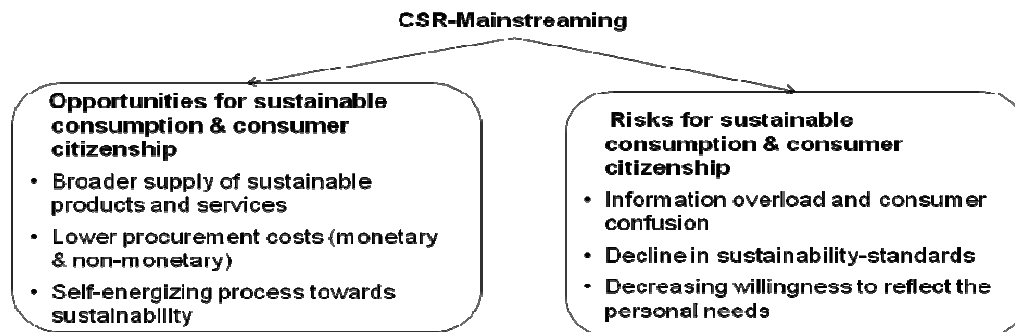

Figure 3 Possible effects of CSR mainstreaming on Sustainable Consumption and Consumer Citizenship

Risks of CSR mainstreaming for sustainable consumption and consumer citizenship

The social and ecological added value of products and services is not necessarily visible on the good itself. To create trust in producers and their products consumers are bound to transparency meaning information about the production process and the activities of the company. In niche markets, transparency, trust and credibility are often created through a close relationship between producers, traders and consumers. In contrast, the mass market compensates its higher anonymity through increased mass communication. Although distribution of information is key element of CSR (Schrader et al. 2008), this looms to create a growing in-transparency. The flood of company-owned and independent organic- and social-labels and standards are leading to a ubiquity of so called "sustainable" products. The consumer`s valuation which standards suits one's own needs and criteria often requires additional information or previous knowledge. The amount and quality of information addressed to the consumer is intractable leading to information-overload and consumer confusion (Langer et al. 2008). Finally, this can undermine the credibility of individual standards and labels as well as the trust in producers and their products. This might lead to a lost in trust and acceptance of sustainable products. In the end it might reinforce former consumption patterns.

If consumers are not able to differentiate between the various CSR activities and act accordingly it might lead to a dilution of sustainability standards. For example *TransFair*, *Rainforest Alliance* and the *4C Association* all claim to bring sustainability into the coffee sector whereas the respective sustainability criteria they comply to vary enormously. If these differences are not describes transparently and clearly for example in the „Sustainable

Shopping Basket", the shopping guide published by the *German Council for Sustainability* (Rat für Nachhaltige Entwicklung 2008) or in educational material, awarded by the UN-decade "Education for Sustainable Development" (Kraft Foods Deutschland 2007), presumably mainstream consumers will not be aware of the differences in the sustainability engagement and will purchase accordingly. Consequently, the incentive for the mass market declines to hold up the usually cost intensive standards which are established in the niche markets. Looking at the example *BP*, it shows how instead CSR communication activities are promoted disproportionately in relation to the actual CSR activities respectively the remaining not-sustainable core business (Vogel 2006). Critics call these cases "*greenwashing*".

A further risk lies in the moral relief that is created when consuming socially sound and environmentally friendly products and services. When consumers feel convinced that they contribute to saving the world through their consumer behavior with CSR mainstreaming their disposition to questions the own consumption quantity and reflect on the personal actual needs will decline drastically. If strawberries can be bought at Christmas time "organic" and "fair", the transport costs and energy expenses of the needed greenhouses fall behind. If corporations like *BP* or *RWE* commit to climate protection energy consumption might only be a question of the thickness of the purse – especially when the domestic illumination is realized with renewables. And what is the moral problem of buying a cheap flight when a certificate of carbon compensation is sold simultaneously like selling of indulgences? In total there is the threat that CSR mainstreaming stimulates consumption- and lifestyle patterns that are unsustainable on a global scale reducing the willingness to question the necessity of consumption activities and undermining consumer citizenship.

CSR mainstreaming: Blessing or curse for sustainable consumption and consumer citizenship?

In summary one can state that CSR is of growing importance in the mass market due to CSR mainstreaming which develops twofold: through growing companies leaving the niche market and the rising importance of CSR within corporations of the mass market.

Looking at sustainable consumption CSR mainstreaming leads to opportunities and risks. On the one hand side new target groups are made accessible and a self-accelerating sustainable development is possible. On the other side the fear of diluting the mission statement "sustainable consumption" is evident. The use or contra-productivity of CSR mainstreaming for sustainable consumption is bound to the respective framework conditions.

Those framework conditions are strongly guided by consumer policy. With different tools consumer policy can ensure that consumers are critical, enlightened and able to remunerate serious CSR activities and unmask "*greenwashing*" activities. That way, adequate consumer information creates transparency about real CSR activities of companies and assists to differentiate between credible and non-credible CSR communication. One step towards better CSR information is provided since 2004 with the – sporadically conducted – CSR tests of the German *Stiftung Warentest*[80] (Schoenheit/Hansen 2004).

A stronger focus on consumer education at schools and universities would stimulate the ability to reflect needs and help judging the credibility of standards and labels as well as on background information and the impact of the various CSR activities. The UN-decade "Education for Sustainable Development" could help to create awareness for sustainable consumption patterns within different stakeholder groups involved directly and indirectly into the production processes. That way the strongly linked activities of sustainable production and

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[80] *Stiftung Warentest* is a German independent consumer organization for testing the quality of products and services. Stiftung Warentest is financed mainly through the marketing of own publications and additional governmental support (16%).

consumption are strengthened mutually and contribute to the spreading of consumer citizenship.

Furthermore, within their representative mandate consumer organizations can be involved closer into stakeholder dialogues for a more severe integration of CSR within companies´ core business. Partly those consumer policy tools are already implemented but are underrepresented with respect to the CSR-(communication)-activities led by companies.

CSR mainstreaming can only unfold its full potential to stimulate and strengthen sustainable consumption, a sustainable economy and contribute to consumer citizenship if CSR is not seen as a business topic only. CSR oriented awareness and activities of all stakeholder groups including consumer policy actors would contribute to sustainable development – and to the success of companies which take CSR seriously.

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Consumer Empowerment in the Digital Era
A case study of ICT-enabled processes in South Africa and Norway

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INTRODUCTION

The world market has undergone major transformations in the past decades, a process which has seen the convergence of industrial structures with markets through economical and technological dimensions. New technologies have become major drivers in the creation of multimedia markets and consumption platforms. The increasing use of digital technology, particularly the Internet has been described as an enabling factor for consumer empowerment by giving consumers access to information and providing deliberative possibilities through participation in knowledge sharing. Internet technology has communication aspects embedded on it. Internet-based knowledge systems aided by social software and collaborative software have the dimensions of interactions and participation at the core of their functionality. Drawing on material from the analysis of web-based consumer-portals in Norway and South Africa, and combining theories from the field of consumer behaviour and communication management, the paper discusses how the improved information architectures and information-processing capabilities enabled by the Internet allow for new forms of consumer participation. As shown through the analysis of consumer complaint forums, discussion forums, levels of participations and frequency of responses in two diverse countries, the paper argues that Internet has an enabling function as both a platform and a medium. Aspects of consumer empowerment arise from consumers' enhanced ability to access, understand and share information. Such knowledge sharing influences consumer behavioural changes since consumers with more knowledge will feel more powerful, and hence are capable of making better informed decisions. Notwithstanding these assertions of consumer empowerment, Internet also has a disempowering and differentiating effect on consumers. The papers argues that the most significant challenge faced by the consumers in the era of web-based marked is either the scarcity or abundance 'information flood', duplicate sources, authenticity and validity. Information processing is also confronted by a number of militating factors which may either enhance or diminish consumer empowerment.

PERSPECTIVES ON CONSUMER EMPOWERMENT

Literature is abounding with theories and perspectives on consumer society, behaviour and consumer empowerment. Discussions of empowerment invariably encounters problems associated with the illusive concept of power. Depending on the school of thought consumer power has been perceived differently with divergent formulations. As Denegri-Knott, Zwick, and Schroeder (2006) correctly point out, 'it is problematic for any research agenda seeking to understand consumer empowerment, because observations linked to whether or not consumers are empowered are irrevocably wedded to the starting definition of power supporting such claims". Conceptualisation of power is divergent, representing the different disciplinary approaches. Traditionally the notion of power has been used to explain the nature and origin of consumer demand and to justify the role of marketing in satisfying it (Smith, 1987) quoted in (Denegri-Knott, Zwick, & Schroeder, 2006). The Frankfurt school, represented by Adorno, Marcuse and Horkheimer, for example sought to expose the powerless nature of consumers seduced by the pleasures of consumption. For Marcuse,

technical progress extended to a whole system of domination and coordination (Marcuse, 1964, p. xiii). Technology is thus incorporated into the systems of domination together with the mass media. Consumption becomes a strategy of power (Hardt, 1992). While the Frankfurt School saw consumers as weak and entrapped in the system of domination, postmodern researchers tend to theorise consumption as a site of resistance and emancipation (Fiske, 1989). Consumer empowerment takes on many different guises depending on the intellectual tradition and conceptual lens used to identify, delimit and measure power. Denegri-Knott, Zwick, & Schroeder (2006) delineate three theoretical perspectives – based on political and social theory and existing concepts in consumer and marketing research. These perspectives are:

(1) The consumer sovereignty model;
(2) The cultural power model; and
(3) The discursive power model (Denegri-Knott *et al*, 2006)

These models of consumer power are appropriate for explaining consumer empowerment phenomenon in South Africa and Norway. From the perspective of sovereign consumer model, the consumer is empowerment when he or she is free to act as a rational and self-interested agent and grows from the combination of consumers' resources and skills in order to compel producers to produce more efficiently, offer better and cheaper products, and increase social welfare (Penz, 2007). An example of such consumer sovereignty is consumer boycotts. Consumer boycotts are active forms of resistance with explicit causes, such as affecting corporate policies and damaging the company's stock (Penz, 2007). From the perspective of the cultural model of power, consumer empowerment is manifested in the creative adaptations and manipulations of the marketer-intended meanings and uses of products and advertisings (Denegri-Knott, Zwick, & Schroeder, 2006). In this perspective consumers manage the disciplinary power of the market by expressing resistance in consumption (Penz, 2007), and they are viewed as active, creative, and agentic (Firat & Dholakia, 1998). Consumer power consists of the creative adaptations and manipulations of the producers' intended meanings and use. From the perspective of discursive power model power is defined as the ability to construct discourse as a system in which certain knowledge is possible, while other knowledge is not (Denegri-Knott, Zwick, & Schroeder, 2006). Hence empowerment in the discursive model is conceptualised as the ability of the consumer to mobilize discursive strategies to determine what can be known and what action can be undertaken in any particular field of action (Denegri-Knott, Zwick, & Schroeder 2006: 963). Thus the discursive model builds on the interactions and exchanges between producers and consumers (Penz, 2007). The interaction is less confrontational but rather more inclusive and facilitates the creation of knowledge. This perspective draws from Michel Foucault's conception of power/knowledge.

Empowerment should also be understood as a process or an outcome or both. As a process, "empowerment requires mechanisms for individuals to gain control over issues that concern them, including opportunities to develop and practice skills necessary to exert control over their decision making" (Pires, Stanton, & Rita, 2006, p. 938). Empowerment as an outcome is a subjective view where "empowered individuals would be expected to feel a sense of control, understand their socio-political environment, and become active in efforts to exert control (Zimmerman *et al*, 1998, p. 6) (quoted in Pires et al 2006, p 938). The questions that need to be addressed in order to understand consumer empowerment as a process or outcome would therefore be whether new Internet-based technologies are an enabling factor for such processes.

ENABLING TECHNOLOGIES AND CONSUMER EMPOWERMENT

Digital technologies, especially the Internet-centred technologies, have been described as communication enabling and conversational technologies. The intensity and global scale of connectivity generated by the widespread adoption of information and communication technologies by suppliers and consumers alike is reconfiguring the relations of power between the consumers and suppliers, thereby adding new dimensions on consumer empowerment. Even though general claims that consumers are empowered by the Internet (Pitt *et al*, 2002) are difficult to measure due to inadequacies in conceptual and analytical tools (Denegri-Knott, Zwick, & Schroeder, 2006), it is still possible to extrapolate areas where consumer empowerment is evident. The increasing use of information and communication technologies (ICT), especially the Internet is shifting market power from suppliers to consumers (Pires, Stanton, & Rita, 2006). From marketing perspectives, the Internet has reduced the costs of transmission, transaction and intermediation. The structure of the ICTs overcomes the barriers of time and geographical distance in international marketing and reduce the costs in terms of both time and money.

Technically speaking ICTs enable accessibility to vast amounts of information stored in the globally networked computer databases. These technologies make possible the storage and retrieval of large amounts of information. They are enablers for information availability, its accessibility and its affordability to many. From a consumer perspective access to information about the market is significant as it widens the available choices. As Morrisey (2005) has argued, "access to more information about the market is complemented by larger choice sets due to the global reach of the Internet, by the ability to exchange information and opinion with peers, to change their own perceptions and behaviour in a rapid and largely unchecked manner, and to define brands on their own (quoted in Pires, Stanton, & Rita, 2006: 937)

Access to information is a prerequisite to knowledge acquisition and consumers with more information will feel more powerful (Foucault, 1972). Because knowledge is power, 'customer empowerment' reflects consumers' enhanced ability to access, understand and share information (Pires, Stanton, & Rita, 2006, p. 937). Empowerment through knowledge has implications on the discussions. Discussion forums have a significant presents on the Internet, a medium which facilitates vertical and horizontal communications, permits dialogue and provide feedback mechanisms. The computer technologies and software enable citizens to participate directly in call-in talk shows, interact with producers, public offices and other consumers with similar interests. However, because "consumer empowerment derives substantially from the knowledge that consumers appropriate from the Internet and from other sources, the extent of empowerment will depend on their ability to discern potentially useful information for evaluating competing service-products on offer, and satisfy their needs with the least waste of time and effort (Pires, Stanton, & Rita, 2006).

The Internet presents genuine opportunities for consumer empowerment process. These opportunities are exemplified in the wide range of tools and applications collectively referred to as social software and collaborative software. These applications encompass a wide range of tools that allow users to communicate and interact, facilitating data capture, storage, sharing and presentation. They facilitate connections between users, mechanics of conversation, and real-time communication. These communication applications are used for instant messaging, text chart, Internet forums, bulletin boards and blogs. Social software allows consumer to interact and share data, link people with shared interests, create deliberative social networks, which in turn builds into knowledge and learning. Constructivists learning theorists such as Vigotsky argue that 'social interaction plays a fundamental role in the process of cognitive development.'[81] Peer collaboration and the

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[81] http://www.learning-theories.com/vygotskys-social-learning-theory.html

process of expressing knowledge and conversations increase the possibilities for the refinement of knowledge.

The case of Norway

The intensity of household Internet connectivity in Norway is indicative of the widespread adoption of technology. Norway has technically fully become an information society, with widespread everyday usage of Internet and e-mail. According to the statistics from Statistics Norway, 86 % of the households in Norway have PC and 84 % have Internet subscriptions. 70 % of Internet users used the Internet in contact with the public authorities in the first quarter of 2008. Information and communication technologies have become an integral part of the Norwegian business, the public sector and the consumers. The government policy directives on ICT's have ensured that their usage is in commensurate with welfare state system and policies of bringing the gap between citizens and ensuring corporate responsibility.

