

Department of Public Health

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# **Master Thesis**

# "Motives and Meaning for Long-Term Indoor Exercise"

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#### **ABSTRACT**

This qualitative study was designed to explore the motives and what gives meaning (is pleasure something meaningful) to Norwegian people who maintain for a long time regular indoor exercise regime. There are few studies on this phenomenon in Norway. The theory of hedonism in exercise informed this study. Six long-term adhering exercisers (three men and three women) were interviewed about their exercise experiences and feelings of pleasure and displeasure when exercising indoor. A phenomenological approach was used for designing and implementing the study and a thematic analysis was performed to analyze the information gathered. Several elements about a regular exerciser's motives and meaning were identified and organized within five themes: one's exercise habits, ways to overcome barriers, choosing own exercise, the exercise environment, and the exercise induced affect. All participants had a goal that helped them exercise on a regular basis; with health and fitness level goal or high performance goal, yet the goal was there. All participants also had developed a high level of self-awareness regarding their bodies and of knowledge regarding exercise types and intensities. Concerning the meaning of the experience and the role of pleasure in it, five of the six participants in this study highlighted the important of pleasure during exercise. To experience the desired pleasure the exercisers select on their own the exercise intensity considering their mental and physical state for the day and time being. Earlier exercise experiences appear to play a positive role for the adherence the exercisers experience today. Last but not least, the participant shared that while they feel pleasure in the exercise environment, sometimes social pressure pushed them to do things differently like increase their exercise intensity in the presence of others. These findings are discussed in relation to the recommendations for physical activity levels provided by the Norwegian government, which are clear and suggest that people need to get more physically active. While this is a qualitative study and its findings should be generalized, as people come into the fitness centers with different experiences and goals, some suggestions are offered for the fitness practitioner who ought to help clients find pleasure in the act of exercise in order to achieve exercise adherence.

# Norsk sammendrag

Denne oppgaven omhandler hvilke elementer som er til stede hos mennesker som trener aktivt i et treningsstudio (og om behag er et viktig element i deres trening). Det er få studier på dette i Norge pr dags dato. Teorien om hedonisme har blitt brukt i en kvalitativ tilnærming i intervjuet av seks personer som trener aktivt på et treningssenter. Oppgaven omhandler ubehag/ behag i trening, samt andre elementer rundt en person som har implementert trening som en livsstil. En fenomenologisk tilnærming til fenomenet har blitt brukt, og videre er dataen som er blitt innhentet analysert ved hjelp av tematisk analyse. Flere av motivene og meningene for deltakerne til å trene er blitt satt inn i temaer som: Treningssvaner, takle utfordringer, valg av egen trening, omgivelsene på treningssenteret, og påvirkning av følelser i treningen. Alle deltakerne hadde et mål som hjalp dem til å trene regelmessig, dette omhandler mål om god helse til store prestasjonsmål. Alle deltakerne hadde også en opplevelse av tilstedeværelse og kunnskap om trening og intensitet, samt om hvordan kroppen deres responderer på treningen. Videre opplyste fem av seks at opplevelse av behag i treningen var veldig viktig for dem. Å oppleve behag i treningen omhandlet å velge sin egen intensitet etter dagsformen. Tidligere positive treningsopplevelser oppleves å være et viktig element for å implementere en treningssvane. Sist men ikke minst delte deltakerne at opplevelsen av sosialt press i treningsstudioet noen ganger påvirket dem til å øke intensiteten i treningen sin. Disse funnene er diskutert med anbefalingene om fysisk aktivitet fra helsedirektoratet i Norge, og de er klare i sin anbefaling om at det norske befolkningen trenger å øke sitt aktivitets nivå. Med denne kvalitative undersøkelsen og dens funn anbefales trenere til å hjelpe individer med å gjøre treningen mer behagelig og på denne måten hjelpe individer til å bli mer aktive og implementere trening i sin livsstil, dette kan videre være helsefremmende.

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#### **CHAPTER 1**

#### INTRODUCTION

Physical inactivity represents one of the biggest public health issues in industrialized countries. The World Health Organization (WHO) estimates that physical inactivity is a factor behind 1.9 million deaths and 19 million cases of disability, worldwide. In most industrialized countries, majority of the populations are inactive or exhibit sedentary lifestyle behaviors (Ekkekakis, 2009; Ekkekakis, Parfitt, & Petruzzello, 2011). To overcome this problem a number of countries have issued recommendations to guide their citizens towards healthier lifestyle habits.

The Norwegian Health Directorate (NHD) published its first set of recommendation in 1954, and has been revising this document since then. Recently the NHD revised once again its recommendations to guide the diet, nutrition and physical activity habits of the Norwegian people (Helsedirektoratet, 2014). These recommendations place special emphasis on the reduction of sitting activities, such as sitting in front of a computer, sitting all day at work, sitting in a car to travel from point A to B, etc. In particular, they recommended that adults should engage themselves for 30 to 120 minutes daily in moderate physical activity, or cumulatively engage at a minimum of 150 minutes per week in high intensity physical activity (Helsedirektoratet, 2014). In addition, the adults and the elderly should participate in strength-training activities, for example weight lifting, three times per week (Helsedirektoratet, 2014). Recent reports from the NHD (Hansen, Kolle, & Anderssen, 2014) state that the recommendations for physical activity published in 2007 (75 minutes of high intensity or 150 minutes of moderate physical activity) were not followed by the majority of Norwegian citizens; only 35% of the women aged from 20 to 64 and 28% of the men within the same age range conformed to these. Considering these statistics in conjunction with the new 2014 recommendations, this would mean that only 10% of the women and 9% of the men in Norway would be active at a level that fulfills the new recommended standards (Hansen et al., 2014).

The problem of physical inactivity has attracted a lot or research attention. According to the existing literature, the behavioral mechanisms behind psychical activity and the underlying processes of engaging and adhering to physical activity are complex. According to Ekkekakis, Zenko and Werstein; (2013) the motivational mechanism behind physical activity itself represents one of the most understudied and unexplored factors in the physical activity

area. One of the theories recently employed to explore prolonged engagement in exercise/physical activity is the Hedonic Theory of Motivation (HTM) (Ekkekakis, Zenko, & Werstein, 2013). The HTM suggests that if people derive pleasure from the activity they engage in it, meaning if they derive a sense of energy or enjoyment, they would probably seek to repeat the activity (Ekkekakis et al., 2011).

Large parts of the population in Norway practice "friluftsliv", which is most commonly translated to outdoor life. Outdoor life has been defined, as life that accommodates physical activity in one's leisure time with the aim of environmental changes and natural experiences (Meld.st.39. 2000-2001). Outdoor life has been identified as a welfare good from the Norwegian government that can be used by everyone in the population, and it can improve people's life quality, increase satisfaction and improve the public health, through benefits from the effects of the nature like daylight, silence, peace and fresh air (meld.St.39. 2000-2001). The activity in outdoor life usually involves physical activities; however it is not the primarily goal for most people. The Norwegian population engages in outdoor life because of the satisfaction, the good feelings and experiences (Meld.St.39.2000-2001).

Taking in consideration the significance of physical activity for people's health (physical, social, and psychological), the lower than anticipated levels of activation among Norwegians, and the HTM proposition on the meaning of feeling energized and experiencing enjoyment that keep people systematically active, the present study was designed to explore what sustains the motivation of individuals who exercise systematically at an indoor fitness center for prolonged time and whether pleasure has a meaning for them—the way satisfaction and good feelings do for *friluftsliv*. The study was approached qualitatively to aid the researcher seek a deeper understanding about the phenomenon of sustaining long term indoor exercise. The researcher sought to learn about and understand regular indoor exercisers' motives and goals, affective responses, intensity and exercise behaviors. The rationale was to learn from people who succeeded in adopting and maintaining a physically active lifestyle as their ways of thinking and doing may help practitioners motivate others to stay active. The research question to be answered here is: What motivates and gives meaning (is pleasure something meaningful) to Norwegian people who maintain for a long time a regular indoor exercise regime?

#### **CHAPTER 2**

#### REVIEW OF THE LITERATURE

To this day, a wealth of literature has explored the physical activity and inactivity levels, as well as their antecedents and effects on people worldwide. Adherence has been identified as a key factor for prolonged engagement in physical activity (Ekkekakis et al., 2013). "Adherence means confirming faithfully to a standard of behaviour that's has been set as part of a negotiated behaviour" (Buckworth, Dishman, O'connor, & Tomprwoski, 2013, p. 35). Throughout the existing literature some tension can be observed concerning the important concept of adherence to exercise. One line of research seeks to find a solution towards achieving adherence by using already well-established theories (for example see, Ajzen, 2011; Ashford, Edmunds, & French, 2010; Beverly & Wray, 2010; Buckworth et al., 2013), while the other line promotes a new perspective for the field of exercise psychology through the lens of the HTM (see Ekkekakis et al., 2013; Segar & Richardson, 2014; Werle, Wansink, & Payne, 2014; Ekkekakis et al., 2011). The present review focuses on the most recent literature on physical activity and exercise and the recent approach to exercise adherence through the lens of the HTM and the works of Ekkekakis and colleagues.

The majority of adults in western countries, is considered to be overweight, and up to one third of them are obese (Ekkekakis, Zenko, & Werstein, 2013). From a public health perspective, the failure of the field of exercise science to develop and implement effective, evidence-based strategies to promote exercise participation and adherence among obese individuals has been brought to light (Ekkekakis et al., 2013). As exercise experts suggest, when the level of non-compliance with a physical activity recommendation exceeds 98%, this is a strong indicator that a radically different approach is needed. Ekkekakis et al. (2013) argued that using weight loss as the sole criterion for evaluating the effects of exercise, particularly in the presence of cultural influences, causes individuals to expect unrealistic amounts of weight loss, which often leads to disappointment and drop out. Hence, the authors suggest a shift in focus for exercise practitioners, who should aim to ensure that exercise is experienced as pleasant and enjoyable by their clients in order for them to achieve life-long adherence (Ekkekakis et al., 2013).

Upon reviewing 33 studies conducted between 1999 and 2009 on the pleasure and/or displeasure people feel when exercising at different intensities, Ekkekakis and colleagues (2011) highlighted the significant relationship between exercise intensity and exercisers'

affective responses. Accordingly, when exercise intensity is self-selected, rather than imposed, felt pleasure is increased and people have greater tolerance towards high intensity level exercise. Moreover, the studies reviewed suggest that the exercise should also be self-selected to avoid lowering perceived autonomy for the individuals. The researchers concluded that physical activity guidelines should take into account the finding that a certain level of exercise intensity is more likely to cause increase or decrease in pleasure, especially in times when physical inactivity is characterized as the "biggest public health problem" (p. 8) and a number of interventions showed limited effectiveness (Ekkekakis et al., 2011).

# **Theoretical Perspective: The Hedonic Theory of Motivation**

According to the theory of psychological hedonism it is assumed that the decision to engage in or disengage from exercise depends not only on the rational cognitive appraisal of information but also, to a large extent, on the affective experiences of the person, such as pleasure versus displeasure (Ekkekakis et al., 2013). According to Walsh (2012) the hedonic principle can be tracked back to centuries ago, when the theory was used by the philosopher Thomas Hobbes (seventeenth century). Thomas Hobbes posted that the motive behind all behaviour was the pleasure-pain principle; we behave in certain way in order to pursue pleasure and to minimize pain (Walsh, 2012).

The core postulate of this theory is that, throughout the years of our existence pleasure evolved to signify utility and displeasure evolved to signify danger, and people have a strong inherent propensity to seek out and repeat pleasant experiences and to avoid displeasing ones (Ekkekakis et al., 2013). "Acknowledgement of this of the pleasure—pain principles is one of the four basic psychological needs, beside self-esteem, healthy relationship to other people and coherence of the conceptual system" (Walsh, 2012, p. 194). Little attention has been paid to exercise and hedonic theory because exercise and acute affective responses to it have only recently been studied (Walsh, 2012). The Hedonic Theory of Motivation (HTM) informed this study and any pleasure physically active people may feel when exercising indoors was explored as one of the elements that keep these individuals systematically active over prolonged periods of time.

# **Research on What Keeps People Active Exercisers**

To understand what keeps people physically active and what leads them to stop exercising, Pridgeon, and Grogan (2012) explored the experiences of 14 individuals who maintained and/or dropped out of a gym-based exercise program. They interviewed seven men and two women who maintained their gym membership from 2 to 11 years and three women and two men who ended the membership. As their main finding they reported that

lack of social support contributed to drop out. While low levels of exercise dependency may be an important factor for adherence, according to the researchers, some of the most common barriers towards being physically active are lack of time, lack of enjoyment, lack of social support and past exercise behaviours. In the contrary, those with a strong exercise habit and adherence felt uncomfortable when not exercising. Pridgeon and Grogan (2012) suggested that future studies should look at exercise habit, empowering and enjoyment.

The findings of Pridgeon and Grogan research are in agreement with Walsh (2012) whose work focused on exercise intensity, affect, and adherence. According to Walsh (2012), there are different types of goals and the goals people set influence their motivation to exercise. For example, difficult goals require more motivation than easy goals because they need a higher standard of performance in order to be satisfied (Walsh, 2012). According to Deci and Ryan (1985) there are two main types of motivations, intrinsic and extrinsic. Intrinsic motivation is internally driven and the activity is driven by pleasure, while extrinsic motivation is driven by external forces (Deci, & Ryan, 1985). Making the choice to exercise without external pressure and having the freedom to change at any point promotes intrinsic motivation and autonomy for the individual (Walsh, 2012). As such, body image-related goals are linked to extrinsic motivation; they have been negatively associated with exercise participation, and have been positively linked to short time participation and dropping out (Walsh, 2012). An external goal orientation guides the person to hold an external focus and motivation, while intrinsic motivation is linked to health and fitness goal. Walsh (2012) concluded that fitness professionals ought to help people set health goals that can promote good feelings, enjoyment and autonomy. Moreover, exercise professionals should help their clients set goals, empower them to select exercise intensity on their own, but also offer them empowering activities outside the gym (Walsh, 2012).

