Antecedents of turnover in federal public administration

Pedro Cavalcanti G. Ferreira[a,*]
Instituto de Pesquisa Econômica Aplicada, Brasília/DF, Brazil, and

Elaine Rabelo Neiva[b]
Universidade de Brasília, Brasília/DF, Brazil

Abstract

Purpose – Understanding the reasons that lead civil servants to abandon their offices is an important step towards qualifying personnel management in the Federal Administration. The purpose of this study is to present an initial approach to the subject and to investigate variables that favor or reduce the turnover intention among civil servants in the Federal Executive Branch.

Design/methodology/approach – To fulfill the objective stated, the study resorted to variables of values, expectations and affective commitment to the organization. Variables were tested in a model of structural equations capable of verifying if these are antecedent or not of the turnover intention levels in a sample comprising 228 civil servants.

Findings – The validation of a model of structural equations unveiled a statistically relevant relation of dependence among values, expectations and the affective commitment to the organization. Moreover, engagement proved to be a mediator of the relation between the other variables and the turnover intention.

Originality/value – The work contributed to literature by presenting evidence that low expectations among civil servants bring low affective commitment which, in turn, leads to higher willingness to quit organizations. On the other hand, the same model showed that self-transcendent values, typical to the public career (serve the public), prevail among civil servants and positively impact commitment. This scenario shows that in people management all these elements of values and expectations must be worked on to reduce the number of civil servants that quit the government every year, as well as the high costs associated with quitting.

Keywords Engagement, Values, Turnover, Expectations, Civil servants

Paper type Research paper

Introduction

Although somewhat neglected, turnover in the Federal Executive Branch is a prominent aspect for public management. According to records, 21.3 thousand civil servants have separated – 7.1 thousand a year, on average – according to the Integrated Human Resources Administration System (SIAPE), accounting for nearly 25 per cent of the new vacancies authorized for that period. Of these, 48 per cent are volunteer requests of separation or exoneration[1]. The remaining separations in the Federal Government were related to taking on new office.

Figures are quite amazing if we consider stability in public sector offices and high wages paid for most Federal Executive Branch officers (in comparison with the private sectors of the economy). Even more surprising is the volume of voluntary exoneration requests, that is, quit the Public Administration without getting another position.

Turnover bears many negative aspects, including the loss of talented employees; mistakes made by inexperienced servants; loss of the organizational memory; and loss of personal links with negative effects on the organization's performance (Torres, 2015). Effects, however, are even more harmful to the Public Administrations because new civil servants are recruited and selected through expensive and time-consuming entrance examinations. Many times these examinations are not even authorized, resulting in civil servants shortage and disruption of public services delivery.

That is why this paper intended to investigate elements that favor or reduce the turnover intention among civil servants in the Federal Executive Branch. To that, the survey made use of variables of values, expectations and affective commitment to the organization. These were tested in a model of structural equations capable of checking if these are antecedents or not of the turnover intention levels in a sample made up by 228 active high-level civil servants working in five ministries and one federal agency.

Theoretical referential
Turnover: concept, costs and predictors
Turnover understood as "the voluntary cessation of membership in an organization by an individual who receives monetary compensation for participating in that organization" (Mobley, 1992, p. 30) is one of the main concerns for organization managers because it involves talented employees, resulting in loss of productivity and discontinuity of services delivery (Caillier, 2011; Mobley, 1992). According to Vandenberg and Nelson (1999), the loss of valued employees is a negative index of organizational effectiveness: "Although some forms of turnover are desirable (e.g. losing poorly performing employees), most practitioners and researchers use the term to refer to the loss of valued employees" (Vandenberg and Nelson, 1999, p. 1313).

Camposo and Malik (2008) point the cost of replacing personnel (selection, admission, instruction, training, labor costs related with separation, etc.) as a negative component of voluntary separation. For the many reasons presented, Moynihan and Landuyt (2008) argue that a large number of research works have tried to understand turnover and the reasons for the employees' voluntary separation, hoping to enhance employers' understanding about the course of action to limit the loss of personnel: "To assist organizations further, scholars have developed models to predict and understand factors associated with turnover" (Caillier, 2011, p. 110).

However, there is an inherent difficulty in the association between effective turnover and the many variables of organizational behavior. As Price (2004) illustrates, some studies tried to work with effective action, applying questionnaires to a group of individuals to describe their work situations. Then, researchers waited for the employee to quit the organization to evaluate the relation with behavioral variables. This delay, however, extended the research period that lasted about one year, thus urging for leaner instruments to approach the topic.

That is why current studies on turnover typically use an instrumental proxy: turnover intention. Turnover intention is the subjective likelihood of quitting the organization in the near future (Mowday *et al.*, 1982, quoted by Vandenberg and Nelson, 1999). Measured by how frequently employees think, want or plan to quit their organizations (Siqueira *et al.*, 1997, quoted by Paranaíba, 2014), it is ideally used as instrument to approach the effective turnover action considering the likelihood of:

- anticipating future decisions to minimize turnover (Vandenberg and Nelson, 1999); and
- associate turnover with many variables of organizational behavior (Torres, 2015).

Mobley (1992) argues that regular estimates of the intention to quit and the correlates of such intentions are a highly recommended projective and diagnostic approach for organizations. Chang (1999) considers the turnover intention as the final cognitive variable that can directly affect the effective separation. Many surveys empirically showed the relevant relation between intention to quit and effectively quitting (Mobley, 1992; Tett and Meyer, 1993; and Phillips and Connell, 2003). Vandenberg and Nelson (1999), in turn, advocates that turnover intention is not automatically transformed into separation. This allows managers to work on the causes and avoid effective separation.

According to Moynihan and Landuyt (2008), the factors associated with turnover intention fit into three broad categories: economic/environmental, individual and organizational. The individual characteristics that influence turnover include gender, social group, family constraints, age, length in the organization and education. Empirical research points out, for example, that longer time working for the organization tends to reduce the willingness to quit. In the same sense, age is negatively related with turnover intention: the older the individual, less prone he/she is to separate. At organizational level, factors can be divided into three subcategories: Work Characteristics; People Management Policies; and Workplace (Moynihan and Landuyt, 2008).

In the Brazilian Public Sectors, some organizational elements are considered to be the reasons that lead individuals to turnover: poor working conditions; little perspective of career development; remuneration policy that does not award performance; and significant wage divergences between similar offices and functions (Gomes, 2008; Fernando, 2006; Oliveira, 2009). In addition, Gomes (2008) points out that civil servants suffer the prejudice that associate them to the Public Service evils, such as inefficiency and corruption.

Torres' (2015) study, for example, gave evidence on the behavior of civil servants holding at-will appointments regarding their intention to quit or to remain in such offices. The paper unveiled that some dimensions of organizational justice and the work-family conflict are relevant to the turnover intention. Another finding was that, differently from international papers, the individual's characteristics barely affect such intentions.

Paranaíba (2014) researched the influence of aspects related to the work characteristics and satisfaction on the turnover intention of civil servants in a federal agency. Results pointed out characteristics inherent to the civil servant's activity, satisfaction with remuneration and satisfaction with promotions as the most important factors to predict turnover.

