

Organizational Commitment: Towards an Integrated Concept Linking the Attitudinal and Behavioral Approaches

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Abstract

This study examines a set of attitudinal and behavioral variables in order to develop an integrative concept of organizational commitment. Structural Equation Modeling was utilized to assess a possible conceptual overlap between organizational commitment and other related constructs. Five measures were employed: the affective scale; the continuance scale; the behavioral intentions to organizational commitment scale and the behavioral intentions to remain in the organization scale. Obtained results (N=1,869) indicate that: 1) The continuance dimension does not integrate the concept of organizational commitment; 2) Attitudinal organizational commitment is a unidimensional construct, constituted only by the affective dimension; and 3) The intentions to remain in the organization are not a component of the organizational commitment. We conclude that organizational commitment is best described as a sort of social attachment established between the worker and an organization, composed largely of an affective component which predisposes individuals to assume proactive behaviors toward an organization.

Keywords: Organizational Psychology, Organizational Commitment, Structural Equation Modeling.

1. Introduction

Organizational commitment (OC) has been one of the most investigated constructs within the field of organizational behavior, both for its impacts on organizational performance and for the meaningful influence on employee satisfaction and motivation levels. With regard to the breadth of its applications in everyday language and within different research traditions, commitment has often been defined in divergent terms (e.g. Cohen & Kirchmeyer, 1995; Dunham et al., 1994; Jaros et al., 1993). Taking into account the development of studies on OC we can highlight three central problems that have hampered the development of an exhaustive and clearer concept of this construct.

The first issue concerns a possible conceptual overlap between OC and other constructs (e.g., satisfaction, identification, involvement, organizational citizenship behavior, loyalty, and intention to stay). The second problem concerns bases or characteristics that justify the quality of the relationship between employee and organization, (i.e., dimensionality of OC). Finally, the third dilemma involves the emergence of different theoretical perspectives that investigate the attitudinal and behavioral approaches phenomenon. The diversity of concepts and interfaces with other constructs is followed by the inaccuracy and redundancy in generating operational definitions for OC. Consequently, a large number of measures focused on the assessment of the construct from different angles and theoretical approaches have been developed.

Due to the difficulty in elaborating constitutive and operational definitions for OC, the present study aims to integrate different research variables proposed to assess the phenomenon on the attitudinal and

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behavioral approaches. This will result in a more precise concept of commitment. We first present some theoretical issues that permeate the current studies on OC. Results are presented in order to make it possible to organize the set of research variables into an integrative empirical model.

- **Organizational Commitment and Its Relationship with Other Constructs**

As proposed by Becker (1960), initial notions about OC stem from the sociological perspective, with the side-bets theory. Commitment is the engagement in a consistent line of activity and comprises a kind of attachment in which the worker's decision to stay with the organization takes into account the costs and benefits of leaving it.

OC has been associated with different social influence processes, such as involvement and identification (Brown, 1969; Hall & Schneider, 1972; Lee, 1971; Sheldon, 1971). Traditionally, Mowday et al. (1979) conceptualized this construct as "the relative strength of an individual's identification with and involvement in a particular organization" (p.226). According to Morrow (1983), this conceptual proximity between commitment and other constructs, occurs because the growth of commitment-related definitions has not been followed by a careful segmentation of its theoretical domain.

It has been common practice to compare OC with the intent to remain in an organization. Although, in accordance to some earlier studies (e.g. Becker, 1960; Mowday et al., 1982) it is hoped that a committed worker intends to remain in their organization, some recent studies have suggested that the intentions to remain in an organization does not constitute the concept of OC, making it a distinct phenomenon (Cooper-Hakim & Viswesvaran, 2005; Klein et al., 2009; Mathieu & Zajac, 1990; Menezes, 2006; Meyer et al., 2002).

- **The Dimensionality Problem of Organizational Commitment**

There are four issues concerning the dimensionality of OC: 1) The conceptual overlap between affective and normative dimensions, 2) The lack of precision concerning how many sub-dimensions constitute the continuance factor, 3) The fact that the continuance factor correlates more strongly with the intentions to remain in an organization than with OC, and 4) The lack of a clear definition of how many dimensions compose the overall structure of the attitudinal OC.

