

VALIDATION OF THE THREE-COMPONENT MODEL OF ORGANIZATIONAL COMMITMENT IN PAKISTAN[#]

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This study examined the construct validity of Meyer and Allen's (1991) three-component model of organizational commitment (OC) in a Pakistani context. Three separate studies were conducted using data from public sector organizations. Study I was a pilot study conducted to determine the readability, and ease of understanding of the measures being used. In the study II, three component organizational commitment (OC) scales (Meyer & Allen, 1991) were translated into Urdu. In the final study, data were collected from 228 employees of a large public sector organization of Islamabad. Five LISREL models were developed to test the best fitting model from the derived data. Exploratory and Confirmatory Factor Analyses (CFA) were conducted to examine the relationship of various constructed models. The results of CFA indicated that a three factor oblique model fit the data best, consistent with the previous research. Reliabilities of the affective and continuance commitment scales were adequate, however, normative commitment scales exhibited relatively low internal consistency reliability. Finally, the present study found that affective and normative commitment were higher in Pakistani and Chinese employees than in previously published samples from South Korea and Canada. Continuance commitment in Pakistani and Chinese samples was lower, however, non significant differences were found between South Korean and Canadian samples on continuance commitment.

To date, much of organizational commitment research has been largely restricted to samples in the USA. Relatively few studies have been conducted elsewhere in the world. The time has now come for more analysis of organizational commitment in other countries too, so

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that cross-cultural comparisons may be made available to researchers and practitioners to increase their understanding of global management. Hofstede (2001) has clearly demonstrated the need to consider the cross-cultural validity and applicability of the popular constructs developed from the US samples. Adler (1991) asserts that for much of the world, comparative findings are scarce and patchy as adequate material on South Asia and Africa is hard to come by, this phenomena is also true in the study of organizational commitment. Allen and Meyer (1996) argued researchers to investigate the dimensionality of the organizational commitment across cultures to discern if multidimensional conceptualizations developed in the US are applicable to other cultures or not. Within past two decades, a multidimensional approach to the conceptualization and assessment of organizational commitment has been proposed and refined (Allen & Meyer, 1990; Meyer & Allen, 1984, 1991, 1997).

Meyer and Allen's Organizational Commitment Scale (Meyer & Allen, 1991) is designed to measure the multidimensional nature of commitment through three separate concepts. Each of the three aspects of commitment—*affective*, *continuance*, and *normative*, is thought to contribute to a psychological state which characterizes an employee's relationship with the organization, and has implications for their continuing membership, and may be affected by different antecedents or have potential consequents with regard to absenteeism, turnover intentions, and citizenship (Meyer & Allen, 1991; Reichers, 1985). According to Meyer and Allen (1991) *affective* commitment refers to the employee's emotional attachment to, identification with, and involvement in the organization; *continuance* commitment refers to an awareness of the costs associated with leaving the organization; whereas *normative* commitment reflects feelings of obligation to remain with the organization. They argued that employees with *affective* commitment remain with an organization because they want to; those with *continuance* commitment remain because they need to; and those with strong *normative* commitment continue their stay with an organization because they think they ought to stay.

Cross cultural Studies of OC

Following Allen and Meyer's (1996) suggestion to investigate the dimensionality of the organizational commitment across cultures to discern its applicability to other cultures, more and more researchers have considered the model's dynamics in other cultural contexts, including Australia (Iverson & Buttigieg, 1999; Noordin, Zimmer, & Williams, 1999), Belgium (Vandenberghe, 1996), Hong Kong (Chiu

& Ng., 1999), Nepal (Gautam, Dick, & Wagner, 2001), Korea (Ko, Price & Mueller, 1997; Lee, Allen, Meyer & Rhee, 2001), Malaysia (Noordin, Zimmer, & Williams, 1999), the United Arab Emirates (Yousef, 2000), Turkey (Wasti, 1999), and China (Chen & Francesco, 2003; Cheng & Stockdale, 2003). Vandenberghe (1996) evaluated the three component model of organizational commitment in Belgium using a French language translation of the commitment scale. He found that the hypothesized factor structure provided a good fit to the data, and hence provided sufficient support for the model in a western culture other than America. Wasti (1999) measured the affective, continuance, and normative commitment in Turkey using "emic-etic" scales. The scales consisted of items translated from the original measures, and items that the researcher wrote specifically for the Turkish context. These scales were found to be reliable and results of confirmatory factor analysis supported the hypothesized structure. In another study conducted in a non Western culture, Ko et al. (1997) evaluated the construct validity of the three component model using a sample of employees in South Korea. As expected, confirmatory factor analysis showed that an oblique three-factor model provided a better fit to the data than did other competing models, a finding that is consistent with previous studies carried out in the west (Allen & Meyer, 1996). The degree to which the model fit the data, however, did not compare favorably to that reported in previous western studies. The authors noted that this difference was most likely due to problems with the Continuance Commitment Scale (CCS). The Korean version of the CCS did not reach the acceptable level of internal consistency. Moreover, confirmatory factor analyses revealed that some items in the Korean CCS did not perform as well as they did in previous research conducted in American context. Based on these findings, Ko et al. (1997) questioned the generalizability of Meyer and Allen's (1991) model to non-western cultures.