In a sample of civil servants from the Ministry of National Integration, Diógenes *et al.* (2016) found significant negative relations between turnover intention and factors of organizational support, notably the factor *Ascension, promotion and wages* (-0.509) showing the relevant role of perception about career opportunities. Another construct, the *Affective Commitment to the Organization*, has been successively tested as antecedent of turnover intention, with statistically significant results.

A recent study by Silva *et al.* (2014) with a sample of 132 professionals in the state of São Paulo found a correlation coefficient (Pearson's r) of -0.71 between affective commitment to the organization and turnover intention. This value was more significant than that found to another construct of *Organizational Support* (-0.63). Likewise, Bastos and Menezes (2010) and Scheible and Bastos (2014) investigated pretty larger Brazilian samples (1,989 and 1,200 individuals, respectively) and found that emotional basis is considered a more responsive

predictor to the intention to remain (another concept of intentional nature related to effective turnover).

Siqueira and Ferreira (2005), in turn, designed a study aimed to testing a psychosocial model on turnover intention, where affective commitment to the organization and job satisfaction were presented as direct antecedents. Results suggested significant negative correlation among turnover intention, commitment and job satisfaction.

The predictive relation between engagement and turnover has also proved to be pertinent in other countries and cultures. Muthuveloo and Rose (2005), for example, have investigated antecedents and consequents of organizational engagement for workers in Malaysia. In the study, some personal traits (race, education, country of origin and religion) were antecedents of organizational engagement, which, in turn, significantly influenced the organizational results such as loyalty, stress level and turnover intention.

This section has conceptually defined turnover and its intentional measure. Moreover, it presented empirical evidence on antecedent factors of turnover intention (mainly the affective commitment to the organization). Following, the theory and applied surveys on affective commitment to the organization are detailed to define the involved concepts and indicate the relations with individual values and variables of expectation which are predictors incorporated to the hypothetical model of this paper.

Affective commitment to the organization: concepts and antecedents
The Organizational Engagement is a theoretical-conceptual construct related to the link established between individuals and organizations. The investigation of this phenomenon basically intends to find answers to a crucial question: what keeps an employee/member connected to their current organization? The answers up to now, at least in the field of organizational theories, lay on multifaceted grounds.

Some formulations emphasize attitudinal and affective aspects. Others follow the calculative/instrumental line. Finally, a third line of answers focuses on the normative (Bastos, 1993). Allen and Meyer (1990, p. 3) summarize the different dimensions of the construct as follows:

> Employees with strong affective commitment remain with the organization because they want to do so; those with instrumental commitment remain because they need and those with normative commitment remain because they feel they ought to do so.

The instrumental focus on commitment to the organization arose from Becker's (1960) works. To the researcher, an individual remains with the company because of the costs and benefits associated to separation (Medeiros *et al.*, 2003). This commitment is also known as side bet – a term related to the exchanges established between individuals and organizations.

The normative commitment was first defined by Weiner (1982). Briefly put, according to Weiner, the commitment in this light is represented by the set of pressures internalized by the individual to behave in line with the organization's objectives and interests (Silva *et al.*, 2014). Committed individuals present some behavior not because they calculate the potential personal benefits, but because they believe this is the right and moral thing to do (Weiner, 1982, p. 300).

However, most studies on commitment found in literature, mainly in Brazil, have elected the attitudinal line related to the affective processes of member-organization linkage. This focus was originally consolidated in the 1970s by Mowday, Porter and Steers. The definition adopted emphasized the identification of individuals towards the objectives and values of the organization in a construct characterized by three factors: a) feeling of loyalty; b)

willingness to endeavor on behalf of the organization; and, finally, c) willingness to remain bound to it.

After several empirical tests, researchers have built and validated an instrument known as *Organizational Commitment Questionnaire – OCQ* (Mowday *et al.*, 1979). In Brazil, Borges-Andrade, Afanasief and Silva validated the scale in the 1980s, which is largely adopted in the country for empirical research mostly oriented to investigate antecedents of commitment (Medeiros *et al.*, 2003).

Despite their widespread repercussions, the conceptual definitions proposed to the affective construct and the resulting instruments were subject of some relevant criticisms. Bastos (1993) considered a problem when Mowday *et al.* adopted a tripartite model, whose definition simultaneously involved attitude and a set of cognitions, feelings and willingness to act.

The researcher advocated that behavioral intentions to remain are not constituents of the commitment to the organization. According to him, the true commitment is affective, and the intention to remain with the organization is a consequent of that commitment (Bastos and Menezes, 2010, p. 300). Therefore, Bastos (1993) suggested using a one-dimension model aimed to measure only the feelings in relation to the organization. In the same sense, Siqueira developed and validated a unifactor *Scale of Affective Commitment to the Organization* in which items measure company-related feelings and emotions, such as pride, satisfaction, enthusiasm, interest and spirit (Ferreira and Siqueira, 2005).

This paper adopted the one-dimension affective commitment to the organization as methodological instrument. As noted by Bastos and Menezes (2010), the construct has presented the most robust empirical results in the role of antecedent of turnover-related intentions (turnover intention and intentions to remain). According to Scheible and Bastos, the need to stay (instrumental commitment) with an organization does not ensure the intention to remain, so the intentions to stay are much stronger when determined by willingness (affective commitment).

Early in the 1990s, Mathieu and Zajac carried out the first comprehensive review of literature on organizational commitment. The authors built a meta-analysis based on the findings of 124 papers published in scientific journals – comprising 174 independent samples which totaled 52 thousand individuals – seeking for empirical evidence about antecedents, correlates and consequents of the construct. Most of the analyses had the affective aspect as reference and the Mowday's and Steers' instrument as methodological structure (Mathieu and Zajac, 1990).

In the group of individual variables, the findings of Mathieu and Zajac point out the perception of personal competence, the subjects' age and the protestant ethic in the workplace as significant and positive antecedents. In relation to the job characteristics, the strongest (positive) correlations were with the innovative and non-routine nature of activities; leader's communication; low ambiguity of roles; and low workload. Finally, gender, education, wage, offices and organizational features (size and centralization) proved to be statistically significant, with reduced values (Borges-Andrade, 1994).

Quite frequently literature is dedicated to study values as predictor of the commitment to the organization. Following, some of the most significant findings are approached.

One of the focuses of this research is to which extent the individual values and expectations influence the commitment to the organization, as antecedents. Next, some empirical findings about these relations are presented.

Rodrigues *et al.* (2010) used a scale of 18 individual values to check the interaction between personal values and commitment to the organization among members of junior enterprises. The values with stronger relation with the construct of Commitment to the

Organization were Prestige and Compliance, followed by Sociability and Social Support, which are identities predominantly associated with the group characteristics.

In a study with 220 civil servants in India, Kumar (2012) found indications that affective commitment is higher among individuals with values, such as justice, logics and moral integrity.