Concerning the first problem, Meyer et al. (1993) introduced their three-component model of OC, the affective and normative dimensions have demonstrated a conceptual overlap ($r = .74$, $p < .05$). Similarly, Meyer et al. (2002) conducted a meta-analysis where a strong positive correlation between the affective and normative dimensions ($r = .63$, $p < .01$) was found, indicating once more an overlap between these concepts. The central hypothesis of such overlap is that the sense of duty and obligation, as a consequence of the norm internalization process stemming from a prior process of identification with the organization (Kelman, 1958).

The second and third problems concern the continuance factor. McGee and Ford (1987) tested Meyer and Allen's (1984) two-component model and concluded that a three-component model provides a better solution than the two-component model. Whereas the affective dimension showed a unidimensional and cohesive factor structure, the factor analysis of the continuance factor had two interpreted sub-dimensions: 1) Low perceived alternatives, and 2) High personal sacrifice.

Besides demonstrating a two-factor structure, the continuance factor is consistent with the side-bets theory (Becker, 1960). An employee develops a feeling of reward and a desire to stay with an organization because of the extrinsic and intrinsic benefits offered. A worker may desire to remain with the organization because of either not having other job opportunities, or believing that leaving the organization may render economic, social, and/or psychological sacrifices. Therefore, both continuance sub-dimensions are related to the notion of remaining but, as mentioned, a few contemporary studies suggest that remaining in an organization does not integrate the definition of OC. Likewise, the continuance factor is not expected to properly predict commitment either, because staying with an organization due to the lack of job opportunities

or to the high personal sacrifice involved in leaving it does not imply behaving committed or proactively (Menezes, 2006).

The fourth problem raises one last issue: how many dimensions are there in the attitudinal organizational commitment? Recent studies show that the continuance factor has not been correlated either with other general measures of commitment, such as the Organizational Commitment Questionnaire (OCQ, Mowday et al., 1979) or with the affective measures. This casts doubts on its convergent validity (Lee & Chulguen, 2005; Meyer et al., 2002; Solinger et al., 2008). Considering the association between the OCQ and the Affective Commitment Measure (ACS, Meyer et al., 1993) as well as the correlation between the OCQ and the Normative Commitment Measure, (NCS, Meyer et al., 1993), $r = .88$, and $r = .50$, respectively. Conversely, the OCQ showed almost null correlation ($r = -.02$) with the Continuance Commitment Measure (CCS, Meyer et al., 1993). In a meta-analysis conducted by Mathieu and Zajac (1990), even when the continuance factor is considered unidimensional, one can detect a level of almost null correlation with the affective dimension ($r = .05$) and a low positive correlation with the normative dimension ($r = .18$).

All things considered, some recent studies suggest that OC should be regarded again as a unidimensional phenomenon. Due to the high correlation between the affective and normative dimensions, and to evidence confirming the negative correlation between the continuance and affective commitment, Solinger et al. (2008) and Menezes (2006) suggest that the feelings of identification and the sense of duty are the main factors in the relationship between the worker and the organization. Thereby, the attitudinal OC can best be characterized as a unidimensional construct, composed only of the affective dimension. Some authors claim that in contrast with the continuance factor, the affective dimension is the most reliable dimension and has the best validity properties (Allen & Meyer, 1996; Cohen, 2003; Meyer et al., 2002). It also presents the best content validity (Brown, 1996; Dunham et al., 1994).

• **Attitudinal and Behavioral Approaches**

The polysemy of OC is also influenced by the different theoretical perspectives that address the issue. There are two approaches that contribute to the diversity of OC concepts: 1) the attitudinal approach, which emphasizes the nature of the identification process that mutually binds individual and organizational goals and values, and 2) the behavioral approach, in which the commitment is supported by the relationship between behaviors and cognitions that strengthen future behaviors. In general, there is a clear prevalence of the attitudinal approach within the research field on OC, as observed in Mowday et al. (1982) classic study, which considers commitment as a unidimensional construct. According to these authors, the attitudinal commitment comprehends the “process by which people come to think about their relationship with the organization” (p. 26).

The attitudinal-behavioral dichotomy has restricted the development of new inquiries aimed at integrating attitudinal and behavioral commitment. Most of the studies investigating this relationship concern the influence of attitudes on behavior, typically evaluated by the intentions to stay with the organization (Mobley et al., 1979; Peters et al., 1981; Steers, 1977). Even earlier studies that explore the influence of behaviors on attitudes of commitment (e.g., O'Reilly & Caldwell, 1980; Salancik & Pfeffer, 1978) do not investigate the reciprocal effects between attitudinal and behavioral commitment. Besides, these studies merely conducted one-sided investigations.