Consumer empowerment through knowledge and knowledge sharing has become an integrated facet of Norwegian media and the education sector. Packaging information for consumer is regarded as one of the most important social responsibility elements in the media. Facilitations of consumer discussion forums through the media's Internet portals achieve a synergy effect in which consumers are not only consumers for pre-packaged information but are also active in the generation of such information. Consumer journalism has exploited the Internet mediums characteristics to make the most of consumers' demands and complaints. The growth of consumer participation/empowerment in Norway can be inferred from Internet statistics. There has been a remarkable increase in numbers of websites dealing with consumer issues ranging from consumer forums hosted in company websites, consumer watchdogs, interest groups, lobby groups and media organisation. Taken together these portals continually set the premises for consumer-producer relations. The portal of interest in this comparative study is the www.diskusjon.no, owned by one of the three largest media conglomerates in Norway, Edda Digital, a division of Edda Media. The discussion forum has as of February 2009, 166350 registered members and 13015736 contributions in virtually all categories from business to games. The main objective of the discussion forum is to put together all information that pertains or concerns consumers, by linking users to specialised forums and other electronic outlets. Registered users are compelled to follow the Norwegian Ethical Code of Conduct for Journalists. These guidelines are meant to encourage and sustain a higher degree of seriousness in the discussion forum. It also draws a line between ordinary comments and commercial responses which indirectly promote a company's business. Attempts by companies to fast track advertising or promotional material may result in expulsion from the portal and in serious cases a company will be billed. Companies and organisations are therefore encouraged to register an official person who will be in charge of answering complaints, questions and queries and respond to accusations from the consumers. Feedback, immediacy, interactivity and networking are some of the aspects utilised in this forum. There are several examples of consumer discussion which on its own create discourses on either products or producers and marketers.

For example, a customer ordered Guitar Hero III and two cordless guitars for Playstation 3 via an Internet shop, CDon.com. He received a wrong order from the shop and found out that the only way to contact the customer service was through a web-based form, and there were no possibilities for telephone complaints. The procedures to address the anomaly were frustrating to him as it provided an endless list of things to do, of which mistakes incur extra charges. Sharing the frustrations with other readers, the discussants were able to share their positive and negative experiences with CDon.com. This discussion goes under the www.komplett.no, one of the largest e-commerce website in Scandinavia. In another forum category for business and ICT (*hardware.no*) discussions are often of practical business nature such as which

products to buy, how to install software, how to troubleshot computer problems, and other information and communications technologies. Discussion in the business forum (*bedriftsforum*) are arguably knowledge building and knowledge-sharing capabilities. They build a web of knowledge which can help the user to make informed decisions when buying ICT products and avoid problematic ICT solutions.

While forums like this provide spaces for participatory discussions, other Norwegian portals like the Consumer Council of Norway provide not only information and advice on consumer-related issues, it also provide practical information on how to handle complaints, seek redress, and make informed choices. Its *forbrukerportalen.no* provides a question and answer platform where consumers get answers for their questions on virtual every aspect. The portal does not however allow for direct comments, but invite comments via its editors. The Norwegian case demonstrates the centrality of information and communication technologies to consumers, allowing for a broader diffusion of consumer citizenship behaviour. It demonstrate that in the future consumer empowerment and power would be fought and centred in the Internet platform.

The case of South Africa

Internet usage in South Africa is relatively lower compared to Norway. According to the 2008 statistics from www.Internetworldstats.com, South Africa is amongst Africa's Top 10, with a penetration of 9.5% or approximately 4.590.000 Internet users out of a population of 48.7 million.[82] These figures are indicative of the glaring digital divide in the world. Even though South Africa boosts some of the latest in information and communication technologies, there is still a huge gap between its citizens, socially, economically and educationally. Consumers are heavily stratified in terms of their knowledge, possibilities, choices, redress and rights. Digital divide presents the biggest challenge for consumer participation and empowerment as many people are excluded from computer-mediated consumer deliberations.

Nevertheless, for those in the middle and upper echelon of society, the Internet solutions provide similar services to those found in developed countries like Norway. Peer-to-peer exchanges and other consumer issues are mediated in the South Africa spaces. For the South Africa case, I chose the National Consumer Forum (www.ncf.org.za), 'a non-profit and autonomous organisation that is dedicated to the protection of consumer rights and interests in South Africa. Unlike the Norwegian example where the focus was on discussion and exchange of experience, the NCF is mainly a one-way portal whose sole objective is to inform and educate. The overall power lies with the senders of information and not with the recipients and therefore offers few opportunities for peer-to-peer communication. An ideal symmetrical communication would be guided by a communication principle that entails establishing electronic forums for communication with consumers and organisations. The National Consumer Forum is mainly preoccupied with the provision of consumer information and consumer education. It recognises that "consumers have a right to complete information on the price, quality, quantity, ingredients and other conditions under which the goods and services they consume are produced."[83] The information attribute is central the empowerment attributes discussed above, given the adage that 'information is power'. Access to information empowers the consumers and enables them to make informed and responsible decisions. Thus in addition to technology-enabled information access, the National Consumer Forum also employs a communication platform which uses a face-to face communication approach, through town meetings. The concept of town meetings being used in addition to the Internet is motivated by the desire to "empower consumers who live in disadvantaged areas" and further

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[82] http://www.internetworldstats.com/stats1.htm (accessed 1 March 2009)
[83] http://www.ncf.org.za/main.php?include=docs/pr/2007/pr0613.html&menu=menus/services.html (accessed 27/02/09)

"to hear from the public about the challenges and problems as consumers of products and services from government and business."[84] Town meetings are functional in the sense that they cover the gaps left by the digital divide in South Africa.

Even though South Africa has a highly developed communication infrastructure, there are still many consumers with little or no access to communication facilities such as Internet. Therefore public meetings are in indispensable means for consumer empowerment, because through dialogue knowledge can be exchanged. One of the recurrent issues brought up by participants in these town meetings is the issue of access to information. "Lack of information was identified as the biggest challenge facing disadvantaged communities in the country" (ibid.). Consumers lacked information pertaining to consumer rights, and protection and felt exposed to unscrupulous businesses who sold products and services which put consumers at risk. Lack of information in South Africa seriously impedes consumer empowerment.

Another aspect of power is reflected through the education-orientation of the National Consumer Forum. Consumer education via the Internet and face-to-face communication are complimentary in that they reach out to the largest possible numbers, reaching both those with access to technologies and those without access. The standpoint for consumer-education is that citizens should grow into 'becoming well-informed and critical consumers of products, commercial services and public services" and this "process of becoming entails not so much the provision of consumer information regarding products, services, the environment and other considerations but rather the continuous cultivation and development of living skills which would include cognitive skills such as critical and conceptual thinking, knowledge and understanding"[85] The National Consumer Forum website can thus be considered as a consumer-education enabling device providing guidance for consumers, advice, alerts and relevant documents on consumer rights and redress. However, lacking in this website is horizontal communication through discussion forums.

This however does not mean that consumers are not offered deliberative opportunities in South African consumer information portals. Other Internet forums such as South African National Consumer Union, generates enough topics for discussion but consumer response are relatively lower.[86] This is despite the fact that views are relatively high sometimes getting up to 40. The low levels of consumer response might be linked to the lower degree of engagement or connectivity.

INTERNET: SHAPING CONSUMER BEHAVIOUR

With the advent of Internet and its increasing role in society, companies are increasingly resorting to the Internet to manage their consumers. Therefore in order to reach their empowerment goals, consumers and consumer organisation would also have to be proactive in their usage of Internet-based technologies. The fact that technologies are an enabling factor to consumer information and empowerment does not necessarily mean that information is easily made available to consumers. It is sometimes difficult to make or force service providers to make all relevant information available to consumers. However, the comparative competitiveness offered by the Internet communications compels business to provide more and more information, if they would have to remain relevant in the global market.

The inherent powers presented by the Internet as a communication technology are also a point of contestation with some forces struggling to control. These struggles are exemplified through the contested models of access. One notably area of concern is corporate sponsorship or ownership of consumer portals. The portals discussed above, www.ncf.org.za and

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[84] http://www.ncf.org.za/main.php?include=docs/pr/2007/pr0613.html&menu=menus/services.html (accessed 27/02/09)
[85] http://www.ncf.org.za/main.php?include=about/conseducation.html&menu=mainmenu.html
[86] http://www.sancu.proboards61.com/index.cgi?board=general

www.diskusjon.no, have corporate sponsorship. The Norwegian example is part of media conglomerate whilst NCF is sponsored by the Telkom, the South Africa telecommunications giant.[87] What are implications of corporate ownership or influence on the legitimate channels of complaint? There is clear evidence of the overwhelming influence on corporate mass media on consumer forums in both South Africa and Norway. While the spaces of contention are offered in the Internet-based communication, corporate influences might in certain circumstances be tilted against consumer empowerment, dependent on the existing relations between consumers and business.

CONCLUSION

Although consumer empowerment is a difficult concept to pin down, the contributions of Internet to the growth of consumer empowerment as a process may be assessed from Internet user statistics. The higher percentage of Internet penetration correlates with its utilization in consumer-related processes. The use of ICT appears to be the driving the process of empowerment. This empowerment enables consumers to seek better value and services. The peer-to-peer web exchanges that the consumer forums embody undoubtedly have implications on consumer behaviour. Communicative interactions offered by the consumer forums also inform the users of their day-to-day activities as they deal with the increasingly challenging environment, marked by growing imbalances in social and economics systems. Discussion forums are knowledge systems central in the diffusion of broader consumer citizenship behavior.

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[87] http://mybroadband.co.za/vb/showthread.php?t=11081

Marketing Communication to and with Net Citizens: Targeting by Means of a Social Network Analysis Approach

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Empirical investigations of the time devoted to Internet interactions indicate that this time surpasses the time spent passively watching TV. This provides marketers with new communication opportunities: First, the WWW is becoming progressively more important in the media world in relation to the phenomenal speed at which it is growing. Even more important, and in contrast to TV-recipients, net citizens are not passive, but explore information actively, choose by themselves the contents that are interesting and sift out less relevant contents and communication partners. They are not restricted to just receiving companies' marketing communication, but can interact with both vendors and other customers in real time and leave their individual opinions, recommendations and reports on experiences with products and services in newsgroups and blogs. These information and communication fragments could remain for years in the virtual environment. Thus, for marketers, it is one of the major issues to identify individuals who are willing to engage in a positive communication process and potentially persuade other individuals to join this communication and share their opinions.

In this study, we introduce an approach for marketing communication on MySpace online communities. For targeting individuals, we consider the users' position in the information space by means of social network analysis. We develop four different marketing options for advertising on MySpace. As an illustration, we outline these marketing options using the example of a fictive product launch campaign.

1. Introduction

The spread of broadband connections, the ever increasing use of the Internet and the new, consumer-generated content of the Web 2.0 make the Internet more challenging for marketers than ever. In 2008, spending on Internet marketing exceeded that of classic TV marketing for the first time (BWT, 2008). Most of the budget on Internet marketing comprises: spending on corporate home pages, banner, pop-ups and e-mail marketing, but online communities also attract the interest of marketers. Online communities deliver two main categories of information. First, they usually include some attributes about their user, such as a name or a nickname, age, origin, preferences and others. Second, they include an interactive social network between the actors, where the users are the knots, and their connections to friends are the ties. The combination of the information of the network and the attributes can be used to identify a very specific target group of users which are promising in terms of their position in the social network, and seem to fit the product by their attributes.

For this paper, we chose the MySpace online community as a database for research because the community is open and freely accessible to everyone without a registration and login. The MySpace community comprises 118 million users in 17 different countries (Stelter, 2008), the largest online network on which users can create their own profiles with their own content

(text, pictures, movies and other applications, particularly widgets like calendars, clocks, or counters) and publish according to their own design.

MySpace, like many other online communities, gives companies the opportunity to set up banner ads on community profiles. However, MySpace goes even further and does not present the same banner to all users and visitors. Marketers can specify their target groups according to attributes of user profiles and then select matching banner advertising to them. 2007 saw the launch of a refinement of this procedure of selecting the profiles utilizing a text mining technology for each member's profile. Thus, in addition to the attributes, marketers can choose adequate keywords, like "gaming" or "lifestyle", in order to select target group profiles (Stone, 2008). This is marketing *from* MySpace.

Another opportunity to use MySpace for marketing purposes is to do it *on* MySpace, which means that companies set up their own campaign profiles in the community. Up until now, MySpace has not been used very often by marketers, except by the music industry, which uses MySpace frequently to promote stars (recently, Pink and Justin Timberlake). They feature new songs, introduce new album releases, announce tour dates, and stay in contact with fans. Competing with established labels, young, independent, ambitious musicians and bands use MySpace to increase their popularity.

However, possibilities to individualize the marketing measures in online communities like MySpace are not currently fully exploited. This paper aims to:

- Introduce a procedure to get involved with target groups of net citizens more efficiently than they do currently.
- Our procedure relies on the distinction of two different qualities of information obtained from online communities:
  - the interaction structure by means of the net citizens' networks and
  - the content provided by the individuals.

It combines quantitative assessments from Social Network Analysis (SNA) with the attributes of the MySpace profiles: In doing so, we obtain a new quality of target information to trigger individual and direct addressed marketing communication with and between community members. We demonstrate the practicability of this procedure by outlining four scenarios of enhanced marketing *on* MySpace.
In the following section, we provide a brief overview of previous investigations of MySpace. Subsequently, Chapter 3 introduces the dataset which we used for this study. In Chapter 4, we outline our procedure in detail and end with a table of opportunities for marketing *on* MySpace. Taking the example of a fictive product campaign, these opportunities, worked out as an example with all the introduced marketing options *on* MySpace, are adopted.

2. Related Work
Social networks have been studied for more than 50 years (e.g., Milgram, 1967), but the rise of communities in the WWW within the past ten years has increasingly drawn the attention of marketing scholars and practitioners (Zhang, Ackerman, & Adamic, 2007). The usability of already established social networks for marketing and market research, or as a supplemental instrument for sales forces, has already been investigated. Ma, Yang, Lyu, and King (2008) conclude that a heat diffusion model fits the spread of opinion in social networks better than the Bass diffusion model. Some of the most recent publications meet the claim of Subramani

and Rajagopalan (2003) to overcome the limitations of descriptive accounts of particular initiatives and advice based on anecdotal evidence when considering digital word-of-mouth phenomena. Recent research focuses on quantitative measures related to the results of the activities: for instance, the adoption of new ideas, products or opinions (Cheung *et al.*, 2008; Ma *et al.*, 2008; De Bruyn & Lilien, 2008), the impact on purchase probabilities (East *et al.*, 2008) and reputation-related issues (Helm, 2000; Reichheld, 2003). However, these efforts do not fully cover the antecedents of marketing activities. From a practitioner's point of view, most interesting is the identification of net citizens, who are willing to engage in marketing communication and who are suited to spread the message over their social networks. In this vein, Subramani and Rajagopalan (2003, p. 300) already called for "an analysis of viral marketing that highlights systematic patterns in the nature of knowledge-sharing and persuasion by influencers and responses by recipients in online social networks." Some attempts have been made at considering our application domain of the MySpace network: Dwyer, Hiltz, and Passerini (2007) analyzed related issues using a small sample of 100 MySpace citizens. The revelation of personal information on MySpace has recently been investigated by Hinduja and Patchin (2008). Caverlee and Webb (2008) analyzed, in a large-scale study, the observations and implications for the social network behind MySpace. However, these studies are restricted either to:

- considering social demographic variables and their relation to digital communication behavior

or

- position in the communication net.