Tamayo *et al*. (2000) used the Schwartz Theory of Motivational Types – which will be presented in the next section – to evaluate the links between axiological priorities and commitment to the organization. The research used Mowday's Commitment Scale and Schwartz Inventory of Values as instruments applied to a sample of 200 individuals from a company in the electric power sector. The multiple regression results showed that four of the 10 motivational types of value could predict commitment: tradition, power, stimulation and universalism. Of these four types, only stimulation is not positively related to affective commitment.

In an analysis of motivational types related to affective commitment, Martins and Santa'anna (2014) found the prevalence of types describing "characteristics of individuals that seek pleasure in doing something, who want to belong, seek stability, harmony and balance in relationship" (Martins and Santa'anna, 2014, p. 243). The predictive strength of values was modest in both surveys, which is an understandable fact according to Tamayo (2000). The author argues that it happens because of the countless antecedents of commitment to the organization related with individual variables, job characteristics, experience in the workplace and characteristics of the role.

Schwartz motivational types have also been tested as antecedents of commitment in a study with teachers in Israel. The evidence gathered by Cohen and Liu (2011) allowed, among others, to establish significant and positive influences between affective commitment and the motivational types of conformity and benevolence. The authors end affirming that individual values and commitment aspects are concepts that allow better understanding the employees' behavior in the workplace, notably their performance.

The theoretical review up to now has recovered the concepts of turnover intention and affective commitment to the organization, reporting the empirical evidence about their interrelations, antecedents and consequents. The affective commitment to the organization proved to be strong predictor of the turnover intention. On the other hand, evidence gathered suggests some kind of antecedent relation between commitment and individual values and expectations. The next two sections will approach the relevant theory on values and expectations.

Individual values
Individual values concern studies in the field of People Management because of their capacity to explain and/or construe behaviors and expectations in an organization. In this research, the comparative analysis of individual values held by the federal civil servants adopted the model of Schwartz (1992) about the structures of motivational types, known as *Universal Theory of Values*, as theoretical and methodological referential.

Schwartz defines values as "criteria or goals that transcend specific situations, are ordered by their importance and serve as principles that guide an individual's life" (quoted by Porto and Tamayo, 2003). His model of Motivational Types designed a structure of the individual's values based on the three universal needs of human beings: basic biological demands – organism; social coordination requirements – interaction; and requirements for the group's proper functioning – group (Porto and Tamayo, 2003; Campos and Porto, 2010).

This theory has been empirically tested in many countries, with a sample of more than 9 thousand participants. The analyses allowed the identification of the structure of types and

values in each culture showing the existence of 10 universal motivational types: Self-direction (independent thought and action); Stimulation (excitement, novelty, challenge in life); Hedonism (pleasure or sensory gratification); Achievement (personal success through demonstrating competence); Power (social status and prestige, control or dominance over persons and resources); Security (harmony and stability of the society, relationships and of the self); Conformity (restriction of actions and impulses that tend to harm the others or violate social rules); Tradition (respect, commitment to customs and ideas provided by the culture or religion); Benevolence (preservation and enhancement of people known to the subject); and Universalism (understanding, appreciation and protection of nature and all people) (Schwartz, 2005).

Schwartz's theory arranges the ten motivational domains in a circular structure based on the multidimensional analytical technique used to develop his research, the *Smallest Space Analysis – SSA*. This statistical method establishes that empirical relations between values (their correlations) may be represented by the distance of points positioned in the multidimensional space.

The circular model is also coherent with the dynamic of conflict and compatibility among the motivational types. In other words, people are more prone to attach high or low priority to given motivational type compatible with given motivational domains than in a random way (Porto and Tamayo, 2003). Therefore, the 10 original types were grouped in four higher instances that establish bipolar relations (domains): Self-transcendence (Universalism and Benevolence) × Self-enhancement (Power and Achievement); Openness to change (Self-determination, Stimulation and Hedonism) × Conservation (Security, Conformity and Tradition):

> In brief, the circular arrangement of the values represents a motivational continuum. The closer any two values are in either direction around the circle, the more similar their underlying motivations (Schwartz, 2006). In this way the author emphasizes the implication of this kind of structure on its relation with other variables and on the prediction of behavior. (Campos and Porto, 2010, p. 201).

In the work where he defined the motivational types, Schwartz said that as it is a continuum, the circular structure division in 10 classes of values was arbitrary. In the same article, the author invited the scientific community to refine this classification, what wa done only 20 years later by the researcher (Cieciuch *et al.*, 2013) who defined 19 motivational types. The refined structure, however, has not yet been broadly applied to Brazilian studies. Therefore, this paper adopted the previous structure of motivational types.

Expectations on career and organizational future
Generally speaking, the studies on perceptions about career and organization ask about future in a generic way, disregarding specific attributes such as wage, workplace, promotion, characteristics of the tasks, management, customers' satisfaction, etc. Some examples are the works by Carr *et al.* (2006) on career expectations, and Posner (2010), Chen *et al.* (2011) and Bordia *et al.* (2004) about forecasts on the organizational future. The non-specificity of the items surveyed hides the parameters adopted by respondents. When answering, they could, for example, be thinking on salary adjustments and promotions or maybe on improved workplace and the activities performed.

Literature also presents some papers that addressed specific issues about career and the organizational future.

Instead of analyzing only objectives, opportunities and general perceptions, these papers asked workers questions about matters such as *mobility expectations* (securing a promotion),

in De Souza (2002), Burke (2001) and Carmeli *et al.* (2007); *pay expectations* in Gibson and Lawrence (2010) and O'Neill *et al.* (2011); and *job characteristics and conditions* in Prince (2003), Eby *et al.* (2005) and Van dam *et al.* (2009). Finally, it is worth mentioning Chen (2011), whose work has consolidated several attributes in a 12-item scale including pay expectations, job challenges, career development, etc. Although bringing important indications about expectational elements, according to Vasconcellos and Neiva (2015), the cases first err for the lack of rigor in the definition of research objects, as their conceptual discussion about the constructs and the instruments used are weak. The second mistake is that they are mostly generic or, if approaching specific attribute, comprise short number of items.

In face of that theoretical gap, the authors have conceptually delimited two new constructs: *career expectations in the organization* and *expectations of organizational future*. Moreover, they developed the related instruments that measure factors such as *Professional Achievements*; *Career/Personal Life Relation*; *Management and Organizational Environment*; and *Organizational Effectiveness*. These instruments were tested for validation and further applied to identify likely relations of antecedence among expectations, commitment and turnover intention.

The *Career expectations in the organization* were defined as the beliefs about the likelihood of some states/situations to happen in the professional future within the current organization (Vasconcellos and Neiva, 2017, published). The *Expectations of Organizational Future*, in turn, are the professionals' beliefs about management and effectiveness of their organization in the future. Following, Vasconcellos (2015) designed a structural model that placed the expectation of career in the organization as predictor of affective commitment to the organization and turnover intentions.

Results found a significant relation among variables. Expectations were positively correlated with affective commitment to the organization and negatively correlated with turnover intentions. Factors related to attributes internal to the organization (*Professional Achievements*) presented the highest correlation coefficients with 0.53 to commitment and −0.43 to turnover intention ($p < 0.01$). The binomial *Career/personal life* presented coefficients of −0.26 and 0.35 to turnover intention and commitment, respectively (also with $p < 0.01$). The factors of expectations about the organization had positive impact on the affective commitment to the organization (coefficient of 0.43 and $p < 0.001$).