• **Purpose of the Present Study**

As the main objective of this paper is to develop a concept of OC which stems from the attitudinal and behavioral variables, two different strategies were adopted in order to test the relationships between the following variables: 1) The affective commitment scale (AC); 2) The low perceived alternatives subscale (CC:LoAlt); 3) The high personal sacrifices (CC:HiSac) subscale; 4) The Behavioral Intentions to Remain in the Organization Scale (BIROS); and 5) The Behavioral Intentions to Organizational Commitment Scale (BIOCS). Please refer to the subsection “Measures of Organizational Commitment” for more details.

The first strategy adopted here was to develop a discriminant validity study between BIROS and BIOCS. This strategy is supported by more recent theoretical assumptions and research findings (Jaros, 2009; Klein et al., 2009; Menezes, 2006), which indicate that the intentions to remain in the organization are not a component of OC. According to Klein et al. (2009), “one’s desire to continue with a target is an outcome of commitment and not an element of commitment itself” (p.26). Menezes (2006) conducted a research that demonstrates the behavioral intentions to OC and to remaining in the organization are distinct phenomena because they did not share the same factor structure. Likewise, in that study it was found that the intention to remain in the organization is not expected to be a part of the concept of OC.

After this initial study, four different theoretical models were proposed and tested to make it possible to find out which one best fits the data. These models are an attempt to summarize classical and contemporary problems approached in the introduction section into a single issue: Which attitudinal variables should be involved in an integrative concept of organizational commitment?

Disregarding BIROS, in the first model we intend to test the explanatory power of the attitudinal variables (AC, CC:LoAlt and CC:HiSac) on BIOCS. This model is supported by the classical view (Meyer & Allen, 1984), according to which the attitudinal commitment is composed of the affective and continuance dimensions. According to these authors, all these variables are expected to be suitable predictors for the behavioral intentions to OC. Considering the relationships between the attitudinal variables, a negative correlation between AC and CC:LoAlt is expected for this model (Hartmann & Bambacas, 2000; McGee & Ford, 1987; Meyer et al., 2002; Powell & Meyer, 2004) as well as a positive correlation between AC and CC:HiSac (Hartmann & Bambacas, 2000; McGee & Ford, 1987; Powell & Meyer, 2004; Stinglhamber et al., 2002). Concerning the relationship between CC:HiSac and CC:LoAlt, a strong positive correlation is also expected from this association. This relationship can be explained as follows: if an employee believes that he or she is currently staying with the organization for not having other job opportunities, choosing to quit it might bring some financial losses as a consequence.

The second theoretical model is derived from the first one and tests the overall model without CC:LoAlt. Therefore, CC:HiSac should not be expected to properly predict BIOCS. Since CC:HiSac is embedded in the notion of “remaining in the organization”, but we should expect the “intentions to stay with the organization” not to be part of the OC concept, we also expect a weak association between CC:HiSac and BIOCS.

The third theoretical model is also derived from this first one, and tests the overall model, without CC:HiSac. It considers that CC:LoAlt does not predict adequately the behavioral intentions to OC (Lee & Chulguen, 2005; Meyer et al., 2002; Solinger et al., 2008). Some investigations (Rodrigues, 2009; Bastos, 2006; Carson et al., 1995) have shown that CC:LoAlt seems to be associated with another construct (organizational entrenchment) rather than organizational commitment. Besides, CC:LoAlt is also embedded in the notion of remaining in the organization. Thus, we expect a weak correlation between CC:LoAlt and BIOCS.

The last model supports part of the central hypothesis for this study. We call this model the hypothesized model. CC:LoAlt and CC:HiSac were excluded from this model. Thus, we expected AC to be the only attitudinal variable that significantly predicts BIOCS. This model was based on the Mowday et al. (1982) and Solinger et al. (2008) assumptions, who consider the attitudinal commitment as a unidimensional construct, constituted only by the affective dimension.

In view of these questions, the single hypothesis for this paper was based upon the assumptions that the attitudinal OC does not comprise the continuance factor, and, according to Menezes (2006), the intentions to stay with an organization does not integrate the concept of OC.

In light of the foregoing discussion, we generated and tested the following hypothesis:

Hypothesis 1: The integrative concept of organizational commitment should be restricted only to the affective and the behavioral intentions to organizational commitment variables.