To enhance a comprehensive understanding, both aspects need to be integrated in the analysis framework.

3. Data

For this study, both the interaction structure and content provided by the individual net citizens were crawled for 19,477 profiles on the MySpace platform in May 2008 using the SocSciBot software (provided by Thelwall, 2004) in a two-step approach. First, the network structure between a subset of relationship-based MySpace profiles were backed up. In other words, all best friends listed on the welcome page, which can be prearranged by the author of the profile, were followed through the MySpace communities to receive the friendship network of the 19,477 MySpace citizens. Second, attributes which also appeared on a profile's welcome page were crawled. The attributes – friends, age, page type, gender, privacy, origin, marital status, religion, sex, last login, number of comments, and "here for" – were collected and saved for all the citizens.

Assessing these data revealed that 98% of all profiles were quite active. Their last log-in was within the last month. Only about 50% of the profiles revealed their age, and from those who did, about 56% were under 30 years old. The age distribution was right skewed: 76% of the citizens were under 40 years old. Half of the profiles were musicians and the other half were various citizens. The gender was balanced within the MySpace community and the majority did not acknowledge the motivation ("here for") for engaging in this community. An impressive 87% of all citizens in our sample kept their content public for everybody. Just 13% kept their profile private for them and their friends only. In summary, the descriptive assessment our data match the descriptions of the community at hand in recent publications. Thus, we expect our sample to match the tendencies outlined by Thelwall (2008a), Caverlee and Webb (2008) and Hinduja and Patchin (2008).

Analysis of the friendship structure is likely to reveal important hints for assessing or triggering communication processes with or between citizens. This topic is of general interest, but particularly relevant for modern marketing activities.

An effective assessment of this structure is based on the tails of the link distribution. A typical phenomenon in online communities is the heavy-tail distribution of the users' number of relations to other users. In this heavy-tail distribution, a majority of individuals have a relatively small number of out-flowing links to profiles of other users. A few users (the hubs in the informal sub-networks) have a high number of outgoing relations to other users. The function of link frequencies draws a hyperbola if the number of links is opposed to the count of the profiles which leads to a linear relation in the log-log system. However, real social networks never build a pure hyperbola because they emerge from a combination of randomly accruing links and links which accrue because of preferential attachment by the profiles (Barabasi, 2007). This log-log system can be approximated by a power function with the form (Pennock, Flake, Lawrence, Glover, and Giles, 2002): $y = a * x^{-(\alpha)}$. The hyperbola approximating our data is given by $y = 9 * 10^9 * x^{-(1.8409)}$ with a coefficient of determination $R^2 = 0.8996$. This result indicates a substantive heavy-tailed distribution. In contrast to the studies of Pennock *et al*. (2002) and Karandikar (2007), we used a log-log system. Thus, the frequency is a cumulative distribution (Newman, 2004, Appendix A). We simply add -1 in the exponent to provide a suited comparison with the non-integral forms from previous studies. Our comparable result is $\tilde{\alpha} = 2.8409$. Social communities (like the whole Blogosphere) usually have an exponent between 1.51 and 2.12 (Karandikar, 2007). The link structure of websites is characterized by a higher exponent between 2.1 and 2.45 (Albert *et al*., 1999). This means that the gradient for websites is steeper than it is for social communities. According to Vazquez (2003), the interpretation of this difference is that the web is likely to grow faster than social communities. Considering the result for MySpace, the exponent is even higher than the upper limit of the interval for conventional web pages, which is about 2.45. Thus, the MySpace social community differentiates from other social communities by its dynamic gain of new citizens. It is likely to outpace the web. Therefore, the MySpace community is of particular interest for marketers. Although the MySpace community has very strong hubs, this network is more suited for direct and viral communication. Figure 1 illustrates the log-log plot of the MySpace friendship structure.
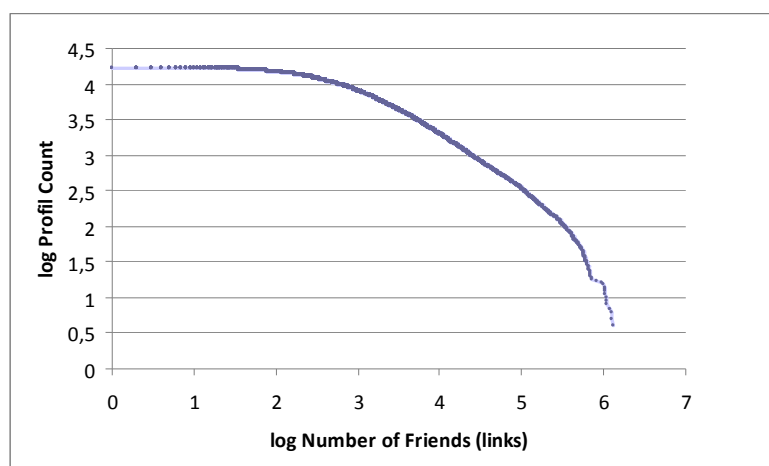

Figure 1: Distribution of the profiles ranked by their number of friends in a log-log illustration

The interesting part of the curve is the interval between 3 and 5 for the log (# of friends): Here, the curve is almost linear. Thus, the correlation between the log (# of individuals to

engage in marketing communication) and the log (# of individuals reached with this communication) is almost stable. Consequently, in this network, mouth-to-mouth communication is going to reach a number of recipients described by the power law (Caverlee & Webb, 2008). Thus, marketing activities can be highly effective. Viral marketing involving community citizens is not only communication to the profile owner (e.g., an advertisement) or with the profile owner (e.g., postings, e-mail contact, bulletin), but also to all the visitors, readers and friends who look at the profile. Thus, we argue the combination of attributes and the network structure of profiles to be essential ingredients for suited targeting of modern online marketing activities.

4. Assessing the Citizens' Network Positions

This paper faces the challenge of combining:

- information of attributes which are frequently specified according to pre-classification schemes

with

- structure information about the network and the actors.

As outlined at the end of Section 3, social networks spawn over time a couple of knots that have a high number of links and a large number of knots only have a small number of links (heavy tail). Consequently, it seems promising to identify the ones with many links to use the structural position of them as a marketing advantage. This has been done with *degree, closeness* and *betweenness*, three different centrality measures which have been proposed for the identification of "important" MySpace profiles (Everett & Borgatti, 1999). In addition, the concept of ego networks is introduced to understand the further computation.

The *degree* of centrality $C_d(\cdot)$ provides an impression of the structure of the network by considering the number of connections from one knot i ($i = 1, \dots , I$) to other knots j ($j = 1, \dots, i\text{-}1; i + 1, \dots , I$) of the network:

$$C_d(k_i) = \sum_j x_{ij} /(I-1) \quad \forall i \tag{1}$$

with k denoting the knot and I denoting the total number of knots in the network. In this study, the degree of centrality is deemed to be the dimension of possible communication activity within the network. The more links a profile has, the higher is the probability of direct communication with other profiles. Thus, we assess how applicative profiles are to start canvassing on these profiles with a high degree of centrality (Klaus & Wagner, forthcoming).

The *closeness* centrality $C_c(\cdot)$ provides an impression of how central a profile is in relation to others:

$$C_c(k_i) = (I-1)/ \sum_{\substack{j=1 \\ j \neq i}}^{I} d(k_i,k_j) \quad \forall i \tag{2}$$

with $d(k_i, k_j)$ denoting the number of edges between the knot pair (i, j). In our application domain, the closeness centrality is deemed to be the dimension of independence from other profiles because the closer the centrality of a profile is, the more direct connections are linked to it. So, a profile is less dependent on another profile if it has many others close by. Moreover, this measure is assessed as the efficiency of a profile in all the other knots within the network. Considering the distance from one profile to all other profiles in the graph, the closeness centrality indicates how fast a marketing communication measure could spread through the network, starting at profile i (Klaus & Wagner, forthcoming).

The *betweenness* centrality considers the shortest distances within the graph:

$$C_d(k_i) = (\sum \tilde{g}_{jl}(k_i) / g_{jl}) / (I-1)(I-2) \quad \forall i \ (l \neq i) \tag{3}$$

with g_{jl} denoting the number of geodesics and $\tilde{g}_{jl}(k_i)$ denoting the number of geodesics through k_i. In this study, the betweenness centrality assesses the opportunities for controlling the communication process. If many shortest distances run over a profile, it has a high influence on the network communication, assuming the user usually uses the shortest way to communicate. In this way, communication from these profiles can be monitored and assessed by marketers with a view to influencing them as they wish (Klaus & Wagner, forthcoming).

Each profile is also assessed by its *ego network*. This comprises a single actor (ego), the actors that are connected to it (alters), and all the links among those alters (Everett & Borgatti, 2005). Thus, the larger an ego network is, the more alters it has – these alters do not know, or barley know, one another – and the more different alters are in relation to their attributes, the more powerfully this ego can distribute information.

Because of computer power and time capacity limitation, the data sample of 19,477 profiles was cut down by a requirement of the profiles to have at least four or more links to other profiles. The evolved new data sample includes 1,315 profiles which were used for the following analyses.

First, the degree-, closeness- and betweenness- centrality were calculated for every profile. In the next step, small proper intervals over the measures were built to find out how many profiles belong to each interval. In the last step, we calculated the ego networks for the cumulative sum for all intervals and analyzed what percentage of the profiles of the whole network was reached by the ego networks with direct links. Selected parts of the results are listed in Table 1 as examples.

Degree	Egos	Egos (%)	Reach the whole net	Reach the whole net (%)
20	60	4.56	990	75.28
21	54	4.10	892	67.83
22	50	3.80	802	60.98
Closeness	**Egos**	**Egos (%)**	**Reach the whole net**	**Reach the whole net (%)**
25	98	7.45	1,031	78.40
26	49	3.72	797	60.61
27	13	0.98	528	40.15
Betweenness	**Egos**	**Egos (%)**	**Reach the whole net**	**Reach the whole net (%)**
1	198	15.05	1,014	77.11
2	42	3.19	645	59.05
3	17	1.29	410	31.18

***Table 1** Selected results of the reach build by a number profiles selected according SNA measures*

Table 1 depicts three cut levels for each assessment. The upper part, referring to the degree of the profiles, shows that within the network exist 50 profiles with a degree greater or equal to 22. Using these 50 profiles as egos and analyzing their combined ego networks, these 50 profiles could reach 802 other profiles via just one direct link out of the whole 1,315 profiles. This would consist of 60.98% of the whole network. To reach near the same percentage of the network with the closeness measure, 49 profiles with closeness greater than or equal to 26 should be contacted. They reach 797 profiles with their ego networks which consists 60.61% of the whole net. Last, looking at the betweenness, it is noticeable that one could choose smaller intervals for the betweenness from 2 to 3. Here jumps the number of egos from 42 to 198 and the reached percentage of the net jumps with it from 59.05 % up to 77.11 %. However, this does not matter since we only look at a sample data analysis. For real data to be

interpreted, it would be necessary to choose a smaller interval for the betweenness to have a closer look at the accession of the reached alters.

Summarizing the above results, it is possible to reach up to 60% or 65% of the whole network via just one direct link to other profiles by advertising on only 3-4% of the profiles. To achieve this result, the profiles of net citizens need to be selected carefully using the above criteria. In addition to this direct effect, the interactions of the alters enforce the communication effect. The assumption for this approach is that profiles which are connected visit or interact frequently with one another.

5. A Procedure of Putting the Results into Actions

In this section, we outline four different marketing options for advertising *on* MySpace, which are summarized in Table 2. In doing so, we do not consider the classic banner advertising as part of mass communication media. This is already common online marketing and is also well done by MySpace. We focus on groups, forums, company/product profile and leaving comments for direct marketing in the community. With these marketing options, each company has the possibility to build up a social community around their product and brands with direct advertising.

Marketing options	Explanation	Selection criterion for profiles	Implementation
Corporate profile with bulletin and blog	Creating a company profile or product profile, which is used for advertising: e.g., Toyoto Yaris.	Attributes Catchwords Centrality measures	Direct marketing with the selected profiles according to the above selection criteria over bulletins and blogs.
Forum	Discussion forum for different topics. Main focus: problem solving.	Forum topic	Participating in discussion forum with relevant topics in order to get into dialog with the discussion members.
Group	Groups of users with similar interest. Main focus: exchange of information and opinions, communication.	Group topic	Participating in groups with relevant topics in order to get into dialog with the group members.
Leaving comments on other profiles and blogs	On any other profile or blog, a "logged-in user" can leave comments with textual or visual information about the company or product.	Attributes Keywords Centrality measures	The information of the company/product, which is posted on the predetermined profiles spread through as much as possible to the members of the ego network.

Table 2 *The four marketing options for advertising on MySpace*

A basic step for the implementation of marketing campaigns is defining the target group. In our application domain, we propose to include attribute-values and keywords depending on the company, brand, or product to be featured. For the forum and group marketing activities, the marketer has to choose an appropriate topic according to their company, brand, or product. The next step is calculating the centrality measures for the chosen sub network as outlined above. In addition, the ego networks need to be identified.

For marketing implementations on user profiles, all the centrality measurements and the corresponding ego networks are important. Marketers need to choose a suited set of profiles on the grounds of their degree, betweenness and closeness values. In a first step, they have to specify what percentage of the network they would like to reach. Similar to the examples depicted in Table 1, this information is used to calculate the number of egos needed to get involved to achieve the aim. In a second step, they need to specify which egos are suited for

the campaign. Not only egos with a high betweenness, closeness or degree are in the relevant set, but also egos with a high betweenness, egos with a high closeness and those with a high degree are included. The adequate mix is important, but largely neglected in contemporary marketing practice. Naturally, the intersection of ego groups, scoring high in the individual criteria, makes up the relevant set. A promising avenue for future research is the adoption of classic media selection models and media budgeting procedures to this concept of marketing on online communities.

This procedure is suited to overcome the major weakness of current practices of marketing and all other attempts at triggering communication processes in social communities: selecting the profiles on the basis of a limited set of keywords. The pre-classification of keywords restricts net citizens in the expression of their interests. Moreover, users frequently do not specify all attributes (e.g., material state and sex), which might be used to cluster the profiles.

In this paper, clustering aims to identify those egos which are seldom selected on the grounds of unspecified attributes or missing keywords. In order to find structurally equivalent profiles in the sub-network, and therefore to find equivalent profiles, the MySpace dataset is segmented. Typical methods for this task include, for example, the CONCOR algorithm (Boormann & White, 1976) and an approach from Burt (1976), which is based on hierarchical clustering. However, partitional approaches like the bisected k-means (Decker & Scholz, 2007) are more suitable for the clustering of large sparse data sets because they need relatively low computational expense in contrast to the agglomerative approaches. The bisected k-means is executed with cosine similarity as a measure and the I2 criterion function, which outperforms other criteria functions discussed in the clustering literature (Zhao & Karypis, 2004). The number of clusters is determined by the stability measurement from Lange, Braun, Roth, and Buhmann (2004).

Table 3 summarizes the clustering results and gives an overview of the number, cluster size and the attribute-values, which fit around 70% of the cluster members. The largest cluster, comprising 649 profiles, consists mainly of musicians, who join the community for networking. The other three clusters, with a size of between 345 and 130, consist of normal users, for which the home country, material status and age can be specified. The attribute "here for" can only refer to the majority of the members of cluster C.

