Resistance to Change in Merger of a Federal Institute in Brazil

[1]Livia Almada, [2]Renata Simoes Guimaraes E. Borges and [2]Antonio Luiz Marques
[1]Department of Management, Faculty of Administration and Accountability,
Federal University of Juiz De Fora, Dferua Jose Lourenco Kelmer,
S/n-Campus Da UFJF-sao Pedro, Edifocio Facc Room 6,
Zip Code 36036-900, Juiz De Fora-MG, Brazil
[2]Department of Management, Faculty of Economics Science, Federal University of Minas Gerais,
Avenida Presidente Antonio Carlos, 6627, Edificio Face, Pampulha-Belo Horizonte-MG,
Zip Code 31270-901, Brazil

Abstract: This study investigates how individuals react to organizational change during a merger process by analyzing the merger of the five federal independent entities that formed the Federal Institute of the State of Minas Gerais (IFMG) in Brazil, through the perspective of their technical-administrative civil servants. Quantitative data were attained through standardized questionnaires completed by civil servants who participated in the merger. The findings from the qualitative and multiple regression analyses reveal that organizational dimensions have a greater influence than individual dimensions on individual's reactions to organizational change. The organization's experience with and ability to manage change defined the level of individual resistance to the merger. Although, there was concern regarding how the merger would affect social interactions at work the findings suggest that work group pressure and early decisions regarding the merger do not influence levels of individual resistance to organizational change.

Key words: Merger, resistance to change, organizational change, human resources administration, public administration, analyzing

INTRODUCTION

The opening of the Brazilian market in the 1990's required organizations to update management practices. Throughout the country new organizational configurations such asmergers and acquisitions, joint ventures, trusts and incorporations were consolidated. These organizations were looking for investment opportunities, expansion, cost reduction, increasing revenues and new technology and skills acquisition. The majority of studies indicate that, of these new configurations, mergers and acquisitions were more prominent, especially those that featured shorter implementation periods lower (Triches, 1996; Camargos and Barbosa, 2003; De Oliveira et al., 2007).

Mergers and acquisitions may cause profound changes to organizational structure, management policies and practices and employee identification with the organization, leading to increasing attention in the literature (Canterino et al., 2016). Nevertheless, some researches do not contemplate the full complexity of this type of change and focus primarily on the quantifiable aspects (Kloeckner, 1994; Camargos and Barbosa, 2003; Martelanc et al., 2005; De Oliveira et al., 2007; Minardi et al., 2009). Only nearly 50% of merger and acquisition processes fail from the financial and management perspectives (Buono et al., 1985; Cartwright and Cooper, 2000; Cartwright and Schoenberg, 2006; Behrens and Pekarek, 2016). However, between one-third to one-half of these mergers and acquisitions neglect the behavioral, psychological and cultural aspects of employees, focusing only on the financial and strategic issues (Sinkovics et al., 2011; Sung et al., 2015) in search of short-term results that do not enable effective change (Triches, 1996; Ross et al., 2003; Lundqvist, 2012).

A study conducted by KPMG (2011) identified the following requirements for the success of a merger, defining and following deadlines which requires clear thinking and rapid action; Not being overly concerned with costs, since, low cost often does not equate to earnings; monitor progress and integrating cultures. Behavioral issues related to

Corresponding Author: Livia Almada, Department of Management, Faculty of Administration and Accountability,
Federal University of Juiz De Fora, Dferua Jose Lourenco Kelmer, S/n-Campus Da UFJF-Sao Pedro,
Edifocio Facc Room 6, Zip Code 36036-900, Juiz De Fora-MG, Brazil

individuals and their perceptions of the change are included in this cultural sphere and are critical to the merger process.

The behavioral issues that arise from disruptive merger processes are important to understand the employee's perspective (Hernandez and Caldas, 2001). Oreg (2003) states that the modern industrial society desires employees who are prepared, show initiative and respond positively to change. Behavior is guided by individual's attitudes as derived from their perceptions of a stimulus. Biggane *et al.* (2016) advocate that the cognitive process and the largely non-conscious process could affect individual relationships during organizational change. In the organizational context, employee's expectations and attitudes must be considered to identify and analyze the barriers and factors of success in a merger process. Thus, the aim of this study is to identify the reasons individuals tend to accept or reject organizational change as represented by the merger process of the Federal Institute of the State of Minas Gerais (IFMG).