2. Method

• Sample and Procedures

Participants in this study were 1,869 employees from companies of the primary (28%), secondary (45%), and tertiary (28%) sectors of the economy. We selected a sample from three different Brazilian regions: North (Manaus Industrial Complex), Northeast (São Francisco Valley), and South (Florianopolis Metropolitan Region). The referred regions, which present different cultural characteristics, were selected to increase sample variability and the generalizability of the results of this research. One hundred and twenty participants were excluded from the final database, out of the 1,989 initial participants, considering at least one of the following problems: 1) The proportion of missing answers was above 10% (Troyanskaya et al., 2001; Wagner et al., 2004); 2) The sum of the raw scores was above 12 on the Validity Scale (see next section); and 3) The number of data points lay outside 1.5 times the interquartile range (Outlier case).

The mean age of participants was 31.2 (SD = 10.3). Fifty-five percent were men, 43% had a high school diploma, and 27% had a college diploma. Forty-six were single and 41% were married. Most companies employ more than 250 workers (54%). Seventy-seven are private companies and 18% are public companies.

• Measures of Organizational Commitment

Attitudinal Approach. The affective commitment was measured using both the modified versions of Mowday et al. (1982) OCQ and of Meyer et al. (1993) Affective Commitment Scale (ACS). Seven out of 15 items from the original version of OCQ were cross-culturally adapted and validated to the Brazilian context by Borges-Andrade et al. (1989). In the same way, three out of 6 items of ACS were translated, adapted, and validated to Brazil by Enders and Medeiros (1998) and, recently, further validated by Menezes and Bastos (in press). To evaluate the low alternatives (CC:LoAlt) and the high personal sacrifice (CC:HiSac) subscales, six items from several organizational commitment scales (Meyer et al., 1993; Rego, 2003; Powell & Meyer, 2004; Carson et al., 1995) were equally cross-culturally adapted and validated. Responses were obtained on a 7-point Likert-scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach alphas for the AC, CC:LoAlt and CC:HiSac scales was .86, .66, and .70, respectively. The full set of items for the affective scale and the two continuance subscales is presented in Table 2.

Behavioral Approach. With regards to the behavioral approach two behavioral intentions measures were used: Behavioral Intentions to Organizational Commitment Scale (BIOCS) and Behavioral Intentions to Remain in the Organization Scale (BIROS), both developed and validated by Menezes (2006). BIOCS items assess four overall facets: Extra effort and additional sacrifice; better performance and productivity; organizational defense, and participation. All items were measured on a 7-point semantic differential scale with two mutually opposite courses of action (1 = lower commitment and 7 = higher commitment). The Cronbach alphas for BIOCS and BIROS was .81 and .71, respectively. An example of an item of BIOCS is shown in Fig. 1.

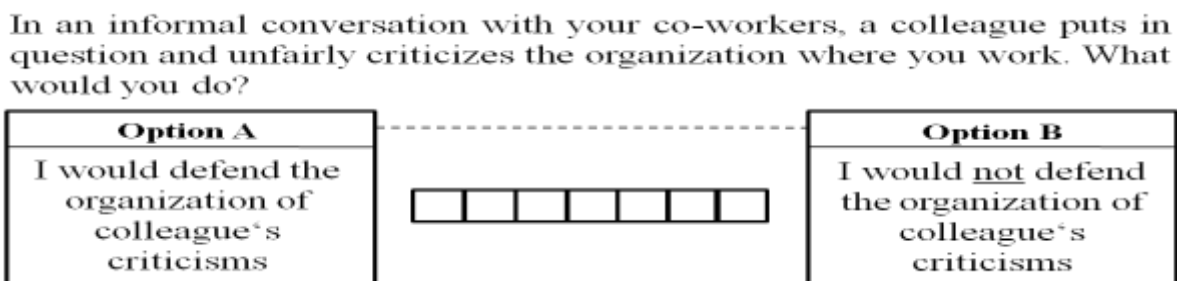


Fig. 1: Example of an Item of Behavioral Intentions to Organizational Commitment Scale - Organizational Defense Facet

Validity Scale. The Validity Scale was originally developed to measure three validation items, which are designed either to assess whether or not an employee provided accurate answers, or whether or not participants have been given the necessary information to complete the questionnaire. To be considered valid, the sum of the raw scores should not exceed 12 (Corresponding to answers marked in the fourth interval in at least two items and a response exceeding the fourth interval in another item).