Hypotheses
The following research hypotheses were investigated in this paper:

H1. The dimensions of self-transcendence and conservation values are positively related to the levels of affective commitment to the organization.

H1b. The dimensions of openness to change and self-enhancement values are negatively related to the levels of affective commitment to the organization.

H2. The levels of expectations in career and of organizational future are positively related to the affective commitment to the organization.

H3. The levels of affective commitment to the organization are negatively related to the turnover intention degrees.

The hypotheses raised suggest a model with the following structure: (Figure 1).

The model is in line with the literature found. The relation between individual and organizational values affects the individual's behavior in the workplace and, as such, hihe/

sher commitment to the organization (Tamayo *et al.*, 2000). The same happens with the expectations about career in the organization and the organizational future (Vasconcellos, 2015). Finally, empirical studies unveiled a direct and significant relation between affective commitment to the organization and turnover intentions (Ferreira and Siqueira, 2005; Muthuveloo and Rose, 2005; Bastos and Menezes, 2010; Scheible and Bastos, 2014). To some extent, the model follows the antecedent stages of turnover suggested by Steers and Mowday (1981). According to the authors: low expectations in the workplace and conflict of values lead to negative affective responses and, finally, lead to the intention to quit the organization.

These relations have been previously approached in the theoretical review.

Method

Population and sample. The required sample size was calculated using the *GPower* statistical software, adopting as parameter the number of factors of instruments, the expected effect (average-low according to Cohen *et al.*, 2003), in a 95 per cent confidence level and 80 per cent statistical strength. By the end of the survey, the sample comprised 228 individuals (working in five ministries and one federal agency). The civil servants' mean age was 38.06 years, of which 52 per cent were women, and all with higher education.

Collection instruments. To obtain the required data to develop the research, a questionnaire was applied comprising items on personal/professional/demographic (sex, education, year of birth, etc.) information and five instruments, as follows: *Turnover Intention Scale* (EIR); *Affective Commitment to the Organization Scale* (ECOA); *Schwartz Value Survey* (SVS); *Career Expectation in the Organization Scale* (EECO); and *Organizational Future Expectations Scale*.

Tamayo and Schwartz (1993) validated the *Schwartz Value Survey – SVS* in Brazil. The IVS was elected over other instruments also validated in Brazilian samples, such as the Personal Values Profile Questionnaire (PVPQ) and its short version (PVP), for two reasons. The first one concerns the education level of the sample assessed. All civil servants approached had higher education or graduate degree. The PVPQ and PVP are usually adopted to investigate the individual values of respondents with lower education (Campos and Porto, 2010). The second is the strong empirical ground of the instrument applied in 67 countries, totaling a sample of 64,271 individuals (Schwartz, 2005).

Both scales of expectations about the future were developed and validated by Vasconcellos and Neiva (2015, 2017). The *Career Expectation in the Organization Scale* (EECO) is made up by two expectation factors: *Professional achievements* relating items such as remuneration, prestige among peers, advances/growth/success in the career and performance of interesting activities; and *Career – personal life* with items about balance between personal life and work, working hours, quality of life. The *Organizational Future Expectations Scale* (EEFO) incorporates items devoted to the organization's future results,
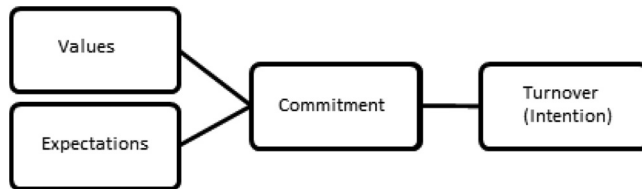

Figure 1.
Model tested

Source: Prepared by the author (2016)

known as *Organizational Effectiveness*, in addition to attributes on management and workplace known as *Management and Organizational Environment*.

The *Turnover Intention Scale* (EIR) was designed by Siqueira *et al*. (1997). Made up by three items the instrument asks individuals to answer, in a five-point scale (1 = never; 2 = rarely; 3 = sometimes; 4 = frequently; 5 = always), how frequently they think about, plan and want to quit their organizations (Appendix).

Siqueira (1995) developed and validated a unifactor *Affective Commitment to the Organization Scale* (ECOA) The short version comprises five items – expressions of positive affects related to the organization.

The characteristics of the collection instruments are detailed in Table I.

Data collection and analysis. Data were collected in May and June 2016. The people's managers of the institutions surveyed were contacted by e-mail and phone. During the contact, the team presented the research purposes and asked managers to distribute the research internally to a random sample of the target audience. The presentation text sent jointly with the questionnaires informed the research objectives to the civil servants and highlighted the confidential nature of the information provided.

Data treatment. The method of structural equations modeling was used to determine the validity of the proposed model. According to Byrne (2009), the term 'structural equation modeling' comprises two procedures: encoding processes in study through several structural equations (regressions) and graphic representation of the model (pathways

Collection instruments	Measuring items	Scale
Schwartz Values Survey (SVS)	Relation of 61 driving values	−1 = Opposite to my values/0 = Not important/1/2/3 = Important/ 4/5/6 = Very important/7 = Of utmost importance
Career Expectations in the Organization Scale (EECO)	13 items on topics such as working hours, career objectives, professional activities, achievements, responsibilities, career development, etc.	0 = Unllikely/1/2/3 = Likely/4/5/6 = Extremely likely
Organizational Future Expectations Scale (EEFO)	Nine items on topics such as workplace, organization management, goals, position in the performance area, perception about the market, etc.	0 = Unllikely/1/2/3 = Likely/4/5/6 = Extremely likely
Affective Commitment to the Organization Scale (ECOA)	The company I work for makes me feel... Proud of it. Satisfied with it. Enthusiastic about it. Interested on it. Inspired by it	1 = Not at all/2 = Little/3 = More of less/4 = A lot/5 = Extremely
Turnover Intention Scale (EIR)	Do you consider quitting the company you work for? Do you plan quitting the company you work for? Do you want to quit the company you work for?	1 = Never/2 = Rarely/3 = Sometimes/4 = Frequently/5 = Always

Source: Prepared by the author (2016)

Table I. Collection instruments, items and measuring scales

diagram). The hypothesized model is statistically tested (here by the AMOS software) considering the whole system of variables to determine if it is consistent or not with the empirical data: "If goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected" (Byrne, 2009, p. 3).

Findings

This section was organized in two topics to systematize the presentation of findings. The first one presents the sample descriptive data, that is, the mean and standard deviation of the variables of values (the four higher dimensions of Schwartz: *Self-enhancement; Self-transcendence; Openness to change;* and *Conservation*); expectations (of *Career in the Organization*, of *Career and personal life* and of *Organizational Future*); *Affective Commitment to the Organization*; and *Turnover Intention.*

It is worth mentioning that the *Organizational Future Expectations Scale* was worked on as a unifactor scale, as the factorization performed on sample did not allow the identification of a second group of variables, in opposition to the what theory had forecasted. The second topic shows the analysis of the regression coefficients found in the structural equations, in addition to the model validity test, adopting the validity parameter suggested by Hair *et al.* (2009).

