

An empirical test of Meyer and Allen's three-component model of organizational commitment in a Croatian context

DARJA MASLIĆ SERŠIĆ

The study deals with evaluation of Meyer and Allen's three-component conceptualization of organizational commitment in Croatian society. The dimensionality of Meyer *et al's* (1993) scales, and their relationships with turnover intentions were examined. Participants were 766 professionals from 21 industrial organizations. Self-report questionnaire measures of job involvement, job satisfaction, and demographic data were also collected. Objective profit data were used as a measure of organizational efficiency. A significant contribution of organizational commitment in predicting turnover intention was found. However, the results speak in behalf of two- rather than three-dimensional definition of this construct. Employees from organizations which were identified as relatively successful according to objective profit data were higher committed to their organizations, had higher job satisfaction and lower turnover intentions in comparison to the employees from unsuccessful organizations.

Organizational commitment has been a focus of numerous studies in the last two decades. It has become one of the most intensively investigated work-related attitude along with job satisfaction. Why has the concept of organizational commitment received so much attention?

Mowday, Porter, and Steers (1982) identified three possible reasons: (1) the theory of commitment suggests that employee commitment to an organization should be a predictor of certain behaviors, especially turnover; (2) the concept of organizational commitment is intuitively appealing to both managers and psychologists; and (3) studying of commitment may improve our comprehension of more general psychological processes by which people choose to identify with objects in their environment and to make sense out of this environment. At the end of the 90s, these reasons are still valid and, even more, they are not just hypothetical and intuitive. A considerable amount of research carried out during 80s showed that employee commitment is related to positive consequences measured at the individual level (see Mathieu & Zajac, 1990 for a review). Further, several studies proved that the consequences are positive even for the organization as a whole (Angle & Perry, 1981; Mowday, Porter, & Dubin, 1974; Ostroff, 1992).

On the other hand, there was not such a consensus with respect to the nature of the concept. Organizational commitment has been defined and measured in several different fashions. A substantial amount of research used the Organizational Commitment Questionnaire (OCQ; Mowday, Steers, & Porter, 1979; Porter, Steers, Mowday, & Boulian, 1974) representing the dominant *attitudinal* approach. The authors defined commitment in terms of an individual's identification with and involvement in a focal organization, and their scale included measures of motivation, intent to remain, and identification. The second most popular form of organizational commitment studied was *calculated* commitment defined in terms of individual-organizational transactions in side-bets or investments over time (Hrebiniak & Alutto, 1972). Finally, the *normative* approach refers to commitment based on employee's feeling of obligation to remain with the organization (Wiener, 1982). Among these different approaches to organizational commitment there is also a long-standing distinction that has been made between *attitudinal commitment* and *behavioral commitment* (e.g., Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982; Salanick, 1977; Staw, 1977). While *attitudinal commitment* focuses on individuals' relationship with the organization, *behavioral commitment* is concerned with the process by which individuals become linked or committed to their own past behavior and decisions. Various definitions and measures shared a common view, that is, the nature of commitment was mostly considered unilaterally. At the same time, there is a growing consensus among commitment theorists and research-

Darja Maslić Seršić, Department of Psychology, University of Zagreb, Ivana Lučića 3, 10000 Zagreb, Croatia. E-mail: darja.maslic@ffzg.hr. (Correspondence concerning this article should be sent to this address).

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ers with regard to multidimensional nature of the construct of commitment. Although the earliest commitment typologies can be found in the work of Etzioni (1961) & Kanter (1968), a multidimensional approach has become dominant recently.

