Validation of the Organizational Commitment Questionnaire (OCQ) in six Languages

Uwe P. Kanning & Anka Hill

University of Applied Science Osnabrueck

ABSTRACT

International research on a construct presupposes that the same measurement instruments are implemented in different countries. Only then can the results of the studies be directly compared to one another. We report on a study in which the English-language original of the Organizational Commitment Questionnaire (OCQ) as well as a German-language version of the OCQ was adapted into four further languages (Polish, Hungarian, Spanish, Malay) and validated. The employees of an international company were surveyed in seven countries (USA, Canada, Germany, Poland, Spain, Hungary and Malaysia). For purposes of validation, the job satisfaction, the self-rated job performance and the support of the employees in implementing the company values were used. The results show that the translations proceeded successfully. In all cases, a reliable scale emerges, which correlates positively with the validity criteria.

Key words: organizational commitment questionnaire, job satisfaction, performance, support of company values

1   Introduction

The progress of knowledge in psychology depends substantially on the quality of the measurement instruments used. Only when we are in a position to measure defined constructs in a broadly objective, reliable and valid manner can the value of these constructs in empirical studies become apparent. At the same time, such scales often provide an important tool for the practical work of psychologists. Due to the increasing internationalisation of psychological research, an adaptation of measurement instruments into many languages would appear to be imperative. In the framework of the current study, an adaptation of the Organizational Commitment Questionnaire (OCQ; Porter & Smith, 1970) was undertaken and validated in terms of an employee survey in an international company in seven countries (six languages).

2   Organizational Commitment

The construct of commitment has been receiving wide attention in organizational psychological research for many years (Gutierrez, Candela & Carver, 2012; Huang, You & Tsai, 2012; Meyer, 1997; Meyer, Stanley, Jackson, McInnis, Maltin & Sheppard, 2012; Cohen, 1993; Mathieu & Zajac, 1990; Tett & Meyer, 1993; Wayne, Casper, Matthews & Allen, 2013). Organizational commitment refers to the extent to which the employees of an organization see themselves as belonging to the organization (or parts of it) and feel attached to it (Meyer, Kam, Goldenberg & Bremner, 2013; van Dick, 2004). According to Allen and Meyer (1990), three forms of organizational commitment can be distinguished:

Affective commitment expresses the emotional attachment of the employees. Those employees who show a high degree of emotional commitment feel integrated into the organization and identify themselves with it (Mowday, Steers & Porter, 1979; Porter, Crampon & Smith, 1976; Meyer, Kam, Goldberg & Bremner, 2013; Meyer, Stanley, Herscovitch & Topolnytsky, 2002; van Dick, 2013). In detail, there are three aspects that together constitute the affective commitment: a) a strong belief in the goals and values of the organization and the employees' acceptance of these, b) the readiness to lend one's support to the organization, and c) a strong need of the employees to maintain their membership in the organization (Mowday, Porter & Steers, 1982).

Normative commitment, by contrast, does not correspond to any individually felt attachment of the organization members, but rather reflects their moral-ethical obligation towards the organization (Meyer et al., 2002, 2013; Wiener, 1982; Wiener & Vardi, 1980). In this way, for instance, an individual's attachment arises from the fact that the employer regularly pays his wages or that in economically difficult times, the employee cannot weaken his own company further by changing to a rival company.

Continuance commitment results from the motivation to avoid impending costs that would be linked to a possible change of employer (Allen & Meyer, 1990; Meyer et al., 2002, 2013). The commitment of the employees is higher the greater they perceive the costs of such a change to be (e.g. relocation, wage losses, loss of personal contacts to former colleagues). In this regard, the previous investments that an employee has made in the organization (e.g. specialist knowledge acquired) and the possible benefits gained through these ("side bets", e.g. extra pay, pension claims) play an important role. The continuance commitment consequently corresponds to the result of a cognitive evaluation process, and is not emotionally coloured (Meyer et al., 2002).

Numerous studies have examined the correlates of commitment. Central to most of the analyses is the examination of affective commitment (Mathieu, Burvold & Ritchey, 2000; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Meyer et al., 2002). In several meta-analyses, negative associations were found between affective commitment and absences and fluctuation. Positive associations were found between affective commitment and motivation, organizational citizenship behavior, job satisfaction, performance and productivity (Davila & Garcia, 2012; Dello Russo, Vecchione & Borgogni, 2013; Gutierrez, 2012; Huang, et al., 2012; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Meyer, et al., 2002; Vecina, Chacon, Marzana & Marta, 2013). The association between commitment and performance was apparent both in terms of self-assessments of the employees (e.g. Bycio, Hackett & Allen, 1995; Lee, 2005; Leong, Randall & Cote, 1994; Meyer Allen & Smith, 1993) and in the performance appraisals by superiors (e.g. Mayer & Schoorman, 1992), as well as with regard to objective performance indicators (Bashaw & Grant, 1994; v. Dick, 2004). In addition, affective commitment correlates positively with organizational citizenship behaviour (OCB; Meyer et al., 2002; van Dick, 2001) and job satisfaction (Friedoon & Masrin, 2009), and negatively with employees' propensity to leave the firm (Lee, 2005). For normative commitment, the associations with performance and OCB lie in the same direction, but turn out to be clearly smaller (Meyer & Allen, 1997; van Dick, 2001). Furthermore, negative associations have been shown with fluctuation and absenteeism. In contrast, significant associations were only found between continuance commitment and fluctuation, and not between continuance commitment and performance, absenteeism or OCB (Meyer & Allen, 1997; van Dick, 2001). Affective commitment is positively associated with transformational leadership, organizational support, ethical climate, person-organizational fit, as well as interactional, distributive, and procedural justice. It is negatively correlated with age discrimination, role ambiguity and role conflict (Gutierrez et al., 2012; Huang et al., 2012; Meyer et al., 2002; Rabl & Del Carmen Triana, 2013). Family-supportive organizations produce higher affective commitment by reducing family conflicts and enhancing work-to-family enrichment (Wayne et al., 2013). People with high affective and normative commitment report favourable work conditions, intentions to stay in the organization and well-being whereas people with high continuance commitment look for a new job and score high in anxiety and depression (Meyer et al., 2013).