Data description

Table II shows the means, standard deviations and midpoints of the scales of nine job variables. In the results for expectations, both of career and of organization future, the most relevant aspect is that in the overall sample the mean of the 22 items representing positive statements about the future, recorded average scores below the scale midpoint (measuring ranges from 0 - unlikely to 6 - extremely likely). This is an indication of high degree of "pessimism" among the respondent civil servants about the future of their careers and organizations. As reference, for all studies in Vasconcellos' (2015) thesis with samples from a wide range of organizations, the mean scores in both scales were above the midpoint.

The mean for commitment scores was 2.8; therefore, once again below the midpoint, indicating poor adherence of civil servants to their organizations. The measuring reference for all of the instrument items was the interval between 1 and 5, with midpoint at 3 (higher the value, higher the commitment). However, this value does not substantially deviate from that found among private companies, for example. A recent study by Silva *et al.* (2014)

Variable	Mean	SD.	Scale midpoint
Self-transcendence	4.9	1.06	3
Openness to change	4.17	1.2	3
Conservation	4.15	1.12	3
Self-enhancement	3.43	1.09	3
Expectations of career and personal life	2.5	1.42	3
Expectations of professional achievements	2.26	1.4	3
Expectations of organizational future	1.68	1.2	3
Turnover intention	3.45	1.08	3
Affective commitment to the organization	2.83	0.94	3
Source: Research data			

Table II.
Descriptive statistics: means, deviations and midpoint (N = 228)

recorded a 2.7 score in the same scale applied to a sample of 132 professionals from private institutions.

The turnover intention indicator, in turn, had a 3.45 mean for the entire sample; this time above the scale midpoint (higher the indicator, higher the willingness to quit the organization). In other words, there is a slight tend towards quitting the organization. Diógenes *et al*. (2016) and Paranaíba (2014) found results somewhat higher in samples of civil servants – 4.35 (sample of 112 civil servants) and 4 (sample of 111 subjects), respectively. Silva *et al*. (2014) found a mean score somewhat closer in private corporations: 3.84.

In the descriptive analysis of values, sample data were aggregated in the structure of four higher dimensions. Among the sample individuals *Self-transcendence* – made up by values such as EQUALITY, INNER HARMONY, SOCIAL JUSTICE, MEANING OF LIFE, etc. – and *Openness to change* – composed, among others, by the values PLEASURE, FREEDOM, BOLD, CURIOUS – are, in this order, the groups with highest means. On the other hand, *Conservation* and *Self-enhancement* scored lowest. Here, the values hierarchy also reflects that found in another study developed by Alfinito (2010) with a sample of 2,483 university students. This is an indication that the standard values of the civil servants studied do not seem to bear specificity.

Model testing
The hypotheses of this paper aim to answer the following question: Do values and expectations have any impact on behavioral indicators, such as commitment and the intention to quit the organization? To advance this issue, a structural equations model (SEM) was designed.

The model statistically analyzes the relations among values, expectations, affective commitment to the organization and turnover intention (testing hypotheses *H1*, *H1b*, *H2* and *H3*). Based on the literature review the model design provides for the relation of values and expectations with turnover mediated by commitment, as Figure 2 shows.

To evaluate the model goodness-of-fit and calculate parameters among variables, the authors used the AMOS software, of IBM, a SPSS module. As this section did not intent to make a confirmatory factorial analysis (CFA), all variables, both exogenous (values and expectations) and endogenous (commitment and turnover intention) were configured in the model as having been observed, through the means of the items of factors. Such aggregation
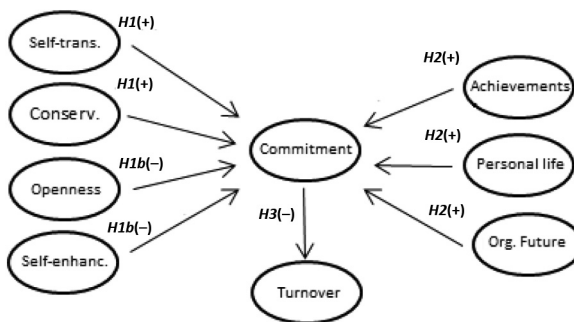
Source: Prepared by the author (2016)

Figure 2.
Structural model

favors the emergence of variables with distribution more "interval-based, normal and reliable" (Hall *et al.*, 1999).

Another preliminary procedure adopted was the verification of multivariate normal distribution, following the steps of the previous sections (MNV package in R language). Normality was evaluated to the set of all variables measured (values, expectations, affective commitment to the organization and turnover intention).

The first Mardia's test resulted in non-normal distribution, as four variables had asymmetry problems, one negative (*Self-transcendence*) and three positive (factor 1 and 2 of the EECO and EEFO). Therefore, transformations were made, squaring the first variable and calculating the square root of the other three, as suggested by Hair *et al.* (2009). However, the distribution remained non-adherent to the normal curve, and therefore, the presence of outliers was evaluated through the Mahalanobis distance. After the removal of 10 observations identified as atypical, distribution was considered normal in the third attempt. When the multivariate normality of variables was confirmed, the model estimation was performed in the AMOS.

Before checking the estimated parameters, the first analysis of results in SEM evaluates the model's goodness-of-fit. This is done by comparing two matrixes of covariance among variables: one made up by the values observed in the sample, and another made up by the covariance estimated through the model's pathways estimates. Hair *et al.* (2009) establish as guideline to accept the goodness-of-fit the use of at least one absolute index, in addition to the chi-square, and an index of poor quality of fit. This work observed the CMIN/DF index (ratio between the chi-square and the degrees of freedom), the *Goodness-of-fit Index* (GFI), the *Comparative Fit Index* (CFI) and the *Root Mean Square Error of Approximation* (RMSEA), all provided by the AMOS.

In the first model test comprising only the relations of dependence, the modification indexes provided by the AMOS suggest the forecast, in the model, of correlations among the four dimensions of values (*Self-transcendence* $\times$ *Self-enhancement*; *Self-transcendence* $\times$ *Openness to Change*; *Self-transcendence* $\times$ *Conservation; Self-enhancement* $\times$ *Openness to Change; Self-enhancement* $\times$ *Conservation;* and *Openness to Change* $\times$ *Conservation*) and also among the three variables of expectations (*Professional achievements* $\times$ *Career and personal life*; *Professional Achievements* $\times$ *Organizational Future Expectations*; and *Career and personal life* $\times$ *Organizational Future Expectations*).

With the adoption of correlations, justified by the expected variances shared by the constructs of values and among the constructs of expectations, the diagnoses suggested a model with overall goodness-of-fit. The CMIN/DF index represents the chi-square statistic of the difference between the two covariance matrixes divided by the degrees of freedom. For a model to be well fit, literature recommends finding significant values to the chi-square and ratio below two. In this structural model, the chi-square was significant to $p < 0.05$ and CMIN/DF = 1,808.

