RELATION BETWEEN ORGANIZATIONAL COMMITMENT AND PROFISSIONAL COMMITMENTS: AN EXPLORATORY STUDY CONDUCTED WITH TEACHERS

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ABSTRACT

The existence of several kinds of commitment in workplace is well known. However, there are few studies that relate these different commitments or that established deterministic models. This study has explored the relationship between organizational and professional commitment in public higher education teachers according the multidimensional perspective of Meyer and Allen (1991), based on a convenience sample of 219 teachers. The proposed models were estimated through structural equation modeling methodology. The Model 1 specified a relationship of direct influence of Professional Commitment on Organizational Commitment and the Model 2 established the opposite relationship of direct influence of organizational commitment on professional commitment. Both models presented a good fit to the data without statistically significant differences between them. Nevertheless, the explicatory power of Model 1 was superior to Model 2, due to the fact that it includes a larger number of determinant relationships that are statistically significant. Theoretical and practical implications were discussed and new directions for future research were identified.

KEYWORDS**:** Organizational Commitment, Professional Commitment, public higher education teachers.

**1. Introduction**

The interest in the study of Commitment due mostly to his association with increased efficiency and productivity in organizations through increased individual performance, pro-social behaviours and innovation, low levels of absenteeism and turnover intent (Klein, Molloy, & Cooper, 2009; Meyer & Allen, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). The organization is one of the most studied outbreaks by Commitment but the interest in the subject does not end in the study of Organizational Commitment since it has witnessed a growing interest by commitment associated with the profession, commonly known by Professional Commitment. Although Professional Commitment and Organizational Commitment have been the subject of several empirical studies, there are relationships that have not yet been properly analysed, in particular, the relationship of determination of one over the other, in the absence of a consensual position on this issue (Cohen, 1999; Klein, Molloy, & Brinsfield, 2012; Meyer, Allen, & Smith, 1993; Morrow, 1983; Randall & Cote, 1991). Thus, the present study aims to identify the directionality of the relationship between Professional and Organizational Commitment, positioning itself in the study of Meyer, Allen e Smith (1993). Like the study of Meyer et al. (1993), we have chosen to use a profession with a strong specialization and high professional culture that stems from the specific nature and differentiating associated activities (Sainsaulieu, 1988), in particular, the teaching of Portuguese public University College.

**2. Theoretical Framework**

**2.1. Organizational Commitment**

The Organizational Commitment began to receive greater attention from the early 60 of the last century (Klein, Molloy & Cooper, 2009). Since then has been defined and measured in various ways, having many authors opted to formulate their own conceptualization of the construct and proposed specific measuring instruments (Meyer & Herscovitch, 2001; Morrow, 1983; Reichers, 1985). At present still not consensual a definition of Organizational Commitment (Klein, Molloy & Cooper, 2009) although multidimensional approaches that argue that this construct is comprised of several components have wider acceptance. It is in these that fits the model of Three-components of the Commitment of Meyer and Allen (1991, 1997), developed with the goal of integrating the one-dimensional dominant conceptualizations. According to Meyer and Allen (1991, 1997), Organizational Commitment is a state of mind that characterizes the relationship of determined nature of the contributor with the Organization and that has implications on his decision to continue or not in the Organization. The nature of this relationship can be affective, normative and calculative, constituting these three types of relationship, represented by the three components of Organizational Commitment: affective, normative and calculative. In this context, employees with a strong affective Commitment remain in the organization because they want to; normative remain in the organization because of the sense of duty or of moral obligation; calculative remain in the organization because they need (Allen & Meyer, 1996; Meyer & Allen, 1991, 1997). This is how the Organizational Commitment is considered a bond resulting from the intensity of the three components that integrate (Meyer & Allen, 1997; Klein, Molloy & Cooper, 2009) - affective, normative and calculative. Despite the weaknesses that are pointed, in particular, the high relationship between the affective and normative components and possible two-dimensional nature of calculative component (Klein et al., 2009; Meyer & Allen, 1997, Rego & Souto, 2004), the model of Three-component of Organizational Commitment has been one of the models who have featured more stable and consistent results in a plethora of empirical studies (Meyer, Stanley, Herscovitch & Topolnytsky, 2002) and one that best has "... withstood sampling and cultural contingencies" (Rego & Souto, 2004, p. 160).