The IFMG was initially created by the merger of five federal independent undergraduate level schools located in different cities: the Federal Center for Technological Education (CEFET) at Ouro Preto, the CEFET at Bambui, the Decentralized Teaching Unit (UNED) at Congonhas, the UNED at Formiga and the Agricultural Technology Schoolat Sao Joao Evangelista. This merger was a federal initiative of the Ministry of Education and Culture (MEC). All five schools started reporting to the Dean's office located in Belo Horizonte, the capital of the state. Although this unification was voluntary initially, the conditions imposed for not agreeing to the merger turn it mandatory to a certain degree.

This research intendsto contribute to literature on organizational change by investigating how employees perceive the merger process. Using qualitative and quantitative research methods, this study offers employee's perspective identifying how organizational and individual factors may constraint or contribute to merger. Finally, the findings of this study may help manager's understanding of the merger process from the employee's perspective.

Organizational change and mergers: Mergers processes are intrinsically related to organizational change because it implies that mergers lead necessary to changes in several aspects of the organization, from structure to culture. Mergers usually require changes on employee's behaviors and attitudes. Studies on organizational change have developed from a macro perspective, from considering the organization as a sole entity that just

responds to the environment (March, 1981) to a more holistic, strategic and technological perspective (Brown, 1991).

Organizational change is defined as the alteration or the transformation of the environment (external or internal) apart from the motivating agent, that cause a state of psychological and sociological imbalance for the individuals involved in the process which must be managed to reestablish balance. Whereas merger is defined as a process in which companies that share common features combine their strengths to form a new company as discussed by Epstein (2005).

Mergers began in North America during the industrial revolution at the turn of the nineteenth century to concentrate capital and restructure finances (Camargos and Barbosa, 2003). According to Epstein (2005), merger success is closely related to six factors. First, a capacity for vision and strategic adjustment which allows firms to develop long-term initiatives and synergize the organization's shape, geography, people and/or services. Second, the structure of the business which is related to the price paid and the type of financing best suited for the merger process. Third, due diligence which is necessary for the accounting and legal issues of the merger, including auditing assets and liabilities, revenues and expenses assessing the company culture and organizational suitability, among other non-financial items. Fourth, pre-merger planning which is required to define the key integration processes and how decisions will be coordinated, communicated and implemented. Fifth, post-merger integration where the management of human resources, technical operations, relationships with important customers and clients and decision-making are crucial. Sixth, external factors that affect the value of the merger in the long term which are separate from the short-term drops in the stock value soon after the merger takes place.

Epstein (2005) and Minardi *et al.* (2009) describe the importance of due diligence, mainly to verify the compatibility of the company cultures, technological skills, human resources and talent. They state that many merger processes can fail if they destroy the existing synergies soon after starting the integration process. Thus, pre-merger planning for strategic decisions regarding structure, leadership and process timelines are vital. It is also necessary to verify the compatibility of human resource systems, selecting employees who will remain and developing a plan for the dismissed ones. Organizations also need to develop a strategy based on communication and transparency to enhance motivation and retain talented employees after the layoff that usually accompanies the merger process (Minardi *et al.*, 2009).

How organizations manage the inherent problems of the planned change may define the outcome of the merger as successful or unsuccessful (Mirvis and Marks, 1992). According to Hirschey (1986) employees consider a change hostile when there is a change in the administrative control. Camargos and Barbosa (2003) add that the major factor for the success of a merger is concentrated, initially in the underlying reasons for every arrangement, ranging from maximizing the wealth of shareholdersto enhancing managerial effectiveness. However, Kloeckner (1994) stresses that there is no empirical evidence regarding maximizing managerial effectiveness and that the possibility of settling a merger becomes a threat to managers who potentially may be dismissed. On the other hand, a merger can increase the well-being of executives who empower themselves during the process (Kloeckner, 1994).

New requirements endured by markets and government standards encourage organizations to merger, leading to the development of new internal and external pressures. These processes affect workers in a variety of ways but mainly in relation to the individual's identification with the company (Liu and Perry, 2014). Although, organizational change represented by mergers allows employees to consider new opportunities and career paths, it can also generate contradictions in their identification process and cause them to be against the planned changes (Hernandez and Caldas, 2001).