Cluster	Number of profiles	Attributes
A	130	American (Male and Female), Married or in a Relationship, Age: 35-50
B	191	English, Single, Male, Age:18-30
C	345	Australian, Female, here for: Networking and Friends, Age: 20-25
D	649	Musician, here for: Networking

Table 3 Clustering results for the sub-network

Even though 17% of the profiles do not specify any attributes, the clustering results show that this approach makes it possible to assign profiles with no attributes to groups with explanatory attributes. These attributes within a cluster help to pre-identify target groups to with which to communicate. A combination of the cluster analysis with the structure analysis seems to have promise for individual marketing campaigns on MySpace to communicate with its net citizens.

5. Example: Marketing Playstation IV on MySpace

The MySpace community offers companies the possibility to build up a social community around their company or brand and to get into direct dialog with the users. A fictive product launch of Playstation IV should substantiate the four marketing options for MySpace.

The marketing concept is a Playstation for the whole family: Playstation 4 ALL – Girls, Boys, Mom and Dad. The new Playstation is also a very interesting product for musicians because it can be used as a hard disk recorder for singers. For this new product, five target groups are defined with the following product focus: Boys: Age14-21, focus: Gaming. Dad: Age 21-99, focus: Gaming, media center. Girls: Age 14-21, focus: Karaoke, fitness. Mom: Age 22-99, focus: Fitness, wellness. Singer: Age 14-99, focus: Hard disk recorder for singers.

We focus on the four marketing activities summarized in Table 4. The first step is done by defining the target groups for the new Playstation campaign. Therefore, the attribute-values are known for the profile selection. Based on the clustering results at the end of Chapter 4, we take our sub-network of 1,315 profiles for an adequate pre-selection for the profiles which match the target groups. The next step is to define what percentage of the network should be reached by the marketing campaign. We define 60%. For the marketing actions "own profile" and "leaving comments", we have to choose a suitable mix of betweenness, degree and closeness for the selection of egos and their ego network. First, we state that we want to reach 60% of the network with these direct marketing options and for each of the three centrality measurements. Table 1 shows how many egos are needed to achieve this aim: 50 egos with a degree greater than or equal to 22, 49 egos with a closeness greater than or equal to 26 and 42 egos with a betweenness greater than or equal to 2. The intersection set of these three groups of egos comprises 97 net citizens. This means that the direct marketing campaign with 97 profiles, or 7.37% of the network, can achieve more than 60% of the whole network because they are the connecters. In the course of this campaign, the mix of the three centrality measurements for the selection of the egos could be rearranged according to their main function.

- Campaign activity (degree centrality):
    - If there is too little conversation about one's campaign in the social community, marketers should increase the number of egos with a high degree.
    - If there is enough conversation in the social community, marketers can decrease the number of egos with a high degree; but they must keep a critical mass and change your focus on efficiency and monitoring/controlling.
- Campaign efficiency (closeness centrality):
    - If the size of the new social community around the company/product is growing too slowly, marketers should increase the number of egos with a high closeness.
    - If the social community is growing very fast, marketers can decrease the number of egos with a high closeness; but they must keep a critical mass and change their focus on activity and monitoring/controlling.
- Campaign monitoring/controlling (betweenness centrality):
    - in order to monitor the opinions of the members in the new social network, there have to be enough egos with a high betweenness.
    - in a critical situation, marketers should increase the number of egos with a high betweenness.

Forums and groups are selected by matching forum and group topics with suited catchwords: gaming, entertainment, music, family, hi-fi, wellness, fitness, music and recording. To promote a viral effect, a widget design – which every user could integrate in his MySpace side – would be used. It is thanks to the visual application of Playstation IV that the product is tested.

Marketing Option	Selected attributes/ catchword/topics	Selected Structure	Result/Implementation
Corporate profile with bulletin and blog	Attributes Gender: male Age: 22-99 Last Login: within the last month. Page type: public	Optimal mix of betweenness, degree and closeness for the selection of egos and their ego network.	Individualized and personalized contacting within the campaign with regard to the company or product. Features: widgets, lottery, bulletin and blog.
Leaving comments on other profiles and blogs	Topics/Catchwords Gaming Entertainment Music	Optimal mix of betweenness, degree and closeness for the selection of egos and their ego network.	Posting comments and e-flyer on the selected profiles and blogs. Aim: advertence, spread of information and contacting.
Forum	Family Hi-fi	-	Supervise/participate own forums or product specific one. Aim: reply to FAQ, deliver and inform about software/hardware updates and widgets.
Group		-	Supervise/participate in own group or product specific one. Aim: information exchange and networking.

***Table 4** Concretion of the four marketing options for a fictive product launch*

6. Conclusions

This paper introduces a new approach to advertising *on* online communities, using the example of the MySpace community. The basic concept is that the target group for online direct marketing is to select the net citizens by both their specified attributes, and by their structural position in the communication network. For this purpose, we extend the methodology to reveal the systematic patterns of influencers and recipients in online social networks. Estimating the power function of link frequencies provides us with an assessment of how a network might be suited for word-of-mouth communication and viral marketing activities in combination with content. It turned out that the MySpace network was well suited. Moreover, we outlined three measures for the degree of centrality of citizens and the related interpretation. In the case of the MySpace network, it has been found that involving about 4% of the members would be sufficient to bring about 60% of all members into contact with the marketing communication. This could be illustrated with the example of a product launch campaign on MySpace. We discuss four qualities of marketing communication actions and their impact.

Finally, we propose using both the assessment of the individual's position within the network and the net citizens' demographic variables to identify archetypes of users on social networks such as MySpace.

Future research should compare different social communities, use even larger datasets to validate our results and test different SNA measures and methods to combine the structural information with the content. Moreover, an analytical criterion to assess the minimal percentage of the net citizens that a communicator should infiltrate is needed. Furthermore, a challenging task is to analyze how the position of a member of the social community influences the celerity of diffusion of the marketing communication.

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Gender Empowerment in Nepal for Sustainable Development

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Abstract

Gender empowerment has become a principal agenda in Nepal as women suffer from exploitation in terms of social discrimination, resource consumption, income and employment. Deep-seated orthodox patriarchal mindset is root cause of socioeconomic exploitation of women in Nepal. Sustainable development, which underpins a confluence of environmental, economic and social factors, cannot be achieved without enhancing women's access to political, economic and social sectors. The Nepalese political changes in 2008 paved the way for the election of constituent assembly and declaration of republic. This has helped to reinforce the empowerment of women with a positive discrimination and also to open a prospect of generating empowered consumer citizens. This paper discusses gender perspectives in the Nepalese context that women empowerment should be an important tool for a sustainable development of Nepal.

INTRODUCTION

Gender empowerment consists of a confluence of factors like equal politico-economic opportunities and participation, and equal access to education and health (Lopez- Claros 2005). Empowerment is pertinent at the individual and collective level, and can be economic, social, or political (World Bank 2002). Nepal is a developing country sandwiched between India and China, having a multiethnic population of 26.4 million with nearly equal proportion of males and females. Thirty-one percent of the Nepalese population is living below the national poverty line and more than 80 % of the population lives in rural areas (Central Bureau of Statistics 2007). The population consists of 80.6 % Hindus, 10.7 % Buddhists and nearly 9% other religious groups. The patriarchal culture in Nepalese society prefers keeping women in a low profile and discourages gender equality (Segala 1999). Nepal ranks 86th in the Gender Empowerment Measure (UNDP 2007) and 145th in the Human Development Index (UNDP 2008). The poverty, discrimination and inequality prevailing in the Nepalese society fuelled armed conflict and dramatic political changes in Nepal paving the way for the constituent assembly election and declaration of republic in 2008. This opened a new avenue for sustainable peace and democracy through the process of economical, political and social transformation. However, Nepal is still in a political transition period. This paper, therefore, discusses gender perspectives in the Nepalese context that women empowerment should be an important tool for a sustainable development of Nepal.

PRESENT SITUATION

The women's disempowerment is obvious worldwide with the rampant violence against women (Robinson 2003) and Nepal is no exception (Rana et al 2005). The gender inequality is often multi-dimensional - economic, social, cultural and geographic - and each aspect reinforces the other. Nepalese women are in a difficult situation due to their dependency on men (Luitel 2001). According to the Nepalese National Women's Commission, only 16% of the women enjoy a regular income whereas 8% of them are in service sector (Dhakal 2008). They also lack access and control, which is one of the setbacks for the gender equity (Agarwal 1994). More recently, the Nepalese government has passed a bill that will enable women to lay a claim on parental property. The empowerment process by redistribution of resources can improve women's status in society. Even though women do wield an indirect power in the decision- making process for family welfare, direct influence appears minimal. Nepalese women contribute more than 60 % of the total workforce for the rural economy, and are engaged in household and agriculture activities - mostly unpaid - making their work less integrated to the market (Acharya 2008). The agriculture sector alone contributes 34% of the country's Gross Domestic Product (World Bank 2007).

Increased employment of women in the industrial sector can help reduce poverty and inequality (Acharya 2008). The Ninth National Plan (1997-2002) duly recognized the problem of gender marginalization in the Nepalese economy. The rural women's physical contribution in livestock production is more than men's despite their limited access to resources, credit, training, extension services and technology The livestock production has been shown to help Nepalese rural women to generate considerable income (Upadhay 2003).

Even in urban areas, as a byproduct of globalization, increasing number of women has become economically active; but majority of them are not able to find good jobs. There is also evidence that allocation of food and health care favour boys in some parts of Nepal and its neighbouring countries (Schultz 1999). To certain extent, preference exists for sons in the Nepalese society for both economic and non-economic reasons (Leone et al. 2003). South Asian women are in more disadvantageous situations particularly during illness and old age (Firke et al. 2004). In Nepal, gender plays an important role on illness reporting and decision-making process for health care (Pokhrel et al 2005). Maternal mortality is still a serious problem indicating inadequate health services to Nepalese women (Borghi et al 2006). Importantly, abortion law came into effect after 2002 (Thapa 2004), which was in fact a remarkable victory for the Nepalese women on reproductive health issue.

GENDER EMPOWERMENT ISSUE

The sixth national plan of the country (1980-85) included the policies to bring women in various developmental activities. Gender issue got further momentum after the restoration of democracy in 1990 (Shrestha 2002). At 1995 Beijing conference, Nepal committed for-integrating women's concerns in all policy frameworks, reviewing legal provisions related to violence against women, prioritising initiatives at impoverished women, improving health and educational status of women, and planning and implementing development programs within gender framework (Shrestha 2002). Following this, a separate Ministry of Women and Social Welfare was established in 1995 to foster the concerns of gender equity and welfare in the country, which reinforced issues of gender mainstreaming for sustainable development (Shrestha 2002). Therefore, contemporary development strategies of Nepal have realized the need for boosting women's empowerment and their involvement in the policy and planning process of the development. Lind argues that feminist approaches should be integrated to development and social programs to overcome gender effects on developmental policies (Lind 1997). Globalisation has opened new dimensions for development in today's world, and

women face dual perspectives - the potential of exploitation via cross border trafficking and also the power to enhance women's lives via global networking (Livesey 2005).

In Nepal, there is a need of increased women's participation and also their empowerment for better and sustainable use and management of natural resources like community forestry (Adhikari 2001). The use of the natural resources should occur in an environment-friendly manner and the responsible citizens are important contributors for a sustainable development (Dobson 2007).

ROLE OF EDUCATION

The male and female literacy rates in Nepal are 65.5 % and 43 % respectively (Central Bureau of Statistics 2007) showing a contrasting gender disparity. Gender discrimination persists in Nepal when it comes to the access for education despite the expansion of educational sector (Stash et al. 2001). A study showed that rural Nepalese women have improved empowerment through literacy programs and small-scale household economic activities (Acharya et al 2007). Nepalese girls are kept at home for domestic works and also for ensuring their chastity while boys are sent to schools (Waszak et al 2003). This is detrimental to the national economy by letting half of the nation's workforce go waste. It is argued that equal opportunities for education to both boys and girls need to be promoted through proper education policy for sustainable development in Nepal (Shields et al. 2008). However, education alone is not adequate for gender empowerment (Malhotra et al. 2003). Furthermore, women's participation in decision-making level is necessary to achieve gender empowerment. Participation of women at policy level was aimed to reach up to 20 % by 2007 (National Planning Commission 2003). Effect of globalisation is apparent in Nepalese society with the gradual increased number of females taking up jobs, which had been hitherto considered that of male domain for e.g. military service. Also, the increasing number of women in higher education and civil services in recent times (through statutory reservations) is a positive sign, indeed.

GENDER POLITICS AND POLICY IMPLICATIONS

Women's participation in political processes is an important means of narrowing the gender gap by granting them greater power to plan and implement policies for development. The Nordic countries have the highest share of women in politics, the best gender empowerment measures and human development indices, which show a strong and positive correlation between gender empowerment and overall development (UNDP 2007; UNDP 2008). The average percentage of women in parliaments around the world is 18.4%, while with Nordic countries it is 41.4% (Women in National Parliaments 2008). In Nepal, the recently held election to the Constituent Assembly has, through quota provisions, led to 33 % of the assembly members being females, a level of women's representation unparalleled to Nepalese history, placing Nepal 14th worldwide in terms of representation of women (UNMIN 2008). The implementation of quota, though controversial, has been instrumental to some extent in achieving gender equality worldwide (Ballington et al. 2002). In the previous Nepalese parliamentary election in 1999, women's representation was merely 5.9% (UNMIN 2008). So, the current overwhelming women's representation is a significant step, albeit just one more step on a long journey towards equality of Nepalese women. Nepal's interim constitution 2007 for the first time in history ensured the provision of citizenship to the children through the mother's ancestry (Interim Constitution of Nepal 2007). Nepalese women's activists also feel that the lack of women in the policy making level will directly impact the life style and further development of women (Rana et al 2005). Women represented by a woman are more likely to contribute in overall political process in

empowering themselves (High-Pippert et al 1998). Moreover, men should realize the need of including women in all domains of socio-political sphere if we want egalitarian society. It is suggested that the gender and development issues should be worked out together with men to overcome prevailing hindrances as recognized by the dominant models of masculinity (Cornwall, 1997). The observations from the gender workshops in Nepal, India and Bangladesh suggest that it is important to have better understanding and willingness to move forward in consensus for development and empowerment of women (Bhasin 1997). Interlink between men's involvement in household activities and women's involvement in public sphere with mutual understanding can bring benefit to family as a whole (Engle 1997). Pre-existing inequality and underdevelopment, root cause of problems among Nepalese women, necessitates an approach that helps to ensure economic, social and cultural transformation. This, in turn, can obtain human rights for overall development of women (Aguirre et al 2008). Work by some Nepalese women to alleviate the sufferings of the victims of gender violence and armed conflicts (Peace Women Across the Globe 2008) is helping to recognize the role of women in addressing gender empowerment issue in Nepal.

GENDER EMPOWERMENT VIS-A-VIS CONSUMER CITIZENSHIP
With more than half of the country's population represented by females, women empowerment is vital in order to create consumer citizens, who then can make independent choices out of various options in the social field. Two distinctive behaviours and values are highlighted in addressing clients of social services and welfare programmes as empowered consumer-citizens: a capacity (and expectation) for choice; and a responsibility for the individual self (Newman et al 2006). In essence, we need to make women aware of their 'right to have rights'! When we say consumer citizens, we mean to incorporate not only the "commodity" aspect but also the social welfare aspect. As Veronica Schild puts it, 'modern' Chilean women are active agents, with 'life projects' that they control – and that presumably include family life, children and paid work – and takes for granted that women exercise their autonomy as empowered citizens who make choices in the market as producers and consumers (Schild 2007).
Like in Chile, empowerment programs should try to envisage women as individual selves rather than as mothers or homemakers, and to offer them courses that focus on personal development, community development and job-related skills training. The Chilean techniques of *desarrollo personal*, or 'personal development' techniques are an exercise of power that incites, induces and seduces women – defined as 'poor', and as victimised by their traditional role and place in society – to transform themselves from domestic beings with responsibilities for others, into individuals with the potential for autonomy and freedom. Its goal is to act on the subjectivity of poor women and to transform them into active, entrepreneurial beings capable of exercising their citizenship as producers and consumers (Schild 2007). Nepalese women contribute in household and national economy by involving themselves actively and responsibly in production of various goods and evolving themselves as consumer citizens.