Meyer and Allen's (Allen & Meyer, 1990; Meyer & Allen, 1991) three-component model has undergone the most extensive empirical evaluation to date (see Allen & Meyer, 1996; Lease, 1998; Meyer, 1997; Meyer & Allen, 1997, for a review). This model integrates a variety of alternative conceptualizations and conciliates opposed ideas present in the literature on commitment. Meyer and Allen treat commitment "...as a *psychological state* but acknowledge that this state can develop retrospectively (as justification for an ongoing course of action) as proposed in behavioral approach, as well as prospectively (e.g., based on perceptions of current or future conditions of work within an organization) as advocated in the attitudinal approach" (Meyer & Allen, 1997, pp. 10). They identified *affective*, *normative*, and *continuance* commitments as elements comprising the three components of organizational commitment. According to their model, an employee simultaneously experiences commitments to the organization that are based on emotional attachment (affective commitment), a feeling of obligation to the organization (normative commitment), and perceptions of the costs of leaving the organization (continuance commitment). Measures of the component constructs developed by Meyer and Allen (1984), and Allen and Meyer (1990), have been used in research which explored - and mostly confirmed - differences in the antecedents and consequences of the component constructs. Several studies of the psychometric properties of the Allen and Meyer's (1990) scales have supported their construct validity (Allen & Meyer, 1990; Dunham, Grube, & Castaneda, 1994; Hackett, Bycio, & Hausdorf, 1994; Meyer, Allen, & Smith, 1993). But, the concept of commitment has been mostly investigated in Western societies (especially with respect to U.S. workers), and there is a lack of data concerning to other cultures. This study addresses the cross-cultural applicability of Meyer and Allen's three-component model of organizational commitment. The study deals with the evaluation of the model in "changing and turbulent context" of Croatian society.

Croatia is a country that undergoes a process of transition followed by deep political, social, and economic crisis (see Maslić & Šverko, 1999). The consequences of the recent war are still present; the process of privatization is still underway on; superseded system of proclaimed collective values is still not substituted with the new one. These circumstances have especially impacted the field of working life. Under the Communist rule, Croatia had a socioeconomic system of a very specific brand that drew attention of sociologists and social psychologists. As Argyle (1990)

noted, Yugoslav factories were "owned by the state and controlled by the workers" (p. I). Currently, Croatian factories are private proprietorship or owned by state, and employees' control is diminished. Before 1990, in the frame of planned economy, the state controlled the market and efficiency of organizations. As a consequence, all employees felt almost equally secure about their jobs, minimum wages and own social security. Today, organizations are involved in market competition as well as in the complex, and not always constructive process of privatization. In spite of the similar starting positions, employees in different organizations have paid very different price to the transition crisis. In this new context, the relationship between employees and their organizations has become more important from practical, as well as from the theoretical point of view. Today, organizational membership has a different meaning to the people and has stronger consequences on their life. Members of successful organizations have significantly better living standard and a feeling of security than members of unsuccessful organizations or people who are temporally unemployed because their organizations did not survive a market competition.

In this context, a particular purpose of the study was to investigate the moderator effect of organizational efficiency on employee's affective, continuance and normative commitment, as well as their correlation to turnover intentions. It was hypothesized that all three components of organizational commitment would positively correlate to turnover intention, and significantly add to its prediction over and above the contribution of demographic variables, job involvement, and job satisfaction. Besides, it was expected that organizational efficiency would impact on the level of employees' commitment, as well as its correlation to turnover intention. Employees within unsuccessful organizations should report lower organizational commitment than employees within successful organizations. It was also expected that employees' commitment to the organization would better predict their turnover intentions in the case of successful organizations. It should be especially valid for affective and normative component of commitment. In spite of emotional attachment and feeling of obligation, employee in an unsuccessful organization may tend to quite.

METHOD

Sample

The participants were 766 professionals from 21 industrial organizations. All organizations belong to the group of big manufacturing firms according to the official classifi-

cation made by Croatian Chamber of Economy (that is, they employed between 200 and 1000 employees at the time of data collecting). All of them have existed for several decades on the Croatian market, and met the process of socio-economic transition as big state-owned firms. The intention was to cover the whole population of professionals (e.g., high educated personnel) within an organization. According to response rate and accessibility of the participants, the sample represents 75,8% of the total number of high educated employees in the participating organizations. Engineers of different branches and economists comprised 73.3% of the sample. Male respondents accounted for 55.4% of the sample. The mean age, total tenure, and organizational tenure were 40, 15.7, and 11.7 years, respectively.

Data Collection

Data from the employees were collected by questionnaire under the guidance of trained psychology students. It was carried out individually or in small groups during the regular working hours. Previously, every participant received a letter explaining the purpose of the study, and the data collecting procedure. Participation in the study was voluntary and the respondents were assured that their responses would remain confidential. The survey was conducted between December 1997 and April 1998.

Data on organizational efficiency were collected from Croatian Chamber of Economy data base.