To further investigate the cross-cultural generalizability of the three component model of organizational commitment in Korean context, Lee, et al. (2001) conducted two studies to determine whether the three-component model is generalizable to a non-western culture. In the study-1, they found that when 6-items revised versions of the scales (Meyer, Allen, & Smith, 1993) were translated into Korean, the psychometric properties of the Affective Commitment Scale (ACS) were similar to those found in America, but problems were identified in the CCS and Normative Commitment Scale (NCS). In the study-2, they found that these problems could be overcome by adopting a revised set of items written in North America. The new scales demonstrated good psychometric properties in terms of factorial

validity, internal consistency, and criterion related validity with respect to turnover intentions. Finally, they concluded that the three commitment constructs are likely to be conceptually and functionally similar (i.e., generalizable) across culture, but that there might be a need to refine the measures for cross-cultural research.

Cheng and Stockdale (2003) and Chen and Francesco (2003) examined the construct validity of the three component model in a Chinese context. They compared the levels of organizational commitment between Chinese sample and previously published data from Canada and South Korea. In a study of 226 Chinese employees, a five factor oblique model, which included both substantive and method factors, fit the data best.

In both the Chen and Francesco (2003) and Cheng and Stockdale's (2003) studies, fit indices for the three component model displayed values falling below accepted standards for a good fit (cf. Medsker, Williams, & Holahan, 1994). In Chen and Francesco, the base line AC-CC oblique model showed moderate .85, .87, and .83 values for fit indices. While in Cheng and Stockdale's study, fit indices for the same model exhibited values of .85, .87, and .85 for NNFI, CFI, and GFI indices, respectively. Both the studies relied on the revised commitment scales from Meyer et al. (1993). As the findings were obtained from the contrasted samples of Chinese workers of a pharmaceutical company (Cheng & Stockdale, 2003), the basic three factor oblique structure of the model did not receive complete support. Less-than optimal fit values for the three component model, using Meyer et al.'s (1993) revised commitment scales, were also reported by two other studies conducted in Asia (Ko et al., 1997; Lee et al., 2001). Meta analytic review conducted by Meyer, Stanley, Herscovitch, and Topolnytsky (2002), suggests that affective and normative commitment tend to be more related to each other outside of U.S ($r = .69$), than within US ($r = .59$). In the Chinese sample, the zero-order correlation between affective and normative commitment was .64 in both Cheng and Stockdale's (2003) and Chen and Francesco's (2003) studies.

The proposed antecedents of each of the three organizational commitment dimensions tended to be associated more strongly with their respective scales. Finally, they concluded that AC and NC were significantly higher in Chinese sample than in previously published sample from Canada and Korean samples.

In Pakistan and China, dominant culture is collectivistic (Hofstede, 2001). In a collectivistic culture, loyalty to the group (organization) is highly emphasized. In such a culture, a person's

decision is largely influenced by other members in the group. Therefore, the concepts of collectivism and AC would seem to be inextricably connected. It is thus hypothesized that AC would be higher among Pakistani, and Chinese, samples as compared to Korean and Canadian sample of workers. Randall (1993) has argued that people from individualistic cultures, with their emphasis on instrumental and agentic behaviors, may report higher levels of continuance commitment than might people from collectivistic cultures, which emphasize expressive, communal, and interpersonally sensitive behaviors. Thus, people from collectivistic cultures, with their orientation toward group identity, might experience higher levels of normative commitment than would people from individualistic cultures like Canada. It is, therefore, hypothesized that normative commitment would be higher among Pakistani, Chinese, and South Korean samples than among Canadian sample.

Construct Validity of Meyer and Allen's Three Component Model

Many studies have examined the construct validity of the Meyer and Allen's (1991) three- component model and its measures. Allen and Meyer (1996) reviewed results from over 40 samples and claimed that construct validity was strong enough to support the continued use of scales. However, some concerns stand out, first, there is doubt about the uniformity of the Continuance Commitment Scale (CCS). McGee and Ford (1987) found two oblique sub-dimensions of the Continuance Commitment Scale, (a) low job alternatives and; (b) high personal sacrifice. The first sub-dimension suggests that people stay in an organization because they do not have other alternatives, and the second sub-dimension suggests that people stay because they do not want to lose investments (e.g., pension plans) they have made in the organization. Several other studies have further examined the dimensionality of the CC (e.g., Dunham, Grube, & Castaneda, 1994; Meyer, Allen, & Gellatly, 1990; Somers, 1993), confirming the McGee and Ford's (1987) findings. Secondly, because high correlations between affective commitment (AC) and normative commitment (NC) have been consistently found, there is doubt about the distinction between these constructs (e.g., Allen & Meyer, 1990; Ko et al., 1997). In response to the problems in their scales, Meyer et al. (1993) revised the OC Scales, each containing six items. Their study indicated that the revised scales have acceptable reliability, convergent and construct validity, however there was still a high correlation between affective and normative commitment.

In the light of literature reviewed above, it becomes obvious that the construct of commitment has multidimensional nature and needs further empirical investigations, as has been suggested by various researchers (for example, Allen & Meyer, 1996; Matheiu & Zajac, 1990; Meyer & Allen, 1997; Vandenberghe, Stinglhamber, Bentein, & Delhaise, 2001). The present study is designed to contribute to the organizational commitment literature by addressing the limitations of previous research, on organizational commitment. To extend research at examining the generalizability of the three-component model in our context, the present study examines the underlying factor structure of the ACS, CCS, and NCS, by comparing models reflecting the substantive structure of the construct, as well as developing more parsimonious models using structural equation modeling.

