

Organizational ties of senior officers of the Brazilian Air Force

Configuración vincular de altos oficiales de la Fuerza Aérea Brasileña

Configurações vinculares dos oficiais superiores da Força Aérea Brasileira

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ABSTRACT

Displaying the organizational ties of the Brazilian Air Force (FAB) senior officers through a qualitative and quantitative research is the purpose of this article. It also aims at contributing to a better understanding of the psychodynamics of the organizations, and at providing support for the strategic review of personnel policies. This empirical-analytical study compiled three conceptual approaches: Organizational Commitment, Elements, which constitute the organizational ties and Types of ties. The instruments to collect the data were applied in the Brazilian Air Force. It was possible to identify, measure and describe the organizational ties of the Lieutenant Colonels and Colonels who ascend to General Officers. Seven factors, which represent the organizational ties of the researched population with the military institution, were identified. Organizational Image, Organizational Structure and Doctrine were considered organizational factors. Emotional tie, Interaction and Recognition, Duty and Conformism were considered personal factors in the proposed methodology.

Keywords: Organizational ties. Organizational commitment. People management. Air Force officers.

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RESUMEN

Presentar la configuración vincular de los oficiales de alto rango de la Fuerza Aérea Brasileña (FAB), obtenida en investigación cualitativa y cuantitativa, es el propósito de este artículo, además de contribuir a una mejor comprensión de la psicodinámica de las organizaciones y dar apoyo a la revisión estratégica de las políticas de personal. Este estudio empírico - analítico ha compilado tres enfoques conceptuales: Compromiso Organizacional, Elementos del vínculo con la Organización y Tipos de Vínculos. Se aplicaron en la FAB los instrumentos de recogida de datos propuestos que permitieron identificar, medir y describir la configuración vincular de los tenientes coroneles y coroneles que ascienden al Generalato. Se identificaron siete factores que representan la configuración del vínculo de la población del estudio con la institución militar. Se consideraron factores organizacionales: la Imagen Organizacional, la Estructura Organizacional y la Doctrina, mientras que el Vínculo Emocional, Interacción y Reconocimiento, Deber y Conformismo fueron considerados factores personales de la metodología propuesta.

Palabras-clave: Vínculo organizacional. Compromiso organizacional. Gestión de personas. Oficiales de la Fuerza Aérea.

RESUMO

Apresentar a configuração vincular dos oficiais superiores da Força Aérea Brasileira (FAB), obtida em pesquisa quali-quantitativa, é o objetivo deste artigo; além de contribuir para um melhor entendimento da psicodinâmica das organizações e fornecer subsídios para a revisão de políticas estratégicas de pessoal. Este estudo empírico-analítico compilou três abordagens conceituais: Comprometimento Organizacional, Elementos Constitutivos do Vínculo com a Organização e Tipos de Vínculos. Os instrumentos de coleta de dados propostos foram aplicados na FAB e os resultados possibilitaram identificar, mensurar e descrever a configuração vincular dos Tenentes-Coronéis e Coronéis dos Quadros que ascendem ao Generalato. Foram identificados sete fatores, os quais representam a configuração vincular da população estudada com a instituição militar. Imagem Organizacional, Estrutura Organizacional e Doutrina foram considerados fatores organizacionais. E Elo Emocional, Interação e Reconhecimento, Dever e Conformismo foram considerados fatores pessoais da metodologia proposta.

Palavras-chave: Vínculo organizacional. Comprometimento organizacional. Gestão de pessoas. Oficiais da Força Aérea.

1 INTRODUCTION

The individual may get bind to the organization by several factors sometimes treated as “types,” sometimes as tied “elements” that, in men, due to their complexity and multidimensionality can be seen as a mixture, called here as organizational ties.

The organizational ties attract the attention of researchers, besides provoking the interest of managers who invest in the constant search for ways to promote the personal relationship with the organization.

A methodology that allows knowing the Psychodynamics of links with an organization may contribute to its sustainability, especially with regard to the production of the desired results.