In addition to the items of these scales, employees were asked to fill a socioeconomic questionnaire with items involving sex, age, marital status, length of service, size of company, among others.

• **Data Analysis**

In order to examine the conceptual structure of OC, we used correlations and structural equation modeling (SEM) as a technique of confirmatory factor analysis (CFA). We calculated the means, standard deviations, reliabilities and zero-order correlation coefficients for all the variables examined. Descriptive statistics, and correlations were calculated in SPSS 17.

At last, SEM was used to estimate, analyze, and test some models that specify different relationships among the research variables. One of SEM's advantages over other methods is that the latent variables are free from random error, because the error is estimated and removed, leaving only a common variance. Furthermore, SEM produces both a statistical measure of goodness-of-fit and the explained variance (R^2) of the model, which allows to accurately choose between different models. Four concurrent models were assessed in this paper: 1) Model 1 – AC, CC:LoAlt and CC:HiSac predicting BIOCS; 2) Model 2 – AC and CC:HiSac predicting BIOCS; 3) Model 3 – AC and CC:LoAlt predicting BIOCS; 4) Model 4 (hypothesized model) – only AC predicting BIOCS. In Model 4 we tested our single hypothesis that OC is an attitudinal unidimensional construct, composed only of the affective dimension together with the behavioral intentions to OC. We expected this last model to be the most suitable of all.

For each CFA, we analyzed the covariance matrix using maximum likelihood estimation. In order to assess whether the observed covariance matrix fits the models, we analyzed a variety of fit indices: a) Overall model chi-square measure (χ^2); b) Goodness-of-fit index (GFI); c) Adjusted goodness-of-fit index (AGFI); d) Normed fit index (NFI); d) Comparative fit index (CFI); e) Root mean square residual (RMR); f) Root mean square error of approximation (RMSEA); and g) Akaike information criterion (AIC). All confirmatory factor analyses were performed in AMOS 16.

3. Results

• **Correlations**

Table 1 shows the means, standard deviations, reliabilities and intercorrelations among latent variables. The highest correlation was obtained between AC and BIOCS ($r = .48$, $p < .001$), followed by the correlation between CC:LoAlt and CC:HiSac ($r = .38$, $p < .001$). The positive correlation between AC and BIOCS was expected because the affective dimension has traditionally demonstrated the best psychometrical properties to assess OC, including the highest correlation coefficients between classical measures, such as OCQ and ACS (Allen & Meyer, 1990; Cohen, 1993; Meyer et al., 2002; Randall et al., 1990; Shore & Tetrick, 1991). Moreover, as both CC:LoAlt and CC:HiSac are sub-dimensions of the continuance commitment and both of them carry the implicit notion that the intentions to remain in the organization are a component of OC, these two sub-dimensions were expected to be positively associated. However, BIROS does not correlate significantly with any other variables of this study. This finding corroborates the results of factor analyses computed in the previous subsection and demonstrates that the intentions to remain in the organization do not integrate the concept of OC.

Table 1: Means, Standard Deviations, Reliability, and Intercorrelations among Latent Variables

Variable	M	SD	1	2	3	4	5
1. AC	4.99	1.18	(.86)				
2. CC:LoAlt	2.66	1.55	.07**	(.66)			
3. CC:HiSac	4.36	1.46	.30**	.38**	(.70)		
4. BIOCS	5.77	.84	.48**	-.12**	.08	(.81)	
5. BIROS	4.01	.72	.02	.00	-.01	.01	(.71)

Note. N = 1,869. Alpha de Cronbach coefficients are reported on the diagonal. All intercorrelations are estimated by SPSS 21.

** p < .001.

• **Confirmatory Factor Analysis**

A confirmatory factor analysis was used to test those four theoretical models previously developed for this current research. The BIROS omission in the following SEM models occurred based on the results of discriminant validity between BIOCS and BIROS. All estimates employed to analyze the correlation coefficients are standardized. Our results show that the hypothesized model ($\chi^2 = 2,580.42$, $df = 400$, $p < .001$) provided the best fit. The first model ($\chi^2 = 3,600.21$, $df = 591$, $p < .001$) provided a poorer fit than the second model ($\chi^2 = 3,148.17$, $df = 525$, $p < .001$) and the third model ($\chi^2 = 2,732.88$, $df = 462$, $p < .001$).