Reactions of individuals to mergers and their possible causes: The behavior of individuals during organizational change moves dynamically in a continuum ranging from active cooperation, passive cooperation, indifference, passive resistance, to active resistance. Oreg (2006) describes that employee attitude to change is caused by the combination of behavioral (the behavior during the change), cognitive (thoughts about the change) and affective (feelings about the change) dimensions which can appear simultaneously. At the core of this issue may be the amendment of the psychological contract of the work which is the individual's perception of their expectations and obligations. According to Rousseau (1995), this relationship includes individual beliefs fostered by the organization and conducted through a psychological agreement between the employee and the employer (Yan and Zhu, 2013). Therefore, since, a merger process is a change that has not been directly agreed to by the parties, the employee can feel injured and a new psychological contract must be established.

The characteristic changes in a merger can cause individual emotions from euphoria to fear as stated by Mirvis and Marks (1992) and Marks (1981, 1999). Fear can prevent the integration of the two organizations, since, one company can stereotype the other and create feelings of betrayal. Thus, a standard of the possible negative reactions from when a merger is announced until the two companies are united was observed and titled "merger syndrome" (Mirvis and Marks, 1992).

Sinkovics *et al.* (2011) discussed the merger syndrome based on employee and manager reactions. Accordingly, this syndrome is characterized by changes in the identification vis-a-vis the organization, centralization of the decision-making process, stress, power games, a drop in productivity and feelings of insecurity, anxiety and mistrust. Thus, the process can increase self-interest, power games and arguments over positions and privileges (Cartwright and Cooper, 2000). Irritability and insecurity are also exacerbated and can engender aggressive reactions and resistance where the magnitude of these emotions depends on how the change challenges certain values (Sinkovics *et al.*, 2011).

Hernandez and Caldas (2001) explained that behavior during change must be analyzed by considering both individual and situational issues, since, individuals react to change according to their perceptions. This depends on how individuals perceive themselves and the situation jointly, by means of the incentives they choose measured by their experiences, personalities and perceptions of reality. One factor that causes resistance to change as discussed in Marques *et al.* (2011) is a lack of clarity regarding the goals of the change. Resistance is directly related to the predominance of an already established standard when a new standard is set in place. Oreg *et al.* (2011) claim that insecurity at work, the perception of personal gain or benefit and the anticipation of injustice directly influence resistance to change. Moreover, any other information that the individual deems necessary for the acceptance of the change also influences their attitude including information about their career, remuneration, hierarchy, tasks or skills (Armenakis and Bedeian, 1999; Oreg, 2006; Dick *et al.*, 2006; Marques *et al.*, 2011).

Involvement in the change process is fundamental to reduce the potential for resistance. Chun and Davies (2010) highlight that the more an individual feels part of the organization, the more this guides their attitude during the merger, depicting the importance of the identification process of the individual with the group they belong to. Sinkovics *et al.* (2011) studied the effect of time on the acceptance of a merger and found that even when mergers took ten years, there were still people who did not integrate themselves into the new reality and continued referring to "Us" and "Them."

In the interim, individual perceptions of the new context are influenced by social encounters which can assign new meaning to reality and establish new parameters for identifying and socializing with the organization. Behavior and attitudes are configured based on this new meaning and are justified by subjective structuring in which resistance can be an option (Berger and Luckman, 1967). Therefore, social interactions are essential for the study of resistance to change, since the group is an important source of acknowledgment for employees. Further, since, organizational changes can threaten the unity of the group, they can affect this individual acknowledgment (Greenberg and Baron, 1996). Employees during organizational change fear that their financial remuneration, status and power will change which can cause great unease and thereby increase the potential for collective resistance (Oreg, 2006; Marques *et al.*, 2011).

Lines (2005) claims that the effort made by an individual to accept change is completely influenced by the individual's context. The relative importance an individual associates with different characteristics of change is influenced by their social environment which also affects their assessment of the change using their personal criteria and general attitude. Mehrnoosh and Dolatabadi (2016) verified that attitude has a positive impact on the performance of employees and aboutthis Mohammadi and Molaee (2016) confirmed on their research that a safety workplace, integrity and development values influence on labor productivity. Oreg *et al.* (2011) state that a major predictor of an individual's intention to support change is trust in co-workers, namely social support and how much this support is relevant to the individual. This allows a sense of ease in relation to the change.