Accordingly, clarify on how the officers’ links occur providing to FAB a better understanding of how this relationship can be administered. Moreover, serve as a basis for programs to improve the human resources department, for strategic planning, with regard to personnel matters and decision-making.

Thus, this paper will develop the presentation of methodological developments establishing organizational ties, whose goal is to present the organizational tie of the senior officers of FAB.

2 LITERATURE REVIEW

In this topic some relevant concepts will be addressed.

2.1 Establishing ties with the organization

According to the authors Kramer and Faria:

[...] the tie is a structure in which an individual, an object (the organization) and a particular relationship between them are included, which can be understood from the constituent elements of the ties. (KRAMER; FARIA 2007, p. 101, our translation).

The ties allow individuals to establish and maintain stronger and more meaningful relationships with organizations, based on commitment and mutual respect.

2.2 Constituent elements of the tie with the organization

Kramer (2003) investigated the organizational ties of a municipal institution of Curitiba. The results obtained have identified 11 (eleven) constituent elements of the ties, which are: identification; sense of belonging; cooperation; participation; creation of enemies; idealization; recognition and appreciation of individuals; solidarity; integration; autonomy, as well as personal and professional development.

The organizational ties denote the connection of the individual with the organization and involvement with projects thereof, as well as the commitment to their problems, policies, performance and results. They allow individuals to establish and maintain stronger and more meaningful relationships with organizations, based on commitment and mutual respect (KRAMER, 2003).

2.3 Types of tie

The quality of life of each individual is determined according to the predominance of the quality of the ties that interact both positively (+) and negatively (-). Four types of tie are considered as fundamental: love ($\pm A$), hate ($\pm O$), knowledge ($\pm C$) and recognition ($\pm R$) that, although some of them acquire an importance on the other, in certain situations, they are inseparable and are conjugated in a state of constant interaction (ZIMERMAN, 2010).

In many organizations we find organizational ties, in which we can read the feeling + A (more love) as the driving force of life, even when employing the term “love” for the occupation; on the other hand, the tie - A (less love) alludes to an opposition to the emotion of love, illustrated as the Puritanism and Samaritanism situation, in the sense of giving up their own pleasure, with personal sacrifice.

Amid the routine, the professional with their fantasies, anxieties, defenses, demands and purposes can manifest or hide the form of love, the peculiarities and idiosyncrasies of their love (ZIMERMAN, 2010).

The tie - O (less hate) can be illustrated as the emotional state and the conduct of hypocrisy; in situations of + O (more hate) it is cynicism and can be expressed in the form of aggression by lack of understanding and respect.

We should stress, “hate is not the same as less love and that the reciprocal is also true” (ZIMERMAN, 2010).

The knowledge is related to the truths (+ C) or falsehoods and lies (- C) “it is linked whether they accept or not of the painful truths, both external as well as internal and relate more directly to the issues of the individuals self-esteem” (ZIMERMAN, 2010, p. 29). A situation of - C (less knowledge) can serve to attack the truths, when seeking to impose a truth as definitive; or when using forgeries, lies or distortions through various forms of avoidance of psychiatric problems. It is seen as an attack on perceptual ties in defense of denial and cancellation of the meanings of emotional experiences. This “inter-relationship between knowledge and truth is a determinant of the sense of identity of an individual at the individual, social and group plans” (ZIMERMAN, 2010, p. 179).

In order that we can acquire existence, a thought, feeling or knowledge require recognition by others.

Being recognized by the group that we take part, waiting for something that might confirm the relevance (or membership) beyond the acceptance of sharing space and common values (ZIMERMAN, 2010).

According to Zimerman, recognition (+ R):

[...] alludes to the angst that every human being has in order to be recognized by others, as a dear person, to be accepted, desired and admired by their peers and bystanders. (ZIMERMAN, 2010, p. 31, our translation).

In cases of - R we can obtain individuals who build ‘false selves’ as defenses, in other words, forgery or mutilation of the true personality.

2.4 Organizational commitment and patterns

Allen and Meyer define the organizational commitment as:

[...] a psychological link between the worker and his organization that makes the employee less likely to leave the organization voluntarily. (ALLEN; MEYER, 1996, p. 252, our translation).