CONCLUSION
Nepal stands at a veritable crossroads and the issue of gender empowerment cannot be put on the back burner anymore. Some works have been done to empower women including their representation at the highest policy level. However, much more is still desired to improve the gender disparity by eliminating age-old patriarchal mindset of people that exists as a hindrance for equality. An issue, as important as this, needs to be dealt firmly by policymakers. They must demonstrate strong commitment and effectively implement various programs to mitigate the gap between men and women. What is at stake here is a definite chance to lead Nepal on a path of prosperity by empowering a gender which, for all its

importance, has been reduced to the household chores when it is capable of much more. In this lies the future of Nepal and along with it the prospect of generating empowered consumer-citizens.

Acknowledgement

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Using Fashion as a Platform to Engage & Excite

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Sustainable consumption is a big and complicated field to tackle. I would like to focus on one area: Textiles and clothing, and show how by making Life Cycle Assessments (LCA) relevant to the consumers' everyday decisions – they will start demanding more sustainably produced goods. This is because they will actually have the proper tools to make relevant decisions. New developments in fashion have also made the consumer's actual input much more relevant. The consumer now has more powerful tools and thus influence on the environmental impact of textiles and clothing. I will argue that this is a development that can transform the consumer to a prosumer. A prosumer being a portmanteau of producer and consumer (Toffler 1970)[1], challenging the consumer society's division of the world into either companies/manufacturers or consumers

Much of the frustration for a consumer today, aside from having little influence on mass-produced clothes, is the confusion surrounding what actually constitutes responsible consumption. In fashion and textiles, the focus has been on organic cotton and fair trade; but this has completely taken the focus away from the much more serious issues associated with textile production and consumer behaviour. (Patterson, 2008)[2]

A recent governmental campaign[3] in Norway focused on the fact that consumers should buy products with officially sanctioned environmental or ethical labels, specifically The Nordic Swan (Svanen), the EU-flower, Debio (organic) or Fair Trade Max Havelaar. But none of these labels were created for textiles; they have a function for food, raw materials, paper or detergents – but fail to deal with the complexities surrounding clothing. The Nordic Swan being an excellent example since in all other areas one of the vital criteria in order to be awarded the label includes quality of the product; but in the case of textiles this criteria has been dropped. The Swan can also only be awarded the 30 percent best in a given area; a consequence being that 70 percent never can be labelled "environmentally friendly" no matter what steps they take! Because of this rule, items in a category where one is unable so say that one is more environmentally friendly that another – even though they all meet with a "best practice" criteria – none of them can be awarded the Swan. There always has to be the criteria that at the most 30 percent are *better* than the rest. One could question the Nordic countries' real wish to improve the textile- and clothing-industry overall with such a philosophy, in fact their willingness to actually make a substantial impact in this area.

What about organic?
Another example is organic wool; sheep grazing in the mountains can never be labelled organic, because in order to control what they eat, they have to be fenced in, in order to be labelled organic. Alpaca – one of the world's most environmentally friendly raw materials – falls under the same problematic rule – since the animals roam freely and graze on nature's own resources.

The main focus has to be redirected to a wider view on the sourcing of raw materials, production and transport – but most importantly more relevant information on care, quality,

updating, repair and recycling. It is in these areas the consumer can have a huge impact, in tandem with designers and producers, which is the principle behind Life Cycle Assessment.

LCA used to be a "cradle to grave" analysis, but has been redefined as "cradle to cradle", incorporating recycling as a possible new starting-point. The Japanese company Teijin has developed recycled cotton and polyester, but because of low oil prices the price for recycled polyester has been too high in comparison with virgin polyester (Goldsworthy, 2007)[4]. Interestingly enough, recycled polyester is estimated to save 90 kWh pr kilo textiles in comparison with virgin polyester (Black, 2008)[5]. In Norway it will be illegal to dispose of textiles to land-fill from July 1st 2009, and the plan is to burn biodegradable material (including textiles) for energy. An informal SIFO (Norwegian State Institute for Consumer Research) estimate has worked out that one kilo textiles will generate 4,5 kWh.

A fresh view
Another interesting way of looking at clothing, for example a t-shirt, is giving it an Environmental Damage Unit score [6], developed by Phil Patterson, of Colour Connections, which gives the entire environmental impact of a given piece of clothing; with surprising results. For example polyester comes out as much more environmental friendly than organic cotton.
SIFO has recently been granted EU-funds to look at textile waste as a resource: "From waste to material resources in a grave to cradle perspective: A stakeholder approach within the textile value chain". When the Norwegian Salvation Army's division Fretex collects up to 17 tonnes textiles pr day in the Oslo region – which is only part of the total amount disposed – there is an enormous potential. SIFO has also invited the British textile expert Kate Goldsworthy to be part of this project; she has been working on "upcycling" (making what was considered textile waste more valuable than for example "shoddy" or second-grade textile material), and will probably patent new technology shortly.

And now: The consumer
There has been some focus lately on consumer care, which is partly related to raw materials. Cotton is washed far more often than other materials and often at higher temperatures (Klepp, 2003)[7]; but in relation to our environmental footprint in care of a garment, using a dryer or ironing are the biggest culprits (The Independent, 2008)[8]. Avoiding conventional cotton, line-drying and not ironing are examples of concrete steps the consumer can take and feel good about. I own a shirt made of Modal (second generation viscose) that I hardly ever wash, which is of excellent quality, doesn't need ironing and has a fantastic fit. Compared to a cotton shirt, it has every possible advantage. Also, it has a timeless design and will never be "unfashionable".

Most important is the need to consume less – but at higher prices and of higher quality – to ensure that Third World countries can see economic growth. In the British Report "Well Dressed?" [9] this specific complex was addressed, as many have claimed that if we consume less, poor and under-developed countries will suffer. But the conclusion in the report is quite clear: If we are willing to pay a higher price for better quality that lasts, the local economies will not be hurt and an added bonus is less child labour; since top quality demands skilled workers.

The fashion industry is a major culprit in the area of wasteful consumption – especially with the enormous growth of so-called "fast fashion chains" (Gina Tricot, Zara, Primark and George at ASDA offer designer knock-offs for next to nothing). One can criticize the "shop-

till-you-drop" approach of McFashion, but at the same time people are fascinated by the newness of fashion, and people all over the world use clothing to express them selves. More and more though, being "well-dressed" is also becoming a question of how one's wardrobe is produced and what the story behind the label is. The creativity in the business today in this area is over-whelming and an excellent starting-point to make the consumer in to a prosumer. There must be a balance between the uncomfortable knowledge of how things are and the comfortable knowledge that one can be proactive. The new "green" is actually transparency.

This is where some very exciting and innovative ideas are linking consumers and producers in entirely new ways. But also producers and factories are communicating in new ways, for example the Swedish clothing company Dem Collective (10) actually asked their workers in Indonesia what they needed to earn in order to cover their expenses and make a decent living. A new approach to establishing "living wages"! Other companies present their entire chain of production on the internet, giving the consumer a chance to view the whole process (transparency) and thus having an input on business practices and Corporate Social Responsibility.

The prosumer
But making the consumer a prosumer is giving the consumer a stake in the product in entirely new ways. Sadly students no longer learn to sew, knit or crochet their own clothes in school as part of their basic education, as I did. Nor do they know how to repair or darn. In a recent meeting we had with the Norwegian sporting clothes company Norrøna (11), they explained how they offer repairs for free (for the most part) on all items, but the sporting goods chains would much rather that the costumers were offered a new item – to save time and logistics. This is of course part of our over-all view that clothes are disposable, rather than something to care for.

I would like to return for a second to the notion of disposable fashion. What if it was truly disposable? What if you, rather as Cinderella, just dumped the dress in the bin once the ball is over? Or even better, in the compost, where it biodegraded together with coffee grinds and shredded newspapers? Kate Fletcher launches the idea in her book Sustainable Fashion & Textiles, Design Journeys (12) and calls it "the one-night wonder". Reminding us of the disposable panties made of paper we used to buy back in the 70's when we went away on vacation and didn't want to bother with laundering. The thought being that some items actually create more environmental havoc with laundering, and less if they were just disposed of.

To dispose or not to dispose?
Recycling has become big business for pristine clothing and designer wear; Frenchman Didier Ludot who sells vintage prêt-à-porter and haute couture in Palais Royal in Paris is as famous as many designers, Hollywood-stars pay full price to wear gowns he sells. Another "sign of the times was a recent project by Otto von Busch, trying to trigger meaning and emotional connection with garments. He set up a small temporary shop stocked with clothes. While none could be bought, they could however be "swapped" for what the costumer was wearing that day. To make the exchange, the costumer had to first write down their feelings about the garment, why they no longer liked it and why they had originally bought it. Most people changed their mind about the swap and elected in stead to keep the piece they were wearing (Fletcher, 2008)12.

I mentioned Fretex, a subdivision of the Salvation Army in Norway, and the enormous amounts of textiles they collect. Recently they have arranged redesign courses around the country and are swamped with participants who want to learn how to upcycle garments they otherwise would have disposed of. Fretex also sell second-hand clothing, sell gift-items made from collected textiles that sell in among other stores Liberty in London, and they recently showed redesign couture on the catwalk during Oslo Fashion Week.

Another way to insure that clothing has more value for the consumer is to involve them in the process. Since we no longer sew our own clothes or have a tailor make them according to our instructions; we generally buy mass-produced clothes. Several years ago the Norwegian designer Pia Myrvold presented cyber-couture as a way for the consumer to involve themselves in the design-process. By offering different alternatives, the customer could decide the finished product, and be a co-designer. Nike and adidas (sic) have offered similar solutions for shoes, making the customer feel they have a unique pair they have a real stake in. Bespoke shoes have actually become a new niche for cobblers, another area where mass-production has resulted in cheap, disposable and ill-fitting alternatives. The recent resurgence of knitting cafés, of redesign work-shop and updating-services (a new variation of "personal shopper" services where one is encouraged to keep clothing and restyle outfits) shows that the consumer has been alienated by the mass-production of clothing and is finally getting a chance to regain a more proactive part in the process and thus becoming a prosumer rather than a consumer.

A future scenario
The prediction is, that this will lead to a more solid link to clothing – and we will return to a time when we did not complain that we have a closet full of clothes and "nothing to wear". A fellow journalist recently commented to me: "I remember back in the 70's; I had a favourite pair of jeans. Now I have no idea how many pairs I own." Since she said this, we've had a financial crisis, and according to H. Lee Scott, ex-chief executive officer of Wal-Mart Stores Inc, the dismal economy has caused a permanent and fundamental change in consumer behaviour. He does not expect conspicuous consumption to make a comeback (WWD, 2009)[13]. He goes on to predict that a focus on being a more sustainable company will be important to the costumer.

One emerging trend is "slow fashion", an expression stolen from the "slow food movement"; another is the accessibility of the designer – which is a big advantage for smaller, flexible design companies that are based locally. Norwegian eco-luxury designer Leila Hafzi [14], who has based her production in Nepal for over ten years, is a good example of both trends. She does the opposite of fast-fashion chains who have new collections in the store every single week; she decides on a theme for an entire year in order for her artisans and factories to be able to plan ahead for production and deliveries. She also does so-called trunk shows (an idiom from when tailors would travel around with their trunks and measure costumers for made-to-order garments) where she meets her costumers and helps fit items they then order. This kind of communication between designer and consumer has an enormous impact on how important clothes become to them (WWD, 2009)[15].

Trend-guru Li Edelkoort predicted that "the future is hand-made" when she curated the exhibition "A World of Folk" in Stavanger in 2008. She loves to use the Norwegian designer-duo Arne & Carlos as an example; since they use old Norwegian knitting patterns in their designs. Rei Kawakubo, the designer behind the iconic Comme des Garçons, has teamed up with these two eclectic designers as well for capsule collections. In a way the future *will* be

"hand-made", because the prosumer will demand to have a stake in what she or he buys. Whether it be how ethically or how "light" the environmental impact of the product's production and transport is – how the use and prolonged use improves the Life Cycle Assessement – or how the item can be upcycled or restyled: This is a unique chance to give the *prosumer* a place in a totally new way of viewing how we consume *and* create.

This will also be illustrated by the project NICE – Nordic Initiative Clean & Ethical, and the up-coming web-site nicefashion.org, which will be launched during Cop 15 in Copenhagen in December 2009. The project aims to reach both designers, producers and consumers; or should I say prosumers. The International Herald Tribune, Women's Wear Daily and the Wall Street Journal have already begun looking at this Nordic trend as something much more than a passing fad.

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Consumer Governance
Consumers and Consumer Organizations in Action

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Introduction
Every time we take a decision to buy a product or to pay for a service WE decide who's going to work for us as a farmer, physician, teacher, politician, or taxidriver.. At the same time the euros yens or dollars we pay are starting a new round. For thousands of years already we're playing this game called "economy" based on the division of labour and the exchange of the resulting products and services. Almost everybody in the world plays a double-role on this worldstage as consumer and as producer. But the consumer is always the one who asks the questions and pays the bills. But with the freedom to choose he or she is of course also responsible for those choises! And that's what we call "consumer governance" to be understood in the same range as corporate governance and government governance as credo's for responsible behaviour.

Towards an economy of question and answer
From a pure do-it-yourself economy where we made our own tent, travelled around to hunt our own food, we didn't hesitate for long to divide all labour and started the first barter-economy to favour the possibilities of specializing, efficiency and dividend called welfare! After a long time it became a world economy with trade and banks in between. And still everry minute new divisions of work are arranged between people, between departments or complete organizations and even countries. Constantly searching for the optimum that labour can be divided for more efficiency, but sometimes integrated again when new insights say that some tasks are better united within one job or one organization.

To divide labour is one step. In fact we are creating a polarity in producing and consuming which has to be connected again by exchange the results which are products or services. In a barter economy everything is transparant enough to exchanges things without money and trade. But when the economic network is growing we will need trading people and transport systems. When growing even wider we'll need some kind of administration and money also. And this is how worldeconomy works now!

Economy started from the consumer in early history and still starts every minute now. Instead of doing it ourselves we ask the painter to paint our house, we ask the garage to repair our car, we ask the politicians to write down laws about what we think is reasonable in our relations to our neighbors worldwide! But in the centuries behind this was mainly managed by leaders and leading corporate and government organizations. Today consumers and consumer organizations are more and more taking the lead in asking the questions, making marketing become bottom-up! From supply and demand to question and answer!

Consumers and consumerorganizations in action
In the years after the Second World War the new generation became aware that a new world order was necessary and protests culminated around the world in 1968 at universities in Berkeley California, Berlin, Paris and Amsterdam. In all the areas of human daily needs people began to talk, to think about quality and new organizational structures, and started

informal and formal organizations to participate in culture, government and business. After the great "renaissance" of individual thinking since the beginning of natural sciences in the 16th century and the introduction of democracy in the French revolution of 1789, the 21st century will start the era of consumer governance!