It is often the case that some clients in a gym do not enjoy the exercise experience and they only value the enhanced body image that results from exercising. According to Whale (2012), this case presents a dilemma to the fitness professionals, as exercising only for extrinsic motives is detrimental for exercise adherence. To promote exercise adherence the clients need to be intrinsically motivated. Whale (2012) pointed out that 'appropriate exercise intensity' is the key element for a client to feel autonomous and to strengthen his/her intrinsic motivation. According to Ekkekakis, et al. (2011), one's freedom to choose exercise intensity positively influences his/her affective responses to exercise.

For individuals who start exercise programs, there is an estimated 45% drop out rate (Ekkekakis et al., 2013). It is reasonable to speculate that in real-life conditions where there is

no support, dropout rates are probably higher (Ekkekakis et al., 2011). Since few people in the USA are following the exercise guidelines provide by the American College of Sports Medicine (ACSM), with intensity as a key component of exercise prescription, two considerations were suggested by Ekkekakis (2009): (i) the maximization of effectiveness and health benefits of the recommendations and (ii) the minimization of risk for a large segment of the population. As more and more research evidence is linking affect to adherence, it is becoming clear that this twofold rationale should be reconsidered. An exercise prescription may be safe, but when very few want to follow it then a public health issue becomes apparent (Ekkekakis et al., 2011). According to Ekkekakis and colleagues (2011), the neglect on pleasure in exercise prescription guidelines until now can be explained by the lack of reliable evidence on the relationship between exercise intensity and affective responses. For example, there is little research on weightlifting and affective response. One of the studies conducted by Bellezza et al., (2009) measured affective valence during weightlifting on active weightlifting early-adults (11 men and 18 women). In the results the researchers indicated that a moderate-intensity workout (70% of 10 RM) was more pleasant than a high-intensity workout (100% of 10 RM) and low-intensity workout (40% of 10 RM) (Bellezza, et al., 2009). More research is necessary in order to accept affect as an essential pillar of exercise prescription, alongside effectiveness and safety, it is also required that we overcome some long-held beliefs and traditions about how people should exercise.

Taking in consideration that citizens of the USA have made little progress in following the Healthy People 2010 physical activity and fitness goals, Buckworth et al., (2013) explored what works best, under what conditions and with whom when it comes to exercising. They conducted a meta-analysis of published exercise intervention studies and found that the strongest effect was observed in interventions that entailed behaviour modifications strategies. Behaviour modifications had a strong effect in the meta-analysis of physical activity intervention studies with adults that were published between 1960 and 2007. Behaviour modifications also had the strongest effect in a meta-analysis of physical activity intervention studies with adult published between 1960 and 2007. Only about 20% of the studies reviewed in their meta-analysis reported a follow-up to the interventions and those studies showed that the increase in physical activity or fitness, associated with time passed after the intervention, was ended (Buckworth et al., 2013).

A recent report about the Norwegian sport model (Meld.st.26., 2012) shows that Norwegians are exercising like never before. On third of the population is exercising or is physically active, one to several times per week. All age groups in the Norwegian population

are participating in some sport and/or physical activity. For adults, exercise is mostly self-organized (Meld.st.26., 2012). Further the fitness centres have strengthened their position as an arena for adult exercise and youth in the exercise in the recent years. Nevertheless, the participant when it comes to physical activity has decreased (Meld.st.26., 2012). This was explained by the assertion that those who exercise are exercising more and those who are inactive are more sedentary and everyday activities have decreased strongly. In addition, clear patterns were reported that the extent and frequency of Norwegians who are involved with exercise and physical activity is larger among people with high education and high income (Meld.st.26., 2012).

While the physical activity recommendations from the Norwegian government are clear, and people need to be more physically active, the existing literature has not connected pleasure and its meaning with the Norwegians' indoor exercise experiences. A gap to the Norwegian research exists with regard to what keeps people who exercise in a gym systematically motivated and whether pleasure is a meaningful element for them when exercising.

#### **CHAPTER 3**

#### **METHODOLOGY**

# Research Design: A Qualitative Approach

A qualitative design was employed and more specifically the phenomenological approach was followed. A qualitative approach is used when one aims to understand the social world, through an examination of the interpretation of that world by its participations (Bryman, 2012). In qualitative research that uses interviews for data collection, the interviewer is listening to people's dreams, fears and hopes; is listening to how they express themselves with their own words, their meanings and perceptions; and learns about their thoughts, their work situation, family life and social life (Kvale & Brinkmann, 2009). I chose this approach for my study because of the nature of the research scope. The aim was to learn and understand people's indoor physically active lifestyle and what kept them training. In other words, I sought to learn about the way these individuals were adhering to prolonged indoor physical activity.

In particular, the phenomenology approach was used as it was a suitable way to conduct research with people who experiences a common phenomenon in their living worlds in which case the researcher aims to learn about this phenomenon from the person's point of view (Kvale & Brinkman, 2009). Phenomenology was selected to help me elicit and describe the meaning of exercise behavior for the participating individuals and to understand the essence of their exercise experience (Creswell, 2007). A phenomenology study aims to describe the meaning for several individuals of their lived experiences. Phenomenologists' focus on describing and clarifying what participants have in common as they experience the same phenomenon (Creswell, 2007). Furthermore, the basic purpose of phenomenology is to reduce individual experiences with a phenomenon to descriptions of universal essences (Creswell, 2007). Phenomenology has its foundation in the social world and the fact that social reality has a meaning for human beings, and therefore human actions are meaningful (Bryman, 2012). The researcher tries to access people's way of thinking, and interpret their actions and social world from the people's point of view (Bryman, 2012). As such, phenomenology was deemed as a suitable research design for understanding individuals who had experienced long-term adherence with exercising at an indoor gym. Most people in Norway have some experience with physical activity, yet in this study the focus was on those who had succeeded in exercising for prolonged time indoors. Due to time constrains, the

present study only approached individuals who maintained long-term exercise habits. Future research should take in consideration individuals who drop out, as the 45% estimate of dropouts from exercise (Ekkekakis et al., 2013) is a number that necessitates consideration and explanation through research evidence.

# **Participants**

There is some challenge with use of the phenomenology, as phenomenology provides a deep understanding of a phenomenon as experienced by several individuals therefore the researcher ought to carefully choose the participants who have experience with the phenomenon-at-focus (Creswell, 2007). Purposive sampling was used. Six healthy exercisers who were systematically working out at a fitness center environment in Hedmark county for at least three years (2-3 times per week) were invited to participate. Gender of the exercisers was taken in consideration to ensure that both men's and women's experiences would be explored in the present study, thus three men and three women participated. The participants' ages ranged from 30 to 65 years while the mean age was 45.33. It was important for the researcher to approach people of various ages including middle-aged people (40-60 years old) as existing research suggests a decline in participation for this age group (Hansen, Kolle, & Anderssen, 2014) and any knowledge from middle-aged people who exercise regularly may offer ideas for the practitioners in fitness centers and in public health offices on how to overcome this decline in exercise rates.

Exerciser A, is a man of 65 years of age, who is exercising 4 to 5 times per week, he mostly does exercise like spinning classes and weight lifting in the studio. He started to exercise regularly in his twenties. He started to exercise for a bicycle race and has had experience with stopping and starting again to exercise. At the time of the interview he was retired. He has a family and he has retried from his job as a teacher. Participant B is a woman of 50 years age, who has been physically active for her whole life since childhood, exercising indoors 5 to 7 times a week, she mostly exercise spinning classes, weight lifting, running aerobic. Her exercise goal is to live a healthy lifestyle. She has a family with kids and a fulltime job. Participant C is a woman at the age 30, she is exercising daily during the week, both at an indoor gym she mostly exercise running, swimming and biking and outside (running and cycling). At the time of the interview, she was training for a triathlon. She has extensive experience with exercising both indoors and outdoors. She has no kids, and has a fulltime job, and higher education. Participant D is a woman of 40 years of old, who has also been active for her whole life, with the exception of a year and a half that she did not exercise during her younger days. She is active both inside the gym with aerobics, running and weight

lifting, and outside the gym with skiing in the winter and running in the summer. She has a family, fulltime job and higher education in the health sector. Participant E is a man in the age of 50, who has been regularly active for the past 10 years, while before that he was inactive for many years, now a days he exercise swimming, running, biking and weight lifting. His goal at the time of the interview was to complete a triathlon in the summer. He has a fulltime job, and higher education. Participant F is a man of 37 years old, who is exercising regularly since he was seven years old. At the time of the interview, he exercised 4 to 5 times per week with exercise like biking, running, skiing (in the winter) and weight lifting, for good health, for body shape, and for having the required strength and energy to play with his children. He has a fulltime job and higher education in the fitness sector.

#### **Data Collection**

Qualitative interview was the tool used to collect information about the participants' living worlds, with a deeper focus on the phenomenon of their prolonged indoor exercise experience (Kvale, & Brinkmann, 2009). Creswell (2007) recommends that a researcher should aim to interview five to 25 individuals who have experienced the phenomenon under study. In this study experiences from six individuals were collected via semi-structured indepth interviews.

Following the phenomenological approach the interview guide (see Appendix A) was prepared with open-ended questions geared to elicit information on the phenomenon experienced and the participants' intake of the experience (Creswell, 2007). The focus was on gathering information that would to lead to a textural and a structural description of the prolonged exercise experience of the interviewees, and ultimately provide the researcher with an understanding of common experiences among the participants (Creswell, 2007). The interview guide was developed specifically for the purposes of this study based on the work of Ekkekakis (2009) and Ekkekakis, et al. (2011) as well as on findings of recent research on exercise motives and meaning (Ekkekakis et al., 2013; Segar & Richardson, 2014; Werle, Wansink, & Payne, 2014).

The interview guide was tested with two pilot interviews. The first pilot interview was conducted with a man who had indoor exercise experience. After the first pilot interview, the interview guide structure felt a bit messy. Hence the researcher changed the order of some questions and organized it in three parts. The first part entailed questions on exercise habit, the second on exercise intensity and other elements about their exercise and the last part asked information about the environment where they exercised. In Appendix A all questions asked are presented both in English and in Norwegian language. This made the interview well

ordered. After the second pilot interview few minor changes were made to ensure that all questions were open-ended questions of good quality. The pilot interview experience also helped me as interviewer to learn more about conducting an interview and to feel more confident in myself during the interview.

The interviews were conducted in a conversational style between the researcher and the interviewees, not a fully open conversation but neither one that kept the two parties locked on the interview guide (Kvale, & Brinkmann, 2009). It was important for me to avoid leading the interviewee toward a specific answer. As Kvale and Brinkmann's (2009) argue, knowledge is produced through social interaction, such as the interaction between the interviewer and the interviewee, where the situation requires the interviewer to handle the interpersonal dynamic that takes place. The interview guide helped me as a researcher to seek an understanding and interpretation of what the interviewee said, and in which way it was said. Following Kvale and Brinkmann's (2009) suggestions, I was seeking a descriptive and nuanced description of the phenomenon under study. With Participant A I experienced some difficulties with long-term adherence, as he did not see the whole picture of the exercise situation, the way it was viewed by the other participants who had earlier exercise experiences and long-term exercise adherence without many drop out phases. Sometimes during the interviews I experienced that the interviewees were sharing information that were not very clear, and it was my job to help them clarify their answers for me, also to clarify any conflicting statements they made which might have been due to communication difficulties, or the use of expressions of ambivalence or contradictions (Kvale & Brinkmann, 2009). As a researcher I was aware that these ambiguities could be the interviewee's real reflections of objectives contradictions in the world she or he lived in (Kvale & Brinkmann, 2009). Sometimes different exercise types and times in the life of the interviewee would give different answer; hence during all interviews I clarified the context of the specific experience that was shared. For example, this was the case with participants A, who had experience with dropping out of exercise four times.

Moreover, considering also our individual differences, as the interviewer I showed openness for new and unexpected phenomena in their exercise situation, for example, cases of sickness and health problems with exercise, time, family and goals outside the gym environment (Kvale, & Brinkmann, 2009). I was also critical to my own knowledge, intuitions and hypotheses about what the interviewee was conveying during the interview (Kvale, & Brinkmann, 2009). A qualitative interview can be a learning process where the interviewee changes descriptions and attitudes about the phenomena; during the interview

they can see new aspects they earlier didn't see or thought about. As Kvale and Brinkmann (2009) suggest, an interview should be a learning process for both the interviewer and the interviewee. This was actually the experience for one of participants in this study who thanked me for the interview, saying that she hadn't thought so much about these questions before

I, the researcher, in person, invited the participants to the interview as I was working in the fitness center they were exercising. Prior to inviting them I had secured the approval of the fitness center manager. Following my purposeful participant selection plan, I invited individuals who had the exercise experience I was seeking. I asked them if they would be interested in participating, after I shared with them the topic of the interview. Post this faceto-face invitation; if they expressed an interest to be interviewed, I emailed them the consent form (see Appendix B). Upon signing the consent form and thus agreeing to participate, we found a convenient time for the interview. All interviews were conducted at the gym, which is located in Hedmark County, where they had membership. The interview place was a meeting room usually used by the employers, for which I secured access, availability and privacy from the gym management before each interview. The interview took place in a setting that was quite, where there was no noise that could affect the quality of the record, it was also important to choose a rom where no one could over hear the conversation, so the participant could talk freely (Bryman, 2012). It was also important to choose a rom where the participant feel comfortable in and connection where they would lead to more sharing about the phenomenon (Kvale, &Brinkman, 2009).

During the interview an audio-recorder device was used to record the conversation. Five of the interviews lasted between 30 to 45 minutes, and one lasted 60 minutes. The average time of the interviews was 40 minutes. Upon completing each interview I transcribed it verbatim right away so all information would be fresh, when I could also recall most of the non-verbal communication. The transcriptions yield 41 pages of single-spaced text.