Measures

The variables of interest were organizational commitment, job involvement, job satisfaction, turnover intention and demographic measures. These were self-report questionnaire measures. Objective profit data were used as a measure of organizational efficiency. The three commitment components were measured by Meyer et al's (1993) six-item versions of the scales. Responses were elicited on 7-point Likert-type formats anchored "strongly disagree" (1) and "strongly agree" (7). Scales were translated to Croatian for the first time and back translation was also carried out. Obtained reliability measures were satisfactory. Alpha-coefficients for the affective commitment scale (ACS), the continuance commitment scale (CCS), and the normative commitment scale (NCS) were, .83, .74, and .87, respectively. Job involvement (JI) was assessed by Lodahl and Kejner's (1965) 20-item scale (4-point Likert type items), and general job satisfaction (JS) by 4 items (responses indicated on 5-point scale). Alpha coefficients were .84, and .79, respectively. Turnover in-

tenion (TI) was measured by 5 questions related to employee's tendency to continue as an organization member. Respondents were asked how likely it was that they would search another job in the following year, how often they think about quitting their organization, do they wait for an opportunity to leave the organization, do they read job advertisements, and search for another job. Coefficient alpha was .77.

Organizational efficiency was estimated by objective profit data based on annual financial reports. Profit per employee was analyzed for several consecutive years and relative trends were taken into account.

RESULTS

The factor structure of the commitment measures

Principal factor analysis was used in data analysis. Three factors, accounting for 40.2, 12.1, and 5.6 per cent of the total variance, respectively, were extracted and rotated to a varimax position. All items of AC scale had highest loadings on the first factor, as well as one CC item and two NC items. The second factor included two CC items and four NC items, while just two CC items had highest loadings on the third factor. The loading of one NC item was split into the first and second factor. According to the eigenvalues (it was 1.004 for the third factor) and Scree-test, the two-factor solution was retained. AC and NC items loaded highest on the first factor, while second factor included highest loadings of five CC items. One CC item had higher loading on the first factor. The items and their factor loadings for the three and two factor solution are reported in Table 1. The same analysis was conducted with more homogeneous sample, e.g. with 115 subjects within an organization and the similar results were obtained.

The zero-order correlations among the scales were all significant ($p < .01$) and were as follows: ACS - NCS = .76; ACS - CCS = .36; CCS - NCS = .42.

Organizational commitment and turnover intention

To assess whether the organizational commitment contribute independently to the prediction of turnover intention a hierarchical regression analysis was used. The purpose was to investigate whether different components of organizational commitment add to the prediction of turnover intention beyond the contribution of demographic variables, job involvement, and job satisfaction. Taking into account the high correlation between ACS and NCS,

Table 1

Varimax rotated factor matrix based on correlations among the items of Meyer et al's (1993) six-item scales of affective, continuance and normative commitment

		Three-factor solution			Two-factor solution	
		F1	F2	F3	F1	F2
<i>Affective Commitment Scale Items</i>						
1.	I would be very happy to spend the rest of my career in this organization.	.69	.31	.08	.71	.18
2.	I really feel as if this organization's problems are my own.	.71	.24	.10	.69	.21
3.	I do not feel like part of the family at my organization.*	.41	.22	-.36	.53	-.25
4.	I do not feel emotionally attached to this organization.*	.61	.40	-.09	.73	.07
5.	This organization has a great deal of personal meaning for me.	.85	.13	.09	.75	.18
6.	I do not feel a strong sense of belonging to my organization.*	.72	.16	-.15	.71	-.04
<i>Continuance Commitment Scale Items</i>						
1.	It would be very hard for me to leave my organization right now, even if I wanted to.	.40	.53	.41	.51	.58
2.	Too much of my life would be disrupted if I decided I wanted to leave my organization right now.	.14	.56	.46	.30	.63
3.	Right now, staying with my organization is a matter of necessity as much as desire.	.64	.09	.39	.48	.44
4.	I feel that I have too few options to consider leaving this organization.	.08	.00	.82	-.12	.79
5.	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.	-.07	.08	.75	-.19	.73
6.	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	.03	.57	.34	.24	.50
<i>Normative Commitment Scale Items</i>						
1.	I do not feel any obligation to remain with my current employer.*	.35	.55	-.25	.63	-.04
2.	Even if it were to my advantage, I do not feel it would be right to leave my organization now.	.49	.65	-.02	.75	.21
3.	I would feel guilty if I left my organization now.	.44	.70	-.07	.74	.18
4.	This organization deserves my loyalty.	.63	.29	-.05	.68	.09
5.	I would not leave my organization right now because I have a sense of obligation to the people in it.	.65	.48	-.06	.80	.14
6.	I owe a great deal to my organization.	.53	.57	.02	.73	.23

Note. *reversed scored items

their similar intercorrelations to other measures, as well as the results obtained by factor analysis, affective and normative commitment scales were not treated as separate predictors. The results on these two scales were summed up and represented as one component of organizational commitment. Coefficient alpha of this measure is .91.