Study I

Study-I was conducted to ensure psychometric cleaning of the items so that only appropriate items chosen through proper analysis would be used. As such, the study-I was aimed at evaluating the readability and understandability of the measures being used, and modification of the vague or unrelated items and items, having high values of skewness and kurtosis.

Sample

Sample included 35 employees from a large public sector organization of Islamabad. They were all full time employees. The age range of sample was 21-38 years (Mean age = 26, $SD = 5.12$). Included in the sample were 28 men and 7 women. Out of these, 15 employees belonged to low management while 20 represented middle management.

Instruments

The questionnaire consisted of two parts. Part one included demographic information while part two included items to assess organizational commitment. Organizational commitment was assessed by Meyer and Allen's (1991) three-component commitment scale, which yields separate scores for three forms of commitment, *affective*, *continuance*, and *normative*. The Affective Commitment Scale (ACS) comprises of eight items, and assesses the emotional attachment and feelings of belongingness to the organization. Continuance Commitment Scale (CCS) has nine items, and assesses the costs

associated with leaving the organization and availability of alternatives. The Normative Commitment Scale (NCS) has eight items, and reflects the level of obligation an individual feels to continue with the organization because it is the right thing to do. Each item is presented with a 5-point response scale with anchors ranging from strongly agree to strongly disagree. Item nos. 4, 5, 6, 8, 10, 17, 19, 20, 22, and 25 are reverse scored. Previous research has reported reliabilities (Cronbach alpha) of the three scales to range between .74 and .83, and the inter-scale correlations to be .49 ($p < .05$) for ACS and CCS, .22 ($p < .05$) for CCS and NCS, and .12 ($p < .05$) for ACS and NCS (for a detailed review on measurement properties of these scales, see, Allen & Meyer, 1996).

Procedure

Participants were approached individually in their respective offices. They were initially briefed about the purpose of the study, and assured of confidentiality. The participants were allowed to take their time in completing the questionnaire and returned it through internal mail. Most of the participants returned the questionnaire on the same day it was distributed.

Analysis

The basic purpose of study-I was to prepare items in the questionnaire for exploratory and confirmatory factor analyses in the subsequent studies. Therefore, pre-analysis checks as recommended by Ferguson and Cox (1993) were employed. These included ratings by judges and test of uni-variate normality in terms of skewness and kurtosis values for each item.

Results

In order to identify the vague, unrelated, or inappropriate items, five judges evaluated the questionnaire thoroughly and carefully. After individual evaluation of the items, these judges met in a committee approach and discussed each item in detail. In the light of their suggestions, a few items were modified for length, content, and argots. These included item nos. 9, 12, 18, and 21. Test of uni-variate normality revealed that all the items have admissible range of skewness and kurtosis values, i.e., all the items showed skewness and kurtosis values of less than ± 2.0 , indicating that data have no problem of non normality and are appropriate for further analysis.

Study-II

Objectives

In the light of results and feedback from the study-I, this study aimed at Urdu translation of the three organizational commitment scales.

Sample

Respondents for the study comprised 60 full time employees from a large public sector organization of Islamabad. Included in the sample were 80% men and 20% women employees. 46.7% employees were between age 36-45 years, while 10.5% were between age 18-25 years. 50% sample belonged to middle management (i.e., administration and human resource personnel), 31.7% were from supervisory positions, and 3% employees represented technical and top management positions, respectively. Out of these, 55% were graduates, 33.3% were post graduates, and 11.7 % had acquired an inter-level education.

Instruments

Eight item Affective Commitment Scale (ACS), 9-items Continuance Commitment Scale (CCS), and 8-items Normative Commitment Scale (NCS) (Meyer & Allen, 1991) were subjected to the following translation procedures.

Translation Procedure

Direct translation was made by the researcher following a “centered” direct approach (Sperber, Devellis, & Boehlecke, 1994) having certain advantages over the “decentered” approach in which a questionnaire is prepared *in* both the language versions in a reciprocal process. An effort was made to translate the feeling connotations of the item rather than literal meaning of the original words (Brislin, 1980).

Bilingual committee approach

Bilingual committee approach was used as a way of improving direct translation, five bilingual experts were contacted and requested to review the translations. The experts were first requested to examine and evaluate the initial translation independently. This work was subsequently discussed with them in committee approach, smaller modifications were suggested. The translations were further examined

and evaluated by the researcher and two bilingual translators from National Language Authority who were not involved in committee approach. The experts went through the Urdu script thoroughly to ensure that it is smoothly and clearly read. On the basis of their judgments and consensus about the Urdu version, a final questionnaire was prepared.

Procedure

Questionnaire was individually administered to the employees in their respective sections. 30 employees were given Urdu version first and the other 30 were administered English version first. After 15 days, employees who took Urdu version first were administered English version and those who responded in English first were given Urdu version. This exercise was geared to identify the point of equivalence or discrepancy between Urdu and English versions of the questionnaire. Paired sample statistics were applied between the items of the two versions to see the conceptual equivalence or discrepancy between the two versions.