Overall, AC was positively related with both CC:LoAlt ($\beta = .10$, $p < .001$) and CC:HiSac ($\beta = .38$, $p < .001$). As expected, the two continuance sub-dimensions (CC:LoAlt and CC:HiSac) were strongly associated ($\beta = .52$, $p < .001$). BIOCS was negatively related to CC:LoAlt ($\beta = -.19$, $p < .001$) and was hardly related to CC:HiSac ($\beta = .01$, $p = .818$). The stronger relationship obtained was the one between the AC and the BIOCS ($\beta = .56$, $p < .001$). The explained variance considering all variables was $R^2 = .35$. However, considering only the affective variable, the explained variance was $R^2 = .33$. This finding demonstrates that the variance shared among the measured variables was, for the most part, accounted for by the relationship between AC and BIOCS. Thus, considering the last model, AC is the variable that best explains the behavioral intentions to OC. The structural model including all three attitudinal variables predicting BIOCS is displayed in Fig. 2.

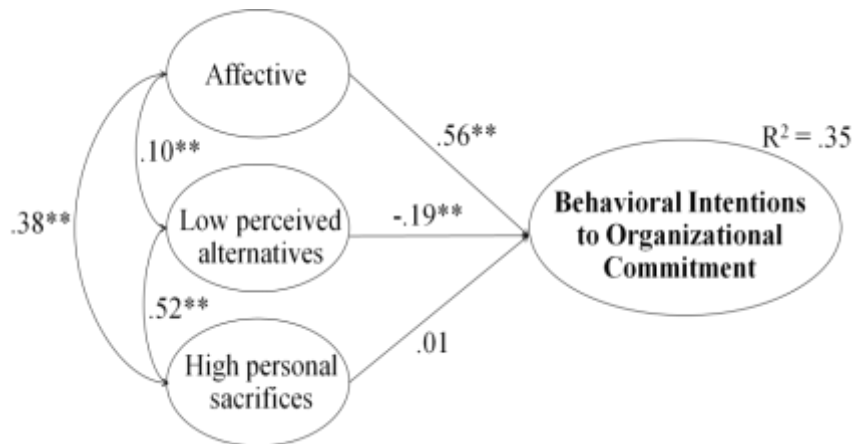


Fig. 2 Standardized path coefficients for the first theoretical model with maximum likelihood parameter estimates. For the sake of parsimony, parameters for the measurement portion and disturbance terms are not presented. **p < .001.

In order to improve the overall quality of the fit indices, we chose to re-examine the last model adding four parameters related to the measurement error in some observed variables. This re-examined model used the Lagrange Multiplier Test, calculated through the Modification Indices (MI) Command performed by AMOS software. The highest MI value was the one obtained between the measurement error of the items “oc_4” and “oc_13”, both measuring a BIOCS facet named “organizational defense” (MI = 263.653). In face

of the great similarity content, three parameters were introduced between the measurement errors for the following AC items: AC_3 and AC_4 (MI = 168.535); AC_7 and AC_9 (MI = 112.204); and AC_8 and AC_10 (MI = 84.838). The written content of the items can be seen in Table 3.

Regarding the minimum criteria established for a better model fit, the re-examined model had almost all indices higher than the expected. NFI was the only index lower than .90 (NFI = .89). These indices are shown in Table 2. Values within parentheses describe Model 4 before the modifications. Values without parentheses pertain to the re-examined model.

Table 2: Fit indices of all theoretical models for variables predicting Behavioral Intentions to Organizational Commitment (n = 1,869)

Model	χ^2	df	χ^2/df	$\Delta\chi^2$	GFI	AGFI	NFI	CFI	RMR	RMSEA	AIC
Null	20,441.43**	630	32.45	-	-	-	-	-	-	-	-
1	3,600.21**	591	6.09	16,841.22**	.90	.88	.88	.87	.223	.052	3,750.21
2	3,148.17**	525	6.00	452.04**	.90	.89	.84	.86	.212	.052	3,288.17
3	2,732.88**	462	5.92	415.29**	.91	.90	.84	.87	.141	.051	2,864.88
4	(2,580.42**) 1,939.62**	(404) 400	(6.39) 4.85	(152.46**) 793.26**	(.91) .93	(.89) .92	(.85) .89	(.87) .91	(.139) .134	(.054) .045	(2,702.42) 2,069.62

**p < .001.

Based on the results of the confirmatory factor analysis for the hypothesized model, the following factor loadings for the affective and BIOCS items were calculated (see Table 3).