**2.2. Professional Commitment**

The Professional Commitment, although it has been the subject of a smaller number of studies compared to Organizational Commitment, it was referenced in the decade of 50 of the last century (e.g., Becker & Carper, 1956; Gouldner, 1957, 1958). Until the beginning of the decade of 90 of the last century Professional Commitment was approached essentially from a one-dimensional perspective (Cohen, 2007), having been conceived as a bond of affectionate nature with the profession (e.g., Aranya, Pollock, & Amernic, 1981; Blau, 1985; Lachman & Aranya, 1986). The Professional Commitment is defined by Lee, Carswell and Allen (2000) as "the psychological connection between an individual and his profession, based on affective reaction of the individual towards this profession" (p. 800). As the Organizational Commitment, Professional Commitment also evolved from a one-dimensional perspective for a multidimensional approach, essentially through the generalization to the profession of measures created to study the commitment with the organization. It was in this context that Meyer and colleagues (1993) expanded the model of Three-components of the Organizational Commitment of Meyer and Allen (1991) to a professional context. The results obtained from a sample of nursing students and nurses, have revealed that the measurements of the three components included in the Professional Commitment - affective, calculative and normative - distinguished among themselves as well as the three components - affective, calculative and normative - included in the Organizational Commitment. These revelations could support the thesis that we were in the presence of two independent constructs (distinguished), although related to each other. Professional Commitment began to receive greater attention, particularly as a result of the rapid transformations of the economy and the world of work and its reflexes in the workers' professional pathways. According to Meyer (2009), in a context of high instability is expected a growing importance of other forms of commitment in the workplace, in addition to the Organizational Commitment. Dealing with uncertainty and with the difficulties of working life leads workers to redefine their commitment targets, causing them to look beyond the Organization and to carefully consider the nature and limits of their connection to the Organization and, in some cases, redirect their emotional energy to the profession (Cohen, 2007; Tsoumbris & Xenikou, 2010; Meyer, 2009).