During a merger, communication about the change is fundamental for the perception of internal consistency and early decision-making, since how things are communicated affects employee's attitudes (Armenakis and Bedeian, 1999). Individuals progress through stages of anticipation, confirmation, culmination and result when notified of a change. The quality, not just quantity, of the information is fundamental for the individual as reported by Oreg *et al.* (2011) and Choi (2011). The analysis of these stages enables a greater understanding of resistance to change by explaining what is occurring with the individual during the change. Similarly, there are stages of negation (where resistance to change is verified), exploration and commitment. Moreover, Choi (2011) states that readiness for change involves individual's perception of the organization's

ability to successfully change, how necessary the change is the benefits that the organization and its members will gain and the evaluation of the suitability and organizational support for the change.

A perception of a lack of justice influences attitudes of cynicism, anxiety and resistance to change and affects the level of commitment to the change and the desire to quit. Negative attitudes regarding the change can also be verified by the individual's insecurity in relation to their employment, indicating the relevance of organizational consistency through the process (Oreg *et al.*, 2011). Therefore, preparing employees who will suffer from the merger is fundamental in increasing internal consistency. Similarly, increasing the participation of individuals enables greater alignment between their expectations and what will actually occur. This improves the potential that they will cooperate, since, individuals need concrete, well-defined answers free of uncertainty or ambiguity (Kruglanski *et al.*, 2007). About the organizational characteristics, Lantara (2016) proved that organizational factor like management support for example, affects the motivation. This can influence the attitude of cooperation.

Employee's early decisions to support change is related to their ability to combine information and position themselves in the context of the change (Chaves *et al.*, 2005), once again establishing the relevance of effective communication. Individuals compare personal experience with their perception of their potential reality (Hernandez and Caldas, 2001). If they have had an unsuccessful change experience, they may be predisposed to resistance. In contrast, previous successful change experiences can increase their potential for acceptance and cooperation.

In brief when employees face organizational change such as a merger, they can either resist or cooperate actively for a variety of reasons, ranging from loss of identity, feelings of threat and fear, changes to their psychological contract and the hope that things will change for the better. In organizational change literature, these reasons comprise five major concepts) social interactions-individuals can resist change out of fear that it will harm the social environment or accept change because they determine it will not affect or even improve the organizational atmosphere) group resistance-the work team or the social group that the employee is a member of exerts pressure on the individual to support or not support, even boycott, the change) early decision-the individual decides whether to cooperate or resist the change based on the information they have at the time and their personal experience and expectations at the beginning of the merger) organizational consistency the

employee evaluates the available information about the merger process and the ability of the organization to lead and manage the change, thus, making a decision about whether to accept or resist the change) previous experience-the individual considers previous experience with the organization in similar change processes and if this experience was negative, there is a greater chance they will resist.

Based on the theoretical reference, the level of acceptance and individual support (which represents the level of acceptance of the chance) suffers from the direct influence of social interactions, group resistance, early decision, organizational stability and previous experience. Therefore, the relationships established between the levels of acceptance of the change and their possible causes are represented in the following hypotheses:

- (H_1): maintaining or improving social interactions will positively influence acceptance of and cooperation with the merger
- (H_2): the perception that the group presents high resistance to the merger process will negatively influence the acceptance of and cooperation with the merger
- (H_3): the early decision that the merger will be negative for employees and for the organization will negatively influence the acceptance of and cooperation with the merger
- (H_4): the perception of high organizational stability in the merger process will positively influence acceptance of and cooperation with the merger
- (H_5): previous successful experience with organizational change processes will positively influence acceptance of and cooperation with the merger

MATERIALS AND METHODS

The objective of this study is to verify and analyze the causes of acceptance of or resistance to change by individuals who have already gone through a merger process. Following the guidelines of Yin (2008), a qualitative case study was conducted. Simultaneously, standardized questionnaires were administered to test the hypotheses, characterized as an explanatory research study (Creswell, 2014). Therefore, a concurrent triangulation strategy was used where the field of research was the Brazilian IFMG which was created as a result of the merger process carried out in 2008 between five institutions of higher education as directed in Law 11.892 of 29 December 2008.