Altogether, commitment – and in particular affective commitment – therefore proves to be an important construct of organizational psychological research. The extent to which employees feel attached to their organization correlates significantly with important variables of performance-related behavior. In general, from the organization's point of view, the interest therefore is to foster a high commitment on the part of the employees. Nevertheless, there are also negative side effects that should not be disregarded. For instance, a very high commitment can conflict with the employees' private obligations therefore result in stress and conflicts (Randall, 1987). That's especially true for multiple

commitments in international joint ventures (Johnson, 1999). Moreover, if a high commitment is accompanied by a strong pressure for uniformity, it can have a negative effect on the creativity of work groups (Six & Felfe, 2004) and in the sense of an extreme "groupthink" foster obedience and fanaticism within the group (Moser, 1996).

Some studies investigate whether organizational commitment is liable to cultural influence (Felfe, 2008; Wasti & Öder, 2009). Also, it has yet to be inquired if the structure of commitment or its correlates are influenced by culture. This study's results indicate that the structure of commitment does not vary (Fridoon & Nasrin, 2009; Lee, 2005; Maier & Woschée, 2002; Yousef, 2003). Concerning commitment's correlates there often are no serious differences either (e.g. Meyer et al., 2002; Sommer, Bae & Luthans, 1996). A meta-analysis (Meyer et al., 2002) compared samples from North America with those outside North America. The correlation patterns were very similar in reference to organizational support, role ambiguity, role conflict, distibutive and procedural justice. Merely the correlations concerning continuance commitment are sometimes non-significant (organizational support, role ambiguity) in the outside North American sample. The meta-analysis conducted by Meyer et al. (2012) was able to show that particularly normative commitment is influenced by cultural values, but much less affective and continuance commitment. Jackson, Meyer and Wang (2013) found a moderating influence of culture concerning the relation between different managing styles and commitment in their meta-analysis. The effects here were overall rather small.

3   Organizational Commitment Questionnare (OCQ)

Central to our study is the Organizational Commitment Questionnaire (OCQ; Porter & Smith, 1970), which relates to the measurement of affective commitment and counts among the most frequently used measurement instruments (Mathieu et al., 2000; Mathieu & Zajac, 1990). The OCQ consists of 15 items, of which 6 are negatively poled (cf. table 1). Most studies revealed a one-factor structure for the OCQ (e.g. Ferris & Aranya, 1983; Maier & Woschée, 2002; Mathieu et al., 2000; Morrow & McEllroy, 1986; Mowday, Steers & Porter, 1979; Tayyab, 2007). Several investigations, however, suggest a two-factor structure, in which the positively and negatively poled items load on different, albeit highly correlated, factors (Lee, 2005; Tetrick & Frakas, 1988; Caught, Shadur & Rodwell, 2000; Yousef, 2003). From the available results, Caught et al. (2000) draw the conclusion that a second factor of negatively poled items does not deliver any important epistemic value, but rather represents a methodological artefact that emerges from the linguistic poling of the items. Against this background, they argue in favour of keeping the one-factor solution (where necessary excluding the negatively poled items; see also Tetrick & Farkas, 1988). The reliability of the OCQ is well documented. The Cronbach's Alpha values lie between .82 and 93 (Mowday et al., 1992). In addition, Lam (1998) was able to show a retest reliability of .59 over a period of 10 weeks. Examinations of validity also show a generally positive result. For instance, positive

associations were found with job satisfaction (Caught et al., 2000) and with the readiness to remain in the organization (Steers, 1977), and negative correlations were found with the intention to leave the organization (Cooke, 1997; Ferris & Aranya, 1983; Pierce & Dunham 1987; Stumpf & Hartman, 1984). Moreover, Maier and Woschée (2002) prove the construct validity of the OCQ with the help of a confirmatory factor analysis by showing that the OCQ represents a construct that can be empirically distinguished from other work attitudes (job satisfaction and job involvement).

4   Hypotheses

The goal of our investigation was the translation and validation of the OCQ. With the help of the validation, the aim was to examine whether the contents of the scale retain their meaning following the translation. The validation ensued through three variables: job satisfaction, performance and support of company values by the employees. The literature review (see above) shows that positive associations can be expected between commitment and job satisfaction (e.g. Caught et al., 2000; Maier et al., 2002; Meyer et al., 2002) and performance (Bashaw & Grant, 1994; Bycio, Hackett & Allen, 1995; Leong, Randall & Cote, 1994; Mayer & Schoorman, 1992; Meyer Allen & Smith, 1993; Meyer et al., 2002). In the case of the third variable, a positive association is also expected here, as the support of company values represents an integral component of the construct of commitment. Consequently, three hypotheses can be formulated:

1. Each version of the OCQ is positively correlated with the job satisfaction of the participants.

2. Each version of the OCQ is positively correlated with the performance of the participants.

3. Each version of the OCQ is positively correlated with the support of company values.

5   Method

Measures; The starting point for the study was firstly the English-language original (Porter & Smith, 1970), and secondly a German-language translation of the scale (Maier, Rappensprenger, Wittmann & v. Rosenstiel, 1994; Items: Maier & Woschée, 2002). In the current study, both questionnaires were presented to four translators, who in addition to these two languages were also translators for one further language (Polish, Hungarian, Spanish and Malay). Their task consisted of translating the items into the respective third language, analogously but not necessarily word-for-word (cf. table 1). The selection of languages resulted from the general framework of the data collection. The study ran in cooperation with an international company that has branches in Germany, the USA, Canada, Poland, Hungary, Spain and Malaysia. All items for measuring the OCQ were dealt with on a five-point Likert scale (1 = "totally disagree" to 5 = "totally agree"). The validation criteria (job satisfaction, performance and commitment) were also measured with the help of a questionnaire through a self-description of the

participants. To measure the variable *job satisfaction*, we drew on a questionnaire that is regularly used in the company for employee surveys. With 33 items, it measures eight facets of satisfaction: Satisfaction with the direct managers (4 items) and colleagues (7 items), opportunities for development in the company (3 items), workload (5 items), opportunities for co-determination (3 items), wage system (3 items), work contents (2 items) and the company organization (e.g. regulation of breaks and holidays; 6 items). The reliability of the individual scales is satisfactory (cf. table 3). In addition, the scales showed a high content validity, as it was always directly asked: "How satisfied are you with…?". Across the individual scales on job satisfaction, a general value of job satisfaction was calculated. This scale also showed a very good reliability (cf. table 3). Furthermore, the general satisfaction with a single item scale was measured ("On the whole, how satisfied are you with everyday professional life in your company?"). All items were recorded on a five-point scale (1 = "very dissatisfied" to 5 = "very satisfied").

To measure *performance*, a single-item scale was used: "How do you rate your professional performance in comparison to your colleagues?". The employees were provided with seven response categories for this purpose, from 1 = "below average" through 4 = "average" to 7 = "above average".

The *support of company values* of the employees was operationalized through their support of the company values. The company has given itself six company values: flexibility, independence, innovation, partnership, passion to achieve top-rate performances, and quality. With one item for each value, the employees were asked to what extent they actively engage in realising the corresponding company value (five-point scale from 0 = "not at all" to 4 = "very much"). Across the six items, the scale "support of company values" was calculated. The scale showed a very satisfactory reliability (cf. table 3).

Sample & Procedure; Participants in the survey were employees of an internationally operating company that manufactures industrial products. The survey referred to all employees from production, administration and service. In total, 2812 questionnaires were distributed in seven countries (Germany, USA, Canada, Poland, Hungary, Spain, Malaysia). The response rate for the total sample amounted to 52.6% (1478 questionnaires). The highest response rate was achieved in Malaysia, with 91.6%, and the lowest was in Spain, with 36.4%. As the questionnaires distributed in the USA and Canada were the English-language original, the two samples were combined in the further analyses. In absolute figures, the following sample sizes were achieved: Germany 503, USA/Canada 348, Poland 208, Hungary 113, Spain 55 and

Malaysia 251. For reasons of anonymity, the gender of the employees as well as other demographic variables were not recorded. Based on the gender distribution in the company, however, it can be assumed that samples consisted highly predominantly of men. The questionnaires were sent by post with the monthly payslip in order to ensure that all employees actually received a questionnaire. The completed questionnaires were

collected in an urn in the respective location of the company.

6 Results

In a first step, the six versions of the OCQ were tested in terms of their homogeneity and reliability. In each sample, first of all a confirmatory factor analysis was carried out with the help of a structural equation model. In all six samples, the one-factor structure of the OCQ could be confirmed (cf. table 2; Bentler & Bonett, 1980). For the samples Germany, Poland, USA/Canada and Malaysia, the Chi² test was significant, which is not surprising in view of the sample size (Bentler & Bonett, 1980).

The examination of internal consistency resulted in a satisfactory reliability value in each case (Cronbach's Alpha between .72 and .93, cf. table 4). The mean values range above the middle point of the five-point response scale.

Table 2: Results of structural equation analyses

Sample	Chi²	GFI	CFI	RSMEA
Germany	300.15**	.91	.92	.08
Poland	140,67**	.91	.96	.07
USA/Canada	228.01**	.91	.95	.07
Hungary	88.13	.90	.98	.05
Spain	93.19	.86	.98	.05
Malaysia	151.13**	.92	.92	.06
Total sample	727.58**	.94	.94	.08

*Note: * $p < .05$, ** $p < .01$*

Table 3: Factor loading

Item	Sample						
	Germany	Poland	USA/Canada	Hungary	Spain	Malaysia	total sample
1	.57	.68	.61	.68	.93	.47	.62
2	.83	.87	.86	.84	.88	.70	.83
3	.54	.17	.30	.28	.31	.13	.39
4	.41	.51	.50	.31	.17	.58	.39
5	.69	.79	.76	.78	.70	.72	.72
6	.83	.88	.88	.85	.87	.68	.83
7	.52	.34	.52	.21	.29	.05	.43
8	.74	.84	.80	.61	.81	.72	.75
9	.59	.60	.59	.67	.65	.77	.61
10	.68	.69	.85	.77	.84	.70	.74
11	.65	.49	.75	.68	.76	.07	.64
12	.47	.41	.65	.42	.12	.13	.52
13	.70	.86	.67	.73	.82	.60	.72
14	.74	.88	.80	.73	.80	.80	.78
15	.69	.68	.78	.73	.86	.36	.68