**2.3. Relationship Between Organizational Commitment and the Professional Commitment and Formulation of Hypotheses**

The interest in the study of the relationship between the Organizational and Professional Commitment developed largely from the perspective of conflict between both constructs, as suggested in the works of Gouldner (1957, 1958). According to this author, in organizations there are two types of distinct and antagonistic contributors among themselves: the cosmopolitan and the locals. The cosmopolitan are oriented mainly to the profession, while the locals focus on organization. These two identities reflect an organizational tension resulting, on the one hand, the need for a loyalty to the Organization (local) and, on the other, the maintenance and development of personal skills related to their profession (cosmopolitan). Thus, in professions of high technical requirement, with a strong formal and informal statutory identity (e.g., doctors, nurses or, from the perspective of this study, academics), proposed by Sainsaulieu (1988), the Professional Commitment will tend to outweigh Organizational Commitment (Gouldner, 1957 and 1958). This theory was restricted to the affective component of the commitment (Lee, Carswell, & Allen, 2000), based on the argument that the organizational and professional standards and values are incompatible with each other leading to an inverse relationship between Organizational Commitment and Professional Commitment (Lee, Carswell & Allen, 2000; Randall & Cote, 1991). Later, this perspective of the mismatch gave way to a two-dimensional conception in the Organizational and Professional Commitment were understood as two independent but complementary to each other constructs in the case of the Organization to facilitate the implementation of the professional expectations of the developer or may reward their professional behavior (Chang, 1999; Lachman & Aranya, 1986; Neumann & Finaly-Neumann, 1990; Wallace, 1995). The initial perspective that these two constructs have an inverse relationship or that they are completely independent was replaced by the conviction that these variables have a positive relationship (Tsoumbris & Xenikou, 2010). However, according to Lachman and Aranya (1986), any one of these two approaches did not consider the possibility of a determination relationship between the professional and organizational commitment. There are researchers who argue that the Professional Commitment is an antecedent of the Organizational Commitment (e.g., Lachman & Aranya, 1986; Vandenberg & Scarpello, 1994). However, Meyer et al. (1993) despite having established the independence of the two constructs, as well as the existence of a relationship between them, not established unequivocally, a determination of one over the other. Then we can establish a first model in which M1: The Professional Commitment is a determinant of the Organizational Commitment. On the other hand, it is established that the organizational features are a distant antecedent of the commitment in the workplace (Meyer & Allen, 1997). Thus, in organizations characterized by a high and complex technology (e.g., hospitals and other similar health organizations, research centres and universities) it is permissible to consider the possibility of organizational characteristics that determine the organizational commitment and this will determine the professional commitment. This possibility is also supported by studies of Aranya, Pollock, and Amernic (1981), using a sample of statutory auditors in the public sector, found that the professional commitment increased as a function of organizational commitment, being the latter a determinant of professional commitment. Thus, one can establish a second model in which M2: The Organizational Commitment is a determinant of professional Commitment. Despite the interest that the organizational commitment has awakened, particularly through the realization and publication of different studies (Klein, Molloy & Cooper, 2009), still very little is known about how the various components of the commitment relate to each other and how they interact to influence behavior (Meyer, 2009). As for the organizational commitment, most existing studies suggest that the affective component is positively related with the normative and not related to the calculative. Already with regard to the relationship between the normative component and calculative is more pronounced than the relationship between the affective and calculative, being significant in some cases (e.g., Johnson, Groff, & Taing, 2009; Meyer & Allen, 1997; Meyer, Allen, Smith, & 1993; Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Williams, Rayner, & Allinson, 2012). However, there are also studies in which the relationship between the three components are significant (e.g., Birth, Lee, & willow, 2008), suggesting the existence of commitment profiles, as was verified, for example by Agus (2005), and Tsoumbris Xenikou (2010) and by Meyer and Parfyonova (2010) and Meyer, Stanley and Parfyonova (2012). On the Professional Commitment, several studies suggest the existence of a relationship between the three components (e.g., Chang, Chi, & Miao, 2007; Dwivedula & Bredillet, 2010; Irving, Coleman, & Cooper, 1997; Meyer et al., 1993; Snape & Redman, 2003; Xenikou & Tsoumbris, 2010). Meyer and colleagues (1993) examined the relationship between the two types of commitment, organizational and professional, from the model of Three-components, having found that the strongest relationships is not confirmed with each other, but rather among its components included in each of the two types of commitment. On the other hand Meyer and colleagues (1993) also verified the existence of significant correlations between components of different nature either in organizational commitment, whether professional, or between the two. The only exception found refers to the relationship between the affective component of organizational commitment and calculative component, both in organizational commitment as the professional. These results were also confirmed in subsequent studies (e.g., Chang, Chi & Miao, 2007; Dwivedula & Bredillet, 2010; Xenikou & Tsoumbris, 2010). Thus, in spite of the two models proposed are substantiated, the theoretical framework established suggests the model 1 as being the most suitable (Chang, Chi & Miao, 2007; Cohen, 2007; Dwivedula, & Bredillet, 2010; Lee, Carswell & Allen, 2000; Meyer & Herscovitch, 2001; Meyer et al., 1993; Vandenberg & Scarpello, 1994). Finally, the nature and characteristics of the population used and, in particular, the strong professional culture that characterizes this type of occupations (Sainsaulieu, 1988), supports the following hypothesis: The level of intensity of the components of professional Commitment is greater than those of the Organizational Commitment.

**4. Methodology**

**4.1 Instruments**

The data were collected during the months of May and June 2012 through an electronic questionnaire, being the answer given in a Likert type scale of 7 points in that (1) corresponds to the "totally disagree" and (7) the "totally agree”. Was also included a relative of sociodemographic variables of the professional participants. To measure the components of Organizational Commitment we made use of the scale proposed by Meyer and Allen (1997), adapted to the context Portuguese by Nascimento, Lopes & Salgueiro (2008). It consists of a total of 19 items, of which 6 items relating to affective component (3 of them reversed), 6 to the normative (1 of which reversed), and 7 to the calculative. The Cronbach's alpha coefficients values found by Nascimento and colleagues (2008) were of 0.91 for the affective range, 0.84 to normative and 0.79 for the calculative. The professional commitment components were measured through the scale proposed by Meyer and colleagues (1993) 6 items on each scale (3 items reversed on affective component 1 on normative, and 1 on calculative), for a total of 18. Cronbach's alpha coefficients found by Meyer and colleagues (1993) were from 0.87 (beginning of year) and 0.85 (end of year) for the affective component, 0.73 and 0.77 (respectively at the beginning and at the end of the year) for the normative, and 0.79 and 0.83 (also respectively at the beginning and at the end of the year) for the calculative.