Results

The results of translation indicated that there were non significant differences in the two versions. Item sum correlation of English version ranged from .30 to .47 for ACS, .07 to .44, for CCS, and .14 to .37 for NCS. Whereas for Urdu version the range of item sum correlation for ACS was between .32 and .51, for CCS and NCS it was between .16- .45 and .09- .36, respectively. Two items, i.e., item nos. 16 and 17 from CCS did not correlate significantly with their total in both the versions; similarly, two NCS items i.e., item nos. 21 and 23 showed non-significant item-total correlation. These items were further reviewed and improved.

Table 1
Mean Score Comparison across Administration (N = 60)

Group	Urdu		English	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Urdu I English II	71.33	6.34	71.13	5.83
English I Urdu II	64.13	10.35	63.96	7.96
Total	68.40	8.81	67.61	8.88

Table 1 indicates that the 30 employees who responded in Urdu first had a mean score of 71.33, (*SD*= 6.34) in Urdu and 71.13, (*SD*=

5.83) in English. The other 30 respondents who answered in English version first had a mean score of 63.96 ($SD=7.96$) in English and 64.13, ($SD=10.35$) in Urdu version. Combined results for all the 60 participants showed a total mean score of 68.40, ($SD=8.81$) in Urdu and 67.61, ($SD=8.88$) in the English version.

Test-retest reliability for Urdu was .67 ($p<.000$) whereas it was .62 ($p<.000$) for English version. Overall, the results provided adequate evidence of the effectiveness of translation process and reliability of the Urdu questionnaire.

MAIN STUDY

Objectives of the Study

The major objectives of this study were to examine the generalizability of the three component organizational commitment model in a Pakistan context, to determine the level of commitment of employees, and cross-cultural comparison in terms of mean levels on the three dimensions in Pakistani sample to those reported in other cultural contexts, e.g., Asian and Western.

Hypotheses

Following hypotheses were formulated to achieve the above mentioned objectives.

- 1) Three-component model of commitment would be supported using employee sample.
- 2) Continuance commitment (CC) would emerge as a unitary construct.
- 3) There would be a positive correlation between Affective Commitment (AC) and Normative Commitment (NC).
- 4) Internal consistency reliability of the three components will be conventionally acceptable using Pakistani sample.
- 5) Affective commitment would be higher among Pakistani and Chinese samples than among Korean and Canadian sample.
- 6) Continuance commitment would be higher among Canadian and South Korean sample as compared to Pakistani and Chinese samples.
- 7) Normative commitment would be higher among Pakistani, and Chinese, than among Canadian and South Korean sample.

METHOD

Sample

Respondents for the study comprised 228 full time employees from Oil and Gas Development Company (OGDC), Islamabad, which is among the largest exploration and production companies in Pakistan oil and gas sectors. Among the 500 questionnaires distributed, 228 were returned, yielding a response rate of 45.6%. Of these 228 employees, 93.2% were men and 6.8 % were women. 40% employees were between age 26 and 35 years, while 35.6% were between 36 and 45 years. 34.6 and 24.4 % employees have acquired a graduation and masters level education, respectively, while remaining 40% had completed inter level education. 35.5% employees represented low management (e.g., assistants, upper/lower division clerks/stenotypists, junior assistants), 28.1% represented middle management (e.g., administration and human resource personnel), 17.5% were technical personnel (e.g., engineers, technicians, radio operators, communication officers/pilots). 17.2 % were from accounts section, and 5.7% of the sample held supervisory positions. The mean organizational tenure of the participants was 13.85 years.

Procedure

A list of forty sections of the OGDC house was obtained from Personnel department. Each head of section served as a research contact for the organization. Once research contacts secured permission to collect data from respective sections, they were given instructions about the study's sampling procedure, i.e., employees should represent all management levels from low to high and administrative to technical. The questionnaires were administered during normal working hours or break periods, either in person or through organization's internal mail system. Data from technical personnel (in field) were collected through organization's official mail system. Respondents were informed that questionnaires were for academic research only.

LISREL Analysis

Structural Equation Modeling (SEM) analyses using LISREL 8.30 (Joreskog & Sorbom, 2000) were employed to examine the relationship of various constructed models. SEM can be effectively conceptualized as a comparative technique in which models are evaluated against other constructed models to determine the best model from the derived data (Anderson & Gerbing, 1988). In order to determine the relationship between different constructed models for the organizational commitment

construct, a nested sequence of model comparisons was made. A null model in this regard served as a baseline for comparison with other models being analyzed. The null model proposed that none of the variables under consideration are related to each other (Byrne, 1989). A total of five models were computed:

- 1) The null model is presented as a baseline for comparison.
- 2) Model 2 represents a single factor solution incorporating all 21 commitment items on to a single factor.
- 3) Model 3 represents a two factor solution breaking all affective and normative commitment items on to one factor and continuance commitment items on the second factor.
- 4) Model 4 separates all the three dimensions on separate factors, i.e., affective commitment (AC), continuance commitment (CC), and normative commitment (NC).
- 5) Model 5 comprises the three dimensions from Model 3 but CC items load onto two separate factors, i.e., continuance commitment-personal sacrifice (CC-PS) and continuance commitment-lack of alternatives (CC-LA).