Table 4: Mean values, standard deviation and reliability of the scales (Cronbach's Alpha)

Sample	Facets of job satisfaction								9	10	11	12	13
	1	2	3	4	5	6	7	8					
Germany	3.24	3.38	2.97	3.30	3.44	3.18	3.48	3.25	3.28	3.58	2.86	5.51	3.96
	.97	.73	.98	.75	.93	1.00	.82	.75	.66	.88	.67	.84	.62
	.88	.86	.86	.78	.77	.86	.70	.79	.95		.81		.89
Poland	3.55	3.60	2.68	2.88	3.23	2.52	3.34	3.35	3.14	3.27	2.89	5.45	3.26
	.88	.63	1.13	.79	.87	1.06	.75	.75	.66	1.01	.85	1.04	.76
	.84	.80	.91	.75	.80	.88	.67	.87	.95		.91		.90
USA/Canada	3.43	3.24	2.83	3.21	3.45	2.60	2.86	2.99	3.08	3.17	2.77	5.72	3.40
	1.07	.79	1.04	.75	1.01	1.15	.96	.83	.78	1.01	.82	.96	.79
	.91	.89	.86	.78	.84	.92	.77	.85	.96		.91		.92
Hungary	3.48	3.47	3.07	3.01	3.45	2.46	3.16	3.13	3.15	3.36	3.07	5.55	3.54
	.99	.65	.89	.64	.77	.99	.75	.68	.56	.84	.56	.71	.64
	.89	.83	.87	.72	.76	.89	.63	.80	.92		.84		.88
Spain	3.77	3.80	3.25	3.09	3.95	3.25	3.62	3.20	3.49	3.83	3.11	5.36	3.62
	.88	.65	1.12	.82	.93	.91	.95	.80	.65	1.04	.62	1.12	.69
	.85	.81	.89	.81	.86	.77	.80	.76	.93		.81		.88
Malaysia	3.43	3.34	2.74	2.88	3.59	2.77	2.99	3.06	3.10	3.25	2.85	5.44	3.50
	.86	.73	.96	.70	.93	.96	.90	.69	.59	.92	.73	1.08	.50
	.87	.88	.79	.76	.81	.71	.70	.76	.92		.90		.72
Total sample	3.40	3.39	2.86	3.12	3.45	2.81	3.20	3.15	3.17	3.37	2.85	5.54	3.59
	.97	.74	1.03	.76	.94	1.07	.89	.77	.68	.96	.74	.95	.73
	.88	.86	.86	.77	.80	.85	.73	.81	.94		.87		.90

Note: Satisfaction with 1 = managers, 2 = colleagues, 3 = opportunities for development, 4 = workload, 5 = opportunities for co-determination, 6 = wage system, 7 = work contents, 8 = company organization, 9 = general job satisfaction calculated over all facets, 10 = general job satisfaction single item scale, 11 = support of company values, 12 = self-rated performance single item scale, 13 = OCQ; upper row = arithmetic mean, middle row = standard deviation, lower row = Cronbach's Alpha.

In a second step, the validation was carried out. To this aim, for each of the six variants of the OCQ, the correlation with the validity criteria was calculated. The results are presented in table 5. The association with job satisfaction could be confirmed both for the 8 facets of job satisfaction and for the complete scale as well as for the single items scale in all six samples. In accordance with *hypothesis 1*, significant positive associations between OCQ and job satisfaction were found. The testing of the hypothesis with the help of the single item scale for the measurement of job satisfaction was also consistently positive.

The testing of *hypothesis 2* was also widely positive. For four of the six variants of the OCQ, a positive association with the self-rated work performance was demonstrated. The higher the commitment, the greater the performance shown by the employees at the workplace, by their own

account. Exceptions to this were the German and the Polish scales, which showed no significant associations.

Hypothesis 3 was also confirmed. For all six variants of the OCQ, a significant, positive association with the support of company values could be demonstrated. The greater the commitment, the more intensively the employees engage in realising the company values, according to their own report.

Table 5: Correlation between OCQ and job satisfaction, support of company values, performance

Sample	Facets of job satisfaction								9	10	11	12
	1	2	3	4	5	6	7	8				
Germany	.38**	.35**	.44**	.36**	.43**	.43**	.47**	.44**	.55**	.58**	.49**	.05
Poland	.44**	.20**	.52**	.54**	.59**	.61**	.47**	.66**	.67**	.61**	.55**	.11
USA/Canada	.51**	.50**	.58**	.57**	.59**	.57**	.61**	.61**	.69**	.61**	.62**	.20**
Hungary	.41**	.32**	.24*	.31**	.34**	.37**	.44**	.24*	.48**	.46**	.43**	.32**
Spain	.33*	.29*	.74**	.48**	.63**	.34*	.71**	.56**	.73**	.64**	.50**	.51**
Malaysia	.38**	.39**	.34**	.39**	.39**	.33**	.39**	.46**	.53**	.41**	.35**	.22**
Total sample	.37**	.35**	.48**	.47**	.48**	.52**	.52**	.50**	.62**	.58**	.50**	.15**

Note: Satisfaction with 1 = managers, 2 = colleagues, 3 = opportunities for development, 4 = workload, 5 = opportunities for co-determination, 6 = wage system, 7 = work contents, 8 = company organization, 9 = general job satisfaction calculated over all facets, 10 = general job satisfaction single item scale, 11 = support of company values, 12 = self-rated performance; scale, * $p < .05$, ** $p < .01$

7   Discussion

The translation of the OCQ was widely successful. In all six versions, the one-factor structure could be confirmed, and the reliability proved to be satisfactory.