**4.2 The Sample**

Was used a convenience sample consisting of 219 teachers of a national public University. These 54.8% are female and 48.2% male. The average age is 45.8 years, varying between 23 and 63 years. Most of the participants are professors of career (61.7%), and in total, more than 80% exercises functions in a full-time regime (68.5% with exclusivity and 14.2% without exclusivity). Only a small percentage teaches part-time (17.3%). Seniority in the profession is 16.9 years and at the institution is 14.8 years. It should be noted, finally, that 58.9% of the participants belong to the subsystem of polytechnic education, while 41.1% of the participants belong to the University.

**4.3 Options For The Treatment And Analysis Of Data**

In the evaluation of the adjustment of the structural models, the following measures were used: Chi-square (χ2), Chi-square value by the number of degrees of freedom (χ2/df ≤ 3.0), Goodness-of-Fit Index (GFI ≥ 0.9), *Root Mean Square Error of Approximation* (RMSEA≤ 0,08), Standardized Root Mean Square Residual (SRMR≤ 0,09), *Comparative Fit Index* (CFI≥ 0,92). As a measure of comparison of models we used the Akaike Information Criterion AIC, being the model more adjusted to produce the smallest value of the model AIC (Hair, Black, Babin & Anderson, 2010; Willow, 2008). It was also the coefficient of determination (R2 ≥ 0.4) to estimate the percentage of the variance of the dependent variables, explained by the independent variables (Hair et al., 2010; Maroco, 2010).

**5. Presentation Of The Results**

**5.1. Descriptive Statistics**

We started by analysing the descriptive statistics of the latent variables (Table 1).

It was found that the affective component introduced greater intensity at both the Organizational Commitment (M = 4.161) and the Professional (M = 4.912). Secondly, calculative component arises also in Organizational Commitment (M = 3.368) or Professional (M = 3.840). The normative component, with the lowest average, presented identical values in the two types of commitment (respectively of M = 3.098 and M = 3.036). The components of Professional Commitment were all higher than those of the Organizational Commitment, the differences having been tested statistically through the t-student's test. The difference between the normative components not proven statistically significant (t = 0.893, sig = 0.373). All components of the Organizational Commitment and Professional Commitment correlate positively with each other, although three of these relationships are not statistically significant. The strongest relationships were observed between the corresponding components of Organizational Commitment and Professional Commitment in line with the results obtained by Meyer and colleagues (1993), as well as in other studies (e.g., Jones, McIntosh & 2010; Xenikou & Tsoumbris, 2010). Also the affective and normative components of Organizational Commitment showed a positive relationship, like the results of the meta-analysis of Meyer, Stanley, Herscovitch. & Topolnytsky (2002) and other researchers (e.g., Jones, McIntosh & 2010; Meyer, Stanley & Parfyonova, 2012; Xenikou & Tsoumbris, 2010). As to the Professional Commitment, stronger relationship was found between the normative and calculative components, and shortly thereafter between the affective and normative, with slightly more moderate values. These results are consistent with those of Tsoumbris and Xenikou (2010) although tendentially the strongest relationship is established between the affective and normative components (e.g., Chang, Chi & Miao, 2007; Meyer et al., 1993; Snape & Redman, 2003).

**5.2. Test of Hypotheses and Comparison of Models**

Were initially tested the Null Model (Mo), the first model (M1) which established the Professional Commitment as a determinant of Organizational and the second (M2) in which was established the opposite, suggesting the results an adjustment equal to goodness the three models (table 2). It was found that adjustment measures are within the bounds of acceptability. However, the SRMR and GFI deviate slightly from the reference values. However, Hair and colleagues (2010) drew attention to the fact that the complexity of the model could lead to a "... problem of an unjust punishment." (p. 751) and unfairly affect these type of indicators. It is also not irrelevant the fact that we have used a sample with one dimension lower than the recommended, which will influence this type of measures of goodness of adjustment more sensitive and more affected by the error of estimate. This conditionality may have contributed also to not have been a difference between the adjustment of the three models. We then review the proposed M1 (M1A), having been successively eliminated structural relations statistically non-significant. Thus, we obtained a final proposed model (M1B) who presented a goodness of acceptable adjustment (Table 3).