According to Hair *et al.* (2009), the GFI is an indicator less influenced by the sample size in comparison with the chi-square. Literature suggests that good models should have GFI above 0.90 (the index ranges from 0 to 1). In the model evaluated, the GFI reached 0.967. The CIF, in comparison with the GFI, is an index with goodness-of-fit less influenced by the model complexity. It also results in values between 0 and 1. To Hair *et al.* (2009), in models observing less than 12 variables the CFI should be higher than 0.97, like in the evaluated model with CFI = 0.981.

Finally, the RMSEA – the misfit index that calculates the error of each term of covariance-variance of the model variables – was 0.06. According to Hair *et al.* (2009), the threshold is 0.10. Table III summarizes the diagnosis of the model goodness-of-fit.

The model validation is concluded by analyzing the parametric estimates. This stage checks if each pathway coefficient is significant and is following the expected direction. The dimensions of *Self-transcendence* and *Conservation* had significant estimates for $p < 0.05$, *Self-transcendence* with positive load, as expected, and *Conservation* with negative load, partially contradicting *H1*. *Openness to change* also reported significant estimate (negative), while the coefficient of *Self-enhancement* was not significant, suggesting the partial non-rejection of *H1b*. The highest standardized estimate was that of the dimension *Conservation* (-0.378), followed by *Self-transcendence* (0.348) and *Openness to change* (-0.201).

For expectations, the second EECO factor – *Career and personal life* – had virtually null impact on the endogenous variable *Affective Commitment to the Organization* (ECOA) and, therefore, was insignificant. In opposition, the variable *Organizational Future Expectation* (EEFO) and the *Professional Achievements* factor of the EECO were significant at the $p < 0.05$ level, with standardized coefficients of 0.351 (EEFO) and 0.213 (EEFO, Factor 1), respectively, suggesting the partial validity of *H2*.

H3 (*The levels of affective commitment to the organization are negatively related to the turnover intention degrees*) was not rejected because the commitment variable (ECOA) recorded reasonable, negative and significant coefficient as predictor of the *Turnover Intention* (EIR). The standardized coefficients are presented in the pathways diagram of Figure 3.

Discussion and conclusion

The main goal of this work was to investigate how values and expectations of the federal civil servants could influence their behaviors in the organization and, thus, the intentions of quitting the Public Administration. This goal was pursued through the working hypothesis.

Index	Recommended	Model
CMIN/DF	<2	1.808
Goodness-of-fit Index (GFI)	>0.90	0.967
Comparative Fit Index (CFI)	>0.97	0.981
Root Mean Square Error of Approximation (RMSEA)	<0.1	0.061

Source: Research data

Table III.
Structural model:
Goodness-of-fit
indexes
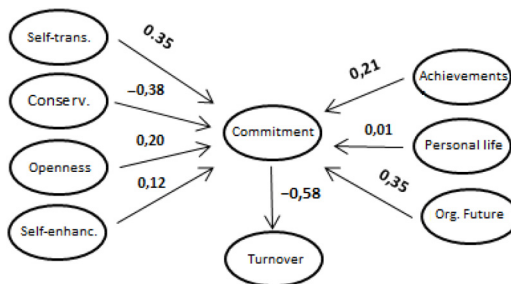
Source: Prepared by the author (2016)

Figure 3.
Standardized
pathway estimates of
the structural model

In the hypotheses testing, the use of structural equations with the variables of values, expectations, commitment and turnover intention, in a sample of 228 civil servants, entailed significant results. The structural model developed showed that, notably the values of the dimensions *Self-transcendence* and *Conservation* can indicate changes in the affective commitment to the organization. The first variable contributes to engagement, while the second one reduces the commitment levels, partially validating *H1*. However, as the *Conservation* sign was opposite to the typically indicated in literature (Tamayo *et al.*, 2000, for example), new analyses are required, mainly using the disaggregation of dimensions by motivational types. A likely explanation would be the disappointment of those holding conservation values as regards the current political problems experienced by Public Administration. Conservation values indicate respect to the rules. The corruption scandals show frequent ruptures of normative standards and are likely to favor the disengagement of those civil servants.

Likewise, the expectations about career and organization have presented remarkable effects on the commitment to the organization, except for the *Career and personal life* factor, in line with *H2*. The positive sign of such relations help understanding why commitment levels are low in the Public Service. As aforementioned, expectations are extremely negative and likely to contaminate the civil servants' conformity to their organizations. This also contributes to understand the high levels of *Turnover Intention*, even in a sector where stability is granted and wages are above the market mean.

Investigations performed by Bastos and Menezes (2010) and Scheible and Bastos (2014) found that affective ground is considered to be a very suitable predictor for the intention of staying or not with the organizations. The structural model of this paper supported such findings. The Affective Commitment to the Organization reported negative coefficient of 0.58, which is quite reasonable for organizational behavior constructs, as suggested by *H3*.

It means to say that the consolidated results of this work contributed to the literature by presenting in the structural model evidence that low expectations among civil servants bring low affective commitment which, in turn, leads to higher willingness to quit organizations. On the other hand, the same model showed that Self-transcendent values, typical to the public career (serve the public), prevail among civil servants and positively impact commitment. However, which should be the implications of this scenario to the Federal Government?

The scenario shows that in People Management, all these elements of values and expectations must be worked on to reduce the number of civil servants that quit the Government every year, as well as the high costs associated with quitting. How? The response to this question goes beyond the objectives of this article, but some pathways could be recommended.

One possibility would be that of working expectations through incentive and acknowledgement programs, notably those with aspects not bound to remuneration (since this element is usually hindered by regulations that depend on law-making processes). There are some successful experiences in some islands of excellence in the different Public Administration branches that should be generalized. These usually involve the definition of courses of action that foresee the achievement of new skills and responsibilities. Another possibility is found in the programs to value the "institutional mission" of the organizations and the civil servant's contributions to achieve this final goal. It means to provide transparence to the effective contribution of employees to deliver value to the society.

This paper does not discuss the topic exhaustively. The aspects approached herein (values, expectations, commitment) are limited and not capable of unveiling the different faces of turnover. There is a large room for investigation to understand the attitudes and

behaviors of civil servants. Scales are nothing but the thermometers that measure the symptom. Literature on People Management in the Public Administration, jointly with the everyday practice, has a lot to gain with in-depth studies, probably qualitative studies, to make clearer the reasons (motivations, frustrations, willingness) that lead civil servants to have such a pessimist view on their careers and organizations.

Note

1. Source: Correio Braziliense, 01/21/2014.

References

Alfinito, S. (2010), "A influência de valores humanos e axiomas sociais na escolha do consumidor: uma análise comparativa aplicada à educação superior", Tese (Doutorado), Universidade de Brasília.

Allen, N.J. and Meyer, J.P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, Vol. 63 No. 1.

Bastos, A.V.B. (1993), "Comprometimento organizacional: um balanço dos resultados e desafios que cercam essa tradição de pesquisa", *Revista De Administração De Empresas*, Vol. 33 No. 3.