The results of the validation underline the meaningfulness of the OCQ in all six language variants. Commitment is accordingly accompanied by job satisfaction, an active support of the company values as well as an increased work performance. The latter, however, could not be confirmed for the Polish or the German version.

The current study cannot make any statements about the direction of the association between commitment and the three validity constructs. For instance, it might well be the case that job satisfaction is the consequence of commitment or else by the same token, that commitment is the consequence of job satisfaction. Further research needs to be carried out to provide information in this regard.

On a critical note, it should be pointed out that all validity criteria only reflect the subjective point of view of those surveyed. For the construct of job satisfaction, this is not a problem as job satisfaction represents, by definition, a subjective experience of the employees. With regard to performance and support of company values, however, third-party assessments by managers and colleagues would appear to be desirable, or in terms of performance also objective measurements such as productivity. In the framework of our cooperation with the company, there was unfortunately no opportunity to record such measures. Here, too, further research is required.

Also, it was not possible to investigate statements concerning effects of demographic variables (gender, age, length of affiliation with the organization) due to anonymity. On the other hand, the study had the advantage of probands' possibly smaller inclination to answer in a socially desirable way. Therefore the results should be less biased.

Furthermore, at this point we cannot compare across cultures because the samples were too small and not representative for the cultures. This is another ground to conduct further research.

Another weakness of the study is the use of a single item scale for the measurement of job performance. There is no information about the reliability of this scale. However, single item scales have by no means in principle a low reliability. By now there has been a variety of studies proving a satisfactory reliability and validity of single items scales (eg. Shamir & Kark, 2004, Woods & Hampson, 2005).

Using a variety of data sources (self description, behavioural data, assessment by others) would furthermore be helpful in guarding against the problem of common method variance (eg. Johnson et al., 2011: Lindell & Withney, 2001). If data from only one source are correlated, there is always a risk that the correlations are at least partly accounted for by common method variance. In this, our work is no exemption from all the other studies using only self-descriptions. Future examinations must show if our results can be confirmed by using other sources of data in addition. Moreover, there is a need of longitudinal studies to estimate the relation of cause and effect.

8 Bibliography

Allen, N. J. & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63,* 1-18

Angle, H. L. & Perry, J. L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly, 26,* 1-14.

Bashaw, E. R. & Grant, S. E. (1994). Exploring the distinctive nature of work commitments: Their relationships with personal characteristics, job performance, and propensity to leave. *Journal of Personal Selling and Sales Management, 14,* 41-56.

Bentler, P. M., & Bonnet, D. G. (1980). Significance test and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88,* 588-606.

Bycio, P., Hackett, R. D. & Allen, J. S. (1995). Further assessments of Bass' (1985) conceptualisation of transactional and transformational leadership. *Journal of Applied Psychology, 80,* 468-478.

Caught, K., Shadur, M. A. & Rodwell, J. J. (2000). The measurement in the organizational commitment questionnaire. *Psychological Reports, 87,* 777-788.

Cohen, A. (1993). Organizational Commitment and turnover: A met-analysis. *Academy of Management Journal Review, 36,* 1140-1157.

Cooke, D. K. (1997). Discriminant validity of the organizational commitment questionnaire. *Psychological Reports, 80,* 41-441.

Davila, M. C. & Garcia, G. J. (2012). Organizational identification and commitment: Correlates of sences of belonging and affective commitment. *The Spanish Journal of Psychology, 15,* 244-255.

Dello Russo, S., Vecchione, M. & Borgogni, L. (2013). Commitment profiles, job satisfaction, and behavioural outcomes. *Applied Psychology: An International Review, 62,* 701-719.

Felfe, J. (2008). *Mitarbeiterbildung.* Göttingen: Hogrefe.

Ferris, K. R. & Aranya, N. (1983). A comparison of two organizational commitment scales. *Personnel Psychology, 36,* 87-98.

Fridoon, J. & Nasrin, S. (2009). Three components of organizational commitment and job satisfaction of hospital nurses in Iran. *The Health Care Manager, 28,* 375-380.

Gutierrez, A. P., Candel, L.L. & Carver, L. (2012). The structural relationship between organizational commitment, global job satisfaction, development experience, work values, organizational support, and person-organizational fit among nursing faculty. *Journal of Advanced Nursing, 54,* 1601-1614.

Huang, C.-C., You, C.-S. & Tsai, M.-T. (2012). A multidimensional analysis of ethical climate, job satisfaction, and organizational citizenship behaviors. *Nursing Ethics, 19,* 513-529.

Jackson, T. A., Meyer, J. P. & Wang, X.-H. (2013). Leadership, commitment, and culture: A meta-analysis. *Journal of Leadership and Organizational Studies, 20,* 84-106.

Johnson, J. P. (1999). Multiple commitments and conflicting loyalties in international joint venture managements teams. *The International Journal of Organizational Analysis, 7,* 54-71.

Johnson, R. E., Roden, C. C. & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. *Journal of Applied Psychology, 96,* 744-761.

Lam, S. S. K. (1998). Test-retest reliability of the organizational commitment questionnaire. *The Journal of Social Psychology, 138,* 787-788.