It was found in M1B final (fig. 1) that in the affective component only Organizational Commitment was related to the normative and as to the Professional Commitment was verified the existence of a relationship between affective and normative component, as well as between the normative and the calculative. It was also verified that the components of Professional Commitment positively determined the components of the same kind of Organizational Commitment. Finally, the calculative component determined positively the affective component. The coefficient of determination of each component of the Organizational Commitment (R2) was greater than 0.40, suggesting a good explanatory capacity of Professional Commitment components in determining Organizational Commitment. Having used a procedure similar to that used in the M1 to the second model (M2), in addition to the initial model (M2A) was tested another model that resulted from the Elimination of non-significant statistical relationships (M2B). The final proposed model (M2B) presented a better adjustment, despite the limitations mentioned previously (table 4).

In the second final model (fig. 2), it was found the existence of a relationship between affective and normative component of the Organizational Commitment of greater intensity than the ratio found in the first final model, and of lesser intensity between the affective component and to rules and regulations and the calculative Professional Commitment.

Similar to what was found in the first final model, also in this model the components of the Organizational Commitment determined the components of the same kind of professional Commitment. As the results obtained for model 1, also in model 2 the values of the coefficient of determination of the dependent variables are greater than 0.40 (fig. 2), suggesting an explanatory capacity variance of professional Commitment through Organizational Commitment (independent variables). There are, however, to emphasize that these values are slightly lower than those of the model 1 (specifically of 1% on the normative components and calculative and 3% in the affective component). Established and tested both models, we passed to the comparison of the models, in order to know whether there would be one that show a better kind of adjustment and therefore a better statistical validity. Both final models (table 5) presented an acceptable adjustment, even though the value of GFI (0.71) be a little short of the recommended value, and the value of SRMR (0.11) lies slightly above the reference value, as I commented earlier, not being able to infer a better adjustment of either of the two models in study.

We have to point out that the measurement value Model AIC is slightly lower (0.87) in M2 end relative to the M1, this could lead to the possibility of Organizational Commitment be a determinant of the Professional Commitment. In fact, according to Salgueiro (2008), as well as Hair and colleagues (2010), the smallest measurement value Model AIC is evidence of a better model set. In light of the reduced value obtained, it was decided to also compare the two models through the Chi-square test, similar to the process used in multi-groups (Salgueiro approach, 2008). Considering the difference of 2 degrees of freedom, the difference between the Chi-square value obtained in each model should be higher than the 5.99. In fact the difference obtained was 3.13 (∆ χ2 = 677.04 -673.90), so the null hypothesis is not rejected, not being able to infer the statistical difference between the two models. Despite this conclusion we have to highlight the fact that Model 2 has a smaller number of relations of determination, only showing a single relationship between two compromises of different nature, in particular the relationship of determination between the Organizational normative and the Professional Commitment calculative. In Model 1 the relationship of determination between variables of different natures are in greater values, in particular, between the Professional Commitment affective and the Organizational Commitment normative, between the Professional Commitment normative and the Organizational Commitment calculative and between the Professional Commitment calculative and the Organizational Commitment affective. On the other hand, the values of R2, discussed earlier, are slightly higher than those recorded in the model 2. So, there are signs of a better explanatory capacity of model 1, suggesting a possible advance of Professional Commitment on the Organizational Commitment, despite not having been verified statistically in the present study.