These models were tested for goodness of fit to the data. The LISREL 8.30 program provides several goodness of fit statistic to aid in the assessment of the degree to which a proposed model fits the observed data. Several authors (e.g., Breckler, 1990; Tanaka, 1993) have recommended that a variety of statistics should be used. Therefore, based on the number of fit statistics available and its usage by authors, multiple fit statistics were selected to determine how well each proposed model fitted the observed data. These include the Chi-square (χ^2), the Goodness of Fit Index (GFI) Comparative Fit Index (CFI), the Non-normed Fit Index (NNFI), $\chi^2 df$ test, and the Root Mean Square Residual (RMR). In the LISREL analysis, χ^2 statistic is the most commonly reported fit index. A lower χ^2 value relative to the degree of freedom is an indicator of good fit and a non-significant χ^2 test is desirable. Most of these fit statistics have been widely used and have received theoretical and empirical support in the literature (for a detailed review, see, Kaplan, 2001).

RESULTS

Initially, an exploratory factor analysis (EFA) was conducted to identify the factorial structure of the 3 component organizational commitment scales. To determine the appropriateness of the correlation matrix, two basic diagnostic statistics were used, The

Kaiser Meyer-Olkin (KMO) test of sampling adequacy and the Bartlett test of Sphericity (Dziuban & Shirkey, 1974). The KMO for the data set was 0.70 which is greater than 0.5 proposed by Dziuban and Shirkey (1974) indicating the applicability of exploratory factor analysis. The Bartlett's test for sphericity (BS) which is based on chi-square statistics was found to be significant (651.346; $p < .000$). Extraction of factors using the K1 rule (eigen value-one criterion) extraction heuristic with eigen values greater than 1 indicated a 7 factor solution accounting for 65.4 percent of the variance. Scree test, on the contrary, suggested a 3 factor solution and appeared to provide the most meaningful and logical interpretation. Therefore, a three factor solution was chosen on the basis of the scree test. A minimum loading of 0.3 was set for a variable in order to define a factor. This is to ensure that only items with high saturation were included. The loadings of items after varimax rotation on the 3 factor solution were evaluated to eliminate items with low loadings (i.e., less than 0.30), cross-loadings, and unsuitable items. Item loadings less 0.30 decrease factor saturation while cross-loaded items indicate that an item is related to more than one factors. A total of four items (i.e. 16, 17, 21, 23) were discarded because these items did not seem to make any conceptual sense to their respective factors. After eliminating these items, rotation was repeated again with three factors and was found (through scree plot) to be accounted for 43.85 per cent of the total variance. Table 2 presents the results of factor analysis.

Table 2

Exploratory and Confirmatory Factor Loadings of the Three Factor Organizational Commitment Scales (N= 228)

		EFA			CFA		
		AC	CC	NC	AC	CC	NC
1.	I would be very happy to spend the rest of my career with this organization.	.61	--	--	.70	--	--
2.	I enjoy discussing my organization with people outside.	.40	--	--	.59	--	--
3.	I really feel as if this organization's problems are my own	.33	--	--	.65	--	--
4.	I think that I could easily become attached to another organization.	.35	--	--	.32	--	--
5.	I don't feel like part of the family at my organization.	.63	--	--	.30	--	--
6.	I do not feel "emotionally attached" to this organization.	.52	--	--	.31	--	--
7.	This organization has a great deal of personal meaning for me.	.78	--	--	.56	--	--

Continued...

		EFA			CFA		
		AC	CC	NC	AC	CC	NC
8.	I don't feel a strong sense of belonging to this organization.	.65	--	--	.44	--	--
9.	Too much of my life will be disrupted if I leave my organization now.	--	--	--	--	.67	--
10.	It would not be too costly for me to leave my organization now.	--	--	--	--	.30	--
11.	Leaving this organization would require a considerable personal sacrifice.	--	--	--	--	.73	--
12.	I will continue to work for this organization as other organizations may not match the overall benefits I have here.	--	--	--	--	.72	--
13.	It would be very hard for me to leave my organization right now, even if I wanted to.	--	--	--	--	.52	--
14.	Staying with this organization is a matter of necessity as well as desire	--	--	--	--	.75	--
15.	I feel that I have too few options to consider leaving this organization.	--	--	--	--	.58	--
16.	I think that people these days move too often from one organization to another organization.	--	--	--	--	--	.36
17.	I do not believe that a person must always be loyal to his organization.	--	--	.37	--	--	.41
18.	I don't believe that leaving one organization to join another one is unethical.	--	--	.37	--	--	.39
19.	I feel it is justified to leave my organization for a better job.	--	--	.52	--	--	.66
20.	Things were better in the days when people spent most part of their Career in one organization.	--	--	.33	--	--	.44
21.	I do not think that desire to be emotionally attached to one's organization is sensible.	--	--	.35	--	--	.34

According to Table 2, the first factor that emerged reflected the dimension of affective commitment. Second factor indicated personal sacrifice and lack of alternatives, all items loaded greater than .30. Factor 3 on the solution reflected normative commitment. The results on dimensionality of continuance commitment-personal sacrifice-(CC-PS), and continuance commitment-lack of alternatives (CC-LA) did not support the scale dimensionality suggested by McGee and Ford (1987). They reported on the basis of EFA that Continuance Commitment Scale (CCS) was not a unitary construct and consisted of two unique components, i.e., continuance commitment-personal sacrifice-(CC-PS) and continuance commitment-lack of alternatives (CC-LA). In the present study, CC subscale emerged as a unitary construct, all CCS items loaded cleanly on a single factor, thus indicating clearly that continuance commitment-personal sacrifice-(CC-PS) and lack of alternatives continuance commitment-lack of alternatives (CC-LA) are not

distinguishable. In sum, the evidence suggests that CCS should be treated as uni-dimensional construct.