Lee, K. S. (2005). Studying Organizational Commitment with the OCQ in the Korean retail context: Its dimensionality and relationship with satisfaction and work outcomes. *The International Review of Retail, Distribution and Consumer Research, 15,* 375-399.

Leong, S. M., Randall, D. M. & Cote, J. A. (1994). Exploring the organizational commitment-performance linkage in marketing: A study of life insurance sales-people. *Journal of Business Research, 29,* 57-63.

Lindell, M. K. & Withney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology. 86,* 114-121

Maier, G. M., Rappensperger, G., Wittmann, A. & v. Rosenstiel, L. (1994). *Realistische Tätigkeitsvorschau bei Führungsnachwuchskräften: Ergebnisse einer Längsschnittuntersuchung.* Vortrag gehalten auf dem 39. Kongress der Deutschen Gesellschaft für Psychologie in Hamburg.

Maier, G. M. & Woschée, R.-M. (2002). Die affektive Bindung an das Unternehmen. *Zeitschrift für Arbeits- und Organisationspsychologie, 46,* 126-136.

Mayer, R. C. & Schoormann, F. D. (1992). Predicting participation and production outcomes through a two-dimension model of organizational commitment. *Academy of Management Journal, 35,* 671- 684.

Mathieu, A., Bruvold, N. T. & Ritchey, N. (2000). Subcultural research on organizational commitment with the 15 OCQ invariant instrument. *Journal of Personal Selling & Sales Management, 20,* 129-138.

Mathieu, J. E. & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin, 108,* 171-194.

Meyer, J. P. (1997). Organizational commitment. *International Review of Industrial and Organizational Psychology, 12,* 175-228.

Meyer, J. P. & Allen, N.J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1,* 61-89.

Meyer, J. P. & Allen, N.J. (1997). *Commitment in workspace.* Thousand Oaks, CA: Sage.

Morrow, P. C. & McEllroy, J. C. (1986). On assessing measures of work commitment. *Journal of Occupational Behavior, 7,* 139-145.

Meyer, J. P., Allen, N.J. & Smith, C. A. (1993). Commitment to organizations and occupations: Extensions and tests of a three-component conceptualization. *Journal of Applied Psychology, 78,* 538-551.

Meyer, J. P., Kam, C., Gildenberg, I. & Bremner, N. L. (2013). Organizational commitment in the military: Application of a profile approach. *Military Psychology, 25,* 381-401.

Meyer, J. P., Stanley, D. J., Herscovitch, L. & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61,* 20-52.

Meyer, J. P., Stanley, D. J., Jackson, T. A., MCInnis, K.J., Maltin, E. R. & Sheppard, L. (2012). Affective, normative, and continuance commitment levels across cultures: A meta-analysis. *Journal of Vocational Behavior, 80,* 225-245.

Moser, K. (1996). *Commitment in Organisationen.* Bern:Huber.

Mowday, R. T., Porter, L. W. & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment , absenteeism, and turnover.* New York: Academic Press.

Mowday, R. T., Steers, R. M. & Porter, L. W. (1979). The Measurement of organizational commitment. *Journal of Vocational Behavior, 14,* 224-247.

Pierce, J.L. & Dunham, R. B. (1987). Organizational commitment: Pre-employment propensity and initial work experiences. *Journal of Management, 13,* 163-178.

Porter, L. W., Crampon, W. J. & Smith, F. L. (1976). Organizational commitment and managerial turnover. *Organizational Behavior and Human Performance, 15,* 87-98.

Porter, L. W. & Smith, F. J.(1970). *The etiology of organizational commitment.* Unpublished manuscript, University of California at Irvine.

Rabl, T. & del Carmen Triana, M. (2013). How German employees of different ages conserve resources: Perceived age discrimination and affective organizational commitment. The International *Journal of Human Resource Management, 24,* 3599-3612.

Randall, D. M. (1987). Commitment and the organization: The organization man revisited. *Academy of Management Review, 12,* 460-471.

Shamir, B. & Kark, R. (2004). A single-item graphic scale for the measurement of organizational identification. *Journal of Occupational and Organizational Psychology, 77,* 115–123.

Six, B. & Felfe, J. (2004). Einstellungen und Werthaltungen im organisationalen Kontext. In H. Schuler, (Hrsg.). *Organisationspsychologie: Grundlagen und Personalpsychologie* (pp. 597-672). Göttingen: Hogrefe.

Sommer, S. M., Bae, S.-H. & Luthans, F. (1996). Organizational commitment across cultures: The impact of antecedents on Korean employees. *Human Relations, 49,* 977-993.

Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quaterly, 22,* 46-56.

Stumpf, S. A. & Hartman, K.(1984). Individual exploration to organizational commitment or withdrawal. *Academy of Management Journal, 27,* 308-329.

Tayyab, S. (2007). An empirical assessment of organizational commitment measures. Pakistan *Journal of Psychological Research, 22,* 1-21.

Tetrick, L. E. & Farkas, A. (1988). A longitudinal examination of the dimensionality and stability of the organizational commitment questionnaire (OCQ). *Educational and Psychological Measurement, 48*, 723-735.

Tett, R. P. & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on metaanalytic findings. *Personnel Psychology, 46,* 259-293.

van Dick, R. (2001). Identification in organizational contexts: Linking theory and research from social and organizational psychology. *International Journal of Management Reviews, 3,* 265-283.

van Dick, R. (2004). *Commitment und Identifikation mit Organisationen.* Göttingen: Hogrefe.

van Dick, R. & Ullrich, J. (2013). Identifikation und Commitment. In W. Sarges (Hrsg.). *Managementdiagnostik* (S. 349-354). Göttingen: Hogrefe.