Bastos, A.V.B. and Menezes, I.G. (2010), "Intenção de permanência na organização: um constituinte ou consequente do comprometimento organizacional?", *Estudos De Psicologia (Natal)*, Vol. 15 No. 3.

Becker, H.S. (1960), "Notes on the concept of commitment", *American Journal of Sociology*, Vol. 66 No. 1.

Bordia, P., Hobman, E., Jones, E., Gallois, C. and Callan, V.J. (2004), Uncertainty during organizational change: types, consequences, and management strategies, *Journal of Business and Psychology*, Vol. 18 No. 4.

Borges-Andrade, J.E. (1994), "Conceituação e mensuração de comprometimento organizacional", *Read. Revista Eletrônica De Administração (Porto Alegre)*, Vol. 19 No. 2.

Burke, R. (2001), "Workaholism components, job satisfaction, and career progress", *Journal of Applied Social Psychology*, Vol. 31 No. 11.

Byrne, B.M. (2009), *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, Routledge, New York, NY.

Caillier, J.G. (2011), "I want to quit: a closer look at factors that contribute to the turnover intentions of state government employees", *State and Local Government Review*, Vol. 43 No. 2.

Campos, C.B. and Porto, J.B. (2010), "Escala de valores pessoais: validação da versão reduzida em amostra de trabalhadores brasileiros", *PSICO*, Vol. 41 No. 2.

Campos, C.V.A. and Malik, A.M. (2008), "Satisfação no trabalho e rotatividade dos médicos do programa de saúde da família", *Revista De Administração Pública*, Vol. 42 No. 2.

Carr, J., Pearson, A., Vest, M. and Boyar, S. (2006), "Prior occupational experience, anticipatory socialization, and employee retention", *Journal of Management*, No. 32.

Carmeli, A., Shalom, R. and Weisberg, J. (2007), "Considerations in organizational career advancement: what really matters", *Personnel Review*, Vol. 36 No. 2.

Chang, E. (1999), "Career commitment as a complex moderator of organizational commitment and turnover intention", *Human Relations*, Vol. 52 No. 10.

Chen, G., Ployhart, R., Cooper-Thomas, H., Anderson, N. and Bliese, P. (2011), "The power of momentum: a new model of dynamic relationships between job satisfaction change and turnover intentions", *Academy of Management Journal*, Vol. 54 No. 1.

Cieciuch, J., Schwartz, S.H. and Vecchione, M. (2013), "Applying the refined values theory to past data: what can researchers gain?", *Journal of Cross-Cultural Psychology*, Vol. 44 No. 8.

Cohen, A. and Liu, Y. (2011), "Relationships between in-role performance and individual values, commitment and organizational citizenship behavior among Israeli teachers", *International Journal of Psychology*, Vol. 46 No. 4.

Cohen, J., Cohen, P., West, S.G. and Aiken, L.S. (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*, Lawrence Erlbaum Associates Publishers, Mahwah, NJ.

De Souza, G. (2002), "A study of the influence of promotions on promotion satisfaction and expectations of future promotions among managers", *Human Resource Development Quaterly*, Vol. 13 No. 3.

Diógenes, L., Paschoal, T., Neiva, E.R. and Meneses, P.P.M. (2016), "Intenção de rotatividade e percepção de suporte organizacional em um órgão público federal", *Revista do Serviço Público*, Vol. 67 No. 2.

Eby, L.T., Allen, T.D. and Brinley, A. (2005), "A cross-level investigation of the relationship between career management practices and career-related attitudes", *Group and Organization Management*, Vol. 30 No. 6.

Escola Nacional De Administração Pública (ENAP) (2015), *Servidores Públicos Federais – Perfil*, ENAP, Brasília.

Fernando, V.S. (2006), "O perfil do servidor público na sociedade moderna", *Revista Esmafe*, Vol. 10 No. 10.

Ferreira, M.L.C.B. and Siqueira, M.M.M. (2005), "Antecedentes de intenção de rotatividade: estudo de um modelo psicossocial", *Organização Em Contexto*, Vol. 1 No. 2.

Gibson, D. and Lawrence, B. (2010), "Women's and men's career referents: how gender composition and comparison level shape career expectations", *Organization Science*, Vol. 21 No. 6.

Gomes, N.F. (2008), "A subjetividade do servidor público constituída na relação com o estado e a sociedade", *Psicologia Para América Latina*, No. 15.

Hair, F.J., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2009), *Análise Multivariada De Dados*, Bookman, Porto Alegre.

Hall, R., Snell, A. and Fous, M. (1999), "Item parceling strategies in SEM: investigating the subtle effects of unmodeled secondary constructs", *Organizational Research Methods*, Vol. 2 No. 3.

Kumar, N. (2012), "Relationship of personal e organizational values with organizational commitment", *The Indian Journal of Industrial Relations*, Vol. 48 No. 2.

Martins, S.H.B.M. and Santa'anna, A.S. (2014), "Valores individuais e comprometimento organizacional: um estudo com o corpo docente de instituição de ensino superior", *Revista Gestão Universitária Na América Latina – Gual*, Vol. 7 No. 3.

Mathieu, J.E. and Zajac, D.M. (1990), "A review and Meta-analysis of antecedents, correlates and consequences of organizational commitment", *Psychological Bulletin*, Vol. 108 No. 2.

Medeiros, C.A.F., Albuquerque, L.G., Siqueira, M. and Marques, G.M. (2003), "Comprometimento organizacional: o estado da arte da pesquisa no brasil", *Revista De Administração Contemporânea*, Vol. 7 No. 4.

Mobley, W.H. (1992), *Turnover: Causas, Consequências e Controle*, Ortiz, Porto Alegre.

Mowday, R., Steers, R. and Porter, L. (1979), "The measurement of organizational commitment", *Journal of Vocational Behavior*, Vol. 14 No. 2.

Mowday, R.T., Porter, L.W. and Steers, R.M. (1982), *Employee Organization Linkages: The Psychology of Employee Commitment, Absenteeism, and Turnover*, Academic Press, New York, NY.

Moynihan, D.P. and Landuyt, N. (2008), "Explaining turnover intentions in state government: examining the roles of gender, life cycle, and loyalty", *Review of Public Personnel Administration*, Vol. 28 No. 2.

Muthuveloo, R.R. and Rose, C. (2005), "Typology of organizational commitment", *American Journal of Applied Sciences*, Vol. 2 No. 6.

Oliveira, C.T.P. (2009), "A concentração de renda pública brasileira", *Revista Querubim*, Vol. 5 No. 9.

O'neill, O., Stanley, L. and O'reilly, C. (2011), "Disaffected pollyannas: the influence of positive affect on salary expectations, turnover, and long-term satisfaction", *Journal of Occupational and Organizational Psychology*, Vol. 84 No. 3.

Paranaíba, N.F., (2014), "Satisfação no trabalho e intenção de rotatividade de servidores das carreiras de uma autarquia federal", In: Camões, M.R.S., Fonseca, D.R. and Porto (Eds), *Estudos Em Gestão de Pessoas No Serviço Public*, ENAP, Brasília.