To confirm and cross validate the factorial structure of the three component commitment measures obtained through exploratory factor analysis, confirmatory factor analysis (CFA) using LISREL 8.30 (Joreskog & Sorbom, 2000) was conducted. Since confirmatory factor analysis allows researchers to dictate constraints consistent with theoretically based, hypothesized structure and to test statistically, how well the covariance among the observed variables is explained given these theoretical constraints. Following Allen and Meyer's (1996) suggestion to examine the affective, continuance, and normative commitment models, five models were compared. For each CFA covariance matrix using maximum likelihood estimation was used to assess if the observed covariance matrix fit the hypothesized model. Results show that 3-factor oblique model ($\chi^2 = 306.72, df = 153, p < .000$) produced the lowest χ^2 value and provided the best fit. Moreover, the χ^2 / df ratio for the best fitting model is shown to be 2.00. This value clearly represents an adequate fit to the observed data (see Table 2). Whereas, remaining models were different from model 4 and did not show appreciably good fit statistics, however, their values are similar to those reported in literature (e.g., Hackett, Bycio & Hausdorf, 1994; Ko et al., 1997). Table 3 shows the results of overall fit indices of the three component models.

Table 3

Overall fit indexes for the three component models (N = 228)

Model	χ^2	df	RMR	GFI	CFI	NNFI	χ^2 / df
I. Null	2879.59	406	-	-	-	-	-
II. 1-Factor (all 21 items)	377.15	177	.08	.85	.79	.75	2.13
III. 2-Factors (AC, NC, CC)	438.25	169	.08	.80	.70	.69	2.59
IV. 3-Factors (AC, NC, CC)	306.72	153	.09	.90	.87	.82	2.00
V. 4-Factors AC, NC, CCPS, CC-LA	364.23	161	.07	.88	.83	.78	2.26

Note: GFI = Goodness of Fit Index; CFI = Comparative Fit Index; NNFI = Non-normed Fit Index; RMR = Root Mean Square Residual

According to results in Table 3, the 3-factor oblique model ($\chi^2 = 306.72, df = 153, p < .000$) produced the lowest χ^2 value as compared to remaining four models. Moreover, the χ^2 / df ratio for

this model (2.00) is also the lowest in comparison to other models. Whereas, the remaining models are different from model 4 and do not show appreciably good fit statistics, therefore, the 3-factor oblique model ($\chi^2 = 306.72$, $df = 153$, $p < .000$) appears to be the best fitting model. All of the structural coefficients, between the latent factors and organizational commitment items in the three-factor model were significant. However, the path between AC and item 4 was low (.02), similarly, the path between, NC and item 18 was also found to be low. (Standardized path coefficients of the best fitting model are presented in Figure 1, see Appendix A). The other paths/loadings were above .30. In addition, the LISREL estimated correlations among the latent factors were all significant and high. The highest relationship was found to be between affective and normative commitment (.54). The relationship between affective and continuance commitment was found to be (.49) confirming the hypothesis that affective and normative commitment are correlated.

Thus, the three-component model of organizational commitment among Pakistani employees appears to have partial support. Hence, the first hypothesis regarding the generalizability of the three component model in our culture was partially supported. The three components seem to be inter-correlated in our sample compared to western and South Korean samples. The one factor model ($\chi^2 = 377.15$; $df = 177$; $p < .01$), the two factor model ($\chi^2 = 438.25$; $d = 169$; $p < .01$) did not get support. Similarly, the four factor model ($\chi^2 = 364.23$; $df = 161$; $p < .01$), also provided a poorer fit than the three factor model demonstrating that the two continuance commitment sub-dimensions are not distinguishable, thus, the findings of present study suggest that continuance commitment subscale be treated as a uni-dimensional construct. This finding also supports the second hypothesis of the present study that continuance commitment would emerge as a unitary construct. Hypothesis 4 of the present study also got partial support, internal consistency reliabilities of the affective and continuance commitment subscales were satisfactory, i.e., .70 and .78, respectively. These values are according to the threshold recommended for acceptability of the measures in the early stages of theory testing, however, normative commitment scale exhibited relatively low internal consistency reliability .52. Thus, hypothesis 4 is partially supported. Overall, the results of CFA demonstrated that three factor model of commitment was the best model.