The sample for the collection of qualitative data was eight civil servants (E1-E8) who participated in the merger and currently hold management positions in the Dean's office. They were selected through snowball sampling and in accordance with their availability. For the quantitative data, the population consisted of 66 technical-administrative civil servants, who once worked in the former independent federal entities, participated in the merger and whose work processes were directly changed by the merger. Using the Barnett (1991) formula, the minimum representative sample of 55 individuals was calculated. Additionally, power analysis was conducted by means of G-Power® 3.1 Software, using a power of 90% and large effect expected, obtaining a minimum sample of 53 respondents. Therefore, 55 valid questionnaires were obtained.

A questionnaire was administered via an e-mail link provided by the application, Google Form®, formulated with questions taken from the resistance measuring model developed by Chaves *et al.* (2005) and tested and perfected by Marques *et al.* (2011). This model can diagnose levels of resistance to change and the interference of individual and situational factors in this process. Moreover, this model presents an excellent degree of internal validity and reliability with a Cronbach's alpha over 0.75. The items were measured on a 5-point likert scale, in which 1 represents active resistance, 2 passive resistance, 3 neutrality, 4 passive cooperation and 5 active cooperation.

Quantitative data were analyzed through multivariate regression analysis based on Hair *et al.* (2006) using the statistics Software SPSS for Windows 17.0. The demographic data were presented and analyzed by means of descriptive statistics. Further, the qualitative data were analyzed using content analysis, formulated in Bardin and the definition of data categorization was based on six variables from the proposed model of resistance to change (one dependent variable and five independent variables)

The proposed model considers the complexity of the individual in relation to an organizational change process, proposing potential reactions to the process in the context of a merger that culminated in the creation of IFMG.

RESULTS AND DISCUSSION

The merger process: The prospective for creating the Federal Institute of Minas Gerais (IFMG) came from the MEC. The main principal of the federal institutes is to have a vertical structure of education that addresses

primary education to graduate studies stricto sensu. The campuses act directly for innovative and technological solutions for the communities into which they are inserted, synthesizing work, science and culture. The initial plan of the MEC was to create a single institute per state. However in Minas Gerais due to political issues, this was not possible and several institutes were created. Several interviewees described this division and how it was decided later in the process:

> E6: Later, the MEC realized the need to increase the number of institutes in several states which is how in the State of Minas Gerais, we ended up with five institutes

> E7: First, the proposal made by the MEC is ,..., there would have been only one institute in the State of Minas Gerais ,..., Immediately afterwards the MEC said that there would be two institutes, one industrial and one agricultural. Following that, four institutes appeared in the State of Minas Gerais and finally the fifth one which was IFMG

The IFMG was initially created by the merger of the Federal Centers for Technical Education of Ouro Preto and Bambui and the Federal Agro-technical School of Sao Joao Evangelista. During the merger, yet, after the publication of the law, the Decentralized Teaching Units (UNED) of Formiga and of Congonhas were incorporated into IFMG. Currently, the prospective is of that IFMG must have 21 locations by the end of 2014. Initially, the MEC's proposal was to have an opt-in policy, according to the statement made by E1:

> E1: The government made a proposal to restructure the network, to create the institutes and at the time entry, ..., it was opt-in, voluntary wasn't it (,...,)

However, the opt-in prospective was not understood in the same manner by other individuals as can be seen by the comments of E3, E7 and E8. The information was passed along by third parties and not directly by the government which can explain the different perceptions. This highlights the relevance of communication for effective change as verified by Armenakis and Bedain (1999). This alignment of information is part of the organizational stability that is linked to the contents of an early decision.

> E3: I know it the way it was explained to me. It was a top-down government ,..., I did not quite know then what it would become in the future. If it would be better or worse. We knew that we would lose independence but we know that the plan was devised unilaterally by the government

> E7: The message, at the time was delivered by the President of CEFET Bambui, who highlighted that entry was not mandatory but that the Ministry had made it quite clear that all the resources (openings, allocations, etc.,) would go to the institute

> E8: However, at the beginning there were many unknowns. The lack of information about the merger was the main complaint reported

> E3: How can I go about doing a thing like that if I cannot get the information?