Vecina, M. L., Chacon, F., Marzana, D. & Marta, E. (2013). Volunteer engagement and organizational commitment in nonprofit organization: What makes volunteers remain within organizations and feel happy? *Journal of Community Psychology, 41,* 291-302.

Wasti, S. A. & Öder, C. (2009). Commitment across cultures: Progress, pitfalls and propositions. In H. J. Klein, T. E. Becker & J. P. Meyer (eds.). *Commtiment in organizations: Accumulated wisdom and new directions* (pp. 309-343). New York, NY: Routledge.

Wayne, J. H., Casper, W. J., Matthews, R. A., Allen, T. D. (2013). Family-supportive organization perception and organizational commitment: The mediating role of work-family conflict an enrichment and partner attitudes. *Journal of Applied Psychology, 98,* 606-622.

Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review, 7,* 418-428.

Wiener, Y. & Vardi, Y. (1980). Relationship between job, organization, and career commitments and work outcomes: An integrative approach. *Organizational Behavior and Human Performance, 26,* 81-96.

Woods, S. A., & Hampson, S. E. (2005). Measuring the Big Five with single items using a bipolar response scale. *European Journal of Personality, 19,* 373-390.

Youself, D. A. (2003). Validating the dimensionality of Porter et al.'s measurement of organizational commitment in a non-Western culture setting. *International Journal of Resource Management, 14,* 1067-1079.

Appendix:

Table 1: Items of the Organizational Commitment Questionnaire

English	German	Polish
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this company be successful.	1. Ich bin bereit, mich mehr als nötig zu engagieren, um zum Erfolg des Unternehmens beizutragen.	1. Jestem gotowa/y zaangażować się bardziej niż to niezbędnie konieczne, aby przyczynić się do sukcesu firmy.
2. I talk up this organization to my friends as a great company to work for.	2. Freunden gegenüber lobe ich dieses Unternehmen als besonders guten Arbeitgeber.	2. Wobec moich przyjaciół chwalę naszą firmę za to, że jest szczególnie dobrym pracodawcą.
3. I feel very little loyalty to this organization. (-)	3. Ich fühle mich diesem Unternehmen nur wenig verbunden. (-)	3. Wobec moich przyjaciół chwalę naszą firmę za to, że jest szczególnie dobrym pracodawcą. (-)
4. I would accept almost any type of job assignment in order to keep working for this company.	4. Ich würde fast jede Veränderung meiner Tätigkeit akzeptieren, nur um auch weiterhin für dieses Unternehmen arbeiten zu können.	4. Zgodziłbym/łabym się na niemal każdą zmianę moich czynności tylko po to, aby móc dalej pracować w tej firmie. .
5. I find that my values and the company's values are very similar.	5. Ich bin der Meinung, dass meine Wertvorstellungen und die des Unternehmens sehr ähnlich sind.	5. Moim zdaniem moje własne poglądy na wartości są bardzo zbliżona do tych wspólnych wartości formowych.
6. I am proud to tell others that I am part of this company.	6. Ich bin stolz, wenn ich anderen sagen kann, dass ich zu diesem Unternehmen gehöre.	6. Jestem dumny/a gdy mogę innym powiedzieć, że pracuję w tej właśnie firmie.
7. I could just as well be working for a different company as long as the type of work were similar. (-)	7. Eigentlich könnte ich genauso gut für ein anderes Unternehmen arbeiten, solange die Tätigkeit vergleichbar wäre. (-)	7. Właściwie mógłbym/mogłabym równie dobrze pracować dla jakiegoś innego przedsiębiorstwa, jeżeli mój zakres czynności byłby porównywalny. (-)
8. This company really inspires the very best in me in the way of job performance.	8. Dieses Unternehmen spornt mich zu Höchstleistungen in meiner Tätigkeit an.	8. Ta firma mobilizuje mnie do najwyższych osiągnięć w tym co robię.
9. It would take very little change in my present circumstances to cause me to leave this company. (-)	9. Schon kleine Veränderungen in meiner gegenwärtigen Situation würden mich zum Verlassen des Unternehmens bewegen. (-)	9. Już nawet niewielkie zmiany w mojej obecnej sytuacji mogą mnie zmobilizować do opuszczenia tej firmy. (-)
10. I am extremely glad that I chose this company to work for over others I was considering at the time I joined.	10. Ich bin ausgesprochen froh, dass ich bei meinem Eintritt dieses Unternehmen anderen vorgezogen habe.	10. Bardzo mnie to cieszy, że przy przyjmowaniu do pracy do tej firmy spośród różnych kandydatów wybrano akurat mnie.
11. There's not too much to be gained by sticking with this organization indefinitely. (-)	11. Ich verspreche mir nicht allzu viel davon, mich langfristig an dieses Unternehmen zu binden. (-)	11. Związanie się z tą firmą na dłużej nie wydaje mi się szczególnie obiecujące. (-)
12. Often, I find it difficult to agree with this company's policies on important matters relating to its employees. (-)	12. Ich habe oft Schwierigkeiten, mit der Unternehmenspolitik in Bezug auf wichtige Arbeitnehmerfragen übereinzustimmen. (-)	12. Mam często trudności z pogodzeniem się z polityką firmy w odniesieniu do istotnych zagadnień pracowniczych. (-)
13. I really care about the fate of this company.	13. Die Zukunft dieses Unternehmens liegt mir sehr am Herzen.	13. Przyszłość tego przedsiębiorstwa leży mi bardzo na sercu.
14. For me this is the best of all possible companies for which to work.	14. Ich halte dieses für das beste aller Unternehmen, die für mich in Frage kommen.	14. Uważam, że moja firma, to najlepsze z przedsiębiorstw, które wchodziłyby dla mnie w grę.
15. Deciding to work for this organization was a definite mistake on my part. (-)	15. Meine Entscheidung, für dieses Unternehmen zu arbeiten war sicher ein Fehler. (-)	15. Moja decyzja o tym, aby tu pracować była z pewnością błędem z mojej strony. (-)