# **Data Analysis**

Thematic analysis according to Braun and Clarke (2006) was used to treat the information gathered with the interviews. With thematic analysis the researcher examined the data to extract core themes that could be distinguished both between and within the transcribed texts (Bryman, 2012). This was suitable for this thesis, looking for themes in those who had experienced long-term adherence in a gym. The researcher followed the steps suggested by Braun and Clarke (2006) for conducting the analysis. These steps are: first the researcher has to familiarizing herself with the data, reading and re-reading the data, noting

down ideas. In the second step the researcher starts generating initial codes like coding interesting features in the data, and setting a coding system across the entire data set. In step three the researcher starts to search for themes; starting to identify potential themes and gathering all data relevant to each theme. In step four the researcher reviews the themes; the researcher is checking if the identified themes work in relation to the coded extracts. In step five the researcher gives names to each theme, and defines them. In step five of the ongoing analysis the researcher refines the specifics about each theme and the overall story that the analysis tells. The last step is to produce the report; in this step the researcher has the opportunities to relate the analysis back to the research question and literature (Braun, & Clarke, 2006).

A theme is a category identified (and organized) by the researcher based on the raw data (Bryman, 2012) that relates to information relevant to the research focus and the research question. According to Brymann (2012), the themes build on codes, which are previously identified in the transcripts and the researcher's notes and provide the researcher with a basis for understanding the data in order then to make a contribution to the literature relating to the research scope of the study. Codes used in thematic analysis can for example be: "representing information that the researcher expects to find before the study, representing surprising information that the researcher did not expect to find, and representing information that is conceptually interesting or unusual to researcher" (Creswell, 2007, p. 153).

The data analysis started after all transcriptions were completed. Initially I started with reading the texts several times to get to know the data well. Creswell (2012) points out that to "analyze qualitative data process the researcher ought to move in analytic circles, rather than use a fixed linear approach" (Creswell, 2007, p. 150). This meant that after getting acquainted with the data while I continued reading I also started to look for repetitions, for topics that recurred again and again (Bryman, 2012). According to Bryman (2012) repetitions in an interview is the most common criterion for identifying a theme. A theme captures something important about the data related to the researcher (Braun & Clarke, 2006). The transcripts where printed out and memos where written in the margins of each page, such as a key concept, similarities and differences (Bryman, 2012; Creswell, 2007). As I continued reading the texts I started to reflect over the written notes and across the participants' answers to see how I would describe and organize the codes I had bracketed in order to establish my themes (Creswell, 2007). It was then that the phase of organizing the codes in content-related themes started and these were reviewed over and over again and discussed extensively and exhaustively with an experienced qualitative researcher.

# Ethical Considerations, Trustworthiness and the Researcher as Instrument

The Data Protection Official for Research of the Norwegian Social Science Data Services (nsd.no) was informed prior to the onset of the study and informed the researcher that the project did not involve notification or concession under the network personal data act §§31 and 31. Each participant prior to the interview was informed about the study (scope, rights and obligations) orally by the researcher and also in written by the consent form.

With regard to the trustworthiness of the study, following Lincoln and Guba's (1985) suggestions the following techniques were used: prolonged engagement of the researcher in the field, triangulation of data analysis, thick description, and a reflective journal was kept by me. These techniques were employed to ensure trustworthiness.

The researcher is a fitness instructor herself for four years and at the time the interviews were conducted she was working in the gym where the interviewees trained. I have been involved in indoor exercise since I was 17 years, and in the later years I have been working as fitness instructor for other people (4years). I have been active in different types of sport like horse riding and diving. I'm a curious person and the time during my education the field of physical activity and inactivity has inspired me to for further research on the topics. This dual experience with indoor training gives me a informed perspective over the phenomenon in this thesis, and also a extra sense of comfort with the people I have been interviewing. During my job I meet different people everyday, and through that I have learned to adapt different people and to make them feel comfortable. During the interview I was critical to my own intuitions, knowledge and hypotheses about the theme. And I had an open mined to what the participant conveyed. I entered the interview with great interest about the participant and their experiences with the phenomenon; this might have increased the possibility for bias.

Furthermore, to take care the method of triangulation the codes, themes and subthemes identified during data analysis were discussed extensively and agreed with another researcher. To satisfy the thick description tool, all the steps taken by the researcher with study design, data collection and analysis have been described in details in this current chapter. Lastly, a reflective journal was kept by my where I noted all thoughts, steps, decisions taken during the study. These techniques can enhance the trust in the process and the product of this study, while it is the reader the one who finally decides how trustworthy a study is (Lincoln & Guba, 1985).

# **CHAPTER 4**

# RESULTS AND DISCUSSION

In this chapter the themes are presented and discussed at the same time, as elements from the findings are linked to and interpreted though the existing literature. The results and discussion are presented here together in order to facilitate the reader in making immediate meaning of each theme and sub-theme and also to place my findings within the context of the literature right away. This way of presenting qualitative findings is commonly done by qualitative researcher and it was recently followed in the study conducted by Pridgeon and Grogan (2012).

During the process of the analysis I identified codes that were classified in five themes, which were labeled as exercise habit, overcoming barriers in daily life to maintain exercise, choosing own exercise, environment and exercise, and affective response. Table 1 presents all themes with their subthemes.

Table 1.

Themes and subthemes identified via the thematic analysis

Themes	Subthemes
1. Exercise habit	i. Reason(s) to exercise
	ii. Impact of earlier exercise experiences
	iii. Earlier negative exercise experiences
	iv. Goal(s) for exercising and impact of the goal(s)
	v. Difficulties with goal(s) and/or lack of goal(s)
2. Overcoming barriers	i. Planning the exercise
<u> </u>	ii. Cooping with fatigue and/or stress
3. Choosing own exercise	i. Exercise intensity: Why this intensity
-	ii. Lactic threshold
4. Environment and exercise	Positive experiences with the exercise environment
	ii. Social impact and exercise
	iii. Negative experiences with and the
	exercise environment
5. Exercise induced affect	i. Affect before and after the exercise
	ii. Intensity and affective response
	iii. Affect and exercise with high intensity
	iv. Positive affect during the exercise.

- v. Focus during high intensity exercise
- vi. Responding to negative affect during the exercise.
- vii. Working out with and instructor and affective response.

#### **Exercise Habit**

Exercise habit entails various elements around the person for choosing an active lifestyle with exercise. It is described here as one's reasons for living a physical active lifestyle and includes subthemes like: reason(s) to exercise, impact of earlier exercise experiences, earlier negative exercise experiences, goal(s) for exercising and impact of the goal(s), difficulties with goal(s) and/or lack of goal(s).

**Reason(s) to exercise.** The subtheme is about the main reason(s) the participants had for exercising systematically indoors; it includes why they think exercise is important for them and what exercise gives them. The participants in this study all emphasized the importance of exercise for them, for various reasons. Here are some examples that portray their reasons for exercising systematically.

Exerciser B talked about exercise as a lifestyle for her, she said in her own words: I have been physically active my whole life, and because of that it is my lifestyle, it's like brushing your teeth, I just do it. I have no specific goal, but in the summer, we are some girls who bike together, and we participate in motivation races.

Exerciser E exercises for the feeling of wellness he gains, for feeling good about and with himself, for the feeling of happiness it gives him.

I exercise for the feeling of wellness, I have it best with myself when I exercise and have a feeling of good shape. I feel that I have a surplus; I feel good about myself that's the main reason for exercise for me. Beside this its like you are setting some goals for yourself, and for achieving these goal you have to push yourself a little more, do something different and do something new. But in everyday life I exercise because of the feeling of happiness and bliss. I also used to participate in motivation races, like the Birkebeiner cycle race, and every year I used to compare the time I did.

On the other hand, Exerciser D shared views that approach her reason for exercising from a different perspective, not what exercise gives her but what lack of exercise gives her and how she developed her exercise habits. She can feel cranky and irritable if she doesn't exercise, it is a big part of her life, and she developed the exercise habits from her family. In her own words:

I like to move my body. I can feel cranky and irritable if I can't be physically active one day, so this is a big part of my life. I'm sure I have it from my family my mother and father are the same as me; they need to move their body. My brothers as well, not necessarily using a gym, but active in different sports or activities. Like I said, a big part of my life is about being active, taking a walk, exercise, I never sit still, I tend always to do something.

Backhouse, Ekkekakis, Biddle, Foskett and William (2007) wrote that affect plays an central role in decision making, and this also holds true for the decision to engage in physical activity; usually people tend to follow behaviour choices that make them feel better. On the other side, people also tend to avoid options that make them feel worst (Ekkekakis et al, 2007). Our participants support this statement. Exerciser D relates to it as she chooses to exercise not avoids immobility in her life while the remaining exercisers (like shown by extracts from B and E) exercise to feel better both physically and psychologically.

**Impact of earlier exercise experiences.** Considering Exerciser D's clear point on how she developed the exercise habit through her family's past experiences, it was reasonable to look at all participants earlier exercise experiences and the impact those had on them for their adherence to exercise. Long-term adherence has been identified as a key factor for prolonged engagement in physical activity (Ekkekakis et al., 2011), and it's therefore interesting what the participant in this study think of their earlier exercise experiences. "Adherence means confirming faithfully to a standard of behaviour that's has been set as part of a negotiated behaviour" (Buckworth, Dishman, O'connor, & Tomprwoski, 2013, p. 35). Furthermore, Pridgeon and Grogan (2012) say that those with a strong exercise habit and adherence tend to feel uncomfortable when not exercising. On one other side Ekkekakis, et al. (2011) pointed out that adherence to exercise may be influenced by affective response and the long-term effects on one's self-esteem, but there can be some genetic differences between people that make some individuals more and other less likely to experiences improved affect and self-esteem. It is possible that this is the case for the participant in this study, as they talk about the importance of a positive affective response that exercise offers them. Moreover, the way they think about their earlier exercise experiences appears to have affected them today, both mentally and physically. Within the data, I identified this subtheme which is about the impact of earlier exercise experiences on the participants and includes statements about what the exercisers think about their earlier experience, what this experiences has given them today, and how it impacts them in the exercise today.

Exerciser B shared that she has all the energy and the guts she needs to do things in her daily life because of the exercise. In her words:

Exercise make a big different in my life! Because people always says to me "I cant understand that you can do so much everyday", I never sit still, and am really effective when I start on something, and that's probably because I exercise that I feel so much surplus that I have. I have the guts if you understand [showing enthusiastically her energy with her hands]. I do stuff home; I clean, and clean clothes and make dinner and yes everything that has to be done in a house with husband and child.

Exerciser C shared that her earlier exercise experiences taught her how good she felt about herself when she exercises: "I'm sure this earlier exercise experiences learned me how good I feel about my self when I exercise. It is nice to train with other people, and that I have from the football." Exerciser D was sure that her exercise foundation was established when she was young, and for that reason she has a good physics today.

I think the earlier experiences had an impact on me today, because my physics are very good to this day, and that's probably because that I always have been active. I see the whole foundation of my physical physic back then, so I think I'm in better physical condition now, than I was back in the earlier days.

Exerciser E said that after being inactive for many years (since he was 12 years old) he will never go back to those days of inactivity and talked about the stress he could feel when he was sleeping back in the old inactive days and the joy he feels now by being active. He has now been exercising on a daily basis for 10 years.

It was a bonus for losing weight and me that I become more fit. I don't feel hysteric about exercise today. I can feel it if I have been unhealthy for a while, I feel that it gives me more motivation to be more active the next week. I don't have any drive to stop with exercise because I will never go back to those days of inactivity. Now it's different, I can go for a run in the dark and the cold, and have a feeling of enjoyment. So the activity has given me so many positive experiences than the boring zapping activity in front of the television [did]. I never wake up during the night and think about my job, like I did before. I feel that the stress can I loose with a run or an exercise session. I feel that I can fix any problem when I exercise, so its so many different ways to use exercise in your everyday life.

Exerciser F was also sure that his earlier exercise experiences helped him know when he can push for more intensity: "I can push my self in higher intensity, because I know where my limit is. I think I can push the limit more and more because of all my exercise experiences."

As the participants shared, their past exercise experiences help explain what exercise gives them today. All the participants think that exercise makes a difference in their lives. Like, Exerciser B who pointed out how much energy she has by exercising and Exerciser D who cannot imagine a life without exercise. Exerciser E told how he will never go back to the days of inactivity; how he broke a habit and re-established a new habit. One of the key barriers in non-adherence is to (re-)establish a new habit (Pridgeon & Grogan, 2011). It seems like the participants in my study have a positive memory concerning their exerciser experiences. Exerciser D said that she built the foundation for her physical condition at an earlier age. This is something Exerciser F also talked about; as he knows for how much intensity he can push for and where is his limit only because of his earlier exercise experiences have an impact on their exercise today, both on how they feel that they can achieve a higher intensity in their exercise, as well as on experiencing the feeling of displeasure when being inactive.

**Earlier negative exercise experiences.** This subtheme revolves on how earlier negative exercise experiences have impact the exercisers in this study, like inactivity, injury or lack of physical activity. Negative past experiences, such as dropping out of exercise, periods of inactivity, and lack of social support, appeared to also have an impact on the exercise adherence of the participants' just like the positive experiences presented above had.

Exerciser A dropped out of exercise four times during his life, and he elaborated extensively on one of the dropouts when he lost interest in exercise. He explained in his own words:

I had three or four times experiences with starting and stopping with exercise. The last experience was when I was working, and then I used a gym near my job. And one day the gym sold out its spinning bikes for 1000 kr, and we who trained together decided to buy some of them. I think I saved 4000 kr in a year by dropping the gym, which was a good idea. But I only used it sometimes at home before it became boring. And after that I become inactive again. After an episode when I experienced that I couldn't go up the stairs from my basement without stopping for breathing I decide to start with exercise again, and now that almost 10 years ago.

