

Co-workership: development of an assessment tool

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Abstract

Purpose – The purpose of this study was to develop an easy-to-use, theoretically well-founded and psychometrically sound assessment tool of the concept co-workership.

Design/methodology/approach – Firstly, inductively generated examples of favourable and unfavourable co-worker behaviours were collected, clustered and then expressed as frequency-based Likert-type scale items. Data were obtained from 825 Swedish white collar workers and military personnel. A factor analysis (principal axis factoring with oblique rotation) resulted in a seven-factor solution built up by 30 items and forming the instrument Co-Worker Questionnaire (Co-Worker Q).

Findings – The factors have a strong resemblance to the content of dominating models of leadership, followership, organizational citizenship behaviour and leader–member exchange. The factor scales had relatively high reliability (high Cronbach's alpha coefficients and low standard errors of measurement). Regarding discriminability, women scored more favourably on five of the factors, men on one factor and age differences were noted on two factors.

Research limitations/implications – Shortcomings include the lack of data on possibly related aspects including person factors, such as personality and socio-economic status, and contextual factors such as more detailed data on the type of work environment and organizational culture.

Practical implications – The instrument has an easy-to-use format and can be used in organization development interventions with a co-workership focus and in individualized coaching or mentoring programmes.

Originality/value – The co-workership concept has so far mainly been used in the Nordic countries. The development of the Co-Worker Q opens up for broader applications.

Keywords Co-workership, Co-Worker Questionnaire (Co-Worker Q), Instrument development, Measurement, Psychometric properties

Paper type Research paper



Introduction

Co-workership has been claimed to be a Nordic concept (Kilhammar, 2011). According to Andersson *et al.* (2020), the concept co-workership (*medarbetarskap* in Swedish) exists only in the Danish, Norwegian and Swedish languages (slightly differently spelled in Danish and Norwegian). These countries, including Finland and Iceland, deviate from most other in the World Value Study by exhibiting a higher degree of postmodern values (Inglehart, 2015). Employees also have a relatively strong position based on labour law and influential trade unions. These countries also have a longstanding tradition of labour-management cooperation and attempts to make the role of employees more active and responsible (Andersson and Tengblad, 2007). Co-workership has been defined as follows by Hällsten and Tengblad (2006): “How employed personnel handle their relationship with their employer, their colleagues and their own work” (p. 10, our translation).

Hällsten and Tengblad (2006) have furthered the model building of co-workership and introduced the so called “co-workership wheel”. Their model suggests a developmental process as follows: Trust and transparency leads to cohesion and collaboration. This, in turn, leads to increased commitment and a sense of meaningfulness, which contribute to increased responsibility and a higher propensity to take initiatives. This, in turn, fosters greater trust and transparency around the wheel.

Closely related concepts to co-workership are participation (Bergman and Klefsjö, 2012) and empowerment (Wilkinson, 1998). A necessary condition for co-workership, participation and empowerment to work is that the organizational management provides opportunities and make it easier for all to be active and committed co-workers (Bergman and Klefsjö, 2012).

Favourable organizational conditions, however, appear to be insufficient. An active co-workership also demands that the co-workers develop their self-trust, communication skills and goal consciousness. Thus, co-workership, participation and empowerment are claimed to require commitment and personal responsibility (Bertlett, 2011; Norberg, 2019; Tengblad *et al.*, 2007).

Research on co-workership outside the Nordic countries is still sparse. However, some related concepts have received considerable attention. In particular, followership (Carsten *et al.*, 2010; Sy, 2010), organizational citizenship behaviour (Chiaburu *et al.*, 2022; Moorman, 1991; Organ, 1997; Wagner and Rush, 2000) and leader–member exchange (Graen and Uhl-Bien, 1995; Yu *et al.*, 2018) are relevant. From a Nordic perspective, our experience is that the term “followership” raises negative associations of hierarchical distance and obedience. The term “organizational citizenship behaviour” has no corresponding word in the Scandinavian languages. It has a “softer” connotation and according to Smith *et al.* (1983), altruism is a key component of the concept. Organizational citizenship behaviour can include all actions considered to be above and beyond an employee’s formal requirements and can be directed at other individuals or directed at the organization (Chiaburu *et al.*, 2022). The leader–member exchange theory states that “effective leadership processes occur when leaders and followers are able to develop mature relationships (partnerships)” (Graen and Uhl-Bien, 1995, p. 225).