Allen and Meyer also comprise that organizational commitment consists of three components:

[...] the affective as an attachment to the Organization; the instrumental, which is perceived as costs associated with leaving the Organization; and the normative, which is seen as an obligation to stay. They characterize individuals: the employees with strong affective commitment remain in the organization because they want to; those with instrumental commitment remain because they need and those with normative commitment remain because they feel they are required. (ALLEN, MEYER, 1990, p. 3, our translation).

Ricco (1998) proposed the patterns for organizational commitment obtained from three components: affective, instrumental and normative; and it can generate up to eight patterns of commitment.

One can obtain the compromised in three dimensions, classified by C; those who are not committed in three dimensions, NC; predominating the affective, A; the affective-instrumental, AI; the normative affective AN; the instrumental, I; the instrumental-normative, IN; and the normative, N.

3 METHODOLOGY

Explanatory research with approach of the problem presented in two investigative lines: a markedly

quantitative, which investigates the theory and uses instruments to collect structured data, and the second line, which is investigative qualitative, focused on the practice of respondents, using interview scripts.

The population selected for this study was composed of officers who remain in FAB in command positions and are likely to ascend to the generals (the Lieutenant-Colonels and Aviator Colonels, Engineer, Quartermaster, Infant and Medical).

The purposive sample used comprised a total of two hundred five (205) respondents for a population that in 2010 amounted two hundred and twenty thousand (1220) members, being distributed among Colonels and Lieutenant Colonels.

In order to perform certain procedures for multivariate data analysis, it is recommended that at least five cases for each variable being analyzed (HAIR *et al.*, 1998, p. 98 and 99). As the original instrument that composed forty questions (variables), the sample of at least two hundred (200) cases was overcome.

Reliability tests were conducted in order to assess the feasibility of the adoption of the factorial analysis as technique.

The measure of adequacy of the sample (0.823) according to KMO test - Kaiser-Meyer-Olkin varies from zero to one (0 to 1). If the value was close to zero it would not be favorable, and around one, the use of this technique would be suitable (FÁVERO *et al.*, 2009, p. 242). The Bartlett sphericity test showed 0.000 as significance value; therefore, less than 0.05, in other words, within acceptable parameters.

Then we calculated the Cronbach's alpha for forty research questions, which generated a coefficient of 0.8649, and is therefore within the accepted limits (≥ 0.6).

The anti-image matrix already obtained in a first execution of the analysis of common factors provides measures of adequacy of the sample, that is, the degree of cross-correlation between the variables represented in the diagonal of the matrix.

According to Hair *et al.* (1998, p99). the value 0.8 or above is considered worthwhile; 0.7 or above median; 0.6 or above, mediocre; 0.5 or above, miserable; below 0.5 unacceptable.

So, they eliminated the variables 8, 10, 12, 24, 25, 26 and 40 because they were below 0.7.

Tests in order to identify outliers were also performed in the three trim levels ($Z \pm 2.5$, $3.0 \pm Z$, $Z \pm 4.0$). Even having been shown few discrepant cases, we decided to not exclude any sample case, in order to reflect the judgment of all respondents (HAIR *et al.*, 1998, p. 65).

After checking the viability of the factorial analysis, before the tests performed, and have eliminated the seven

variables, according to the anti-image matrix, we used the analysis with the varimax method, trying to represent the entire set for a smaller number of factors (HAIR *et al.*, 1998; FÁVERO *et al.*, 2009).

4 ANALYSIS AND INTERPRETATION OF DATA

The discussion of the results will be held separately on the items: characterization of the respondents, global commitment, factor analysis, analysis of the patterns of organizational commitment and analysis of respondents' perceptions of typical situations of commitment.

4.1 Characterization of respondents

The research comprises a total of 205 respondents, all male, of which 112 are Lieutenant Colonels and 93 are Colonels.

From the total of Lieutenant Colonels, 94% are married and from the 93 Colonels, 91%.