Exerciser E has also had experiences with long time of inactivity and talked about how he felt during this period of his life, and how he started again to exercise:

Ten years ago I started again to exercise, after being inactive since I quit as a 12 years old. I started because of health issues, I had a body weight at 110 kg, and my physical

shape was really bad. I remember that I started with walking, and then running and then cycling. Then it become boring to cycle, and I started to run again, and that become boring, so I started to cycle again and that become boring. So I started to lift weights. It was so many years without exercise. I remember the winter as a dark and sad time, it was tiresome, and I had to go out to shovel snow. My only wish was to go away somewhere warmer and sunny. That was the same every winter, during those years of inactivity I felt that my brain worked on another level, I didn't sleep as good as I do now, and that is completely different now.

Exerciser D also talked about her experience with inactivity, she pointed out how her body is made for movement and that she dislikes herself when she has to be inactive. She talked about her brief experience with inactivity at the age of 18 years of old.

I have an experience with inactivity in relation to a surgical procedure, and the same day of my operation I was out of bed. So inactivity doesn't fit me, I'm made to move. I do not thrive if I can't move my body, I am sure it's in the genes. I had a half year of inactivity when I was 18 years old. I used to dance until I become 18, and then I realized that I could never become a professional dancer. Until that day I trained for 4 days a week. I didn't do anything during those six months. It's the worst 6 months of my life; I felt so useless, unpleasant, felt lazy, with little energy, and experienced that my weight increased--which is not funny at that age. I didn't feel good about my self. I don't know why I stopped completely; I couldn't find a replacement for the dancing. I didn't fall for a new activity. Until I started going to the gym after those 6 months; I started lifting weights and after that I started attending some aerobics classes, and this was the closest I come to dancing.

According to Ekkekakis, et al. (2011), it is possible that the exercise inducted increase or decrease in the pleasure a person feels may be influenced by the formation of positive or negative memory traces related to exercise. This memory(ies) consciously or subconsciously may influence a person's subsequent decision to engage in, to adhere to or to drop out from exercise (Ekkekakis et al., 2011). As Exercisers E and D shared about their experiences with inactivity, it established for them a memory of a time with lack of energy surplus, which memory appears to motivate them today for being active in the present time. We may even infer as a possibility that actively exercising today establishes in them a more positive memory than inactivity did in the past, which helps them stay active.

The participants of this study shared about their earlier experiences, Exerciser D talked about feeling "useless, unpleasant, felt lazy, with little energy, and experienced that my

weight increased--which is not funny at that age" during her inactivity experience. It is possible that by the age of 18 a person who exercises systematically like she was has already developed a strong exercise habit (memory of it), and according to Pridgeon and Grogan (2012) people who adhere to exercise tend to feel uncomfortable when not exercising (Pridgeon, &Grogan, 2011). This could be the case also for Exerciser A, who shared less than positive memories of exercise; his memories may consciously or subconsciously have influenced his various past decisions to engage in, to adhere to and to drop out from exercise. He has experienced four-drop outs from systematic physical activity and how he felt during the inactivity periods may have created strong memory traces of feelings that we wishes to avoid thus now he engages systematically with exercise activity. Exerciser E also talked about his long period of inactivity as a life that he does not wish to go back. According to Ekkekakis et al. (2011) previous exercise experiences can affect the decision to engage in or to drop out from exercise It appears that the exercisers in this study look back to their times of inactivity as times of displeasure which they try not to live again. This theme requires more research to enrich the findings of this study and the findings of Ekkekakis' et al. (2011) work; yet interviewing gym dropouts has always been difficult to do as access to people who have left the gym environment is usually not feasible.

Goal(s) for exercising and impact of the goal(s). This subtheme was identified based on what the participants shared about having a goal for their exercise and the importance this goal had for them as well as the motivation it gave them. According to Walsh (2012), there are different types of goals and the goals people set influence their motivation to exercise. For example, difficult, challenging goals require (and can inspire) more motivation than easy goals because they need a higher standard of performance in order to be achieved (Walsh, 2012). According to exerciser A, his goal is to keep his health problems at a level where he doesn't have to use medication for his conditions. This appears to be related for him to a goal for good health, "The goal for my exercise is to keep my life style deceases on a level where I don't have to use medication." He also pointed out that he exercises for loosing weight, and to be in better shape.

The main reason for me for exercising is to have a good health, and good shape, and to stay in physical shape. I feel like I'm on the average now, when I look at others in the gym. I also want to decrease in weight but that is hopeless. The motivation right now for doing exercise is that I can feel that I am in better shape than before (Exerciser A). According to Ekkekakis et al. (2013) using weight loss as the sole criterion for evaluating the effects of exercise, particularly in the presence of cultural influences, causes individuals to

expect unrealistic amounts of weight loss, which often leads to disappointment and drop out. Exerciser's A main goal is related to health and being in good shape and weight loss appears to be a secondary goal. His view that his secondary goal may be "hopeless" could be explained by the Ekkekakis et al. (2013) finding that weight loss as a goal may cause unrealistic expectations, of which this participant seems to be aware.

Exerciser E's goal is to partake in an Ironman event in Barcelona next summer. This appears to be is a high achievement goal and according to Walsh (2012) a goal of this level requires high motivation.

This summer in Barcelona, there are some of us men who have the goal to do a full distance triathlon; this is new for all of us. I have never been running for more than 21 kilometers with my legs, and this summer we are going to run a full marathon (42 kilometers) after we being on the bike for 180 kilometers and the swimming on top of that.

According to Welsh (2012) his high achievement external goal can help him to maintain an external focus and his motivation. Exerciser E also pointed out that he systematically exercises for the good feeling he experiences for himself, which can be linked to the intrinsic motivation that relates to health and fitness goals (Walsh, 2012), as he stated his health-orientated goal for his exercise habit: "I want to generally keep my health and shape good"

Exerciser F talked about his reasons for exercising, which included weight regulation but also living an active life with his kids--to spend time with them outdoor (*Friluftsliv*).

I like to hold my body in a good shape, I use it to control weight regulation, I don't want to increase my weight. And I want a life where I can be active with my kids, be out in the nature with them (*filuftsliv*).

Exerciser F at first sight appears to have external motivation for his exercise. According to Deci and Ryan (1985) there are two types of motivation, intrinsic and external. Intrinsic motivation is internally driven and signifies that the activity is driven by pleasure, while an external force drives external motivation. The external motivation for Exerciser F relates to exercising for something outside of his own activity, like being active with his kids and spending time with them outdoor (*friluftsliv*). Yet, to do so it requires a good physical shape that will allow him to spend time with the kids outdoor, which is then also linked to intrinsic motives for his health and fitness goal (Walsh, 2012). Hence, F appears to be driven to exercise both by extrinsic and intrinsic goals.

Exerciser C elaborated on the importance of having an external goal. She emphasized that for her there is no reason to exercise without having a specific goal for it; she has a high achievement goal, to complete the Ironman within 10 hours.

My goal is to cross the finish line of the Ironman within 10 hours. There is no point for me to exercise if I don't have a goal. The feeling of crossing the finish line of the Ironman, that's the best feeling. I can think of that feeling and think that's why I'm exercise. Even if I can't walk one week after the race, I always remember that feeling in the finish line.

The importance for Exerciser C is to have an external goal that feeds her motivation and her need of achieving for a higher standard of performance, as Walsh (2012) suggested. As this is highly important for her, she appears to be extrinsically motivated, through the external force to achieve her level of readiness for completing the Ironman under 10 hours. Furthermore her other reasons for exercise, to keep her free from injury, to be in better shape and feel energized, "The main reason me for to exercise is to keep me free from injury, and for be better, it gives me energy" suggest that she also has some internal motives for staying active. Nonetheless, both the good health she aspires to maintain and staying injury free indirectly assist her to achieve her Ironman goal, which can be then questioned if these are intrinsic goals or by products of her external focus. This was not discussed during the interviewed, thus will not be interpreted here. Overall, she also appears to have both intrinsic and extrinsic goals/motives, which in her case closely connect with each other (Deci & Ryan, 1995).

A goal that was highly reported and valued by the participants in this study was to be in better physical shape, while some of them also reported of external high achievement goals. The participants fundamentally appear to be intrinsically motivated, as they want to maintain good health, for the feelings that exercise give them, the power and energy it gives them, as well as because they see systematic exercise as their lifestyle. Some of them were both intrinsically and extrinsically motivated in the case they were after a higher achievement goal. Last but not least, Exerciser D (who feels cranky and irritable without exercise) pointed out of another interesting goal of hers, which is exercising in order to avoid negative emotional and cognitive states.

While having a goal can inspire and enhance a person's motivation, certain difficulties can also be faced with goal achievement (Weinberg & Gould, 2015). Exerciser C talked about some difficulties when exercising for a specific goal that aims for achieving a high standard of performance. She talked about the Ironman blues and the loneliness she can feel post pursuing her high standard goal.

The hardest thing with Ironman is the Ironman blues; when you cross the finish line, people cannot stand to exercise for several months, because the next goal is to far away, they don't have a goal, and they can't find a reason for exercise. Because it is a year to the next competition, you exercise a lot before an Ironman, you are alone. No one is waiting for you when you are training alone.

A difficult goal requires a high standard for performance, a lot of exercise, often twice a day. A goal of this level impacts the person's life before, during and after its achievement. She specifically elaborated on the day after the race when the goal does not exist anymore that can often lead to an anti-climax for those with this high standard of goals, because she has achieved her goal setting and has no other goal at that point. Very often athletes have been reported that they formulate a new goal right at the moment they complete or even moments before reaching their existing goal-event (e.g., see the story of Olympic US swimmer Jeff Rousse).

# **Overcoming Barriers**

This theme describes how the participants are overcoming barriers to exercise in their daily lives. To overcome barriers, like limited time for exercising, they plan their exercise while they also have developed ways to cope with barriers like fatigue and/or stress. Pridgeon and Grogan (2012) stated that some of the most commonly reported barriers to physical activity are lack of time, lack of enjoyment, lack of social support and lack of past exercise behavior. Participants talked about how they manage time to exercise in a busy daily life with a house, family, and kid responsibilities.

**Planning the exercise.** Entails how the exercisers are planning the exercise sessions when living a hectic life and how they manage the time for their exercise.

Exerciser B uses the time in between her kids' activities; when she has to drive the kids to activities she finds time for exercising herself. She said:

People laugh of me because of this, but when I drive my child to an activity and you have to drive to town for that activity, then I'm thinking OK, I have one hour to wait on my child, then I use the gym meanwhile. So I use to combine driving [my kids to their activities] and my exercise. I make a plan, maybe it sounds silly. But when I know what I have to do in a day, I also think when can I find time for my exercise? I plan out the day, and if I can't exercise one day, its not a big crises for me, I can do it the next day; since exercise is a lifestyle for me it doesn't stress me up. I feel lucky to have this as a lifestyle, I have the drive and it has become a habit.

It appears that Exerciser B found a way to prioritize exercise as she combines it with the daily activities of a mother, such as driving her kids around. She exercises even though she is busy. But if it is too much stress for her one day, she doesn't stress with the exercise because she knows that the opportunity will come later. She also pointed out how lucky she feels about being capable to exercise systematically while living the busy life of a mother. Similarly, Exerciser F also talked about how important it is that the training schedule is systematic. "To have systematic in the exercise, with planning when to do what, look at the exercise in daily life, and all stuff you have to do in a day. That's importance elements for my exercise." Participants in this study, successfully manage to prioritize their exercise in a busy life with kids, a job and house care. They plan their next exercise and need a detailed schedule for finding the time. For this detailed planning they use one could argue that it improves their daily life quality, as it does not become hectic from all chores that ought to be completed during a day. Pridgeon and Grogan (2012) argued that improving qualities of life positively impacts adherence in people.

**Coping with fatigue and/or stress.** Exerciser F also talked about his experience with fatigue and exercise within his hectic life:

I didn't listen so well to my body before as I do now. If I feel really tired or having a bad day, I just pass the exercise. I probably will dig my self deeper if I exercise when I am tired. Recent years this strategy has worked out really good for me. Before I was thinking more that I should go and exercise anyway. But now it doesn't stress me out if I skip one exercise.

He shares that he learned from his experiences with fatigue and how exercising when he is really tired will only make him more tired. Therefore if he can't make time for exercise one day, it doesn't stress him out in recent days. He uses the exercise to improve his health. Little is known about some individuals that appear to be obsessed and become stressed if they do not manage to exercise as systematically as they wish. On the other hand, also little is known on why some people are adhering to exercise schedule and others drop out; according to Pridgeon and Grogan (2012) self-worth can be a central concept that distinguished the adherence from dropping out. To learn from an experience like Exerciser F has, shows that he takes into account of how he feels, and if he is too tired to exercise he takes his health seriously and does not train for a day. This may reveal a good sense of being in touch with his body and of self-worth for him as he chooses to pace the exercise to maintain his good health and feelings (Pridgeon, & Grogan, 2012).

# **Choosing own Exercise**

This theme elaborates on elements around the person's competencies and the act of choosing the intensity of exercise. It is described here in terms of one's competence on regulating exercise intensity and includes subthemes like: preference over exercise intensity, competence on knowing about lactic threshold.

Exercise intensity: Why this intensity? The subtheme revolves on how the participants think and what they know about the intensity in their exercise. It also considers whether they use external monitoring for controlling intensity. According to Deci and Ryan (1985) a person needs to feel competent on the situation he/she will participate in, like an activity. When the individual feels competent in the situation (here it is the exercise situation), it will improve the intensity of effort that is exerted in the situation (Deci & Ryan, 1985).

Here are some examples that portray the participants' competent thinking and knowledge about intensity of exercise.