The core of the concepts followership, organizational citizenship behaviour and leader–member exchange appears to be various aspects of psychological maturity and psychosocial interaction (Bertlett and Arvidsson, 2009). However, looking at the reported content of these three concepts, the differences in relation to existing descriptions of co-workership, appear to be small. Thus, common themes include responsibility, commitment, communication skills, a positive attitude, loyalty, support of the leader and integrity (Baker, 2007; Carsten *et al.*, 2010; Chiaburu *et al.*, 2022; Danielsson, 2013; Gustafsson and Jansson, 2006; Hällsten and Tengblad, 2006; Ifreya *et al.*, 2006; Kilhammar, 2011; Organ, 1997; Van Dyne *et al.*, 1994). For a detailed discussion of similarities and differences between these and other concepts, see Andersson and Tengblad (2007).

A different approach takes leadership models as point of departure. An example is presented by [Shondrick and Lord \(2010\)](#) who relate implicit leadership theories to implicit followership theories. These authors claim that this approach facilitates the understanding of the follower's role due to possible generalizations from the extensive available leadership research.

The present study draws on both of the above-mentioned approaches. Item construction started in the co-worker domain by gathering a number of spontaneous associations to this concept (see Method below for details). The process was followed by relating obtained responses to the developmental leadership model ([Larsson et al., 2003, 2018](#)). This model in turn, could be summarized as a Scandinavian-adapted version of the transformational leadership model ([Bass and Riggio, 2006](#)), possibly the most researched leadership model so far.

The Nordic character of the co-workership concept implies that scales designed to measure followership, organizational citizenship behaviour and leader-member exchange may have limited value for use in the Northern European countries. An exception is the Work-Oriented Relationships and Knowledge-Based Investigation Questionnaire (Work-IQ) developed by [Bertlett and Arvidsson \(2009\)](#). However, its relationship to the research traditions mentioned above is unclear, it is not internationally published and it is rather long (56 items). Thus, we identified a need for a shorter, theoretically well-founded and psychometrically sound assessment tool.

Given the pragmatic standpoint that increased awareness of good co-workership and use of such behaviours is favourable for the individuals involved, as well as their organizations, we predict an increasing demand for time and cost-efficient co-workership-oriented interventions. Drawing on experiences in leadership development interventions where questionnaires are frequently used ([Day et al., 2014](#)), we assume that such instruments could also be valuable in co-workership enhancing efforts. The aim of the study was to develop an easy-to-use, theoretically well-founded and psychometrically sound assessment tool of co-workership. Psychometric properties were restricted to include the dimensionality of the questionnaire, the reliability of dimension indices and the scales capacity to discriminate between subgroups, gender and age in this case.

Method

Participants and procedure

The study population consisted of employees at the school-, social welfare- and technical support departments of two medium-sized Swedish municipalities and military and civilian personnel from one regiment in the Swedish Armed Forces. During September 2019 through May 2020, they were invited to participate in a half-day workshop on active co-workership. The workshop built on the themes used in a preliminary questionnaire (see below).

As part of the preparation for the workshop, all employees at the departments in question were invited by colleagues at the respective HR departments to respond to the preliminary questionnaire digitally (self-rating). Thus, the study group could be described as a convenience sample. The completion of the questionnaire was voluntary and anonymous and 825 responses were obtained. We have no exact data on the response rate, but it is estimated that about 75% of all potential participants attended the staff meetings. According to our colleagues who led the questionnaire administration, all or almost all session attendees had responded. Information from the HR departments indicates that the vast majority of the respondents had an academic degree (e.g. engineers, military officers, social welfare officers and teachers). The only collected background data were sex and age. The demographics of the total study group ($N = 825$) are shown in [Table 1](#).

Table 1 shows that the study group is dominated by women and most are between 30 and 50 years old.

Measures

The Co-Worker Questionnaire. The preliminary questionnaire consisted of 31 items. Originally, it included 61 items which were developed in an earlier pilot study where participants (10 military officers and 10 research colleagues) were asked to give free-text examples of favourable and unfavourable co-workership behaviours. Similar kinds of responses were qualitatively clustered according to Miles and Huberman (1984) and 31 behaviourally anchored items remained. All items were positively worded and expressed as behaviours and a nine-point Likert-type frequency-of-behaviour scale was used ranging from 1 (*never or almost never*) to 9 (*always or almost always*).