> E7: No studies were conducted to answer questions and dispel suspicions. Not even by MEC ,..., Today my perspective is that the project got started without having everything planned ,..., therefore, it was hard to do any work to reduce resistance, since, nobody knew what the rules of the game were

Confusion among the interviewees regarding the purpose of the merger highlights the need for communication during organizational change. In addition, legislation required a Dean's office in the capital of the state which would centralize the institute's strategic administration. However that is not what occurred in Minas Gerais, since, more than one institute was created and the Dean's office of each is in a strategic location in the five regions with that of IFMG in Belo Horizonte, the capital of the State of Minas Gerais. Curiously, the IFMG has not a single campus in the city of Belo Horizonte, leaving the Dean's office completely isolated from its schools.

The proposed change initiated by the Federal Ministry of Education, stated that the whole administration of the resources (financial and human) should be centralized in the Dean's office which should prepare now an annual budget proposal to the multiple campus structure. In sum, each school was no longer autonomous in the administration of their resources asking for support from the distant Dean's office.

Table 1: Results from regression analysis

Coefficients	Unstandardized coefficients		Standardized coefficients	
	B	SE	Beta	Sig.
(Constant)	1.208	0.430		0.007
H₁ social interactions	0.287	0.112	0.332	0.013
H₂ group resistance	-0.025	0.104	-0.029	0.810
H₃ early decision	-0.168	0.085	-0.241	0.054
H₄ organizational stability	0.259	0.112	0.337	0.025
H₅ previous experience	0.233	0.091	0.357	0.013

Dependent variable: acceptance and individual support

Causes for individual's reactions to the change:
Regarding the sample of 55 civil servants, 60% are men and 40% women; 31% are over 45 years old, 22% are between the ages of 41 the 45 years and 20% are between the ages of 31 and 35 years; 76% of the group are married; and 76% have completed graduate studies. Of these graduated individuals, 54% are men and 46% are women, showing a balance of genders in the pursuit of education. The majority of the individuals have limited service where 40% had 7-15 years of service and 33% had <6 years of service. The individuals with <6 years of service entered independent entities soon after the merger occurred.

Multiple regression analysis was applied to test the hypothesis. In the initial analysis, the estimated linearity, normality and homoscedasticity were satisfied in keeping with Hair *et al.* (2006). No outliers were identified nor were there any missing data. Table 1 shows that hypotheses H_1, H_4 and H_5 were confirmed. The results indicate that maintaining and improving social interactions ($\beta = 0.332$, $p<0.05$) influence acceptance and cooperation with the merger. Furthermore, the organizational factors such as organizational stability ($\beta = 0.337$, $p<0.05$) and previous successful experience with organizational change ($\beta = 0.357$, $p<0.05$) also were found to influence acceptance and cooperation with the merger.

On the other hand, hypothesis H_2 and H_3 were not confirmed, suggesting thatgroup resistance ($p = 0.810$) and early decision ($p = 0.054$) did not influence acceptance and individual support for the change in the context of the creation of IFMG.

Multiple regression analysis shows that 42.4% of the variation in acceptance and individual support is explained by social interactions, organizational stability and previous experience (R^2Adj = 0.424). The following regression equation was identified: $Y = 1.208+0.259$ previous stability $+0.287$ social interactions $+0.233$ previous experience.

The interviews confirm the quantitative data in relation to social interactions (H_1), organizational stability (H_2) and previous successful experience (H_5). Several participants stressed the work group's fear of the new model, describing social interaction as an influencing factor in the acceptance of and individual support for the change.

E3: They wanted the other people to come to the room; Not to for them to leave. Three or four people who stayed there). The interviews also affirm that there was a perception of organizational stability in the merger process (E7: ,..., I managed to perceive a fast maturity in his position (the Dean's) mainly improving his listening and negotiating skills, ..., obviously there were also important steps taken mainly by the systemic directors who contributed a lot to the structuring of IFMG, related to the professionalization of the management). There are indicators that previous experience with old interventions by the Federal Government in the independent entities influenced the reactions of the civil servants (E1: ,...,) after the creation of the agro-technical school in (19)78 without a doubt the most significant fact was the transformation or the incorporation of the agro-technical school as a unit of IFMG. The creation of the federal institutes).