In my case is it the biking and the spinning that has increased my health and shape. And that is hard exercise. I think some high intensity exercise sometimes can be good for me, but not every time, for me its three times a week. I got some help last year to verify my maximum heart rate, so I can use my heart rate monitor to see which intensity I am in. And after I did that, the exercise is so much heavier than before. (Exerciser A)

Exerciser B shared that sometimes she can feel a kind of social pressure to exercise in high intensity. However, her own experiences from high intensity exercise is that "too much" may lead to stagnation in progress. She said in her own words:

Sometimes I feel that I should exercise on a hard intensity, it's like you feel it's a competition on how hard you can push yourself. Living up to those expectations is not always easy. If I push my body to hard in every exercise, the progress will come to a stop. And then I need to lower my intensity. During the week I think about what I will train, and how I will train. Not only activities that require high intensity but vary with weight lifting, and aerobic.

My focus isn't on exercise principles and stuff, but I use a heart rate monitor to control my intensity on the bike, and to be in the intensity-zone the instructor says. Sometimes when I plan attending spinning classes several times a week I say to myself; Okay! Today I will only be in zone 2 or 3, and then the next spinning class be in a higher intensity. I only use this on cycle and sometimes when I run. In aerobic and weight

lifting I feel that it doesn't mean so much. In some of the classes in the studio I can feel that the lactic acid comes rather quick, so there I don't need anything to control my intensity. I also feel that I don't have the same power as I did when I was younger, with jumping and stuff, and up and down from the floor, and running to a point and turn back.

Exerciser B also uses a heart rate monitor when she runs and rides a bike for controlling her intensity zone. She appears to be knowledgeable about heart rate levels and competent in regulating her own exercise. She knows how much intensity in her exercise she can manage and adapts the exercise schedule when she feels tired. Like when she attends a spinning class she can adjust her intensity level according to how her body feels. It is reasonable that this competence gives her advantages when managing her everyday exercises and following the Deci and Ryan's (1985) position it improves her effort and consequently her motivation.

Exerciser D shared that she requires high intensity exercise of herself and that she needs to feel tired after exercising in order for her to get her feeling of exercising effectively. She also shared that she has sufficient knowledge about her exercise situation and how her body reacts to the exercises.

If I have not trained hard, I feel that it isn't exercise. Exercise should be hard and intensive. If I have done Pilates I don't feel the same like after a set of high intensity exercise, I think exercise should be hard and intensive to be effective, is probably something in contrast for those who never push themselves out of their comfort zone. To get results from your exercise you need to train outside your comfort zone, unless you only want to maintain your shape. In the context with all the people who are inactive in our society today, I could lower the threshold for my exercise, I think I exercise too much and to heavy sometimes. But it's hard to turn it around. And it doesn't escalate; It doesn't feel like am pushing and pushing myself, because it always comes to a point where I think how unpleasant can I actually feel [talking about hard intensity exercise]. I control my intensity after how I feel that day. I rarely monitor my heartbeat. When I do cross-country skiing I control my intensity by measuring how fast I am skiing. On a good day I try to see if I can do a better time than a previous exercise session. I used to control my pulse before, but for me that wasn't the right thing to do. Because one day I could of natural reasons have higher pulse, like if you are stressed out. And then if you are training in different pulse zones it becomes wrong. If you think of running and skiing, first person to the finish line is the winner. In those cases I don't care how high my pulse are, but it matters how fast you can run

a kilometer. What determines the intensity in races is how fast you went. Running and cross-country skiing are the only two activities where I control my intensity. In other activities it's the daily fitness that controls the intensity.

Ekkekakis et al., (2009) revealed evidence that indicates that most individuals have a poor ability to estimate their heart rate and therefore reproducing a certain level of exercise intensity. Exerciser D talks about this, that she don't use a heart rate monitor when she exercise, she believes that this will not give her any advantages. Instead she emphasized that measuring her "running a kilometer or cross-country skiing for kilometers" give her a more meaningful feedback.

Exerciser E also uses a heart rate monitor for controlling the intensity in his exercise. The purpose of this is to gain maximum benefit from the efforts he puts in to the exercise. He said in his own words:

I exercise 8 hours a week; I can't push my self to maximum every time I exercise. I have a colleague who exercises two times a week, and he is really pushing himself hard, and gets good result from that. But, he gets a good rest between those exercises. I have learned through the years to control my intensity. So I don't need to train hard, I can train in low intensity--I feel good about that. I use the Olympiatoppen [Olympic Training Center of Norway] intensity scale with heartbeat zones. I use that every time I exercise. Because I know that when I am running as far I am going to do this summer, and cycle and swim for 10-13 hours I need to control my intensity. Through this winter my focus has been on very low intensity exercise. High intensity exercise is not concerning me right now [February]. I have much more focus on low intensity, around 82-87% of max heartbeats per minute. I am very conscious on this. And if I have a shorter exercise with high intensity it is very short, only 20 minutes. This is something I have learned in context with setting goals, so you can control your peak performance. I have learned it through reading books and experiencing it, so I know how it works. Before a competition, when you rest you get so much more energy.

He appears to diversify his exercise and points out the importance of low intensity exercise in the overall picture. This is similar to what Exerciser F is doing who use a heart rate monitor when he exercises. Exerciser F talked about the need for high intensity exercise for improving his fitness:

If you want to be in a better shape you need to push yourself in higher intensity. But if you think about health generally and are in a good shape, you don't need to push yourself all the time, it can be better with slower and longer exercise time. I use a

combination of both; low and high intensity works fine for me. I often exercise in a high intensity; I feel that my shape is lifted to a higher level when I push my self. For me that is a natural part of the exercise, to feel really tired after an exercise. But also exercise in low intensity, over time and with a combination of high and low intensity is the best, but like everything else it needs to be customized. I use Olympiatoppen intensity zones in running, bike and spinning. I use it very conscious. In high intensity exercise I 'm in zone four and five with 85-87% of max heartbeat and up to 90-95% of max heartbeat. In the low intensity exercises my heart rate level is around 70-75% of max heartbeat. Usually my intensity level is fairly high, even if I planned on a lower intensity workout.

Exerciser F also appears to have knowledge on his exercise; he exercises often in high intensity because he feels that his body needs the high intensity to get in a better shape. Some exercise paradigms emphasize the concept of prescribed "target" range of exercise intensity, with the emphasis of the intensity reproducing a view that if the intensity is too low, it will not be effective (Ekkekakis et al., 2009). Some practitioners believe that peak performance only comes as a result of high intensity exercise. In addition, this trend of higher intensity workout may lead to further perceived pressure to exercise in a higher intensity. This is something both Exercisers B and D pointed out, who have a lot of experience in exercising, and they have a bigger chance of avoiding these pitfalls, like exercising too hard. The use of "target" range exercise intensity, can lead to a need of monitoring intensity, e.g., a heart rate monitor. With use of the external monitoring it can help the exerciser when exercising in intensity that is both effective and safe, like Exercisers B, F and E use. Furthermore Exercisers B, E and F also talked about the need for low intensity exercise, which is supported by the literature. The intensity depends on the health or fitness outcomes of the individual, not all outcomes need high intensity, in some cases high intensity exercise can be ineffective or detrimental (Ekkekakis et al., 2009). Exerciser D talked about how the heart rate monitoring isn't right for her and she controls her intensity with how much time she used on a kilometer. Ekkekakis et al., (2009) point out that use of external monitoring can lead to lack of perceived control and result in less positive affective experiences, which then may decrease one's motivation.

Lactic threshold. This subtheme is about how the participants think of and their knowledge on their own lactic threshold; it also entails some experience with testing their lactic threshold. The subtheme elaborates only on the participants' competence on lactic

threshold as the affective responses are discussed later under the theme of high intensity exercise and affective response.

Exerciser A talked of high intensity exercise and that he needs a long time for getting his heart rate to higher levels. He said:

I need a very long time for getting my heart rate level to a high level. I try to keep intensity below lactic threshold, when I have a heartbeat on 80-83 % of max then I feel some sort of pain in my legs. When I'm on 90% max pulse I have no more to give, it hurts too much.

At an intensity of 80-82 % of max he can feel the lactic in his leg and with an intensity of 90% of his maximum heartbeat he has no more to give. In high intensities (highest work effort where VO<sup>2</sup> and blood lactate can be maintained at a steady state) the exercise can be maintained for extended time as Exerciser A shared; he can feel it in his legs, during high intensity exercise (Ekkekakis 2003). However in high intensity exercise, the exercise from critical power to VO<sup>2</sup> max, the exercise cannot be maintained for extended time. Like Exerciser A, who has no more to give when exercising with a 90% heart rate.

Exerciser B uses a heart rate monitor for verifying that she actually controls her lactic threshold, as she can feel it when she exercise above it, "I feel when I'm on my lactic threshold. Visually, I verify this by using my heart rate monitor". Exerciser D talked about her knowledge on lactic threshold and that she doesn't need external monitoring for controlling it; she can feel it.

I know my body so well, so I know when I'm on my lactate threshold and how much lactic I can handle. I know exactly when I'm on my threshold. I have also tested it in a lab, and the test results came out just as expected. Running requires more than aerobic for me, I can be higher in intensity (heart rate) in aerobic than running (however, with less lactic acid.). When I am training hard on a bike I can feel the lactic acid almost before I have started, that's because I don't cycle that much. It's in the aerobic that I can be on the highest intensity over time according to my threshold, if I should take base from my max heartbeat in running, I have higher max heartbeat on aerobic. And that because I use so much more of my body in aerobic than running, I use my arms more.

Exerciser D stands out from rest of the participants in this study with the no use of external monitoring that she reported for controlling her intensity in exerciser, unless she is skiing and running (where she compares her time accomplished in one kilometer). She talked about how knowledgeable she is about her lactic threshold and that she has an understanding for her

lactic threshold in several exercise situations. Running requires more from her than aerobic and cycling; her experience is that she accumulates lactic acid quickly. Like mentioned above, the test result from her lactic threshold confirmed her feeling. Like Exerciser D, Exerciser F also talked about how he can feel the lactic threshold and that he has also tested his lactic threshold on a bike.

I have tested my lactic threshold, so I know when I exceed my threshold. That test was on a bike. I have not been tested when running. But I can feel when I am over the lactic threshold, because I have been exercising a lot with a heart rate monitor and under different intensities. This gives me a good feeling on the intensity level and lactic threshold. When running, my experience is that the threshold is exceeded when I get a certain feeling in my legs. I believe that I can determine my threshold without a heart rate monitor.

Similarly he points out the feeling he gets in his muscles, indicating his knowledge about his lactic threshold. As it was mentioned under the theme of exerciser intensity, he uses a heart rate monitoring for controlling his intensity. In these findings Exerciser D stands out, with no use of external monitoring for controlling exercise above or below the lactic threshold. According to Deci & Ryan (1995) it is reasonable to think that the competence on their lactic threshold can give to the participants more room for effort and enhance their motivation during the exercise, because they know how much lactic they can push.

#### **Environment and exercise.**

Environment(s) entails various elements about the participants' exercise setting. It is inclusive of subthemes like: social impact on the exercise, positive experiences with the environment and negative experiences with the exercise environment. According to the hedonic principle it is reasonable to look at the gym and how the environment affects people with long-time exercise adherence. In SDT the basic needs are competence, relatedness and autonomy, and the environment and the social impact of the environment affect those people who exercise at the gym (Walsh, 2012).

**Positive experiences with the exercise environment.** The subtheme is about how the participants think of the gym exercise environment in a positive way. Exerciser B said, "You get really spoiled of being here. It's so nice to exercise here". The positive talk about the exercise environment was a theme the participant had thought about. Exerciser C shared that:

I think the environment has a lot to say on how the exercise is experienced. You have to work out in an environment where you feel well, if I feel indisposed when I run on the treadmill the exercise is not so good. You have to train some place where you feel wellness!

She pointed out that she has to exercise at an environment that makes her feel well. This can be related to the hedonic principals according to whom it is more reasonable that people will repeat experiences that is pleasant (Walsh, 2012; Ekkekakis et al., 2009; Ekkekakis et al., 2013).

Exerciser D pointed out the importance of mirrors to help her with the exercise; she also talks about how she can be motivated by other exercisers in the gym:

I think mirrors affect me, because I use them to check my technique, and I think other people use them to look at them self. I think all people do so. I get motivated to look other people who train and look good, and if they are doing some new exercises. Those inspire me. If people train in a tank top and are muscular I feel more motivated to train more. It is every people who use the gym who make it good to be here. I think most of the people who work out in the gym are thinking about them self. That the atmosphere is good is important.

This is exactly the opposite finding of non-adherence of overweight people in the study of Prichard and Tiggeman (2005), who said that the fitness center environment contains a large number of clearly objectify features like; multiple full length mirrors, the direct opportunity for direct comparison with other women and men, scanty aerobic clothing and the presence of men observing women exercising. According to Exerciser D she gets more motivated to exercise when she observes people who are good-looking and others inspire her when they perform unknown exercises for her. It can be reasonable to look at the mastery feeling of those with long-term adherence, compared with non-adhering people, maybe because of the positive earlier exercise experiences they have learned how to master the social pressure in the gym and accept their exercise shape. Like exerciser D points out, she thinks that most of the people in the gym are thinking about themselves, which says something about her level of self-awareness and self-worth, and according to Pridgeon and Grogan (2012) self-worth can be a central concept for exercise adherence.

Exerciser E thrives so well in the exerciser environment that he pays two memberships, one in a gym he uses for swimming, and one membership in the gym he uses for other types of exercise. He said:

I absolutely believe that the environment affect my exercise, in according to feel satisfaction where you are. When you come here its so big and nice. In addition I am a member at another gym who has a swimming pool; I could use the gym where the

swimming pool is, but I choose not to. It is not the same atmosphere; I pay for satisfaction. I hear many people that are saying the same about this place, the people are nice, and the opportunities are endless. But in these days I focus on my goal.