Statistics

A factor analysis (principal factoring with oblique rotation) was performed on the 31 items questionnaire. Oblique rotation was chosen because, from a theoretical perspective, we expected people to rate a vast array of co-workership behaviours which could be assumed to be interrelated. Factor scale scores were computed by adding the raw scores of the items belonging to a scale and dividing this sum by the number of items. Descriptive statistics for the factor scales and bivariate correlations were computed. Comparisons between subgroups (gender and age) were performed using *t*-tests and one-way analysis of variance. Statistical significance was assumed at $p < 0.05$.

Ethics

The study was designed and carried out in accordance with ethical principles of human research (Swedish Research Council Vetenskapsrådet, 2002), i.e. the principles of respect for autonomy, beneficence, nonmaleficence and justice, and approved by the Advisory Board of the Leadership Discipline at the Swedish Defence University.

Results

Dimensionality of the Co-Worker Questionnaire

Factor analysis and factor reliability. Seven factors with eigenvalues greater than 1.0 were extracted. One item was deleted because of marginal factor loadings. All remaining items but three had factor loadings of 0.40 or higher in a given factor and all but one had loadings below 0.30 on all other factors. The seven factors accounted for 57.4% of total variance. The Kaiser–Meyer–Olkin (KMO) verified the sampling adequacy for the analysis: KMO = 0.92 (values in the 90s are described as “superb” by Field, 2013, p. 877). The result is shown in Table 2.

Age group	Men (<i>n</i> = 243) (%)	Women (<i>n</i> = 581) (%)	Total (<i>n</i> = 824) (%)
29 years or younger	16	12	14
30–50 years	52	48	49
51 years or older	32	40	37

Note: ^aOne individual in the total study group of 825 did not report gender

Table 1.
Description of the
study group^a

Items	Am involved and take responsibility	Show individualized consideration	Support the boss	Confront constructively	Inspire creativity	Show a positive approach	Handle stress well
I take part in discussions on the development of the working group	-0.80	-0.04	0.01	0.04	0.06	-0.01	-0.05
I contribute so the work group achieves its goals	-0.74	-0.05	0.03	0.01	0.06	-0.09	0.06
I contribute to discussions on the values of the work group	-0.73	-0.02	-0.14	0.09	0.01	-0.03	-0.08
I discuss what values are important before making decisions	-0.65	0.08	-0.18	0.04	0.04	0.05	-0.06
I discuss with others involved how a job task shall be carried out	-0.58	0.07	0.10	-0.01	0.05	-0.03	0.09
I accept responsibility for ensuring that started tasks are completed	-0.31	0.13	-0.25	0.06	-0.29	-0.07	0.09
I am well prepared when a job task shall be carried out	-0.30	0.15	-0.16	-0.01	-0.22	-0.04	0.12
I give others constructive feedback	0.02	0.61	-0.07	0.18	0.12	0.12	0.03
I mention it when someone has done something good	0.00	0.59	-0.08	0.03	0.04	-0.11	-0.07
I make others feel important	-0.02	0.57	-0.06	-0.05	0.15	-0.20	-0.04
I take time to listen	-0.15	0.49	0.07	-0.02	-0.15	-0.11	0.13
I contribute actively to the creating of good decisions	-0.15	0.03	-0.65	0.06	0.12	0.10	0.09
I contribute to the execution of decisions made	-0.18	-0.05	-0.63	0.09	-0.08	-0.01	0.08
I make it easier for my boss to do a good job	0.06	0.11	-0.61	-0.03	0.09	-0.16	0.07
I support and encourage my boss	0.09	0.14	-0.50	0.07	0.05	-0.23	0.01
I dare to speak up at meetings when I have a deviant opinion	-0.02	-0.14	-0.03	0.83	-0.01	-0.07	0.01
I express my views openly	0.02	0.02	0.09	0.77	-0.04	-0.07	0.02
I bring up sensitive issues	0.01	0.02	-0.04	0.76	0.04	0.06	0.05
I bring up conflicts at work	-0.02	0.11	-0.03	0.71	0.02	0.08	-0.05
I inspire others to think along new lines	-0.15	0.10	-0.12	0.16	0.56	-0.01	0.09

(continued)

Table 2.
The Co-Worker
Questionnaire (CWQ) –
factors, items and
factor loadings

Table 2.