Since the beginning of the century the general consumer organizations had already emerged and were coordinating their efforts from 1960 and thereafter in the International Organization of Consumer Unions IOCU now called Consumers International. (see annex). The seventies became the beginning of all categorical consumer organizations: patients, parents of schoolchildren, travellers, housing, food, etc etc. And in the eighties alternative banks emerged all over Europe. Finally in this century consumer-education started up to give all the knowledge and experience to our next generation, with the Consumer Citizen Network CCN as frontrunners!

But there's still a lot to be done in professionalizing the bottom-up marketing worldwide! Although big companies are also willing to help in delivering affordable products to even the poorest people in the world at the bottom of the pyramid, more and more consumers today are not only enthousiast but now also willing to verify, to choose and to pay for the most sustainable products and services! These are observations that we can make all around us in shops, discussion groups and workshops. Not only the generation of the sixties but even more this upcoming generation! And the most interesting observation one can make is that all the journalists in press radio and tv have changed the last two years into researchers, storytellers and moderators in looking for solutions together with all parties in culture society and economy instead of reporting only!

And this allround mentality is the necessary basis for all problems and solutions ahead because everything is connected with everything. Nobody can make any judgement anymore without looking from the greatest possible horizon. Only with the best information one can make a real free choise in products and services and will be willing to pay or even finance for the right price, for sustainabilty and fair trade. Consumers are the first who aask the questions based on all daily needs, the consumer-organizations are there to collect all the questions where tailor-made products or services are not possible but serie- and massproduction have to be optimized.

Everyday practice and new developments
Untill today the consumer organizations developed from small groups of consumers to all kinds of organizations in all sizes with some of them even highly professionalized. Since the last two years even the most down-to-earth sector food and agriculture is emerging now! Due to the fast forward growing market for organic and biodynamic products and the culinair culture of good taste. Top cooks are invited to tv programs and the EU parliament was invited this summer for a complete lunch with the best products nature itself can offer.

Although many many progress is made through the last few decennia, the greater public still has to go in a higher gear to make the world sustainable again and to play their role in a new world of good governance in economy, democracy and a culture of science education religion art and development. For the near future it will be more and more important to look at the whole picture and see how all actions are connected to each other. Most essential is the discussion now about the disconnection of labour and income again in its economic and its justicial aspects again, people worldwide are already discussing these problems since two years about basic incomes, top salaries, and the whole spectrum in between. When this

discussion becomes more transparent then only then all the other problems in the world will become 100% transparent also because everybody can finally focus on the essence of their jobs instead of on their income alone. (see annex / About the quality of life / Tilburg conference January 10, 2008 following the OECD conference in Brussels november 2007 "Beyond GDP - From wealth to welfare").

Because more and more people become aware that money is important but quality of life is first priority for all six billion members of the world family, most discussions are already in a current where we are talking about food, about water, about sustainabilty, about everything, and, moderated by modern highly interested journalists, become more professuional every day!

The newest developments are those where people are working towards long term sustainable solutions, in consumer-producer relations now also in the chain of food to agriculture, in the integration of all old and new professions in medicare including all alternatives, in the "meet and greet" of civilizations and religions thanks to the disaster of 9/11, and all other discussions to the bottom of the problems to be solved! But still it's only the beginning of the future!

Consumer freedom and responsibility

We're free to choose as Milton Friedman already said, but of course we're also responsible for every choice we make! And that means that we have the basic need of maximum of information, another need for all possible arguments and overview of all consequences according to other people and nature to make the best of all choices, and finally accept that we pay with every euro yen or dollar for all the results in quality of life for ourselves and all the people working for us in the whole chain! This is in the first place basic education for all generations to come in the same way as we learn to bike or to drive a car!

Consumer governance means education first, good management information on a daily basis, lifelong learning in judging products services and situations, and the right financial registration to reflect and to evaluate one's own decisions. A simple houshold booklet with twelve columns for our daily needs makes the world economy transparant and so the role we play from month to month!

Me and the Other's Project: Citizenship Education through Playful

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Introduction

In the scope of the protocol between IDT (Drugs and Drug Addiction Institute) and CIID (Identity and Diversity Research Centre), we are developing a design of a research-action project. The aim is to evaluate the test implementation of the project "Eu e os Outros" – This design and some results is what we intend to present and discuss. It is important to stress that the test phase will be carried through the national level, however, we propose ourselves to present the drawing project in Leiria - scope of intervention of the CRI Leiria – IDT (Centre of Integrated Answers) and IPL-CIID (Polytechnic Institute of Leiria).

This national Project, created by the central services of IDT, the Project known as "Eu e os Outros" appears associated to the youth website www.tu-alinhas.pt as a setting that creates sensitivity and reflection connected to the thematic of drugs and other areas related to the growth. The main goals to achieve are: to promote the health education; to strengthen the preventive approach; to implement this project, with continuity, through the teachers as educative and socializing agents; to stimulate the students to the critical debate, the shared construction of knowledge and attitudes.

Health Promotion and Prevention

The health education will only be able to get significant results if it is integrated in the school daily life and if it is no longer an activity of certain teachers and some external organizations: Therefore, the schools need to open themselves to the exterior… (Sampaio in DGIDC, 2007:10). Being the school a privileged setting in the preventive approach with its educative and informative role, stimulating the reflection and enabling the young ones to a decision making that leads to conscientious promotional choices in terms of well-being, this project represents a dynamic and interactive way to meet the education and health aims in a perspective of global promotion of transversal skills of citizenship.

In this context we understand prevention as a technical-scientific level of intervention and, in a general sense, can be understood as an active process of initiative implementation intending to modify and to improve the full training and the quality of life of the individuals, being the personal and social abilities fomented, oriented to the well-being of the populations (Marques in DGIDC, 2007:80).

This preventive intervention can be implemented in three levels of strategies: universal, selective and indicated, that is, directed to the set of the students, to specific groups of students (classes/groups identified with some psycho-social vulnerabilities) or to some sub-groups already presenting risk consumptions and/or behaviours, that will imply different approaches (Borges and Filho, 2004). In the "Eu e os Outros" Project the preventive intervention is of universal scope, directed to a set of students, without taking in account the level of individual risk.

This project is about training personal and social skills, which adopts the interactive game shape, its is based in eight different narratives and implies the exploration in groups in a data support - online – that is oriented by a technical team, composed by teachers, from a set of

instructions worked in training context. The teachers, applicator, must be willing to live the challenges that are proposed to and to reflect according to his personal experiences (Melo, 2006). This preventive intervention in school will have to go through a comprehensive approach, in a teacher-student relationship structuralized in the reciprocal trust which will have to be established (Sampaio in DGIDC, 2007:11). It still has go through the improvement of the health, well-being and existing conditions of the individuals, which, in specific terms, consists in the improvement of the knowledge and competence levels, in the promotion of the individual responsibility and in the development of social and communitarian bows (Morel and others, 2001). Therefore, the "individual life skills", in accordance to the World Health Organization (Fernández and others, 2006:7), are the abilities to adopt a flexible and positive behaviour that allows the individuals to approach with effectiveness the requirements and challenges of the daily life. It is the personal, interpersonal, cognitive and psychological skills that allow people to control and to direct their lives, developing the capacity to live with their environment and to get changes in it. As examples of these abilities we can relate the decision making, the critical thinking, and the knowledge of itself, the communication skills, interpersonal relation and the capacity to face emotions and stress control.

We can't possibly learn these skills in abstract, but through the practice. That's why its learning is known as a training whose conditions are: the application of significant settings - the School, in this particular case - and the use of interactive methods.

The "Eu e os Outros" Project is based in the communication globalization processes of nowadays "network societies" (Castells, 2002), highlighting the fact that the Internet is a precious instrument helping the processes of education and learning, where the young themselves are active elements of their training (Cardoso and others, 2005). In this perspective, we are in a new communicational setting based in shared communication codes, which go beyond the technological skills and lead to new forms of appropriation and integration in the daily practice (Castells, 2002; 2004). The youngsters develop, thus, in a reflexive, active and critical perspective their skills of civic participation, since the methodology of action-reflection, associated to the game, highlights and stimulates the critical debate, the shared construction of knowledge and attitudes and values the fact of all of them having capacities and abilities for the resolution of problems.

The Game Approach
In the "Eu e os Outros", the use of the game as a preventive instrument is organized in an intervention program with timing and sequential structure more or less defined. This supposes the gradual conquest of a set of contents or abilities, or the constancy of the work developed in a defined way. In this case, the intervention consistency is obtained through small stories that establish bridges between each session, as chapters of a book. The game implies discovery, living the stories, a dynamic process and an increased form to gain security and autonomy (Arez e Neto, 2000).

The game approach - game of exercise, symbolic and of rules - and its playful component has an extreme importance in the psychological development and as a preventive strategy. These playful constructions involve the understanding of the values, attitudes and representations in association with the actions done, the action settings and the time management related to daily life routines of formal nature (school time) and informal (spontaneous or institutionalized free time). Although sometimes the game is centred in the citizen, the development unit must be of relationship nature (Arez e Neto, 2000).

The Project is based on the principles of the interactive narrative, assuming that the best way to know the relation of the young with any thematic is through its own words, analyzing its own narratives about the diverse phenomenon in chat environment, both formal and informal ones. So, the space for the integrated risk experience, the exploration, the confrontation with

the unexpected at the same time that it guarantees a space of relation and meeting with the other will be found again (Melo, 2006).

This way, a reflection is promoted about its meaning attribution and the implied transaction personal processes in its construction. The reflection process is the moment where each one selects what of more significant occurred during the action, decides if he wants it to be shared with the others and where he analyses the correct way of making it, collating itself with the others´ reactions. To do this, each one elaborates what initially was not more than a provoked experience and attributes meaning to it in according to the previous experiences. This existential learning follows some phases: experience of the game (how it was); talking about feelings, emotions or reactions (how did you feel? what did you like most?); performance evaluation (were you satisfied with the game result? was it what you were waiting for?); thematic contents exploration (what do you find that was more important in this game? what is this game all about?); and changing perspective (if you played it again, which changes would you make?) (Gramigna, 1994).

The Project

The "Eu e os Outros" is a project of health promotion, which stresses the drug addiction prevention, directed to the 11 to 15 year old students (3rd CEB).

The implementation of the project will pass by the accomplishment of seven sessions for each story/subject. Eight stories (with eight subjects and eight characters) have a central character as a subject, inside there is a crossing of some dimensions of each subject with different perspectives of some questions and the psychoactive substances are present in different stories giving a notion of diversity of effects, settings, standards of consumption, etc. These stories will allow the student to place himself in the position of the other, identifying himself with some thematic and finding some tracks to face situations-problems. The young will be able to reflect on the questions raised in each story and, as the story goes, they have to take decisions that will direct the story progress.

The challenges and dramas of the eight stories have the setting of situations related to the subjects – Growing up, Friends, Family, Love and Passion, School, Amusement, and in the Future…, When Justice is not Blind… - and, they have as engine the eight characters - Jamal, Catarina, Emanuel, João, Alice, Sabrina, Daniel and Maria - created by the youngsters in graphical terms, personality, social context, social representation of youthful cultures or urban tribes - surfer, gothic, nerd, dread, fashion, beta, foreigner, freak… (www.tu-alinhas.pt). The result is an approach of the thematic of drugs demanding a reflection and taking of decisions through the diverse challenges that come across.

The implementation has the following methodology: five groups of five schools of the 3rd CEB (students between 11 and 15 years, approximately); two applicators (one assuming himself as "the game master"), one of them is a teacher of the group in the non disciplinary curricular area of Civic Training, Area Project or Accompanied Study; a rotating power by "a decision chair" in which each one of the students has to pass trying different roles; argumentation and anticipation of the consequences in the taking of decision for the group; provide complementary answers for the group dynamic (to consolidate the reflection concerning the questions arising).

The joint work between CIID and IDT is based in the Technical Group of Support (GTS) whose role is the planning, the follow up and the evaluation. In planning terms, this Group mobilizes and dynamics the implementation of the project in the geographic area of Leiria (including the training to the applicators), is the link between teams of the central services and the applicators and guarantees the link with the local structures harnessing the existing resources. The follow up of the project implementation is in accordance to the needs of the group of applicators (planning and structuring the application sessions according to the work

aims defined for each group; orientation of the applicators in the resolution of situation-problem that takes into account the group management and dynamic). The evaluation is assumed as an application of the established evaluation protocol that is related to the data evaluation collection, its treatment and the consequent information of the project execution.

At this moment the Project is in the planning phase, and we have proceeded to the selection of the schools and it's being held the preparation of the applicators training.

Conclusion

In synthesis it matters to strengthen the idea that the use/ abuse problematic of psychoactive substances appears inside a generic approach to the questions of the adolescence. In this sense, there is a concern to guarantee a significant and transversal approach for the student, independently of their age, gender, youthful culture, school level, socio-demographic and cultural characteristics.

These aspects are related to other training and education territories, which require the development of civic abilities in a global context. The citizenship skills, or civic, are the individual capacities to know, to make and to have an attitude in a defined acting environment in the political, social, economic, cultural levels (Selewyn, 2004). In this context, the Society of Information, based on the knowledge, supposes the active participation of population that implies the development of new pedagogical approaches in the sense of the continuous development of the individual. The "Eu e os Outros" Project assumes itself as a contribution in this domain.

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Using Creative Instruments for Promoting Sustainable Citizenship

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Abstract:
This paper and presentation discuss the importance of co-operation between different actors of society as well as the use of creative tools and processes when targeting the transition to more sustainable lifestyles. It gives examples on how to raise awareness and promote sustainability among different citizen groups by co-operating among researchers, civil society and business.

The first part of the paper focuses on the potential of partnering between civil society and researchers. Civil society has a crucial role in the issue, but more dialogue and partnering between civil society and researchers are needed. Two European Framework Programme 7 research projects targeting at this are introduced with examples on new, creative instruments that civil society organisations can use for advocating, partnering and encouraging change towards sustainable lifestyles. New practices are needed to transform the behaviour change from forerunners to the mainstream.

The second part presents an online community-based service called One did it. The service is based on a test that gives an estimate of the ecological backpack of one's lifestyle. After doing the test, users have a chance to receive daily tips and see the benefit of their actions. Furthermore, it is possible to share ideas and actions with other members and see what the whole community has done. Based on the experiences from this community, the potential of online communities to encourage changes in lifestyle is discussed. The exemplary initiatives presented show the potential of the co-operation between different actors.

1. INTRODUCTION
1.1. The SCP challenge
This year, Europe is facing multiple challenges related to its financial system, climate change and food supply. Tackling these global challenges requires engagement from business, governments and civil society. We need common, overarching strategies to offer solutions to these global problems. The financial meltdown in the short term reduces energy and resource use, but when the growth sets in again, will we return to the business as usual? The revival politics hold potential for change and need to be targeted to support development of more sustainable economics and society (UNEP 2009, Green New Deal Group 2008).

The concept of sustainable consumption has been proposed as a guideline to shift consumption behaviour towards a less harmful direction. A widely recognized definition of sustainable consumption was proposed by the Oslo Symposium on Sustainable Consumption in 1994: "Sustainable production and consumption is the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as to

not jeopardize the needs of future generations." (The Norwegian Ministry of Environment 1994).

The consumers' view on sustainable consumption is in general positive but also passive (OECD 2008). There is still a challenge to stress the relevance of food, housing and mobility sectors in order to affect the most important sectors of private consumption. Also cooperation between different actors and new innovations are required to find ways to encourage and support consumers to make changes in their consumption patterns. However, in the recent years, concern about climate change has risen and more and more people are willing to do something to promote sustainability.