Like Exerciser C and D, Exerciser E also pointed out the importance of feeling satisfaction where you are; and this is so important for him that although he could cut in half his monthly expenses for exercising he chooses not to. Like Exerciser D, Exerciser F also talked about how he gets inspired by other people in the gym. He tells with own words:

I'm not affected in a negatively way in the gym. I exercise out from own wishes and needs, I know what I will exercise that day. But I can feel impressed of what other people achieve in the studio, which work really hard and have a good technique. That gives me inspiration.

It is reasonable to consider here linking long-term adherence with earlier exercise experiences and competence on their own exercise; like Exerciser F pointed out, who exercises out of his own wish and needs to know what he will do that day, to know this is requires knowledge about exercise. Researchers have found that time spent at an exercise facility is positively related to self-objectification and that people exercise for weight-loss, body tuning and attractiveness rather than health (Ekkekakis et al., 2013). This is the opposite from the findings in the long-term adherence and the environment in this study. The participants in this study highlight the importance of exercising in an environment in which they thrive. Further its difficult to talk about the environment and omit the social interaction in the exercise environment. Like Exercisers D and F pointed out that, they have the ability to get inspired by people who are looking better and exercise in ways not yet known by them.

**Social impact and exercise.** The subtheme was identified based on how the exercisers think about the social environment, and includes social interactions in the exercise situation. In this subtheme the exercisers talk more about the social interactions in the exercise environment.

Exerciser B talked about the good cohesion in the exercise group when she is exercising with her friends:

When I exercise with the other girls in spinning classes we are sitting next to each other and I feel we have a good cohesion, we talk and laugh and it feels social. I feel the same on the running-class as well.

Exerciser F talked about how he always meets with people he knows in the exercise situation, and about the joy he experiences within the exercise group:

I'm sure the environment affect my exercise, and the people in the gym. People who spread joy in the group you are with. And when I am in the gym I always meet people I know, who I talk to, or maybe exercise beside with.

Both Exercisers (B and F) highlighted the importance of the social environment and how it makes them thrive when exercising. According to SDT, the feeling of relatedness is one of the basic needs a person has and it is reasonable to say that the social interactions in a gym can influence in a positive or negative way in a positive exercise environment (Deci &Ryan, 1985).

**Negative experiences and the exercise environment.** This subtheme entails negative aspects of the exercise environment. One of the long-term adherence participants in this study stands out with negative experiences within the exercise environment. Exerciser C has been exercising for a long time, however she still feels the social pressure for higher intensity when she exercises at a gym. She said:

I often feel that I can get higher intensity in an exercise situation when I feel that I has the best shape in the group. However If my intensity is to low in relations to others I get more irritated than performing better. And if I feel we are on the same exercise level, that's the best, then I feel I can get in high intensity. I don't like to feel that I'm the last one or the worst, and often tend to give up then. It's irritating to be the slowest one, but when I exercise in the studio or in aerobic I don't mind it. And if you look around others don't always push them self to the maximum either.

Exerciser C feels that she has to increase her intensity in a situation where she exercises with others. This finding is supported by Ekkekakis et al., (2009), who stated that when others observe individuals, they show a tendency to race their intensity. This is because of the perceived pressure from the social environment. Furthermore in this line of thinking, Exerciser C likes to stand in a corner in the gym when she exercises.

When I run on the treadmill I like to place me alone in the corner of the studio, with no one behind me. If I have someone behind me I can get the feeling of standing in the middle of the room running, and that people are stare at me. I don't like it when people stare. I will concentrate on what I do, and other people should do the same.

Exerciser C talked about a situation that many people can recognize when they feel that other people are staring at them; they believe that people have an opinion about them and this gives them a feeling of displeasure. "The displeasure associate with the perceived critical gaze of others appears to be more personal significant than the pain or discomfort associated with the exercise itself" (Ekkekakis et al., 2013, p. 27). There is no reason to believe that Exerciser C

feels the perceived critical gaze from other so unpleasantly that she will quit with indoor exercise, as she has found a solution for it and herself by choosing to exercise in a corner with no one behind her. One could consider here that her reasons for exercise and her approach to it are stronger indicators for her adherence than the social pressure she experiences.

### **Exercise Induced Affect**

The theme exercise inducted affects entails the affective responses relating to exercise that were experienced by the participant. It is organized with subthemes like: affect before and after exercise, intensity and affect, exercising with high intensity (lactic threshold), positive affective response during the exercise and experiences with an instructor and affective response to that. According to the theory of psychological hedonism it is assumed that the decision to engage in or disengage from exercise depends not only on the rational cognitive appraisal of information but also, to a large extent, on the affective experiences of the person, such as pleasure versus displeasure (Ekkekakis et al., 2013).

Affect before and after the exercise. This subtheme is about what the participants feel before and after the exercise. This subtheme is considered key for answering the research question of this study. According to the theory of hedonism it is equally important what long-term adherence contributes to feelings around the exercise.

Exerciser C mainly experiences a feeling of pleasure before exercise: "For the most part I feel pleasure in front of an exercise, I am looking forward to get started. But sometimes I also feel tired. It depends on what I will exercise that day". Exerciser B talked about the stress she can feel before an exercise, stress that relates to lack of time and her hectic life style.

If I have been exercising for several days in a row, and I feel tired I just postpone the planned exercise to the next day. That's no a crises for me. I don't feel bad if I don't go one day, because I know new opportunities will come tomorrow. So when its hectic with all I have to do at home or work, and you feel that the clock is deciding what you will do to get a spinning class or a class with aerobic, I think in those cases when its stressful, I could say to my self: okay, you have to skip that class, then I can train by my self in the studio, because there your don't have to think about the time.

During the interview she concluded with a solution for her problem on the lack of time. She shared that she can be better off by exercising in the studio by herself.

Exerciser E also talked about a pleasant feeling before the exercise, he mostly feels joy, and pointed out that he exercises for what he wants and what he feels by exercise "I feel joy and pleasure most of the time before an exercise." Exerciser F said that he has been

experiencing a range of feelings before exercise; he also talked about how he uses exercise to disassociate himself from the stressful job. He said:

I can feel every thing from tired, angry, sad, and happy and sometimes I feel like I don't have the energy to go on an exercise, and other times I cannot wait to go. Often I feel a kind of surplus during the exercise. For the most part I am happy to go exercising, to let go of all the stress, and just go for an run, that feel amazing, its like my way to meditate. In context to a stressful job and a buzzy day it's a good way to disconnect.

Exerciser D shared that she gets motivated to go exercise, and for the feeling after she is done. She said that she always has positive emotions after exercise:

It does vary what I feel in front of an exercise, sometimes I am very exited to go out and exercise. So I will say that the feeling I get after an exercise is a factor of motivation to go for an exercise. I always feel good after an exercise. Sometimes I only want to lay on the couch and rest, but I know that after an exercise I get so much more energy and feel happy. I can get up from bed 0800 am in the weekend for a run, and after I know the day will be good, I have so much more energy instead of stay in bed to 10.00 am. That's the feeling that motivates me the most before an exercise, the feeling I know I get after. I am not always running to an exercise full of joy, it isn't always funny. Except those times I will get out on skiing- then I always feel joy. It pleases me, because it is a good way to exercise. I think it's much harder to motivate before a run, because then you need to push yourself every step.

The exercisers in this study appear to relate their choice to exercise with a belief about a positive affective impact it has for them. Considering Walsh's (2012) work in interpreting this finding, this belief can serve as motivation for their exercise. According to the interviewed exercisers, all of them felt positively before going for they also mentioned an exercise while an after positive affect. Exerciser D pointed out how she gets motivated to exercise because of the feeling she gets when she done. She knows her day will be better and she will feel happy after the exercise. Exercisers D and E talked about how much better they feel after exercising and that this state of emotions motivates them in the occasions they feel tired before the exercise. However, we also need to emphasize Exerciser E's point of view, who pointed out how he uses the exercise for disconnecting from his work, plus how he feels amazing when he exercises. Exercise has been extensively reported in the literature as a stress buffer (Biddle & Mutrie. 2008; Weinberg & Gould. 2010)

**Intensity and affective response.** This subtheme is about the importance that affective responses have for the exercisers. In this subtheme the exercisers talk about their affective response to exercise, which seems to be important for them. The hedonic theory provides support when the exercisers here talk about the affective response and exercise.

Exerciser A said "I feel more positive about exercise than negatively, if it only had a negative impact on me, I wouldn't do it." Even Exerciser C who is exercising with an external goal she pointed out that,

I exercise because of the feeling of joy. If every exercise had some sort of negativity to it, then I wouldn't have been exercising. It has to be fun! I can also feel really tired, almost like fatigue, but I exerciser anyway or take a day off.

Also Exerciser E pointed out that the affective response is very important for him as it determines his exercise intensity for the day and he makes necessary changes in his exercise in the case the intensity does not feel okay.

The affective response is important for me, how I feel and my mood affects me in on a large scale. If I don't want to do high-intensity exercise one day, I don't do it. Then I make a change in my exercise.

Exerciser F shared that "The affective response is important for me". Ekkekakis et al., (2009) suggest that self-selected intensity is regulated on the basis of affective response, like Exerciser E pointed out who makes changes according to the affective response he experiences during exercise. Both Exercisers A and C pointed out that the experienced affective response is important and emphasized the joy they feel with exercising. If exercise had a negatively affect instead of a positive one, they wouldn't exercise.

Affect and exercising with high intensity. Describes how the exercisers feel in high intensity exercise and when exercising above the lactic threshold. I take here in consideration that the affective response of pleasure/displeasure acts as a major determinant for people's behavior choices, and one's physiological threshold is the "turning" point of pleasure, when pleasure decreases and displeasure increases beyond that point during the exercise (Ekkekakis et al., 2009). The turning point is exactly what the exercisers talked about when they reach their lactic threshold during exercise.

Exerciser A talked about the pain he feels when the intensity gets to high. It's my legs that stop me in high intensity exercise, its painful with all the lactic acid. So I have started to lower the intensity during the exercise, and after a while increasing intensity again. I cannot keep a high intensity over a long time, therefore I increase the intensity level slowly; I have to use a long time before I reach 90 % of max heartbeat.

Exerciser B also emphasized that it is unpleasant with high intensity exercise but on the other hand she can see the benefits from her exercise, and she is absolutely sure that she needs to reach a certain level of intensity to have progress:

I really have to work my self to keep a high intensity exercise. It's hard. Like when I performed running-intervals yesterday, and you push yourself up in high intensity, I felt during the one minute pause that I was really nauseous, so I think its like that, it has be unpleasant if I will get a better oxygen capacity.

Exerciser C said it clearly that high intensity exercise should be painful, "High intensity exercise should be painful, before it gets better, it's a time effective way of exercising". Exerciser C also pointed out how time-effective this kind of exercise is.

Exerciser D talked about not being so good at pushing herself in high intensity but sometimes she can manage to do it.

I do not have the capability to push my self very much. When I get over the lactic threshold, like when I do aerobic or step, or if I go for a ski race or running races. The only thing I can do then is to do it! I have to finish! I'm stubborn, and because of that I can push myself and finish. And because of my experience in exercising I know the pain will not last forever, during a certain point the pain will leave and my body will get rid of the lactic. I'm sure of that. If I just go a little bit more it will be easier, it work like that almost every time. And that feeling can give me motivation to maintain hard exercise.

It appears to be hard for exerciser D to push herself up in high intensity, like she says the unpleasant feeling will not last forever, and the only thing she has to do when the lactic acid is too high is to keep moving, because she knows from her exercise experiences that her body will get rid of the lactic. And this also motivates her to continue. This is something Exerciser E also talked about, who needs this high intensity exercise to get in better shape; it is painful but like Exerciser C pointed out it feels so for a relative short time. He said:

When I have decided to attend a spinning class or go for a run with high intensity I know it's going to be painful. To gain a higher level of fitness you have to deal with the pain. It has to be painful I guess, especially if you want to get in a better shape. And then its over, the pain is soon forgotten and the well-being takes over. Its like an exercise that to, for me I have to do on intervals or in a motivation race or run. Those years I got the best times on Birkebeiner race, where those years I participant often on motivation races.

Exercising for the purpose of increasing a critical power or VO<sup>2</sup> max, is a relative time effective type of exercising and all of the exercisers in this study mentioned it (Ekkekakis, 2003). Like Exerciser D, Exerciser E also talked about how fast the pain deteriorates but he also pointed out how painful high intensity exercise can be. There is low individual variability when it comes to the negative affective response to high intensity exercise (Ekkekakis, 2003). It seems like the exerciser can see the benefits from high intensity exercise and all of them have pointed out the need for high intensity exercise for getting themselves in better shape. Like Exerciser E said, in the previous years when he exercised a lot in high intensity, he also had the best results in motivation races. Exerciser F also said it clear: "It's really unpleasant to exercise in high intensity. It's painful". With this statements it's clear that individuals with long-term adherence also think high intensity exerciser is painful, but unlike people with less experiences it is reasonable that they can see the benefits from the high intensity exercise.

**Positive affect during the exercise.** Entails when the experience of a positive affective response is experienced during the exercise. According to Ekkekakis (2003) when exercising in moderate intensity below and up to ventilator threshold the affective response is positive with low level of variability among individuals. This positive affective response was experienced and elaborated by Exercisers B and D. Exerciser B told the interviewer:

When I go for an easy run I can think of my family, plan what we are going to do that day, that's a good feeling. After I have been on Zumba I feel great and after a yoga exercise I feel like sleepy and relaxed.

She shared how good she feels when she is exercising without any pressure, how great she feels after a dancing class or how sleepy and relaxed she gets with doing yoga. Exerciser D has become more aware of the pleasure she experiences in the recent years. As she said in her own words:

I think that this "pleasure-thing" has something to do with age; in recent years I have focused more on exercising with a higher degree of pleasure. Some years ago I hated training like Pilates- I found it boring and a waste of time, but now I can feel that my body need it. After a session with Pilates I feel wellness. I feel relaxed especially when I use my breathing as well. In those classes I never push my self to the limit, I feel that I'm in a good zone then, and my body feel great after. So for me, adding elements of pleasure in my exercise regime is correlated with my age.