Items	Am involved and take responsibility	Show individualized consideration	Support the boss	Confront constructively	Inspire creativity	Show a positive approach	Handle stress well
I inspire others to reconsider old routines and work procedures	-0.23	0.02	-0.15	0.06	<i>0.48</i>	-0.02	0.06
I encourage others to develop their abilities	-0.15	0.25	-0.05	0.07	<i>0.45</i>	-0.08	0.10
I create enthusiasm for a task	-0.19	0.12	-0.01	0.05	<i>0.37</i>	-0.35	0.07
I show a positive attitude towards others	-0.23	0.02	-0.15	0.06	-0.04	<i>-0.80</i>	0.06
I emphasize the strength of co-workers	-0.11	0.22	0.05	0.01	-0.03	<i>-0.63</i>	0.03
I talk positively about the organisation/the business with external contacts	-0.04	0.06	-0.24	0.01	0.05	<i>-0.50</i>	-0.03
I am calm in stressful situations	0.03	-0.09	0.03	0.03	-0.06	0.01	<i>0.93</i>
I act advisedly and thoughtful in stressful situations	-0.03	-0.05	-0.02	-0.01	-0.05	0.04	<i>0.87</i>
I demonstrate positive thinking in stressful situations	-0.00	-0.04	-0.04	0.03	0.06	-0.09	<i>0.80</i>
I have a calming effect on my co-workers in stressful situations	0.07	0.16	-0.03	0.00	0.08	0.01	<i>0.71</i>

The naming of the seven factors was guided by an ambition to reflect the core of the actual items and to be behaviour-oriented by using verbs. The factor labels in the developmental leadership model (Larsson *et al.*, 2003, 2018) were also used as a theoretical point of reference. The Cronbach's alpha coefficients of the seven co-workership scales are shown in Table 3 and range between 0.75 and 0.90. It should be noted that the two factors which included items with factor loadings lower than 0.40 showed high Cronbach's alpha coefficients (Am involved and take responsibility: 0.86, and Inspire creativity: 0.83). The standard errors of measurement (also shown in Table 3) are low.

Table 3.

Factor scales – correlations (Pearson), means, standard deviations and standard errors of measurement ($N = 825$)

Factor scale ^a	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>	<i>SE</i>
1. Am involved and take responsibility	<i>0.86</i>							7.79	0.90	0.03
2. Show individualised consideration	0.48	<i>0.76</i>						7.41	0.93	0.03
3. Support the boss	0.59	0.51	<i>0.82</i>					7.54	1.04	0.04
4. Confront constructively	0.39	0.33	0.39	<i>0.85</i>				6.82	1.37	0.05
5. Inspire creativity	0.55	0.55	0.57	0.44	<i>0.83</i>			6.97	1.11	0.04
6. Show a positive approach	0.46	0.51	0.52	0.17	0.48	<i>0.75</i>		7.81	0.95	0.03
7. Handle stress well	0.36	0.36	0.39	0.25	0.37	0.37	<i>0.90</i>	7.32	1.15	0.04

Notes: ^aAll factor scales can range from 1 (*lowest frequency*) to 9 (*highest frequency*). All correlations are statistically significant ($p < 0.001$). The figures in italic text on the diagonal represent the Cronbach's alpha coefficient of the scale

Descriptive statistics and correlations

Table 3 shows that the participants rated themselves favourably on all scales, although the means are slightly lower on “Confront constructively” and “Inspire creativity.” All bivariate correlations are lower than 0.60 but still statistically significant at the $p < 0.001$ level. The scales “Confront constructively” and “Handle stress well” show somewhat weaker correlations with the remaining scales.

Discriminability

Comparisons between men and women. Perusal of Table 4 illustrates that the mean differences between men and women are statistically significant on six of seven scales. Women rate themselves higher (more favourably) than men on five of these scales. Men rate themselves significantly higher on one scale (“Handle stress well”). No gender difference was found on the scale “Confront constructively”.

Comparisons between different age groups. Significant differences between the three age groups were found on two scales – “Support the boss” and “Confront constructively” – where gradually higher mean scores were found with increasing age [one-way analysis of variance, $F = 3.36 (2), p < 0.035$; and $F = 5.52 (2), p < 0.004$, respectively]. Post hoc tests (Scheffé) showed that the mean differences were significant between the youngest and the oldest group on the scale “Support the boss”. The differences between the youngest and the oldest group, as well as the middle group, were also statistically significant on the “Confront constructively” scale.