Table 3: Confirmatory factor analytic item loadings for affective and BIOCS (n = 1,869)

Organizational Commitment Items		Maximum likelihood Estimates of factor loadings	
		Affective	Behavioral Intentions (BIOCS)
AC_1	My organization inspires the best of me to my progress in the performance at work	.52	
AC_2	I am interested in the fate of my organization	.49	
AC_3	I really feel as if this organization's problems are my own	.64	
AC_4	I really feel as if this organization's aims are my own	.45	
AC_5	It would be costly for me to leave this organization	.60	
AC_6	I feel a sense of ownership for this organization, even if only one employee	.57	
AC_7	Talking to friends, I always comment that this organization is a great institution to work	.72	
AC_8	This organization has a great deal of personal meaning to me	.74	
AC_9	I feel proud telling people that I am a component of this organization	.77	
AC_10	I feel that there is a strong attachment between me and my organization	.74	
oc_1	Extra effort and additional sacrifice		.46
oc_2	Better performance and productivity		.46
oc_3	Extra effort and additional sacrifice		.42
oc_4	Organizational defense		.39

oc_5	Participation	.44
oc_6	Better performance and productivity	.41
oc_7	Participation	.57
oc_8	Better performance and productivity	.52
oc_9	Extra effort and additional sacrifice	.59
oc_10	Extra effort and additional sacrifice	.49
oc_11	Participation	.61
oc_12	Extra effort and additional sacrifice	.52
oc_13	Organizational defense	.32
oc_14	Participation	.58
oc_15	Extra effort and additional sacrifice	.61
oc_16	Better performance and productivity	.56
oc_17	Participation	.44
oc_18	Organizational defense	.41
oc_19	Better performance and productivity	.38
oc_20	Participation	.57

Note. As the BIOCS items are designed in a semantic differential scale, only the general content (sub-dimension) was reported in this table. For a complete version of BIOCS please contact the authors. All loadings are standardized.

4. Discussion

The current study attempted to fill a blank in the literature by examining how different attitudinal and behavioral variables were associated with each other to develop an integrative concept of OC.

The central variable for all models presented was found to be the affective, which is strongly correlated with the behavioral intentions to OC and moderately correlated with the high sacrifices sub-dimension. A second substantial finding of this research concerns the dimensionality of OC and the expressivity of the continuance factor within the attitudinal perspective. The higher correlation coefficient obtained for low alternatives sub-dimension stems from the association with high sacrifices, but the correlation between low alternatives and intentions to remain in the organization was almost null. We had expected a negative correlation between scores on low alternatives, and scores on intentions to remain in the organization. Similarly, we had expected a strong positive correlation between high sacrifices and intentions to remain in the organization, but again an almost null correlation was obtained between these variables, as shown by Table 1.

An expected result was found between high sacrifices and behavioral intentions to OC, assuming very low correlation indices. If high sacrifices can measure OC, a strong positive correlation between these variables should be expected on Model 2. However, since high sacrifices are content-related to the intentions to remain in the organization, but these intentions differ from the behavioral intentions to OC, we were expecting a correlation close to zero. Likewise, although the high sacrifices sub-dimension is positively correlated with the affective variable, it does not contribute to the prediction of behavioral intentions to OC. Moreover, Model 2 has poorer fit indices than those of the subsequent models.

The lack of precision of the continuance factor is noteworthy and can be attributed to three possible reasons: 1) a non-cohesive factorial structure, which has generated two distinct sub-dimensions (low alternatives and high sacrifices); 2) the lack of a clear definition of which perspective (attitudinal or behavioral) better supports the continuance factor assumptions. When characterized as a side-bet, the continuance factor seems closer to behavioral than attitudinal approach (e.g. Meyer e Allen, 1984) because it is related to the individual's tendency to engage in "consistent lines of activity". According to Becker (1960), this engagement includes rejecting other job opportunities as well as staying with the organization due to the perceived costs to leave it; and 3) the theoretical overlap between some assumptions of both the continuance factor and remaining with the organization, although our research findings have not supported such a relationship. Both continuance sub-dimensions are theoretically associated with the intentions to remain in

the organization: an individual might want to stay not only due to the lack of job alternatives but also because of the perceived costs associated with leaving the organization.