The prevalence of age of the Lieutenant Colonels occurs between 41 - 44 years, which, according to the stages of life, presents increasing search of existential values, such as discomfort with his own career success or fear of not having an identity.

For the colonels, it is highlighted the ages from 46 to 50 years, the stage at which there is an attachment to what has been won professionally, as main events appear to reach a higher level of status in his career or settling for less. A greater personal comfort or fear of never realizes their aspirations can also occur (COHEN; FINK, 2003).

It is found that 68% of the officers have from 2 to 3 financial dependent. It should be noted that 17.1% of respondents have between 4 - 5 dependents. Still, 11.2% have 'aggregates', typically only one.

The service time devoted to FAB, usually the only job, can contribute to the issue of leaving or continuing in the exercise of functions, which can lead them to typical situations of commitment raised herein.

The search for new knowledge on the part of the officers shows the following configuration: 34% have undergraduate degrees, and 6% of these were financially supported by FAB. For specialized courses *lato sensu*, 51% held courses in various areas and 29.76% of the cases were financially supported by FAB. 15% of the respondents got a master's degree and 4% doctorate.

A point to be reflected is the gender issue that in FAB is predominantly male and the sample of this research is exclusively male. Would the organizational tie be different if the gender of the respondents were more heterogeneous?

4.2 Analysis of the degree of commitment

The overall commitment of respondents prevailed in elementary school, with 53%. 10% of respondents were in the highly grade.

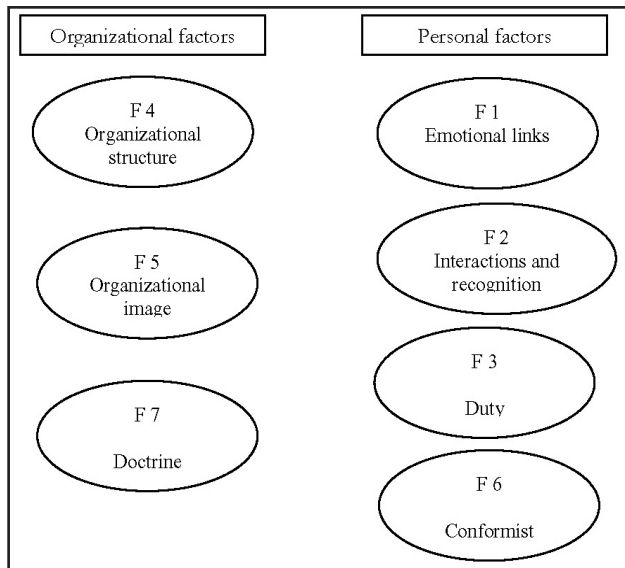
4.3 Factorial Analysis

After the tests of reliability in the data obtained from the 205 cases, among the forty initial variables, the anti-image matrix excluded seven, being included thirty-three variables in the factorial analysis.

Seven factors were found in the major components analysis. From these, by factorial, four variables were excluded because they presented less cargo and two variables presented approximate cargo on another factor, totaling six exclusions. So if there were thirty-three, with a reduction of six, they became twenty-seven variables. Considering that the initial instrument contained forty variables and the final instrument remained twenty-seven, we obtained a reduction of efforts around 32.5%.

After the appointment of the factors, it was possible to visualize two predominant fronts interacting with each other, organizational and personal. Figure 1 illustrates the organizational tie obtained by factorial analysis. At the left side are presented the conditions offered by the organization represented by the factors 4, 5 and 7, and at the right side, personal factors represented by the factors 1, 2, 3 and 6.

Figure 1: Organizational tie of FAB.



Reference: The author.

The organizational tie obtained in the factor is constantly reinforced in daily work interactions. The intensity of the organizational ties, whether strong or weak,

will depend on the conditions offered by the organization and the emotional predisposition of each person. Thus, on one hand the personal factors that contributes to create **emotional links** (F1), favor **interactions and recognition** (F2), which enable the **sense of duty** (F3), but also enable **conformist attitudes** (F6). And, on the other hand, the organizational factors comprised by the **organizational structure** (F4) and the **organizational image** (F5), strengthening and consolidating the **doctrine** (F7) and strengthening the pillars of the organization.