Phillips, J. J. and Connell, A. O. (2003), *Managing Employee Retention: A Strategic Accountability Approach*, Elsevier, Burlington, MA.

Porto, J.B. and Tamayo, A. (2003), "Escala de valores relativos ao trabalho – EVT", *Psicologia: Teoria e Pesquisa*, Vol. 19 No. 2.

Posner, B. (2010), "Values and the american manager: a three-decade perspective", *Journal of Business Ethics*, Vol. 91 No. 4.

Price, J.L. (2004), "The development of a causal model of voluntary turnover", In: Griffeth, R. and Hom, P. (Eds), *Innovative Theory and Emprirical Research on Employee Turnover*, Information Age Publishing, Charlotte, NC.

Prince, J.B. (2003), "Career opportunity and organizational attachment in a blue-collar unionized environment", *Journal of Vocational Behavior*, Vol. 63 No. 1.

Rodrigues, C.M.C., Vieira, K.M., Ribas, F.T.T., Arruda, G.S. and Santa Catarina, G.M.F. (2010), "Relação entre valores pessoais e comprometimento organizacional: o caso das empresas juniores de santa maria", *Revista Eletrônica De Gestão Organizacional*, Vol. 8 No. 2.

Scheible, A.C. and Bastos, A.V.B. (2014), "Analyzing the impacts of commitment and entrenchment on behavioral intentions", *Universitas Psychologica*, Vol. 13 No. 1.

Schwartz, S.H. (1992), "Universals in the content and structure of values: theory and empirical tests in 20 countries", In Zanna, M. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY, Vol. 25.

Schwartz, S.H. (2005), *Basic Human Values: Their Content and Structure across Countries*, In: Tamayo, A. and Porto, J.B. (Eds), *Valores e Comportamento Nas Organizações*, Vozes, Petrópolis.

Schwartz, S. H. (2006), "Les valeurs de base de la personne: theorie, mesures et applications", *Revue Française de Sociologie*, Vol. 47, No. 4.

Silva, R.S., Cappellozza, A. and Costa, L.V. (2014), "O impacto do suporte organizacional e do comprometimento afetivo sobre a rotatividade", *Revista De Administração Imed*, Vol. 4 No. 3.

Siqueira, M.M.M. (1995), "Antecedentes de comportamentos de cidadania organizacional: a análise de um modelo pós-cognitivo", Tese (Doutorado), Universidade de Brasília, Brasília.

Siqueira, M. M. M. and Ferreira, M. L. C. B. (2005), "Antecedentes de intenção de rotatividade: estudo de um modelo psicossocial", *Organizações em Contexto*, Vol. 1 No. 2.

Siqueira, M.M.M., Gomide, J.R.S., Moura, O.I. and Marques, T.M. (1997), "Um modelo pós-cognitivo para intenção de rotatividade: antecedentes afetivos e cognitivos", *XXVI Congresso Interamericano de Psicologia*, Congresso Interamericano de Psicologia, São Paulo, Vol. 1.

Steers, R.M. and Mowday, R.T. (1981), "Employee turnover and post-decision accommodation processes", in Staw, B.M. and Cummings, L.L. (Eds), *Research in Organizational Behavior*, Vol. 3, JAI Press, Greenwich, CT.

Tamayo, A. and Schwartz, S.H. (1993), "Estrutura motivacional dos valores humanos", *Psicologia: Teoria e Pesquisa*, Vol. 9 No. 2.

Tamayo, A., Souza, M.G.S., Vilar, L.S., Albernaz, J.V., Ramos, J.L. and Ferreira, N.P. (2000), "Relação entre os valores do empregado e o comprometimento organizacional efetivo", *Encontro Nacional de Pós-Graduação e Pesquisa em Administração*, ANPAD, Rio de Janeiro, Vol. 1.

Tett, R.P. and Meyer, J.P. (1993), "Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on Meta-analytic findings", *Personnel Psychology*, Vol. 66.

Torres, R.V.B.S. (2015), "Rotatividade no Poder Executivo Federal: uma análise das intenções de sair e de permanecer dos servidores comissionados", Dissertação (mestrado), Universidade de Brasília.

Van dam, K., Van Der Vorst, J. D. and Van Der Heijden, B. I. (2009), "Employees' intentions to retire early: a case of planned behavior and anticipated work conditions", *Journal of Career Development*, No. 35.

Vandenberg, R.J. and Nelson, J.B. (1999), "Disaggregating the motives underlying turnover intentions: when do intentions predict turnover behavior?", *Human Relations*, Vol. 52 No. 10.

Vasconcellos, V.C. (2015), "Antecedentes e Consequentes de Expectativas de Carreira e de Futuro Organizacional", Tese (Doutorado), Universidade de Brasília.

Vasconcellos, V.C. and Neiva, E.R. (2015), "Escala de expectativas de futuro organizacional: desenvolvimento e evidências de validade", *XXXIX Encontro da ANPAD – Associação de Pesquisa e Pós-graduação em Administração*, ANPAD Publicações, Rio de Janeiro, Vol. 1.

Vasconcellos, V. C. and Neiva, E. R. (2017), "Antecedentes de Expectativas de Carreira na Organização", *Temas em Psicologia*, Vol. 25, pp. 1-13.

Weiner, Y. (1982), "Commitment in organizations: a normative view", *Academy of Management Review*, Vol. 7 No. 3.

Further reading

Burke, R.J. and Ng, E. (2006), "The changing nature of work and organizations: implications for human resource management", *Human Resource Management Review*, Vol. 16 No. 2.

Dancey, C.P. and Reidy, J. (2013), *Estatística Sem Matemática Para Psicologia*, Penso, Porto Alegre.

Di Pietro, M.S.Z. (2010), *Direito Administrativo*, 23rd ed., Atlas, São Paulo.

Field, A. (2009), *Descobrindo a Estatística Usando o SPSS*, Artmed, Porto Alegre.

Korkmaz, S., Goksuluk, D. and Zararsiz, G. (2014), "MVN: an R package for assessing multivariate normality", *The R Journal*, Vol. 6 No. 2.

Meyer, J.P., Allen, N.J. and Smith, C.A. (1993), "Commitment to organizations and occupations: extension and test of a three-component conceptualization", *Journal of Applied Psychology*, Vol. 78 No. 4.

Meyer, J.P., Herscovitch, L. and Topolnytsky, L. (2002), "Affective, continuance and normative commitment to the organization: a Meta-analysis of antecedents, correlates and consequences", *Journal of Vocational Behavior*, Vol. 61 No. 1.

Rokeach, M. (1981), *Crenças, Atitudes e Valores: Uma Teoria De Organização e Mudança*, Interciência, Rio de Janeiro.

Schwartz, S.H. (1994), "Are there universal aspects in the structure and contents of human values?", *Journal of Social Issues*, Vol. 50 No. 4.

Schwartz, S.H. and Bilsky, W. (1987), "Toward a universal psychological structure of human values", *Journal of Personality and Social Psychology*, Vol. 53 No. 3.

*Corresponding author
Pedro Cavalcanti G. Ferreira can be contacted at: pedro.ferreira2@ipea.gov.br