**6. Discussion and Conclusions**

Considering the indicators of goodness of both adjustments, the model of Professional Commitment is more consistent and presents a better adjustment to the data compared to the model of Organizational Commitment. These results suggest that the University professors are more committed to the profession than with the organization where exercising their profession, which is in line with other empirical studies that used professions with high professional culture and identification (e.g., Chang et al., 2007; Jones & McIntosh, 2010; Meyer et al., 1993; Xenikou & Tsoumbris, 2010). The commitment of teachers, either with the profession or with the Organization, is predominantly of affective and calculative nature. These results are common in the literature and have been identified in both constructs in other studies (e.g., Irving et al., 1997; Snape & Redman, 2003; Jones & McIntosh, 2010; Tsoumbris & Xenikou, 2010; Williams et al., 2012). The results point to the desire of teachers to remain in the profession and in the Organization (in this case, the University) because they like and are affectively connected to them, but to do so they have to be accompanied by a material or instrumental necessity. For Meyer (2009) organizational changes, in particular, those that result in staff reductions, have the potential to influence the three forms of Commitment, in particular the commitment calculative. The job insecurity and poor availability of alternatives can lead to the development of this type of commitment on workers who understand the fragility of their situation, as well as changing the orientation of the commitment, to other forms of commitment that exist in the workplace, other than the organizational. Of all relations of statistically significant determination, it is important to reflect on the single interface that is common to the two models, in particular, the relationship of determination of Professional normative Commitment over the Organizational Commitment calculative in the Model 1 and the Organizational Commitment normative over the Professional Commitment calculative, in Model 2. In the first model the relationship of determination between the two constructs is negative, while in the second model is positive. This result suggests that a strong sense of obligation and duty in relation to the profession may outweigh the investments made in the organization and the costs associated with an eventual exit. So, face the hypothetical need to have to choose between the profession and the organization, the teacher would choose his profession, even with loss of material conditions. In contrast, in the model 2 it was found that the presence of a strong sense of duty in relation to the organization would be translated as gain/investment in relation to the profession, giving rise to a high cost relatively to a possible change of profession. Both situations are admissible, in the first case because of its strong cultural identity (Sainsaulieu, 1988) the profession overlaps the organisation and, in the second case, the sense of obligation and duty in relation to the organization would enhance the value of the profession, so increasing the costs associated with an eventual change of profession. On the other hand, it was the affective components of professional or Organizational Commitment that showed greater intensity, suggesting that the primary nature of the relationship was the affective. Thus, in a context of profound organizational changes and social crisis, it is important to not only manage the change in the type of commitment, but also, and above all, changes in their nature (Meyer, 2009), implying that a human resources management more Dialogic nature then dialectic (Lopes, 2012), more demand-driven rather than supply-driven (Bilhim, 2009) and more oriented towards the management of affections. Although we have not found statistically significant differences between the two models proposed and, therefore, cannot claim that the Professional Commitment is an antecedent of the Organizational Commitment (M1) or its inverse (M2), however, there is evidence to support the possibility of a better match of the first model. In reality it is an more explanatory model because, on the one hand, it presents a greater number of relationships of determination and, on the other, the independent variables (Professional Commitment) best explained the variance of the dependent variables (Organizational Commitment). In addition, it is also the model that best fits the theoretical framework that proposes the determination of professional commitment over the organizational. This theoretical framework is based on a more personal nature than contextual or organizational, of the Professional commitment and should therefore be an antecedent of the Organizational Commitment (e.g., Meyer & Allen, 1997; Meyer & Herscovitch, 2001; Meyer et. al., 2002). Of all the limitations identified and referred previously, the reduced sample size for the methodologies used, suggests replicating the study with a larger sample, allowing a confirmation of the results obtained. The absence of multi-groups analysis is another limitation due to sample size, which made it impossible to check for possible effects moderators of other variables such as demographic or compromising profiles on models in study. In conclusion, this study highlighted the fact that being faced with several alternatives supported by theoretical and empirical studies that, being seemingly contradictory in a perspective of complementarity, may allow the identification of the relations determined to provide a better explanation of a specific facet of the relationship collaborator/organization.

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Table 1

*Descriptive Measures of latent variables*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Average** | **Standard Deviation** | **COA** | **CON** | **COC** | **CPA** | **CPN** | **CPC** |
| **COA** | 4,161 | 1,086 | (,848) |  |  |  |  |  |
| **CON** | 3,098 | 1,142 | ,72\* | (,836) |  |  |  |  |
| **COC** | 3,368 | 1,019 | ,24\* | ,13 | (,805) |  |  |  |
| **CPA** | 4,912 | ,711 | ,60\* | ,45\* | ,14 | (,767) |  |  |
| **CPN** | 3,036 | 1,203 | ,42\* | ,75\* | ,17\* | ,43\* | (,858) |  |
| **CPC** | 3,840 | 1,176 | ,39\* | ,35\* | ,74\* | ,16 | ,50\* | (,843) |
| **COA:** Affective Organizational Commitment; **CON:** Normative Organizational Commitment; **COC:** Calculative Organizational Commitment; **CPA:** Affective commitment to the profession; **CPN: Normative commitment to the profession CPC:** Calculative commitment to the profession; \* p< 0,05 ; In brackets is the value of Cronbach's Alpha coefficient (α) | | | | | | | | |