4.4 Analysis of the commitment components

The matrix rotated with three factors (table 1), confirmed the studies of Meyer, Allen and Smith (1993). Affective and instrumental components were well determined as factors. On the other hand the normative factor was highlighted by a sense of duty and loyalty, whose variables are presented as belonging to the affective component.

Such a result, in addition to validate the proposals of Meyer, Allen and Smith, corroborates to Ricco studies (1998), carried out in organizing the FAB, which obtained the same behavior of the two variables refereed.

Table 1: Matrix rotated with 3 factors.

	Affective	Instrumental	Normative
V1	0,647		
V2	0,655		
V3	0,753		
V4	0,818		
V5	0,759		
V6	0,757		
V7		0,656	
V8		0,695	
V9		0,677	
V10		0,780	
V11		0,637	
V12		0,747	
V13			0,613
V14			0,816
V15			0,791
V16	0,598		
V17			0,799
V18	0,484		

Extraction method: Principal Components Analysis.

Rotation Method: Varimax with Kaiser Normalization. Convergent rotation in 5 iterations.

Reference: The author.

4.5 Measurement of bond types

On measurement of the bond types covered ($\pm A$, $\pm O \pm C \pm R$), the prevalence of more love (+), less hatred (-O) more knowledge (+ C) and more recognition (+ R) was obtained.

The situation + A (driving force of life, self-esteem) confirms the results presented by the first factor of the multivariate analysis, called emotional bond (F1). In addition to the recognition and interaction factors (F2), organizational structure (F4), organizational image (F5) and doctrine (F7), they further reinforce affective commitment.

The type of bond less hate (- O), presented by 60.3% of respondents, tends to arise when there is a conflict of personal interests and ultimately generates situations of hypocrisy, observed in duty (F3) and conformity (F6) factors.

Regarding knowledge type, 58.3% of respondents have more knowledge type (+ C), 29.7% belong to the less knowledge type (- C), suggesting that this type of bonding occurs by two opposing personal perspectives. Some respondents are bond to the FAB in function of acceptance and others through denial of the painful truths about themselves and the organization. Such questions may be reflecting the factors called conformism (F6) and duty (F3) for the type of bond of less knowledge (- C), and the integration and recognition factors (F2), organizational image (F5) and the doctrine (F7) for situations of more knowledge (+ C).

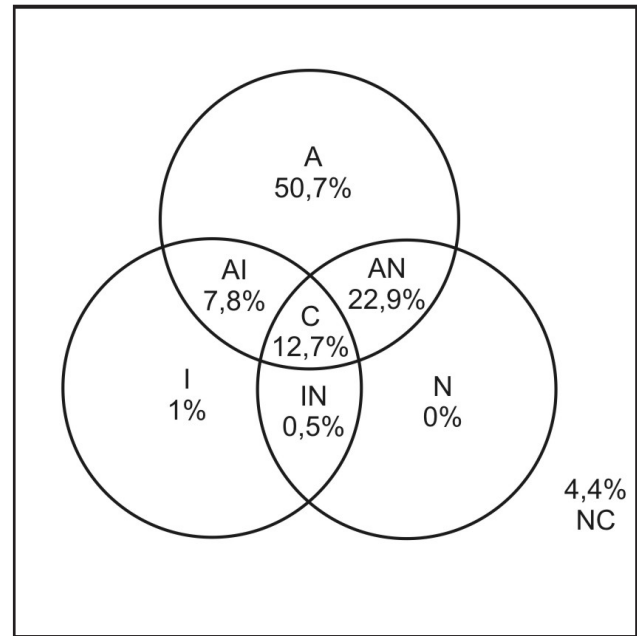
And finally, the recognition (+ R) for the organization and peer comes to further contribute to the strengthening of affective commitment and the organizational tie of emotional bond (F1). The situation of more recognition (+ R) can be observed in the integration and recognition factors (F2) and organizational structure (F4).