Table 4

Cross Cultural comparison of the three Organizational Commitment Scales: Pakistani, Chinese, Korean, and Canadian Samples

Sample	N	Source	ACS			CCS			NCS		
			M	SD	α	M	SD	α	M	SD	α
Pakistani	228	Oil and Gas Development Co.	2.90	.77	.70	2.60	.43	.78	2.81	.46	.52
Chinese ^a	299	Joint ventures and foreign owned companies	4.69	1.20	.78	3.71	.089	.52	4.24	1.07	.75
South Korea ^b	227	Nurses	4.21	1.28	.86	4.15	.94	.61	3.81	1.00	.74
Canadian ^c	603	Industrial Health Education Institute	3.91	1.47	.82	4.03	1.39	.74	3.04	1.41	.83

Note: Scale score range for Pakistani sample, ACS = 8-40; CCS = 7-35; NCS = 6-30. Scale score range for Chinese and Korean Samples = 6-42 for ACS, CCS, and NCS; Scale score range for Canadian Sample = 8-56 for all the three Scales.

^a Chinese study (Cheng & Stockdale, 2003)

^b Lee et al. (2001)

^c Meyer et al. (1993)

As is evident from the Table 4 that, the internal consistency reliabilities of the three scales are not as high in our sample as these were in the Chinese, Korean, and Canadian studies. The reliability coefficients of ACS, ($\alpha = .70$) and CCS, ($\alpha = .78$) were acceptable, however, reliability of NCS ($\alpha = .52$) was relatively low. Contrary to this finding, the reliability of NCS was acceptable in all the three studies, i.e., Chinese, South Korean, and Canadian. However, reliability of CCS was below acceptable levels in Chinese, ($\alpha = .52$) and Korean studies, ($\alpha = .61$). For ACS, Pakistani sample had a high mean score ($M = 2.90$, $SD = .77$), the Chinese sample also had a high level of affective commitment ($M = 4.69$, $SD = 1.20$) compared to Korean ($M = 4.21$, $SD = 1.28$) and Canadian samples ($M = 3.91$, $SD = 1.47$). Thus, hypothesis 5 was supported. For continuance commitment, Pakistani ($M = 2.60$, $SD = .43$) as well as Chinese sample ($M = 3.71$, $SD = .89$) showed relatively low mean scores as compared to South Korean ($M = 4.15$, $SD = .94$) and Canadian samples ($M = 4.03$, $SD = 1.39$). As expected, Pakistani and Chinese sample were low on continuance commitment, however, contrary to our expectations, South Korean employees had a high level continuance commitment. Non significant differences were found between South Korean and Canadian samples on CCS. Pakistani ($M = 2.81$, $SD = .46$) and Chinese samples ($M = 4.24$, $SD = 1.07$) had a high level of normative commitment as compared to South Korean ($M = 3.81$, $SD = .1$) and Canadian ($M = 3.04$, $SD = 1.41$) samples. The South Korean sample also had a higher level of normative commitment than Canadian sample.

DISCUSSION

The present study was an attempt to fill a void by examining the measurement properties and generalizability of the three-component model of organizational commitment (Meyer & Allen, 1991) in a Pakistani context. The procedure followed in the evaluation of measurement properties of the organizational commitment construct has been suggested by Schwab (1980) who outlined a set of recommendations for psychometric properties of the measures used in organizational behavior research. The findings related to dimensionality of Organizational Commitment Scale (OCS) demonstrated that organizational commitment is a multidimensional construct having conceptual distinction in terms of Affective, Continuance, and Normative commitment. Thus, the findings supported the previous research identifying the multidimensional nature of the construct (for a review, see, Allen & Meyer, 1996;

Dunham et al., 1994; Hackett et al., 1994; O'Reilly & Chatman, 1986). Similarly, in the present study, the exception of getting a multidimensional structure received support from the results of both EFA, CFA. Although the number and type of factors in the previous research have varied (see, for example, Iverson & Buttigieg, 1999; Ketchand & Strawser, 1998; Ko et al., 1997), most of the previous studies yielded the dimensions associated with employees' emotional attachment, moral obligations, personal sacrifice, and role of available alternatives in the decision to remain with an organization.

The results on the dimensions of Continuance Commitment-Personal Sacrifice (CC-PS) and Continuance Commitment-Lack of Alternatives (CC-LA) dimension generally did not support the scale dimensionality suggested by McGee and Ford (1987). They reported on the basis of exploratory factor analysis that CCS was not a unitary construct and consisted of two unique components, i.e., CC-PS and CC-LA. In the present study, however, all items loaded significantly on one factor indicating clearly that CC is a unitary construct and the two sub-dimensions, i.e., CC-PS and CC-LA are not distinguishable. Thus, the findings confirmed the results of previous research addressing the issue of dimensionality of the organizational commitment construct particularly in an Asian context (Chen & Francesco, 2003; Cheng & Stockdale, 2003; Hackett et al., 1994; Ko et al., 1997; Lee et al., 2001, Meyer et al., 1990). High correlation among the three primary components of organizational commitment construct found in the current study suggest that in our context people who are emotionally attached to the organization also feel obligated to stay in the organization, and believe they will lose a great deal if they leave the organization. Therefore, increasing one of the commitment components will be associated with the increase of two other components. Thus cultivating any component of organizational commitment will largely increase the overall commitment level.