An interesting result obtained concerns the relationship between behavioral intentions to OC and to remain with the organization. Typically, the intentions to stay with the organization was embedded in Mowday et al. (1982) definition, in addition to the continuance factor assumptions (Meyer & Allen, 1984). However, as Menezes (2006) concluded, the mere decision to stay with or to leave an organization does not provide an adequate representation of the extent to which a worker intends to proactively contribute toward many different aspects of organizational life. When a worker agrees to stay with an organization, this does not necessarily imply commitment. A possible explanation for this is that they do not expect to find other job opportunities, i.e., they may be organizationally entrenched (Carson et al., 1995; Rodrigues, 2009), or else, they may be more strongly attached to other focus, such as teamwork.

In a recent theoretical study conducted by Jaros (2009), the author reports that “thirty years ago, when many employees expected to spend their careers at a single firm, a ‘desire to remain’ in one's organization or union might have been the most salient outcome of commitment, but today it might be a willingness to innovate during the short time that both the employee and the organization expect to be together” (p.32). Additionally, Jaros (2009) points out the weakness of commitment measures, and he asserts that “scales that were valid measures of organizational commitment at one point in time, may, as time goes by, reflect it less and less accurately” (p.33).

Another explanation to the potentially increased frailty in the relationship between commitment and intentions to remain concerns to the instability in the economic relations, especially in the post-globalization era. The sharp rise in turnover has increased the uncertainty over employment stability, and may have changed the nature of the attachment established between worker and organization. As stated by Arthur and Rousseau (1996), “the old picture of stable employment, and organizational careers associated with it, has faded, and a new picture of dynamic employment and boundaryless career calls for our attention” (p.6). As the significance of careers has changed, the meaning of organization is changing as well. Instead of the static perspective of the single organization, it is necessary to think about the organization in a more dynamic way. Explaining OC from the worker's intentions to remain means to understand the organization concept from a stable view. Thus, it is possible that the intentions to remain in the organization do not express OC anymore because employee's perception of the organization is changing over time.

• **Limitations and Directions for Future Research**

Although our findings bring some theoretical contributions to the organizational commitment literature, there are a number of limitations that should be noted. First, our research did not investigate a set of classical antecedents and outcomes of OC. Some other variables can interfere in the association between the attitudinal and behavioral measures, including personal and professional features. Second, the generalizability of our results is still limited to the Brazilian background. Although the sample was designed to increase the power of generalizability of findings, it is necessary to extend this investigation to other countries and to different cultural contexts. It is worth mentioning that despite the fact that the measures used in this research were previously adapted and validated they differ from the traditional measures of OC. Thus, the psychometric properties of these measures should be cross-culturally assessed.

Finally, although the behavioral intentions can be regarded on a behavioral approach, they are actually useful as links between attitudes and behaviors (Ajzen, 1988; Ali and Raza, 2015), but not as a behavior by itself. Then, it is important to consider for future research other OC related-behaviors, such as job performance and proactivity at work.

5. Conclusions

This article has attempted to offer a deeper insight into the ways in which a number of attitudinal and behavioral variables are related to each other. Evidence was found that the affective variable is the only

attitudinal component that predicts in a suitable way the behavioral intentions to organizational commitment. The data indicates that the intentions to remain in the organization are not part of the OC construct. Similar findings were also corroborated by Rodrigues & Bastos (2010). Moreover, the continuance factor and its sub-dimensions (low alternatives and high sacrifices) do not predict behavioral intentions to OC. As stated by Solinger et al. (2008), the three-component model (Meyer et al., 1993) suffers from a conceptual inconsistency and a lack of an unequivocal empirical support. In accordance to these authors, the use of the three-component model as a general model of organizational commitment should be discouraged.

In short, more than just testing a set of relationships between the measures employed, this research is a first step toward integrating the attitudinal and behavioral approaches. Our findings suggest that the continuance factor, according to Meyer and Allen (1984), and the intentions to remain in the organization, as described by Mowday et al., (1982) are no longer part of the concept of OC. Nowadays, we have entered a new era where staying with an organization has become increasingly difficult due to continuous turnover and job instability (Brewer et al., 2012). All things considered, we propose the following concept of organizational commitment: Organizational commitment is a sort of social attachment established between the worker and an organization, composed largely of an affective component which predisposes individuals to assume proactive behaviors toward an organization.

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