As already noted, the special interest was to investigate the moderator effect of organizational efficiency. For this purpose, 21 organizations were divided in two categories related to their successfulness in the period of transition.

Based on data on profit per employee in the year 1996, trends in profit per employee during the several consecutive years (from 1992 to 1996), and the predictions made by Croatian Chamber of Economy, it was possible to identify 9 organizations whose transition to a market economy was quite successful. Twelve organizations composed the second group. For these organizations it was not possible to find out any positive trends in their efficiency. Compared with the first group of organizations, these organizations had very low profit per employee. Accordingly, the two

samples were constituted: a sample of employees within relatively successful organizations (Sample 1) and a sample of employees within unsuccessful organizations whose financial data indicated a deep crisis (Sample 2). Means

and standard deviations of all the variables for both samples appear in Table 2. Zero-order correlations among the measures are reported in Table 3.

Table 2

Means and standard deviations of measures for employees in successful organizations (Sample 1) and employees in unsuccessful organizations (Sample 2)

Variable	Sample 1 (n=423)		Sample 2 (n=339)	
	M	SD	M	SD
Age	39.1	9.97	42.2	10.06
Sex ^a	1.5	.50	1.6	.49
Total tenure	14.6	9.94	16.9	10.21
Organization tenure	10.4	9.30	13.3	10.15
Job involvement	2.8	.34	2.8	.39
Job satisfaction	3.4	.57	3.2	.60
Affective commitment	5.0	1.21	4.7	1.36
Normative commitment	4.2	1.38	3.8	1.53
Continuance commitment	4.3	1.20	4.0	1.16
Turnover intention ^b	8.1	2.50	9.7	2.88

Note. ^a 1=male, 2=female.

^b 5 is theoretical minimum, 12 is theoretical maximum.

Table 3

Zero-order correlations among measures for Sample 1 (employees in successful organizations) and Sample 2 (employees in unsuccessful organizations)^a

Variable	Age	Sex	TT	OT	Jl	JS	AC	NC	CC	TI
Age	-	.08	.93**	.73**	.25**	.07	.35**	.31**	.26**	-.34**
Sex	.13**	-	.08	.01	.00	.06	.08	.03	-.03	-.05
Total tenure	.97**	.12*	-	.82**	.28**	.10	.36**	.32**	.31**	-.33**
Organization tenure	.75**	.03	.78**	-	.30**	.13*	.44**	.34**	.35**	-.31**
Job involvement	.07	.00	.08	.00	-	.34**	.60**	.52**	.25**	-.32**
Job satisfaction	.06	.03	.07	.00	.42**	-	.53**	.54**	.22**	-.50**
Affective commitment	.18**	.14**	.18**	.18**	.54**	.54**	-	.77**	.39**	-.55**
Normative commitment	.17**	.07	.15**	.18**	.44**	.51**	.75**	-	.41**	-.59**
Continuance commitment	.30**	.04	.27**	.29**	.11*	.20**	.32**	.42**	-	-.41**
Turnover intention	-.15**	.03	-.15**	-.18**	-.28**	-.54**	-.53**	-.59**	-.39**	-

Note. ^a Values below the diagonal refer to Sample 1 (n=423).

Values above the diagonal refer to Sample 2 (n=339).