1.2 All actors of society needed – the triangle of change

Changing consumption and production patterns will require a joint effort by government, business and civil society actors. Like the Sustainable Consumption Roundtable (2006) stated, "Participation of all actors in society is needed to achieve sustainable consumption and production. None of these actors can change unsustainable patterns alone, but together they can form a so-called triange of change. Actors are ready to change their behaviour if they know that others are doing their bit"(Figure 1).
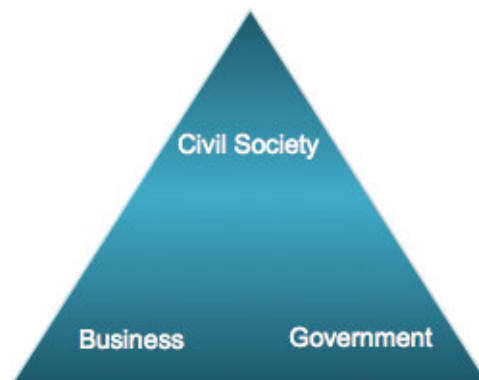
Figure 1. Triangle of change

For governments this would mean to create a supportive framework and policy instruments, for business to provide sustainable products and services. Civil society would be important for the introduction of creative instruments for behavioural change. Here, civil society organisations (CSOs) have a crucial role in e.g. motivating consumers to rethink their consumption patterns, pushing business to produce and market in an environmentally and socially responsible way, asking academia to assess the trends, drivers and impacts of our current consumption patterns as well as negotiating with the government on measures to make our current patterns more sustainable. The CSOs' role is so vital due to their potential to work at the interface of all relevant actors, ranging from academia, policy makers, consumers and business.

The raising environmental awareness of consumers and the business sector has encouraged SMEs to develop services to respond to the demand for information about sustainability and sustainable products and services. Internet provides a favourable environment for them to find audience for new innovative services and products. One example from Finland is a company called Kuinoma (http://www.kuinoma.fi/, in Finnish) which provides a web-based platform for private consumers to rent items to and from each other. Among the most popular products in Kuinoma is high quality outdoor equipment. The service encourages to share equipment and to make more use of already existing items. Kuinoma is one example of an initiative

providing business opportunities related to innovative services that also help to introduce sustainable consumption practices.

1.3. Creative instruments for promoting sustainability

The concept of creative instruments is commonly used to refer to new economic tools like emission trading (e.g. Schilling & Osha 2003). Creativity is often also linked to problem solving or finding new approaches i.e. in planning processes (as presented by Woerkum, Aarts and de Grip 2007). However, in this paper the creative instruments refer to new approaches that support behaviour change. These include web tools, comics, exhibitions and community activities to spread awareness of SCP issues, but also new policy instruments and business approaches. In development communication the value of comics for instance has been recognized (e.g. Packalen & Sharma 2007). Authors argue that entertaining and informative tools of communication should be more widely adopted in SCP communication, too. Case examples of new innovative tools are presented in this paper.

Table 1 Examples of creative instruments for SCP led by different stakeholders.
This table will be created based on the CSO Platform on SCP conference results.

2. Case CSO platform on SCP
2.1. Objectives

The first step in involving CSOs to SCP is to inform and engage these organisations. It is essential to first agree on "the evidence base" if we want to achieve changes in the system of consumption and production (Tuncer & Narberhaus 2008). This requires a platform for discussion on the most relevant SCP issues.

The project "CSO Platform on SCP" is funded by the EU's 7th Research Framework Programme and conducted by UNEP/Wuppertal Institute Collaboration Centre for Sustainable Consumption and Production (CSCP), Centre for Sustainable Design (CfSD) and Regional Environmental Centre Hungary (REC). In the project a discussion platform for CSOs has been established. The idea of the platform is that CSOs can exchange information and discuss the role that CSOs can play in promoting sustainable consumption and production.
The specific objectives of the project are to:

- Develop material promoting the concept of SCP and displaying the potential and role of CSOs in this field. The material will contain information on previously undertaken research, the status of relevant processes, programmes and action plans (especially the EU Sustainable Development Strategy and the SCP Action Plan) and relevant stakeholders and networks (especially concerning CSOs).
- Identify and discuss patterns and sustainability impacts and factors that limit progress towards SCP in the demand areas of food, housing and mobility with the active involvement of stakeholders.
- Identify and discuss issues in the areas of finance, technology, policy instruments, capacity building and education and behavioural change as factors limiting or enabling SCP with the active involvement of stakeholders.
- Draw and discuss conclusions for the future research agenda, for the implementation of processes, programmes and action plans and for deliberative processes to involve stakeholders with a focus on CSO and similar organisations.

2.2. Materials and methods

The CSO Platform on SCP project focuses on three high-impact consumption areas, namely food and drink, housing and mobility. These areas have been chosen because they are

responsible for 70 to 80 percent of the environmental impact of product consumption in the EU-25 (e.g. Tukker et al 2006). In practice, the project consists of three conferences with several workshops and an internet-based discussion platform (http://csoplatform.ning.com). The Internet platform offers a place for discussion and idea change between and after the conferences.
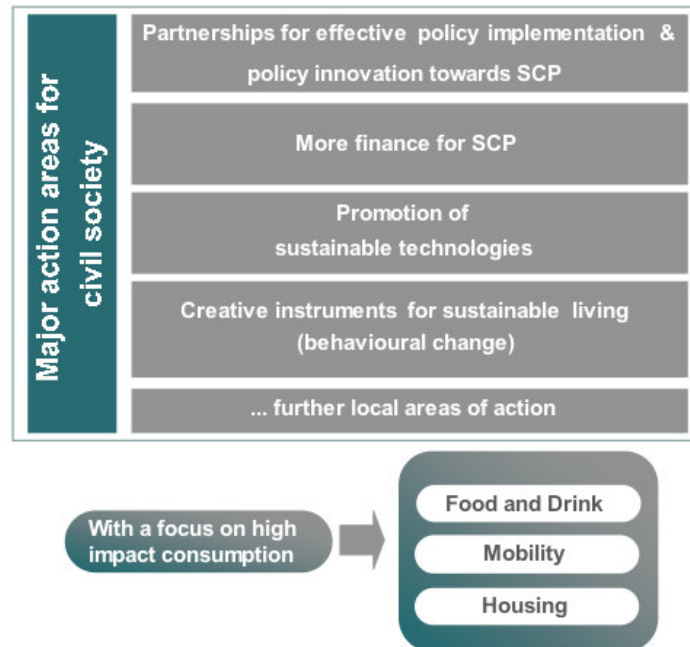

Figure 2 *Main focus areas of the CSO Platform project. This figure will be revised for the final version.*

2.3. Preliminary results and learnings

This chapter will be written for the final version of the article. It is based on the learnings of the two first conferences of the project. The first conference was held in Szentendre, Hungary, on October 2008, and the second one will take place on March 2009 in Wuppertal, Germany.

3 CASE ONE DID IT
3.1. Objectives

The growing interest on environmental issues has encouraged the development of environmental calculators and internet-based tests, many of which focus on green house gas emissions or the ecological footprint method. Various sites also provide eco-tips on how to save energy or produce less waste for instance. There is no lack of information and consumers interested about the sustainability issues but the question is how to convert the consumers' concern into real actions and changes in lifestyle.

The *One did it* service provides a platform for a community, which encourages to take small every day actions and adopt little by little a more sustainable lifestyle. The importance to closely combine environmental information and guidance on how to make improvements has been shown by Sutcliffe et al. (2008). They suggest that consumers are willing to act when the recommendable options are presented and can be easily adopted.

One did it is an online community and an eco-toolbox which members of the community can use to calculate the size of the ecological backpack of their lifestyle and get inspiring tips on how to lighten their backpack. The beta version of the One did it application was first launched in June 2008 at the Green Week in Brussels. Since then, feedback from users has been collected and the content, features, and visual performance have been developed.

3.2 Materials and methods

The core feature of the site is the ecological backpack test which estimates the environmental burden of one's lifestyle including housing, energy use at home, mobility, food and beverages, household goods, leisure time activities and waste. After completing the test and registering, daily tips providing a means to make small eco-improvements in everyday life will be provided. The main features of the service are presented in figure 3.
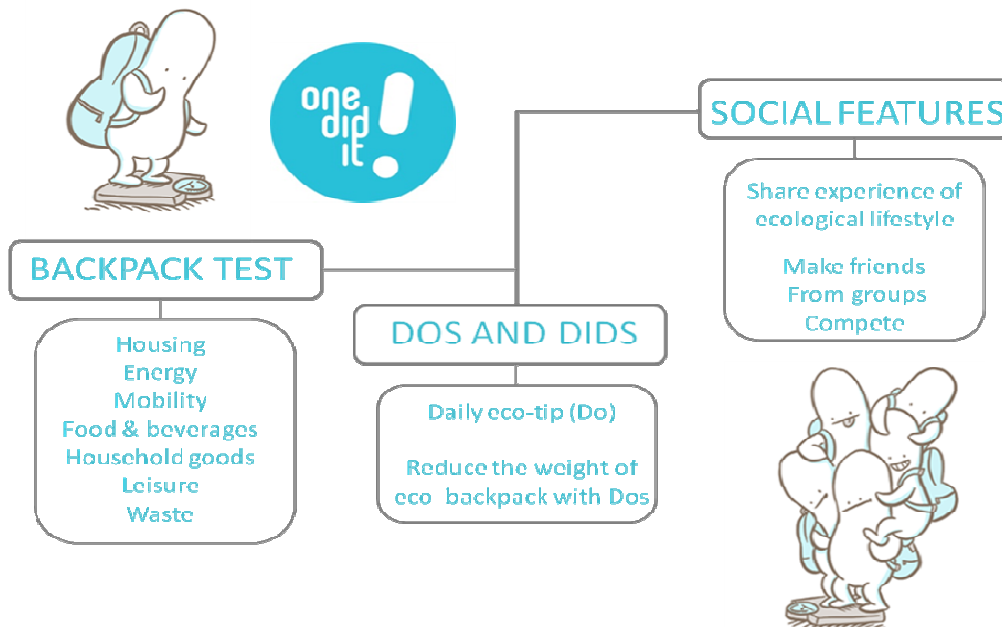

Figure 3 The structure of the One did it service.

The eco-tip feature proposes new Dos once a day for registered users. After a user confirms having completed the Do it becomes a Did. Dos hold a value in kilograms and once the user accomplishes a Do the saving will be subtracted from the original backpack test result. The Dos encourage users for example to choose a vegetarian lunch, take public transport to work or to share books, tools and other sort of household with friends. To make the actions more rewarding, the total saving of the whole community, meaning all users together, is presented on the site. This makes the power of the community visible like the Sustainable Consumption Roundtable suggests: people must feel that their efforts are important and that there are also others acting the same way and this is why it all makes difference (Sustainable Consumption Roundtable 2006).

In addition to the test and daily eco-tips, social features are an essential part of the service. Features like groups and challenges with friends and groups will motivate users to actively take small everyday actions. This includes competitions with friends and groups about who is the most active resource saver. In the development phases to come, members of the community will be able to document and show others "how they did it" by for example sharing a photograph of the new bicycle they will use for commuting or presenting a good recipe which was a success when they were having a vegetarian day.

The *One did it* calculation system mostly uses material intensity data published by the Wuppertal Institute in Germany and studies conducted by the Finnish Association for Nature Conservation (e.g. Kotakorpi et. al. 2008). In addition some individual case studies have been used as well. The database is under constant development process since the existing data is in some cases limited in its scope.

3.3. Preliminary results and learnings

What has been learned from the *One did it* service this far is that the visualization of the message and usability of the service is essential since various forms of media, messages and on-line services compete for consumers' attention and time. There is no lack of the basic information concerning SCP issues in the media. However, to get consumers interested about the subject, involved and doing the correct things the information needs to be presented in a simple and entertaining manner. This is the strength of the *One did it* service.

Edutainment, combination of education and entertainment, in the form of a comic strip or animation for instance will provide an easy introduction to the issue. In addition to involving consumers, this material can be used by teachers too. A special teacher's package will be provided on the *One did it* site too to help teachers to introduce SCP issues in their teaching. *For the final version of the article, we will provide Do's top ten and other statistics from the service.*

4. HOW TO MOVE ON? CONCLUSIONS AND NEXT STEPS

As discussed in this paper, the shift towards sustainable consumption patterns is needed. To promote this shift, the social aspects of consumption need to be considered when searching for means to communicate sustainable consumption and to encourage consumers to rethink their habits. Creative instruments are seen as potential tools for raising awareness and putting the lifestyle change into action. It is not only artists who can use creative instruments, but there are instruments for all actors of the society.

Since an increasing number of people is involved in online communities, these communities should provide an opportunity to promote sustainable consumption patterns, too. *The One did it* has shown that cooperation between experts and actors from different sectors can be a successful method when communicating the issues of sustainable consumption towards consumers.
More conclusions will follow in the final version.

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Green Consumption – A State Responsibility?

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INTRODUCTION

The aim of this paper is to highlight some challenges that states may face if involving in consumer citizenship education. I present two consumer initiatives that are regarded by the Norwegian Ministry of Environment as tools for the state for educating consumers. Following the discussion on these initiatives I argue that before a state involves in such consumer organisations it should take democratic principles into account, and consider under what conditions such organisations may receive popular support.

In order to meet several environmental goals, developed countries have to change their pattern of production and consumption (see e.g. UNEP, 2009). In Norway, the government recognises the need for a substantial change in consumption patterns throughout the 21st century (Ministry of Environment, 2007). Addressing consumption patterns is, however, a difficult task, not the least when it comes to individual consumers and households. In the Norwegian Official Report on how to reduce climate gas emissions in Norway, the commission stated that even though a radical shift in citizens' lifestyles would lead to major reductions in emissions, they chose not to discuss this any further (NOU, 2006: 18). This was because "among other things we believe it would be politically impossible to realise such a task". Therefore, the main focus in the Norwegian climate policy is on production, not on consumption. At the same time, since policies aimed at changing consumption patterns are believed to be unpopular among citizens, the Ministry of Environment (hereafter referred to as the Ministry) attempts to change the population's attitudes through the "back door", by using initiatives for consumer education as a tool. Two semi-governmental organisations that appear to the public as "grassroot" initiatives have been financed, and even shaped, by the Ministry in order to strengthen the population's support for a more environmental friendly consumption pattern. These two organisations are *Green Living* and *07-06-05*.

In this paper I discuss these two organisations[88], which are interesting to study for two main reasons. First, they touch upon discussions on the role of voluntary organisations in democracy. They have a semi-governmental organisational form, meaning that they are somewhere in between a voluntary organisation and a state organ. This way of organising reflects changes in the voluntary sector, and in the relation between the state and civil society, which started in Norway in the 1980s (See e.g. Bortne et al., 2002). There is a need for studies on how these newer changes influence democracy and democratic participation. Second, these two organisations are relevant for the studies of consumer education, because they shed light on the role of the state in this issue. They demonstrate some challenges that emerge when a state involves in "grassroot" organisations in order to educate citizens. The following question is examined: Are these top-down consumer initiatives compatible with democratic principles, and are they able to strengthen citizens' involvement with environmental issues?

I argue that Green Living and 07-06-05 are part of a negative trend for democracy, where the state increasingly controls voluntary organisations, and where bureaucracy enters the organisations' domain of shaping public opinion. Further, the singular focus on the individual in these organisations may lead the debate away from important societal questions, and

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[88] This paper is based on my master thesis from the Department of Comparative Politics, University of Bergen (Sælensminde, 2008).

unintentionally send a signal to the citizens that climate change and other environmental problems are not that serious after all.