4.6 Analysis of the patterns of organizational commitment

In the quantitative analysis seven patterns of commitment, in which there are a prevalence of affective component and the low presence of the instrumental component were found.

However, one cannot help commenting that the pattern of non-commitment (NC) in the three dimensions was contemplated and the normative pattern (N) purely also hasn't existed in the surveys, as shown in Figure 2.

Figure 2: Summary of patterns of commitment.



Reference: The author.

4.7 Analysis of the respondents' perceptions of typical situations of commitment

Table 2 shows the main reasons given by officers to justify a return to FAB or evasion of the organization.

Table 2: Summary of perceptions of the officers.

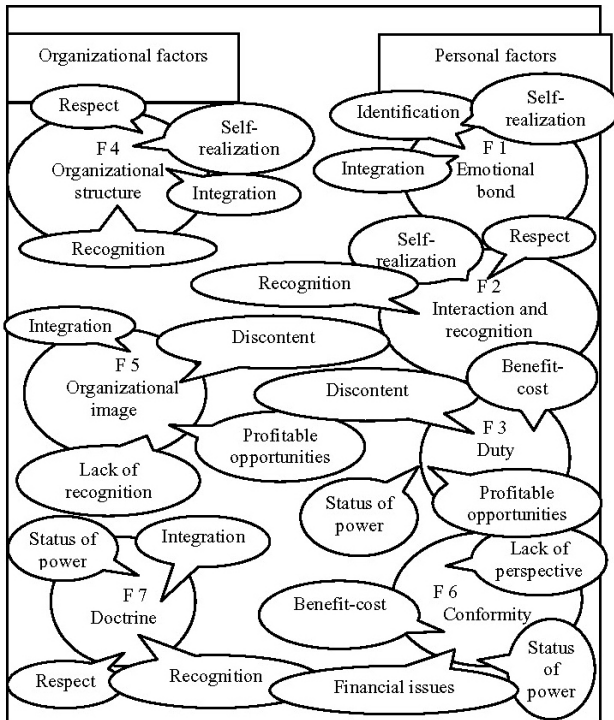
Reasons for return	Reasons for evasion
Identification	Lack of Staff and Career Perspective
Financial	Benefit-cost
Integration	Profitable opportunities
Interaction	Discontent with FAB
Self-realization	Lack of recognition
Status of power	
Recognition	
Respect	

Reference: The author.

4.8 Validating the organizational tie

The organizational tie obtained in the factorial and its analysis from two perspectives: the organizational and personnel, which are in constant interaction, can be observed in Figure 3, in which there are some relationships between the results obtained in the qualitative and quantitative analyzes.

Figure 3: Validation of qualitative and quantitative lines.



Reference: The author.

The relationships suggest adherence between the results obtained in the qualitative and quantitative approaches.

The emotional bond personal factor occurs mainly due to self-realization, identification and integration. The interaction and recognition are linked to self-realization, respect and recognition. The duty relates to dissatisfaction, benefit-cost, profitable opportunities and with the status of power. And the conformity with the benefit-cost ratio, with financial issues, lack of perspective and the status of power.

Among the organizational factors, organizational structure contributes to the respect, recognition, integration and self-actualization. The organizational image reflects integration and profitable opportunities, but also discontent and lack of recognition. Finally, the doctrine is connected with status of power, respect, integration and recognition.

5 CONCLUSION

The work with the results of the research, its limitations and suggestions for future studies is now complete.

The objective proposed to identify, measure and describe the organizational tie with the Organization was reached and a methodological proposal was built and presented, with explanation of its stages. To this end, data collection instruments were developed and applied to officers who are in positions of Lieutenant Colonel and Colonel, indicating that they are at the level of preparation to engage in Commands. Qualitative and quantitative analyzes to certify the validity of both instruments and the results obtained were performed.

The research was limited to its application, aimed at territorial expansion. Initially the sample should be

random and stratified, which made complex the location of the officer corresponding to the draw. Another difficulty was the return of questionnaires.

It is believed that, even if dealing with an intentional sample, with restrictions on the extrapolation of the results to the total universe, this work presented significant contributions in the identification of existing organizational tie in FAB.