Discussion

The aim was to develop an easy-to-use, theoretically well-founded and psychometrically sound assessment tool of co-workership. The dimensionality of the Co-Worker Q was tested with an exploratory factor analysis and seven factors based on 30 items emerged. The main theoretical source when labelling the factors was the developmental leadership model (Larsson *et al.*, 2003, 2018). However, the instrument development process could be described as mixed as it started with an inductive item-generating approach.

The factor “Am involved and take responsibility” corresponds well to the factor “Exemplary, authentic model” in the developmental leadership model. The factors “Show individualized consideration”, “Support the boss” and “Confront constructively” resemble the leadership model factor “Individualized consideration” with its two facets “Support” and “Confront”. The factors “Inspire creativity” and “Show a positive approach” overlaps the

Factor scale ^a	Men (<i>n</i> = 243)		Women (<i>n</i> = 581)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Am involved and take responsibility	7.52	0.89	7.90	0.88	5.66	0.000
Show individualised consideration	7.23	0.93	7.48	0.92	3.47	0.001
Support the boss	7.38	1.05	7.61	1.04	2.81	0.005
Confront constructively	6.87	1.24	6.80	1.42	-0.65	0.514
Inspire creativity	6.77	1.06	7.05	1.13	3.29	0.001
Show a positive approach	7.54	0.99	7.92	0.91	5.40	0.000
Handle stress well	7.48	1.10	7.25	1.16	-2.54	0.011

Table 4.

Gender comparison

Note: ^aAll factor scales can range from 1 (*lowest frequency*) to 9 (*highest frequency*)

content of the leadership model factor “Inspiration and motivation” to a high degree. The factor “Handle stress well”, corresponds well with the leadership model factor “Stress management-related competence”.

Thus, by starting inductively rather than reformulating the items of the Developmental Leadership Questionnaire (Larsson, 2006), the co-workership perspective was taken care of. However, the conceptual overlap with the leadership model factors could be interpreted as a sign of construct validity (Shondrick and Lord, 2010). It should be noted that the content of the Co-Worker Q also shows a resemblance to factors derived from models of followership, organizational citizenship behaviour and leader-member exchange; e.g. responsibility, commitment, communication skills, a positive attitude, loyalty and integrity (Baker, 2007; Carsten *et al.*, 2010; Chiaburu *et al.*, 2022; Danielsson, 2013; Graen and Uhl-Bien, 1995; Gustafsson and Jansson, 2006; Kilhammar, 2011; Organ, 1997; Van Dyne *et al.*, 1994). In our opinion, the Co-Worker Q factors “Confront constructively”, “Support the boss” and “Handle stress well” are not equally strongly emphasized in the other theoretical models.

The content of the Co-Worker Q items and its factors also show a resemblance to the eight concepts in the aforementioned co-workership wheel (Hällsten and Tengblad, 2006): trust, transparency, cohesion, collaboration, commitment, meaningfulness, responsibility and propensity to take initiatives. However, contrary to the co-workership wheel, which prescribes a causal four-step sequence, we regard the Co-Worker Q factors as non-sequentially related. In later writings, Andersson *et al.* (2020) have also de-emphasized the sequential postulate and claim that the most important tool in a developmental process is the dialogue.

Our conclusion is that the Co-Worker Q appears to have adequate conceptual validity and has captured the core of co-workership. However, further research is needed to substantiate the generalizability of our proposed factors and evaluate the practical usefulness of the instrument. Future research may also consider theoretically integrating the obtained dimensions with related models such as followership and organizational citizenship behaviour. Our interpretation is that the different models show similarities at the basic item level.

The seven factor scales are correlated in the 0.17–0.59 range which indicates that they can be regarded as separate, distinct factors (Field, 2013). Yet a pattern could be noted where the scales “Confront constructively” and “Handle stress well” showed lower correlations with the other more positively toned factors, which, in turn, were higher correlated with each other. Further studies using different samples are needed to investigate potential higher-order factors.

Five of the seven factor scales had Cronbach’s alpha coefficients of 0.82 or higher. The “Show individualized consideration” scale reliability was 0.76, and the “Show a positive approach” scale’s was 0.75. The standard errors of measurement were low. The response format with frequency of behaviour ratings has probably contributed to the satisfactory reliability. We conclude that the seven Co-Worker Q factors constitute separate dimensions of co-workership and that the scales have acceptable reliability.