* p < .05 ; ** p < .01

Table 4

Hierarchical regression analyses predicting turnover intentions from the obtained variables for Sample 1 (employees in successful organizations) and Sample 2 (employees in unsuccessful organizations)

	Turnover intentions	
	Sample 1	Sample 2
	β	β
<i>Block 1</i>		
Age	-.03	-.15
Sex	.00	.02
Organization tenure	-.17*	-.25**
Adjusted R^2	.03**	.12**
<i>Block 2</i>		
Job involvement	-.04	-.10
Job satisfaction	-.54**	-.45**
Adjusted R^2	.32**	.35**
Change (R^2)	.29**	.23**
<i>Block 3</i>		
ACS + NCS	-.38**	-.37**
CCS	-.18**	-.17**
Adjusted R^2	.45**	.45**
Change (R^2)	.14**	.10**

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

Results of hierarchical regression analyses are reported in Table 4. Organizational commitment significantly contributed to the prediction of turnover intention in both samples. Normative and affective component had higher beta-ponder than continuance component of organizational commitment. At the first step of the analysis, demographic variables explained more criterion variance in the sample of employees in unsuccessful organizations. Employed predictor variables explained similar amount of criterion variance, in two samples, with organizational commitment scales showing somewhat larger contribution in the sample of employees in successful organizations. At the final step of the analysis, only job satisfaction and organizational commitment had significant beta-ponders ($p < .01$) in both samples.

DISCUSSION

Several studies examined the factor structure of the commitment measures using exploratory or confirmatory

analyses. For the most part, the results obtained in Western English speaking countries show that affective, continuance, and normative commitment are distinguishable constructs (Allen & Meyer, 1990; Dunham et al., 1994; Hackett et al., 1994; Meyer, Allen, & Gellatly, 1990; Moorman et al., 1993; Shore & Tetrick, 1991; Somers, 1993; Vandenberghe, 1996). On the other hand, Meyer and Allen's three component model is still not extensively investigated in other cultures. The specific contribution of this research was the cross-validation of Meyer and Allen's scales of commitment in Croatia. Accordingly, several findings were obtained. First, exploratory factor analysis failed to provide a clear evidence that the affective, continuance and normative components are conceptually separable. The ACS, CCS, and NCS items did not load appropriately on three separate factors. Only affective component items corresponded closely to one of the three extracted factors, and normative and continuance items split their factor loadings. The third factor explained only 5.6 per cent of the total variance and its eigenvalue was close to 1, so the two-factor solution was retained. Factor matrix mostly supported that continuance commitment scale could be distinguished from the other factor including both, affective and normative commitment scales.

Meyer et al. (1993) replaced the eight-item version of the NCS with a rewritten six-item version in an effort to measure normative component more adequately. They found, however, that the new versions of the ACS and the NCS were highly correlated ($r = .74$) and relatively independent of CCS. In this study all correlations among the scales were significant ($p < .01$), and higher than those obtained in other studies. Reliabilities of the scales are all high and acceptable. Alpha coefficients corresponded to the values obtained for these scales investigated in Western English speaking countries. However, the study failed to support Meyer and Allan's scales as a measure of the three components of organizational commitment. Affective and normative scale lacked discriminant validity.

On the other hand, results revealed that organizational commitment added significantly to the prediction of turnover intention. Of the predictors employed, general job satisfaction and organizational commitment had significant beta-ponders ($p < .01$) at the final step of hierarchical regression analyses. Bivariate correlations between job involvement and turnover intention were significant, but job involvement did not contribute independently to the prediction of turnover intention. This is congruous with the meaning of this construct. Negative correlations between organizational commitment and both employee intention to leave the organization and actual turnover are well established, and they are the highest for the affective commitment (see Allen & Meyer, 1996; Lease, 1998, for the review). To that extent, this research confirms these predictions and speaks in favor of cross-cultural applicability of

the commitment conceptualizations and its operationalizations.

Finally, this study revealed that employees from organizations which were identified as relatively successful according to objective profit data, were higher committed to their organizations, and had higher job satisfaction (all differences were significant, $p < .01$) in comparison to the employees in unsuccessful organizations. The same directions of difference between the two samples was found for turnover intention. However, employed predictor variables correlated similarly to turnover intention. In general, the concept of organizational commitment showed to be a relevant predictor of turnover intentions in the context of deep social and economic crisis. Despite different levels of organizational commitment between employees who pay different price to the transition crisis, it has similar validity in the prediction of turnover intention. However, employed demographic measures were stronger predictors of turnover intentions in the group of employees in unsuccessful organizations. In accordance with the starting assumption, the contribution of organizational commitment scales in accounting for turnover intention was higher in the sample of employees in successful organizations.

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