Table 1: Items of the Organizational Commitment Questionnaire (continued)

Hungarian	Spanish	Malay
1. A cég sikere érdekében készen állok arra, hogy a rendesen elvártnál sokkal nagyobb erőfeszítéseket tegyek.	1. Estoy dispuesto a emplearme más de lo necesario para contribuir al éxito de la empresa.	1. Saya sedia berusaha gigih dalam membantu syarikat mencapai kejayaan.
2. Barátaim előtt a céget dicsérem, és nagyszerű munkahelyként említem.	2. Delante de mis amigos hablo muy bien de esta empresa como empleador.	2. Saya sedia memaklumkan kepada rakan-rakan saya mengenai keistimewaan/kebagusan di syarikat ini.
3. Kevés hűséget érzek a szervezet felé. (-)	3. Me siento solamente poco implicado con esta empresa. (-)	3. Saya hanya mempunyai sedikit rasa kesetiaan terhadap syarikat ini. (-)
4. Szinte bármilyen munkaköri áthelyezést elfogadnék azért, hogy továbbra is a vállalatnál dolgozhassak.	4. Aceptaría casi cualquier cambio en mi puesto solamente para poder seguir trabajando para esta empresa.	4. Saya sanggup menerima apa jua tugasan demi mempastikan bahawa saya akan terus bekerja di syarikat ini.
5. Úgy találom, hogy az én értékeim és a vállalati értékek nagyon hasonlóak.	5. Creo que mis valores y los de la empresa son muy parecidos.	5. Saya mendapati bahawa pendirian saya dan syarikat amat serupa
6. Büszkén mondom másoknak, hogy része vagyok ennek a cégnek.	6. Poder decirle a otras personas que formo parte de esta empresa me llena de orgullo.	6. Saya bangga untuk memberitahu kepada semua bahawa saya adalah sebahagian daripada syarikat ini.
7. Éppúgy dolgoznék más cégnek is, ha a munka típusa hasonló lenne. (-)	7. Realmente podría trabajar para cualquier otra empresa, siempre que mis funciones fueran comparables. (-)	7. Saya lebih rela bekerja dengan syarikat yang lain asalkan jenis kerja yang dilakukan adalah serupa. (-)
8. Ez a vállalat a munkateljesítményt illetően valóban a legjobbat hozza ki belőlem.	8. Esta empresa me anima a rendir lo máximo en mis actividades.	8. Syarikat ini benar-benar memberikan inspirasi pada diri saya sendiri dan terhadap prestasi kerja saya.
9. Jelen körülményeim egészen kis változására is elhagynám a céget. (-)	9. Bastarían unos cambios mínimos en mi situación actual para que dejase la empresa.(-)	9. Hanya dengan sedikit perubahan sahaja boleh mengakibatkan saya berhenti dari syarikat ini. (-)
10. Nagyon örülök annak, hogy annak idején, amikor ide jöttem dolgozni, más cégek közül ezt választottam.	10. Me alegro sinceramente de haber dado preferencia a esta empresa a la hora de elegir mi trabajo.	10. Saya amat gembira kerana telah memilih syarikat ini berbanding syarikat yang lain sewaktu membuat pilihan untuk bekerja.
11. Nincs igazán sok értelme ehhez a szervezethez ragaszkodni a végtelenségig. (-)	11. No me hago muchas ilusiones de vincularme por un largo tiempo a esta empresa. (-)	11. Tidak banyak yang boleh diharapkan jika berada lama di syarikat ini. (-)
12. Sokszor nehezemre esik, hogy egyetértsek az alkalmazottakhoz kapcsolódó fontos kérdések céges politikájával. (-)	12. A menudo tengo dificultades a la hora de concordar con la política empresarial en cuanto a cuestiones importantes para los empleados. (-)	12. Selalunya sukar bagi saya bersetuju dengan pihak syarikat mengenai perkara-perkara penting di dalam polisi syarikat yang berkaitan dengan pekerja-pekerja. (-)
13. Valóban törődök a cég sorsával.	13. Me importa mucho el futuro de esta empresa.	13. Saya amat mengambil berat mengenai nasib syarikat.
14. Számomra ez a legjobb szóba jöhető vállalat, ahol dolgozhatok.	14. Considero a esta empresa como la mejor de todas las que son opciones para mí.	14. Bagi saya ini adalah syarikat terbaik yang ada untuk saya bekerja.
15. Amikor úgy döntöttem, hogy ennek a szervezetnek fogok dolgozni, az kétséget kizáróan hiba volt a részemről. (-)	15. Seguramente me equivoqué cuando decidí trabajar para esta empresa. (-)	15. Keputusan untuk bekerja di organisasi ini sesungguhnya adalah merupakan satu kesilapan buat diri saya. (-)

Correspondence address:
Uwe P. Kanning
University of Applied Science Osnabrueck
Caprivistrasse 30a
D-49076 Osnabrueck
GERMANY

U.Kanning@hs-osnabrueck.de