The discriminability of the Co-Worker Q was tested in two ways. The first consisted of a comparison of ratings provided by men and women. Results showed that women rated themselves significantly more favourably than men on five of seven scales. This result corresponds well with a recent comparison of self-ratings of leadership behaviours of female and male leaders in Sweden (Larsson and Alvinus, 2019). In the last-mentioned study, it was concluded that women leaders do not lack confidence in their leadership role. The present study suggests that this holds true for co-workership as well. The results of both studies contradict the stereotype image that women tend to underestimate themselves (Bern, 1974; Carli and Eagly, 2011). We venture to guess that the results

reflect the situation in Sweden, and possibly the other Nordic countries, which are ranked among the most gender equal countries in the world [European Institute for Gender Equality, 2017; United Nations Development Programme (UNDP), 2010]. How this response pattern would look elsewhere is a matter of empirical enquiry.

The second test of discriminability involved a comparison of age groups. The main finding was that younger participants (29 years or younger) scored significantly lower on the scales “Support the boss” and “Confront constructively”. A possible explanation is that these two co-workshop behaviours are favoured by experience.

The differences between men and women, as well as between the three age groups, point to acceptable discriminability, despite that the scale means are high. However, high mean scores are typically the case on leadership ratings as well (Day *et al.*, 2014). In summary, the results show that the Co-Worker Q has acceptable discriminability.

One of the strengths of the study is that it is based on a relatively large sample of participants. A second strength is the inductive start of the instrument development process, which resulted in a factor structure which conceptually showed a high overlap with the developmental leadership model as well as with models of followership and organizational citizenship behaviour. A third strength is the reliability of the behaviourally anchored rating scales. A fourth strength is the easy-to-use format of the Co-Worker Q. It can be web- or paper-and-pen-based and only takes a few minutes to complete. However, there is obviously a need for further conceptual development regarding co-workshop versus leadership, followership, organizational citizenship behaviour and other related concepts. This is our main proposal for further research.

The lack of insight into the response rate is a weakness. Shortcoming in the present study also include the lack of data on other possibly related aspects including person factors, such as personality and socio-economic status, and contextual factors such as more detailed data on the type of work environment and organizational culture.

Another shortcoming is that the study is based on self-ratings, collected at one point in time. Following from this, there is a risk of artificially inflated relationships among variables, usually referred to as common method variance (Podsakoff *et al.*, 2003, MacKenzie and Podsakoff, 2012; Spector and Brannick, 2010). In particular, there is a risk of responses being affected by social desirability in the present study (Conway and Lance, 2010). No markers of common method variance were available. However, as each participant made ratings of him- or herself for personal use only, we regard the impact of this kind of bias as limited. Podsakoff *et al.* (2012) also point out that individuals are still in the best position to report their own behaviours, perceptions and experiences.

A practical implication of the study is that the Co-Worker Q can be used in organization development interventions with a co-workshop focus and in individualized coaching or mentoring programs. The use of the questionnaire during the half-day workshop in the present case was, for instance, reported as advantageous according to the intervention facilitators. Workshop participants discussed self-chosen aspects of their self-ratings in small groups. Getting feedback, as well as listening to the others' views on their co-workshop behaviours, was regarded as a learning experience. In the present case, the half-day workshop was preceded by an anchoring in, and support from, the management of the participating organizations. The workshop was followed up with a second half-day meeting. These kind of framing activities are regarded as desirable components of co-workshop development interventions.

Additional suggestions for further research and practical implications include that the Co-Worker Q could be used by researchers and practitioners for diagnostic and predictive purposes. Examining workplace relationships where co-workshop is the dependent variable and new work environments, for example, more remote work in the post-COVID-19 situation, is the

independent variable could contribute to the general field of organizational behaviour and direct HR interventions (diagnostic and predictive actions). Furthermore, examining co-workership as an independent variable exploring the relationships between co-workership and creativity/innovation, job satisfaction, job performance, burnout, turnover, employee retention and work-life balance could be used as predictive measures and subsequent HR or management interventions. Here, the Co-Worker Q could serve as a valuable and easy-to-use and score addition to existing instruments based on the organizational citizenship behaviour and leader-member exchange models.

Conclusion

A 30-item instrument – Co-Worker Q – was developed using an initial qualitative approach followed by a factor analysis (principal axis factoring with oblique rotation). Three main conclusions can be drawn. Firstly, the seven-factor solution which emerged shows a conceptual resemblance to the content of models of leadership, followership and organizational citizenship behaviour. Secondly, the factor scales show satisfactory psychometric properties. Thirdly, the instrument proved to be easy to use within the framework of co-workership development interventions.

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