The paper is divided into six parts. First, I define central concepts and outline the method. Second, I give a presentation of Green Living and 07-06-05 with focus on how they are organised and the purpose of the organisations. The next three parts discuss, based on the empirical findings, three challenges that the state face when using such organisations as tools. There is a tendency in Norway that the state involves more directly in political participation and opinion building, and this may have implications for the democratic role of the organisations. Finally I outline some political implications of these findings.

CONCEPTS AND METHODOLOGY

Studies of concepts such as the state, civil society, and democracy step into a "conceptual minefield" (Dryzek et al., 2003:12). I will therefore make clear what I mean by these concepts. I use a simple definition of the state as "the set of individuals and organizations legally authorized to make binding decisions for a society within a particular territory" (Dryzek et al., 2003). Here, politicians and civil servants act as a group, with common collective interests that are more than the sum of their individual interests. Civil society is considered a third sphere in society, the two other spheres being the state and the market (Cohen and Arato, 1992). Cohen and Arato define civil society as "a sphere of social interaction between economy and state, composed above all of the intimate sphere (especially the family), the sphere of associations (especially voluntary associations), social movements, and forms of public communication". By organisation I mean a set of stable, social relations created in order to meet a goal (Stinchcombe, 1965:142). Voluntary organisations are ideally built upon voluntary membership, organised independently of the state, and established in order to promote the members' common interests (Sills, 1968:362). In Norway there has always been close ties between the state and voluntary organisations (Bortne et al., 2002). This is why I use the term "voluntary organisations", and not "non-governmental organisations" (see Grendstad et al., 2006). As I will explain in more detail later, these ties are getting tighter, resulting in the emergence of semi-governmental organisations.

Democracy has been called an "essentially contested concept" because the discussion about what the concept means is intrinsic to the idea of democracy (Gallie, 1964). Dryzek et al. (2003:16) argue that because it is difficult to analyse whether one system (e.g. a country or an organisation) is more democratic than another, studies of democracy should use historical data to analyse whether the development moves in a democratic *direction.* I will discuss Green Living and 07-06-05 in such a historical perspective, and distinguish between two different roles that voluntary organisations may have in democracy. First, they may have a *direct* democratic role, as organs that link citizens to the political system (See Cohen and Arato, 1992:558). Here, citizens are able to develop and express norms and values, and the organisations front their members' interests and views toward the state. Voluntary organisations may also function as channels for the state to get in touch with citizens. Second, they may have an *indirect* democratic role by "educating" citizens in democratic norms and values, creating identities and strengthening the citizens' knowledge on societal issues and political participation (See e.g. Pateman, 1970).

This study builds upon qualitative interviews with leading actors in the two organisations and with civil servants in the Ministry, six interviews altogether. The advantage of qualitative interviews is that they highlight the central actors' version of a subject, and try to grasp their perception of reality and their reasons for doing what they do (Hellevik, 1999:110). This is fruitful in the study of this top-down way of educating consumers, because it gives an impression of why these organisations were started and how they are intended to address consumer and environmental issues. The interviews were unstructured in order to avoid

influencing the informants' perspectives, and in order to let them introduce new aspects. As a supplement to the interviews I studied documents, namely the organisations' websites, yearly reports, plans, and correspondence with the Ministry. The written material was not analysed systematically, but served as supplemental information about the organisations, their self-evaluation, and of the Ministry's expectations and demands. This empirical material is studied in light of international and Norwegian research on the relation between state and civil society, and on studies of citizen education and citizen involvement in political processes.

TWO TOP-DOWN "GRASSROOT" INITIATIVES

Green Living and 07-06-05 have a unique combination of two features, being semi-governmental organisations deliberately looking like independent "grassroot" consumer initiatives. They are not the only semi-governmental organisations or foundations in Norway, but they are the only ones among this type of organisations that address individual consumers and citizens by appearing like initiatives coming from below. At the same time, they differ from voluntary organisations in the sense that the Ministry of Environment defines them as tools for public policies, so that their purpose is to implement, not to influence, the state's environmental policy. As I will come back to, these features illustrate important developments in voluntary organisations in Norway, and in the relation between the state and civil society.

Organisations are shaped by the period in which they were created (Stichcombe, 1965:143). Green Living and 07-06-05 are rather new organisations and reflect developments that have taken place since the 1980s, in the organisations and the state alike (Grendstad et al., 2006). This is part of a general tendency seen all over Western Europe, where neo-liberal thoughts have increased the faith in market solutions (See also Furre, 1993:422; Bortne et al., 2001:177). In this section, I will show how Green Living and 07-06-05 are organised, how this strategy is defended, and how these choices and arguments are parts of this general trend.

Green Living: A voluntary organisation with close ties to the Ministry

Green Living was created in 1991, in a time when there was a lot of attention to environmental problems (See e.g. Endal, 1996). The initiative of establishing Green Living came from the biggest environmental organisation in Norway, and it was funded in its entirety by the Ministry of Environment. The Ministry's funding of the project was a part of the following-up of the World Commission for Environment and Development, lead by the Norwegian Prime Minister Brundtland. In the Commission's report from 1987 it was stated that since the environmental problems are global and complex, all levels of society must make an effort for sustainable development; the international, national, local and individual level (Brundtland et al. 1987). Green Living gives information about how individuals can contribute to sustainable development, for example by recycling or saving energy.

Green Living is a hybrid between an umbrella organisation and an organisation addressing individuals. It has 15 member organisations that work in order to promote environmentally friendly habits among their members. Most of these organisations are not primarily environmental organisations. The individual "members" are called "participants", and are not members in the usual sense of the word. In order to become participants, people must check on a form some activities they will try to do in order to improve the environmental performance in their household. The entire household then becomes a participant. There is no membership fee or other obligations connected to being a participant, and Green Living is not a democratically built organisation allowing the participants to elect the leaders or to influence the organisation's means or goals. This is done by a steering committee with representatives from the member organisations. The organisation is rather centralised, concentrated on five regional offices with paid employees (Green Living, 2006).

The organisational form of Green Living reflects that it is a top-down project. The aim is to educate citizens, not to represent and canalise members' views into the political debate. The representatives of Green Living explain in the interviews that the organisation aims at making people more politically interested in environmental issues by starting with a small and simple tasks (interviews with Bugge, Endal, and Hareide, 2006).The Ministry now supports the organisation with about 7.5 million NOK every year (about 860 000 €), which is more than half of Green Living's income (Green living, 2006). Green Living is totally dependent on this funding, and the Ministry attaches several conditions to it. First, Green Living must focus on consumer issues that are prioritised by the Ministry. Second, the Ministry influences how the organisation work. However, the organisation is formally led by its member organisations, and the ministry cannot make decisions on behalf of Green Living.

07-06-05: A state project
07-06-05 was started in 2000 by the Ministry, as a reaction to studies that indicated that the population's attention to environmental problems had decreased throughout the 1990s (see e.g. Hellevik, 2006). The project focused on consumption, and aimed at *tempting* citizens to consume less by stating that shifting the focus from material to immaterial values could increase the quality of life. There was a hope that such a shift in values would lead to political mobilisation and a demand on the politicians for doing more for the environment. The name 07-06-05 refers to June 7th, 2005, the 100th anniversary for Norway's independence, the day by which they hoped to mobilise citizens to plea for a new kind of independence - an independence from stress and materialistic values. The project ended on this date, without having become the large social movement it intended to be (see e.g. 07-06-05, 2005).

Even though 07-06-05 was a state-driven project, it had similarities with voluntary organisations. 07-06-05 deliberately avoided to mention that it was lead and funded by the Ministry, in order to get the legitimacy of a civil society initiative. It called itself "a project of change", an "invitation", a "meeting point", or the like. It was led by a secretariat consisting of two public servants that during the project period formally worked independently of the Ministry. They appealed to the citizens using commercials, adds, concerts, exhibitions, and a website. On the website, people could sign a petition, and by signing they could agree to receive an e-mail from 07-06-05 once a month. Apart from this the project did not have members of any kind.

A CLOSER RELATION BETWEEN THE STATE AND CIVIL SOCIETY
Green Living and 07-06-05 reflect several developments that have taken place in voluntary organisations, in their relation to the state, and in the role of bureaucracy, throughout the last three decades (Bortne et al., 2002; Rothstein, 2005). First, the organisations have experienced a professionalisation and an effectivisation inspired by the market sector (Bortne et al., 2002). Earlier, voluntary organisations aimed at recruiting as many members as possible in a structure of internal democracy, because the members gave the organisation strength. Since the 1980s, all new environmental organisations have been created without internal democracy, with permanent leaders, and with paid employees. Organisations are less focused on recruiting members and aim at acting quickly, getting attention in the media, and basing their arguments on expert knowledge (Gundersen, 1996:72). New information technologies also change how the organisations work (Bortne et al., 2002:131). This new way of organising is found in Green Living and 07-06-05: In the ministry, informants argue that voluntary organisations are not efficient enough, and that the state therefore must improve this situation by creating or supporting new organisations that are more appealing to modern citizens.

Second, even though the Norwegian state has always supported voluntary organisations economically, this is now done in a way that gives the state more influence on the

organisations (Selle, 1998). Whereas the state used to give economic support to organisations without trying to influence their work, there is now a "culture of contract" where the state increasingly tries to make the organisations implement public policies by attaching conditions to the economic support. This may lead organisations to gradually becoming "arms of the state" (Bortne et al., 2002:148-152: Grendstad et al., 2006:168-169). Green Living can be interpreted as an example on this. With 07-06-05 this tendency has gone even further, by the fact that the ministry actually created and shaped it.

Third, the influence from market thinking has changed the state's view on bureaucracy. Rothstein (2005) studies how bureaucracy itself has started to participate in political debate and opinion building. Rothstein's study is on Sweden, but the development is recognisable in Norway as well. He registers how several new state organs from the 1990s were created mainly to produce ideologies, and not to implement the policies decided by the politicians. 07-06-05 is an example on such a state organ. It got a role that differs from bureaucracy's traditional role as implementers of political decisions. Instead, 07-06-05 was given the freedom to try to *shape* the opinion of the citizens and politicians.

THE DIRECT DEMOCRATIC ROLE OF GREEN LIVING AND 07-06-05

Following the definition of voluntary organisations in this paper, Green Living may be considered a voluntary organisation whereas 07-06-05 is a state initiative. However, in both of them it is difficult to see where the voluntary ends and the state begins. I argue that this new way of organising, reflecting the changes in the state and in civil society described in the previous section, may be considered a negative trend for the direct democratic role of voluntary organisations and bureaucracy. When the aim of the organisations is defined top-down, they do not work as links between the state and the citizens in the same way as more independent voluntary organisations do. Green Living and 07-06-05 give the state an opportunity to send their message to the population, but they have no mechanisms for letting citizens address their opinions or concerns to the state. Further, Green Living and 07-06-05 can hardly be able to work efficiently as arenas for public debates or discourses. Because they work in order to promote the state's perspective on environmental issues, not to question or debate it directly, they have a limited possibility of debating the Norwegian consumer or environmental politics, or of promoting alternative views that breaks with it. Thus, Green Living and 07-06-05 will only to a limited extent fill a function that is crucial for limiting the concentration of power in society, namely securing that other views than that of the state is heard in the debate. A development where the state increases its influence on voluntary organisations may therefore be considered a negative development for democracy.

A second issue concerning the direct democratic development is the entry of state organs in the political debate (Rothstein, 2005). Rothstein argues that this kind of ideology producing state organs may work to undermine the legitimacy of the political system. He underlines that all political systems need to have an administration that secures that the decisions of the democratic elected leaders are actually put through. In this way, civil servants are an important part of representative democracy (see also Olsen 1993 [1978]). Rothstein argues that it is problematic if public servants work in order to influence politics instead of administering and implementing it. It is the role of political parties, and also voluntary organisations, to make platforms for the citizens' political will. If bureaucracy is in lead in political debates, parties are reduced to doing advertising for ideas coming from state organs. Bureaucracy may here underline the politicians' inefficiency in environmental matters, and thereby contribute to undermining, not supporting, the political system.

DO THESE ORGANISATIONS HAVE AN INDIRECT DEMOCRATIC ROLE?

In the interviews the informants defended the use of Green Living and 07-06-05 as tools for consumer education by referring to their *indirect* democratic role. Their argument was that even though these consumer initiatives do not have a democratic structure, they do socialise citizens into important values in society. They stated that Green Living and 07-06-05 may increase citizens' political interest for environmental issues within democratic norms and values, and contribute to making citizens well-informed and politically active. The indirect democratic role of the organisations is thereby intended to be twofold: They are to increase environmental knowledge among citizens, and to strengthen citizens' political mobilisation.

This, however, presupposes that the two consumer initiatives may actually strengthen people's knowledge on environmental matters, and that they will mobilise citizens. I do not state that Green Living and 07-06-05 cannot have a certain effect on habits and attitudes toward consumption. However, there are studies that indicate that Green Living and 07-06-05 may not be able to meet their goal of increasing the knowledge and strengthening the mobilisation on *societal* problems. This is due to their choice of strategy as top-down projects: Their singular focus on the individual as a means of appealing to the population.

First, these organisations face the danger of overloading the individual, leading the discussion away from the responsibility of the political system. Such a focus on the individual may contribute to derail the debate and give an impression that the individual has more possibilities and responsibilities of solving the environmental problems than they actually do (Straume, 2001). Sørensen (2004) argues that politically oriented consumer initiatives coming from below are legitimate, whereas they are *not* legitimate if they come from the state. A state initiative may lead responsibility away from the political system and put it on consumers and the market. This does not mean that citizens should leave all responsibilities on environmental issues to the state. However, it is problematic if the state does not have the courage or will to influence the development of society, and choose to appeal to consumers and market mechanisms instead. Green Living and 07-06-05 also send the message that citizens do not have to change their habits radically, but that they may contribute to sustainable development by doing smaller changes in their everyday lives. This is done in order to motivate people instead of scaring them away from discussions on sustainable development, but it may reduce environmental politics to becoming an administrative issue rather than the area of political conflicts and priorities that it really is (see e.g. Straume, 2001).

Second, Green Living and 07-06-05 may not be able to appeal to more than a limited part of the population. Several informants state that in order to appeal to the population it is necessary to have a moderate message, focusing mostly on people's everyday lives and less on political debates on overaching questions. Næss and Ryghaug (2007) conclude in their study of environmental attitudes among citizens that people feel that they already do what they can for the environment within the society they live in, and that they are provoked by politicians that talk about individual moral, shaping the climate issue as a question of individual attitudes and responsibilities. According to Næss and Ryghaug, citizens blame politicians for not understanding that political actions send out a message about whether or not to take scientific information seriously. When politicians do not take action, this is a signal that the situation cannot be that serious after all. Næss and Ryghaug see this in relation to Beck's (1992) *Risk Society*: Citizens need their own perceptions about risks in society, if not they may feel insecure and ambivalent. Instead, in the Norwegian environmental policy, they feel left alone by the authorities regarding what to do on the climate issue.

CONCLUSIONS

This discussion is relevant for initiatives on consumer education where the state is involved. I do not generally question organisations that focus on individuals and consumption. Neither have I criticised initiatives from the state aiming at informing and educating citizens on the environmental impacts of consumption. However, a state must consider in a democratic perspective what kind of organisations they legitimately may involve in, and how this may be done. Further, such top-down organisations face major challenges regarding how to inform and appeal to the population. I have indicated that in the Norwegian context the state seeks popular support on environmental issues by focussing on individuals, but that citizens may end up blaming politicians for leaving it all to them. Even though it has never been the intention, state-initiated consumer initiatives face the danger of being regarded as a disclaim of liability from the state, handing the responsibility over to individual citizens.

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