Table 2

*Measures of goodness of the adjustment of models in study*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Models** | **Df** | **χ2** | **RMSEA** | **GFI** | **SRMR** | **χ2/df** | **CFI** | **Model AIC** |
| **Model 0** | 390 | 663,07 | 0,057 | 0,71 | 0,092 | 1,70 | 0,98 | 813,07 |
| **Model 1** | 390 | 663,07 | 0,057 | 0,71 | 0,092 | 1,70 | 0,98 | 813,07 |
| **Model 2** | 390 | 663,07 | 0,057 | 0,71 | 0,092 | 1,70 | 0,98 | 813,07 |

Table 3

*Measures of goodness of the adjustment Template 1*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Models** | **Df** | **χ2** | **RMSEA** | **GFI** | **SRMR** | **χ2/df** | **CFI** | **Model AIC** |
| **Model 1A** (Inicial) | 390 | 663,07 | 0,057 | 0,71 | 0,092 | 1,70 | 0,98 | 813,07 |
| **Model 1B** (Resulting from the AFE) | 396 | 673,90 | 0,057 | 0,71 | 0,11 | 1,70 | 0,98 | 811,91 |

Table 4

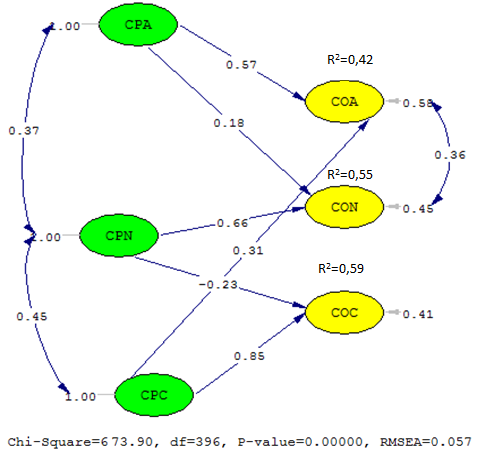
*Measures of goodness of Model 2 adjustment*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Models** | **Df** | **χ2** | **RMSEA** | **GFI** | **SRMR** | **χ2/df** | **CFI** | **Model AIC** |
| **Model 2A** (Inicial) | 390 | 663,07 | 0,057 | 0,71 | 0,092 | 1,70 | 0,98 | 813,07 |
| **Model 2B** (Resulting from the AFE) | 398 | 677,04 | 0,057 | 0,71 | 0,71 | 1,70 | 0,98 | 811,04 |

Table 5

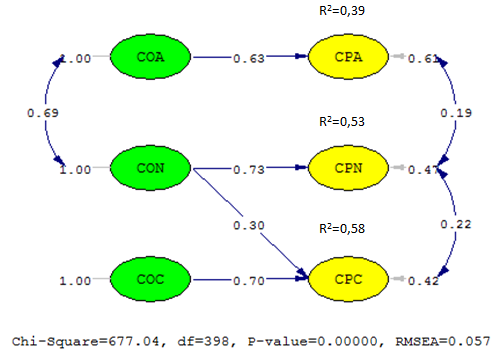
*Measures of goodness of the adjustment of the final models*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Models** | **Df** | **χ2** | **RMSEA** | **GFI** | **SRMR** | **χ2/df** | **CFI** | **Model AIC** |
| **Model 1 Final** | 396 | 673,90 | 0,057 | 0,71 | 0,11 | 1,70 | 0,98 | 811,91 |
| **Model 2 Final** | 398 | 677,04 | 0,057 | 0,71 | 0,11 | 1,70 | 0,98 | 811,04 |



R=0.42

*Figure 1.* Model Diagram 1B Final



*Figure 2.* Model Diagram 2B Final