Factorial analysis generated seven factors named as: emotional bond (F1), interaction and recognition (F2), duty (F3), organizational structure (F4), organizational image (F5), conformity (F6) and doctrine (F7), it may thus open discussions scientifically-grounded on the subject, creating, perhaps, in the military authorities, a critical look at the typical situations of commitment in FAB. In this regard it should be emphasized again that we must observe and systematically talk with the members of the organization, in order to make explicit the unspoken certainties of FAB. And remember that the essence of the culture of an organization is based in their values; there are no right or wrong, better or worse culture. This work has performed exactly this role, to open dialogue with officers, identifying, through an unpublished methodology proposal, the organizational ties present in FAB.

It is worth remembering that the awakening to the theme of this research appeared in the studies of the likely reasons for evasion of the engineers, which couldn't verify, as well as the search for greater understanding about the real reasons for the return of reserve officers for activities on FAB in the fixed-time scheme.

Thus, shall begin, in conclusion, the more specific considerations of each of the factors of the identified organizational ties in this research.

The first factor, labeled **emotional bond**, brings together the constituent elements of the bond, identification with the organization, sense of belonging and idealization of the organization. The identification with the organization means having admiration, loyalty, feel that this relationship has personal meaning. The sense of belonging extends this idea, because it makes members feel as representatives and responsible for the organization. The person feels like an agent, reacting to criticism and trying to defend it. The idealization of the organization means that relations are harmonious with it, a factor that has predominantly the plus love (+ A) type of bond strengthening the affective component.

The second factor, **interaction and recognition**, presents, in all the variables that make up the most recognized (+ R) type of bond, which denotes respect and admiration for the FAB. Such interaction designates reciprocal relationships between people and also the recognition by the organization and professional respect.

The third factor, **duty**, strongly sets the questions of the normative component of the organizational commitment (they feel obliged to stay), which was poorly represented. Once the analysis of the type of bond obtained the prevalence of the types less knowledge (- C) and less hate (- O), the attitudes in this organizational tie can still be linked

to the denial of personal and organizational truths and mere reproduction of ideas and acceptable opinions.

In the fourth factor, **organizational structure**, the prevalence of the more recognition (+ R) type of bond is prominent, denoting a kind of organizational gear, whose structure promotes the relationships between people.

The fifth factor, **organizational image**, comprises the idealization of the organization, cooperation in activities and autonomy, providing the facilitation of communication channels and the opening of participation in decision making, making the person gets the more knowledge (+ C) situation.

The sixth factor, **conformism** presents the knowledge and hate types of bond; and situations of less knowledge (- C) and less hate (- O), which can characterize the denial of the painful truths and hypocrisy, making the military, when faced with tense questions, (e.g., staying in or leaving FAB) to act contrary to what he professes. And yet, when considering the time already dedicated and personal financial health, personal concerns are likely to aggravate the initial situation. In this factor prevails the instrumental commitment component, indicating the perception of impeding costs associated with leaving the organization; Therefore, he decides to stay because he understands that he needs to do it, hence the name given to the factor, conformism.

The seventh factor, **doctrine** prevail the more knowledge (+ C) variables, duty and loyalty, which also represent the normative commitment; however, it is worth remembering that these variables in the analysis of the common factors for FAB, consisted in the affective component.

As this is a military institution, thus a total institution, which has groups like one of its main psychodynamic, one cannot ignore that it is in these groups that the identity is discriminated, affirmed and consolidated, reflecting and being reflected as a mirror (FOUCAULT, 1997; Zimerman, 2000 - our translation).

Finally, some points to be deepened, as suggestions for future work.

Check the role of military doctrine and personnel management model and its ability to act more effectively in the interaction between the two perspectives - organizational and personal - identified in this study.

Apply the instrument to engineers in training phase and the aspirants of ITA.

Establish a link between the leadership and organizational ties.

By having devoted so much time to the same organization, pragmatically remaining on it, could it lead to the conformity or a poor quality of service delivery? So, as a suggestion for future studies, the analysis of the bond and organizational results.

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