Results of CFA further demonstrated that a 3-factor oblique model provided the better fit to the data in terms of goodness of fit statistics as compared to the two studies conducted recently in a Chinese context (Chen & Francesco, 2003; Cheng & Stockdale, 2003). In both these studies, fit indices for the three component model display values falling below the accepted standards for a good fit. One potential reason for this weak support of the model in the above mentioned studies and the relatively adequate fit of the same model in the present study may be related to translation issues. Even if a standard translation procedure (Brislin, 1980) is used, it is often difficult to express the true meaning of items in a different language other than that in which the instrument was built. Translation

difficulties may be more problematic for some languages than for others. For example, translating commitment items from English into Chinese and Urdu generates more problems than if one were to translate the items in French. Vandenberghe, et al. (2001) for example, provided strong evidence for the equivalence of English and French versions of the three component model in Europe. However, the reason for this might be that French and English share several commonalities that English and Urdu do not.

To further investigate the cross cultural generalizability of the three-component commitment model, Urdu translations were obtained to determine whether similar pattern of results would be found using alternative Urdu English versions of the affective, continuance, and normative commitment scales. The new measures were then evaluated in terms of internal consistency reliability by administering them to a new sample. The reliability of the translated measures was re-evaluated in order to enhance the psychometric properties of the scales. However, the results revealed that four items did not generalize in our culture, even when the construct they are measuring does generalize. Differences in the relevance of items to constructs across culture have also been found in other areas in organizational psychology. Therefore, it might be possible in future to develop and add emic items to assess the commitment constructs as they manifest themselves specifically within our culture.

Findings of this study also provided partial support for reliability of the organizational commitment construct in terms of internal consistency. According to the results, Affective and Continuance Commitment Scales showed satisfactory internal consistency reliability and proved to be uni-dimensional; however, Normative Commitment Scale exhibited relatively low internal consistency reliability. As regards the conceptual distinction between affective, continuance, and normative commitment is concerned, Meyer and Allen (1984) reported that affective and continuance commitment were unrelated. In contrast, subsequent research as well as the present study found that the CC subscale was significantly related with ACS. Steers and Porter (1975) stated that commitment process may be viewed as a self-reinforcing cycle in which attitudes and behavior are reciprocally related. Additionally, they suggested that individuals who feel bound to an organization (through side bets or sunk costs) “.....typically engage in some form of psychological bolstering in which they attempt to rationalize or self-justify their situation” (p,428). Hence, a high degree of behavioral commitment could produce affective commitment through a process of dissonance reduction.

Thus, consistent with previous research, the findings of present study suggest that affective and continuance commitment may not operate totally independent of one another (see, for review, McGee & Ford, 1987; Meyer & Allen, 1991). Finally, another possibility is that commitment might have a hierarchical structure where affective and continuance commitment are two dimensions of a general commitment concept and that attitudinal commitment is composed of affective and normative commitment without causal relationships among the various components. These possibilities need to be investigated in future research. Overall, an examination of the available data suggests that these scales possess satisfactory reliability and validity for research purposes. Coefficient alpha for the subscales ranged from .52 to .78, while item sum correlations were found to be between .30 and .68. In the previous research, internal consistency of the OC scales has typically been estimated by using coefficient alpha. The number of estimates obtained for these scales ranged from a low of .20 for Normative Commitment Scale to a high of more than .40 for Affective Commitment Scale. Median reliabilities for the ACS, CCS, and NCS, respectively, are .85, .79, and .73 (for actual estimates across studies, see, Allen & Meyer, 1996). Thus, the reliability estimates obtained through the present study grab some place among an assortment of research reporting reliability estimates of the OC Scales.

Finally, for the purpose of cross cultural comparison, the mean levels of affective, continuance, and normative commitment in our sample were compared to those reported in other cultural contexts recognizing that some factors other than culture might account for mean differences (e.g., occupation gender, and age). This comparison allowed to test preliminary hypotheses about the influence of culture on levels of commitment, and to add the body of literature on cross-cultural comparisons of organizational attitudes. As expected, employees in the present study were high on affective and normative commitment than continuance commitment, similar to a recent study by Cheng and Stockdale (2003) in a Chinese context. It may be interesting to note that Pakistan and China along side other Asian countries have been listed among countries where dominant culture is highly collectivistic (Hofstede, 2001), in which loyalty to group or organization is highly emphasized. Moreover, conditions of unemployment in our country foster people stay with the same organization and continue their jobs because of unavailability of other alternative jobs. Therefore, it is possible that over the years loyalty and attachment become a part of culture or habit, so that very few people challenge it, or differentiate its various components. Perhaps,

when alternatives are not available and employees have certain investments in the organization in terms of, for example, pension plans, fringe benefits, interpersonal relationships, they might internalize their commitment to the organization as reflecting their own values (high affective commitment).

Some limitations need to be noted when interpreting the results of this study, although the current study made cross cultural comparisons, our findings are limited by sampling problems, none of the studies included in cross-cultural comparison utilized national probability samples. Thus, generalizations cannot be made to their respective nations. Furthermore, each sample had different gender, occupation, and age compositions. The Canadian Sample was primarily middle-aged, female nurses. The Korean sample is comparable to Chinese and Pakistani sample in terms of age, gender, and organizational tenure, however, there are large differences between occupations. The 30% of the Korean employees are nurses and the other 70% are industrial hygiene technicians, whereas the Chinese sample consisted of employees from different industries such as chemistry, video entertainment, and hi-tech, while our sample included employees of different job categories from a single large public sector organization. Therefore, it is difficult to determine whether these sample characteristics account for more of the differences between the cultural variables per se.

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