Like Exerciser B, Exerciser D also talked about how good she feels when there is no pressure in her exercise. She also shared how she hated Pilates before, she thought it was boring. However now she feels wellness and relaxed after a Pilates' class. These findings support the

work of Ekkekakis (2003) who stated that exercise that is done below the ventilator threshold is mostly characterized by positive feelings.

Focus during high intensity exercise. The subtheme is about how the participants work with their mindset during high intensity exercise. According to Ekkekakis (2003) high intensity exercise gives displeasure in affective response. The participant in this thesis talked about how they have worked with their mindsets during high intensity exercise. This subtheme is important to show how long-term adherence works on the individual's focus during high intensity exercise. Exerciser A said, "I try to focus on that I will make this!! When I have taking a decision on making it, I just bite me teeth together and try to hold out". He told me about how he talks to himself that he will make it and that he just holds on. Exerciser B said more about how she pep-talks herself and also uses the clock to monitor how much time she has left. She said:

When I use a pulse clock I really have to work with my self to keep the intensity high during the exercise. I say to my self: You have to keep on working, get the pulse up. And I think I will just stand in it for one minute longer, I try to keep a rhythm in what I do, and I always watch the clock, to see how long time I have left in the high intensity zone, but I try not to. The seconds are very long when you are in a high intensity zone, really long, 15 second feel like two minutes.

She also shared how she use the rhythm in the music to motivate herself more in the exercise, she talks to herself that she has to keep on working, and how slow the seconds are going when the exercise is really unpleasant. This is something Exerciser C also talked about, how time seems to slow down.

When I'm on the bike I often look at the clock to see how much time is left, and the time is moving very slow, I can't understand its possible that time can go so slowly. I think the mental picture means everything for my high intensity exercise. I have to keep the focus on something else during the exercise. I focus on how happy I will be when its over, and I did work my self through the pain. The few times I am not capable of pushing my self through the pre-determined exercise I get upset with my self.

She shared how she has to keep her focus on something outside of the exercise [see Weinberg and Gould (2015) for the mental technique of cognitive disassociation during stressful experiences]; she usually keeps her focus on how happy she will feel when her exercise is done, and that she manages to work with herself through the pain. However, she is affected in a negative way if she does not manage to finish her high intensity exercise.

Exerciser D talked about what she is thinking of during exercise "I know it will pass!" Like exerciser B, Exerciser F also uses the rhythm in the music to keep his intensity up. He said with own words:

When I exercise in really high intensity over the lactic threshold I try to have the focus on the music, then I need music with a good drive and intensity, that gives me a rhythm I can follow, and it gives me motivation to perform. I use music above lactic threshold exercises. And I try to mentally prepare my self on the exercise that is ahead, I say things like; that it will end soon and that it does not take that much time. I just have a little left, I can do it, I know I can do it, I have done it before. I know how it feels if I just push a little more, and that you make a decision before you go on the exercise, like; today I will give all I have. I can also see the benefits from what I do to day during the exercise, and how that impacts my exercise, and that motivates me.

He told of how he talks with himself before the exercise, that he has done this exercise before, and he knows he can do it, he can also see the benefits he will get after the exercise, and that gives him motivation.

All the exercisers have some thoughts about how they manage to exercise in high intensity; all of them talked with themselves (use of self-talk), channel their focus as it suits them either inwards or outwards and motivated themselves to keep on moving when the exercise is really unpleasant. Like Exerciser F said that he can see the benefits from the efforts he puts into it. Walsh (2012) stated that people choose to exercise because they believe in its positive impact, and this belief serves their motivation, which view was shared by all participants in the present study.

**Responding to negative affect during exercise.** This subtheme is about how the exercisers respond to any negative effective experiences they have during their high intensity exercise. It is about how they make changes to make the exercise more pleasant during the time they do it.

The participant talked about how they make changes and how they select their preferred intensity during exercise. Exerciser E talked about how he makes changes during the exercise to make the exercise better for him. He said:

If I feel much pain during an exercise, I make some changes. It does not matter what I had planned in advance, I change it to something different. Like taking a long and slow running instead of a short one with higher intensity. I feel when there is no point for pushing my self too much; I can do it the next day. So if I suddenly don't feel for

doing something I change. I always do the best for my body; I can go for a long time as long as its funny and my body plays along.

He pointed out how he always does the best for his body, and he can change the intensity according to how he feels that day. He shared that he can exercise for a long time, as long it is fun for him and his body is feeling OK. Exerciser F shared of similar experiences with intensity selection in order to make the exercise more pleasant for himself. He said:

If it doesn't feel all right I make some change during the exercise. Before such an adjustment made me feel that I had lost or something. For example if I had a plan for going on a high intensity exercise, and my body didn't work as I had planned, that felt like a defeat. But now when it doesn't work it don't work, and its feel good to could make those change in the exercise. And when the body work its give me so much more. It's the mastery feeling of the exercise I do that really gives me the good feeling. That gives me boost, when I feel that I have a better shape than the day before.

Exerciser F makes changes during the exercise but interestingly when he did this at an earlier age he was experiencing this as a defeat. It is reasonable to say that Exerciser F has learned from his experiences with fatigue (see theme overcoming barriers) and that possible his self-worth at this later stage of life is not linearly related to the type of exercise he uses for the day. He also told about how great it feels when his body gains better shape and the mastery feeling that exercise gives him.

According to the hedonic principles it's important to learn about what the exerciser does when the exercise gets too unpleasant. The core postulate of the theory is that, throughout the years of our existence pleasure evolved to signify utility and displeasure evolved to signify danger, and people have a strong inherent propensity to seek out and repeat pleasant experiences and to avoid displeasing ones (Ekkekakis et al., 2013). Furthermore, Ekkekakis et al. (2009) points out that if people derive displeasure, discomfort and pain or a sense of exhaustion, the chances for them to repeat the activity or adhere to it over a long time would be diminishing. If participants perceive that they have a choice in determining the attributes of their exercise program, this is an element that has been associated with better attendance (Ekkekakis et al., 2009). It includes the self-selection of intensity. If the intensity is self determined it gives more pleasant experiences, and it is followed by that the participant has the freedom to regulate ones intensity (Ekkekasis et al., 2009). It is reasonable to say that Exercisers E and F get more pleasant exercise experiences with self-selection of intensity. It also shows that they have the freedom to regulate their intensity. Furthermore these findings have derived from long-term adherence exercisers with a lot of experiences, and it is

reasonable to say that exercisers with less exercise experiences would have difficulties choosing exercise intensity.

Working out with an instructor and affective response. This theme emerged from the participants shared words on how they respond to exercising with an instructor and their affective responses to this experience. It also touches on the act of self-selected exercise intensity. Self-selection of intensity during exercise, is driven by the desire to maintain a steady and positive affective state, and on the other side avoiding a decline in the positively and affective state (Ekkekakis et al., 2009). A possible reason for self-selected intensity is that it creates a sense of autonomy and control, it allows the exercisers to cognitive reframe the experiences of the exerciser like "this is something I choose to do" instead of "this is something I must do" (Ekkekakis et al., 2011, p 41). When an instructor or a personal trainer controls the intensity in the exercise, it can affect the exercise in a way that the exerciser loses the perceived control of the exercise situation, and therefore it may decrease one's positive affective response (Ekkekakis et al., 2009). Furthermore, in an exercise situation the exercise can be affected by the perceived social pressure, so one's intensity level can be imposed not only by the instructor but also by the social environment, because of the self-presentation concern (Ekkekakis et al., 2009). The exercisers told about their experiences with an instructor.

## Exerciser B said:

It depends on what kind of exercise I attend. Like on the running exercise the reason I give so much is because of the instructor. I push my self more when some one is pushing me. I feel I can get in a higher intensity with an instructor than when I exercise alone.

She can get at a higher intensity when someone is pushing her. Exerciser C talked about how she feels good when someone controls her exercise, because she knows that the trainer has the competence to make her better and she thrust the trainer.

I have always used a trainer who had told me what to do. Sometimes it feels good to avoid to think about that. I just do it. When someone is training me I trust that they know what I should do. If you can follow that intensity the trainer or instructor tells you to follow its feels good. Sometimes in spinning it can be stressful to push your pulse up and down all the time, because you get told to do something that's hard for you to do.

She pointed out that if she can hold the intensity, the instructor tells her to operate in, she can feel it that it is stressful to push her heartbeat up and down all the time, and she get stressed

because someone is telling her to do something that hard for her to do. Exerciser D talked about how she gets highly motivated by the instructor and that she always gives everything when she attends exercise classes with an instructor.

I get highly motivated with an exercise instructor. I reach my full potential; I hadn't pushed my self so much alone. It is because of them who are in front of me I can give more in the exercise. If I have a bad day I give even more with an exercise instructor, I try my best and give my best.

She pointed out that she even gives more with an instructor on a bad day. Exerciser E shared that he can push himself at a higher intensity with an instructor in a spinning class. But when he runs with other people he is scared that he slows the exercise down, so then he pushes himself at a higher intensity. Generally he pushes himself more when he exercises with other people.

With an instructor I reach a higher level of intensity in my exercise. I see many who push them self to the limit during a spinning class. When I am running intervals it is different for me, if I run with someone I'm scared to feel like am slowing the pace, then I can push myself a little more. So I believe that I push my self more with other people than if I'm exercising alone. But on a treadmill, I'm not sure, you can probably out-run me there.

Exerciser E pushes himself in higher intensity when he is exercising in a group and especially when he is running with others. He said that he push himself because he is scared to be the slowest one in the group. It seems that the perceived social pressure in the group affects him. Exerciser F talked about how he gets inspired by others during exercise. He shared:

Because of the other participants in a training group I can achieve higher intensity. The instructor who pushes me also inspires me. You don't want to be the person who holds back, I want to be the person who gives everything. I'm sure it gives me more to exercise with an instructor. But when I feel during the exercise that the body isn't working, that I having a bad day, then it doesn't help if the instructor push me, then I get more demotivated, because I don't have the power anyway. Then I fall in intensity and just keep the intensity low for the remaining part of the exercise. Its possible we are different in that way. If I'm fit for fight, then I give what I have.

He also talked about the perceived social pressure to a higher intensity when in a group, and his is positive that exercising with an instructor contributes to higher quality. However, when he has a bad day, the instructor demotivates him and he completes his exercise at his own intensity.

The findings in this theme indicate significant differences between the participants' affective responses when exercising with a trainer/instructor; some of them feel that they can get a higher intensity in their exercise with an instructor and some of them feel displeasure when another person controls their exercise intensity. Moreover, some also perceive social pressure to increase their intensity. Like Exerciser F, who changes the intensity if it doesn't feel right and just completes the exercise in a self-selected intensity, to make the exercise more pleasant for him self. Findings like the abovementioned have been previously reported about long-term adherence exercisers (Ekkekakis et al., 2009; 2013), and it is reasonable to think that people with less autonomy, less exercise experiences and knowledge about exercise are not able to do these kind of adaptations during the exercise. For those who feel more of displeasure when someone controls their intensity; it is possible that individual differences exist in how people affectively respond to working with an instructor, which probably depends on their earlier experiences, their exercise goals and motivation (Ekkekakis et al., 2009) as well as perceived social pressure (Ekkekakis et al., 2013) and even self-worth (Pridgeon & Grogan 2012).

#### **CHAPTER 5**

## **CONCLUSION**

This study aimed to provide an answer to the research question "What motivates and gives meaning (is pleasure something meaningful) to Norwegian people who maintain for a long time a regular indoor exercise regime?" Six individuals who had long-term exercise adherence experiences, among other things offered me insights to their reasons for exercising systematically, their feelings of pleasure and displeasure. Overall, it appears that earlier positive exercise experiences and an early onset with exercise (like at an early age) have a key role in maintaining long-term adherence. Likewise, does a person's knowledge about exercise and awareness of his/her body and how it responds to exercise. Five out of six participants highlighted the important of pleasure during exercise. To experience pleasure, the participants regulate their exercise through self-selection of intensity according to how they feel. However, during moments of displeasure they use various techniques to work through these, like self-talk and disassociation, selective focus on pleasurable thoughts or on what the end result of the work out will be. To this last technique, the use of goals adds immensely and appears to be popular among the participants; some preferred high achievement goals and other work with health related goals; but all of them had a goal to chase. Last but not least the environment they worked in also had a positive impact in keeping them happy.

Considering the theory of psychological hedonism which assumes that the decision to engage in or disengage from exercise depends not only on the rational cognitive appraisal of information but also, to a large extent, on the affective experiences of the person, such as pleasure versus displeasure (Ekkekakis et al., 2013); the shared experiences of affect exeprienced by participants in this study attest to it. Feeling pleasure appeared to be an important element for the six Norwegians interviewed in this study who were working out for prolonged time indoors. Much attention has been given to this day about the experience of pleasure and satisfaction from outdoor experiences in Norway and this study offers some evidence about the pleasure felt by individuals who work out indoors. Of course the qualitative nature of the study presents a limitation in order for a generalization to be made and larger studies are necessary to further explore the experience and impact of pleasure among Norwegian gym exercisers.

Moreover, one also needs to consider here the three SDT needs of autonomy, relatedness and competence, which also appeared to be taken care by the participants in this

study who had ways to satisfy each one that is of importance to them. For example, their autonomy is enhanced through heightened body awareness and the competence to choose and modify exercise intensity according to what the body tells them for the day. Their competence is supported by the increased knowledge they appear to have on exercise intensity and how their body responds on exercise, and different kind of exercise for example different competence on their body in different activities like for example running, and biking. Lastly their relatedness is satisfied by the positive experiences in the exercise environment, like the social impact on the exercise, further it's appears that their relatedness in the activity also is important for the participant.

Nonetheless, one needs also to consider some possible limitations that derive from the findings of this study before making any suggestions for practitioners in the gym fitness field. For instance, for less experienced (novice) exercisers it may be difficult to know their body and how it reacts to exercise. For this reason I ought to highlight the importance of helping novice exercisers to learn how to monitor their bodies and eventually be in position to self-select their intensity, which will empower their autonomy. Closely related to this is that clients will also benefit from some help from the instructor in setting health and fitness goals that will help them adhere to exercise for long time (Walsh, 2012). Of course here one ought to always consider individual differences as some people function better with high achievement goals (i.e., ego oriented than mastery goals, see Roberts, 2012 for a review).

The experiences shared in this study also touch on the social interaction between exercisers, which may lead to some perceived social pressure for higher intensity, and consequently to the use of external monitoring aid to control intensity. The social environment in a gym includes people with all kinds of exercise experiences; from those with no experiences all the way to athletes. According to the participants here, the environment, affects them mostly in a positive way, but sometimes they also feel pressure to increase the intensity in the exercise. It is possible that new clients or clients that are not adhering to exercise are the ones who are the most affected by social interactions in this type of environment "as the displeasure associated with the perceived critical gaze of others appears to be more significant than the pain or discomfort associated with the exercise" (Ekkekakis et al., 2013, p. 27). Practitioners need to listen to the clients and find a solution within the exercise environment that suits the client, like one of the participants here who chose to exercise in the far corner of the gym.

The participants here highlighted the importance for experiencing positive affective response in relation to exercise, and so does the recent literature based on the theory of

psychological hedonism by Ekkekakis and colleagues (2013). Practitioners should try to make exercise as fun as possible for their clients, but most importantly help them identify pleasure in the act and habit of exercising. According to Ekkekakis et al., (2013) they can find pleasure in exercising they increase their chances to keep exercising. When it comes to exercise intensity, as it usually takes time to see any benefits from high intensity exercise, practitioners should carefully decide to choose high intensity, especially at the onset of an exercise program. And if they still choose to work with their clients at high intensity exercise, they should explain the benefits from this type of exercise to the clients in order for them to start developing some level of understanding that can lead to knowledge about exercise, self- or device aided-monitoring competencies of their bodily and affective responses to it.

Practitioners need also to take in consideration how their clients think when working out with high intensity, and whether they have the cognitive skills to sustain effort under pain. The practitioner can also help them to focus on what motivates the individual and/or on what sustains his/her effort through the use of mental skills such as goals, self-talk, disassociation, etc. Eventually and as experience with exercise increases, it is also reasonable to expect that the individual will learn what intensity exercise (high or low) fits the person and provides the desired benefit for their fitness level. The practitioners ought to support and empower the clients to learn to choose own intensity as well as to modify it according to the person's plans, needs, affect and sensations for the day. Nonetheless, a new exerciser ought to be informed that it takes time and practice to develop the experiences and knowledge about what is right. Overall the findings in this thesis emphasize the principles of hedonism, where clients should exercise at an intensity that produces a positive affect response.

Overall, while it is difficult to generalize to the greater Norwegian population based on interviews from six exercisers the findings give us some ideas (i) for practitioners in fitness training (as it was reported above in this chapter), (ii) for practitioners in exercise psychology (iii) for public health offices, and (iv) for future research. Concerning the exercise psychology practice, as pointed out by the participants and discussed here the use of mental skills for sustaining effort during exercise but also dealing with stress, fatigue and pain are areas that exercise psychologists can help exercises. From a public health perspective in Norway, it is clear patterns that the extent and frequency of Norwegians who are involved with exercise and physical activity is a larger among people with high income and high education (Meld.st. 26). Nonetheless, the recommendation for physical activity levels provided by the Norwegian government is clear and people need to get more physical active. It is reasonable that people come with different perspectives into this physical challenge, yet we, fitness practitioner,

ought to help people find pleasure in the act of exercise in order to achieve exercise adherence. I quote here the famous Norwegian psychiatrist, writer and researcher Finn Skårderud: "In these days we live in a culture where intensity and cultural chaos thrive. Cultures like these have a tendency to translate the body into a sort of language, because the body is not something abstract and we can relate to the body in a meaningful way. Today the body is far too meaningful to state who we are. What shape and defines us as human beings is narrower than ever before, and many of us fall outside the standardized frame. It has become two-dimensional; either are you fit and slim, or not. Many of the things that are meant to be positive related to our body disappear, felling like pleasure, playfulness and sensuousness. The modern way of interpreting the body is now about concern rather than hedonism".

# Limitations of the Study and Future Research

A number of limitations have already been reported throughout this study, moreover, the limited background of information about each participant here was necessity in order to protect the participant's anonymity and personal data. Because of the time limitation of the thesis it has urgent me to move forward with the data collection while I still was learning and developed my skills as a researcher. Last but not least, while I have tried to provide as much detail as possible regarding the conception of the research question, the method used to collect and analyze the data it may still be difficult for other researchers to produce the same data, because of my knowledge and experience in the gym as an exerciser myself and as a fitness instructor which definitely provided me with biases that I tried to set aside when working on this study.

Future research should take in consideration individuals who drop out, as the 45% estimate of dropouts from exercise (Ekkekakis et al., 2013) is a number that necessitates consideration and explanation through research evidence. Further researcher should take in consideration: social interactions in the gym, pleasure/displeasure for non-adherence, exercise and social class in Norway, and self-acceptance of body image and exercise as well as monitoring exercise for the non-athlete individual. There appears to be an increasing need for future research on pleasure/displeasure that people feel when engaged in indoor exercise.

# **CHAPTER 6**

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## **APPENDICES**

## APPENDIX A: INTERVIEW GUIDE—ENGLISH/NORWEGIAN VERSION

#### Introduction

Hi, thank you for your time and for coming to the interview. The present study is designed to explore what keeps some individuals exercise systematically for a long time. All the personal information you will share with me today will be treated confidentially. The interwiev today with your permission will be recorded and then transcribed in order to be analyzed. When the is completed the recorded conversation will be erased. The data will be anonymous, and referenced as interview Participant A, B, C etc.

It is voluntary to participate in the project, and you can at any time choose to withdraw from the study without stating any reason. If you decide to withdraw, please contact me and all your personal data will be deleted.

The question focus on three different elements first is about your exercise habits, the second is about your exercise intensity and your affective response and the last element is on the environment around your indoor exercise. I estimate that it will take us between 45minutes to 1 hour.

OK let's start!

### **Part 1: Exercise Habits**

- When did you start exercising systematically?
- Når startet du å trene regelmessig?
- What was your reason for starting to exercise back then?
- Hva var årsaken for at du valgte å starte med treningen da?
- How often are you exercising these days?
- Hvor regelmessig trener du nå Om dagen?
- What's the main reason for you to exercise today?
- Hva er hovedgrunner for at du trener I dag?
- Do you have any specific goal for your exercise? (Weight loss, performance etc.).
- Har du et spesifikt mål med treningen?
- Did you enjoy exercise when you where younger, like for example handball, football, gym, other activites.

- O How do you think these early experiences impact your exercise today? Drev du med aktitivtet når du var yngre? Tror du disse tidligere erfaringene påvirker treningen din pr dags dato?
- Have you experienced starting and stopping with exercise, will you share this experiences with me, how did this impact you? (Why did you stop? Why did you start again?)Har du noen erfaringer med å slutte og deretter starte igjen med treningen, vil du dele de erfaringene med meg?
- Do you feel that you have autonomy in you exercise? (This means that you are in control of your exercise and have a feeling of own it).
- Har du en følelse av autonomi I treningen din? (Autonomi menes at du føler at du eier treningen).
- There is a common belief that exercise is or should be extremely prolonged and intense to be truly effective, what do you think about this?
- Det er en forestilling om at treningen skal være veldig hard og intens for å være effektiv, har du tanker om dette utsagnet?
- how do you feel before exercising?
- . Hva føler du før du skal dra å trene?
- How do you feel after your exercise?
- Hva føler du etter en treningsøkt?
- Does exercise make you feel better in some ways?
  - o What ways do you feel any difference, can you describe these to me please?
  - o Gjør treningen at du føler deg bedre på noen måte?
  - O Hvordan føler du at treningen gjør en forskjell.

# Part 2: Intensity and more

I would like now to ask you some questions on the intensity and other elements of your exercise

- You may have heard or read that there are different ways to exercise, and people are exercising in different intensities. Will you share with me how you exercise, and how you use intensity in your exercise, in what way?
- Du har kanskje hørt om eller lest at det er forskjellige måter å trene på, noen mennesker trener etter forskjellige intensiteter for å oppnå best treningsresultat. Vil du dele med meg hvordan du legger opp treningen din, og om du legger opp treningen din etter intensiteter?
- How do you select intensity?

- Hvordan velger du intensitet?
- Are you familiar with the recommendation from the Norges Helsedirektorat?
  - o Do you use this recommendation in your exercise?
  - o Er du kjent med anbefallingene fra Helsedirektoratet?
  - o Bruker du disse I treningen din?
  - \* The Olympiatoppen regulate the training with five different zone, many people use this to regulate their exercise, are you familiar with the intensity zone from the Olympiatoppen.
    - o Do you use this intensity zone in your exercise?
- In which way are your feelings important for you when you are exercising? For example some people report feeling displeasure, pleasure, tension, relaxation, energy or tiredness, enjoyment, fun during exercise? What do you feel and are these feeling important to you? In what way?
- Er følelsene dine viktig for deg når du trener? For eksempel noen mennesker rapporterer følelse av ubehag, behag, uro, avslappende, energy, trøtthet, morsomt, glede.
- Can you think and share with me if you are feeling any pleasure during your exercise?
- Vil du dele med meg noen av følelsene du opplever under treningen?
- Do you know when you surpass the treasure for lactate? How do you know?
- Kjenner du selv når du trener over terskel? hvordan vet du hva din terskel er?
- Can you please describe How do you push yourself over the lactat treasure?
- Hvordan jobber du med deg selv for å komme over terskel?
- Would you like to share with me what you focus on when the exercise is unpleasant? How long can you exercise when you feel displeasure?
- Vil du dele med meg hva du fokuserer på når treningen er ubehagelig? Hvor lenge Kan du trene med dette ubehaget?
- How important is the feeling of pleasure for your exercise?
- Hvor viktig er følelsen av behag I treningen din?
  - Do you find it enjoyable, fun? Or in the other side, feelings of fatigue, anxiety,
     pain. Can you talk to me about these feelings?
  - o Vil du snake med meg om disse følelsene?
- Have you ever considering how you can make your exercise more pleasant?
- Har du tenkt på hvordan du kan gjøre treningen din mer behagelig?

#### Part 3: Exercise environment

Now I would also like to ask you abut the Environment where you exercise:

- Do you think the environment where you exercise influences your exercise?
  - Can you share with me how the environment impacts your exercise?
  - <sup>o</sup> Tror du at omgivelsene I treningsstudio påvirker treningen din?
  - Vil du dele med meg hvordan dette påvirker deg?
- If you are with an exercise trainer, do you feel more pressure to exercise in higher intensity? How does the trainer make you feel when he/she pushes you into higher intensity (for example in spinning classes or running on a treadmill)?
- Hvis du er med I en gruppetime, eller trener med en personlig trener. Føler du da at du oppnår høyere intensitet? Hvordan påvirker treneren deg når han/hun presser deg opp I intensitet?
- When someone controls your exercise like a trainer for example, do you feel this gives you more of good feelings? Like enjoyment, fun, happiness, energy. Why do you think this is the case? Or why not?
- Når du trener med en trener som kontrollerer treningen din, føler du da større eller mindre grad av gode følelser?

## **Closing**

Thank you so much for the time, if you have question after the interview about the findings you can contact me. The thesis will be finished in May 2015.

Have a good day, and thank you again.

## APPENDIX B1: CONSENT FORM--ENGLISH VERSION

# Request for Participation in Research Project

"What Keeps One Training: Motives and Meaning for Long-term Indoor Exercisers"

# **Background and Purpose**

I, Mari M. Nordby am a student in Public Health Sciences at Hedmark University College, Department of sport & physical education. As a part in a master study the student is required to write a master thesis in research and development work aimed public health. The study is about: What motivates and gives meaning (is pleasure something meaningful) to Norwegian people who maintain for a long time a regular indoor exercise regime? Purposive sampling will be used. Healthy exercisers who are systematically working out in a fitness center environment at Hedmark County for at least 3 years (2-3 times per week) will be invited to participate. Gender of the exercisers will be taken in consideration to ensure that both men's and women's experiences will be explored. Middle-aged people will be approached as existing research suggests a decline in participation for this age group.

# What does participation in the project imply?

The present study is designed to explore what keeps some individuals exercise systematically for a long time and whether pleasure has a meaning for them who are exercising indoors. Data will be collected through interview about exercise, intensity, pleasure/displeasure and the environment in the gym.

## What will happen to the information about you?

All personal data will be treated confidentially. Under the interwiev the data will be recorded, and after the interview the data will be analyzed. When this is done the recorded conversation will be erased. The data will be anonymous, and further it will be used referenced to interview object A, B, C etc.

The mission will remain anonymous and can in no way be directed back to the center's clients. Neither customer, managers' names will be recognized for the sake of privacy. The project is scheduled for completion by 26.05.2015

## Voluntary participation

It is voluntary to participate in the project, and you can at any time choose to withdraw your consent without stating any reason. If you decide to withdraw, all your personal data will be made anonymous

If you would like to participate or if you have any questions concerning the project, please contact studeent Mari M. Nordby, phonenumber 47320671 or supervisor Stiliani Chroni, phonenumber 62430121.

The study has been notified to the Data Protection Official for Research, Norwegian Social Science Data Services.

# Consent for participation in the study

I have received information about the project and am willing to participate
(Signed by participant, date)