The interviews confirm that group pressure (H_2) was not relevant in the decision of individuals to cooperate with or resist the merger (E1: ,..., so, they did not have politics strength to actually block it from happening (,...,) They did not have a solid proposal that could oppose what was being presented). However, although the quantitative data do not to support H_3, the respondents claimed that the early decision did influence individual's reactions. The lack of information and support by the MEC adversely affected decision-making. However, the statements by managers differed from those by non-managers, showing that a lack of involvement could have led to resistance at the beginning of the process (E3: I did not very well know then what it would become in the future. If it would be better or worse. We knew that we would lose independence, ...,).

Thus, we observed that the creation of the IFMG was accepted by the majority. The civil servants deemed the merger beneficial because it enabled greater visibility and growth for the once independent entities by gaining more resources and opportunities to create new programs and openings (E7: It was good because I understand that the creation of the institutes put Brazil at a more current level in terms of the company-school relationship, aligning investment in education with the real possibility of innovation and the improvement of the regional economic sector's competitiveness).

Finally, the results of the descriptive analysis indicate that among cooperation, indifference, passive resistance and active resistance, 40% of the respondents displayed

an inclination to cooperate. Although, 55% of the participants varied between indifference and passive resistance, only 5% said that they developed active resistance.

CONCLUSION

These findings suggest that the acceptance and cooperation by civil servants in the merger process of IFMG was mainly influenced by concerns about social interactions, organizational stability andprevious experience. However, it is also important consider the influence of early decisions, often mentioned as being relevant in the change process while group pressure was not a concern in this context. The results also indicate the absence of a difference in the intensity between the three factors (social interactions, organizational stability andprevious experience).

Among the hypotheses proposed, the situational factors (organizational stability and previous experience) have a much greater influence on acceptance and cooperation by individuals in the merger than do the individual factors (social interactions, group resistance and early decisions). This finding suggests that the individual's perception about what the organization did, says it will do and does is more impactful on the indi vidual's reaction to the change than their concern with the social environment and group pressure. This underscores the influence that management has on the individual resistance of civil servants. This contradicts what Jacobson *et al.* (2014) claim about the existence of resistance as a natural and expected feature of change processes.The results also indicate that there was a greater trend toward cooperation than resistance and that the merger, although initially confusing was viewed positively.

Additionally, a lack of information was reported, since, information arrived in a piecemeal and haphazard fashion and was not structured or planned. What stands out is the lack of support from the MEC, one of main actors responsible for this lack of information and management structure for the merger. This generated a large amount of fear of the merger results. The transmission of information necessary for the implementation of the merger featuring high quality communication is a decisive factor in the success of a merger as stated by Armenakis and Bedeian (1999), Choi (2011) and Oreg *et al.* (2011). Furthermore, the findings reinforce the importance of preparing for a merger to enhance internal stability through greater alignment of those involved and the practices conducted with clearly stated goals (Kruglanski *et al.*, 2007). This preparation enables individuals to manage their expectations and

feelings, better understand the need for change and decide what stance to take in relation to the change, either resisting or accepting it (Berger and Luckman, 1967; Judson, 1991; Lines, 2005; Oreg, 2006; Marques *et al.*, 2011).

Another concern emphasized in the interviews was the loss of power as a result of the merger. This was one of the reasons for resistance, primarily by individuals in executive roles at the independent entities. Safavi and Tehrani (2015) found that symbolic capital and position taking have a major role on the individual choice to resist during a merger process. Chun and Davies (2010) emphasize that individuals with upper level positions are more likely to resist change for strategic reasons, since they are deeply rooted in the politics and practices that once needed to be defended, thus encouraging an idea of loss when an essential part of their administration is modified. Therefore, future studies could deepen the understanding of how early decisions arising from the loss of power as a result of the merger affects the degree of acceptance of and individual support for the change among managerial and non-managerial staff. What appears, especially, relevant is the perception of the leaders, specifically the dean and the executives, of those who did not receive enough information for establishing an opinion. It is a common practice in mergers to have an absence of information at the base of the corporate structure, since the higher levels believe that only the management should receive confidential and strategic information. However, the findings confirm that during a harsh change process such as a merger, the dissemination of information helps individuals understand the difficulties, limitations and possibilities of the organizations involved. Communication brings employees closer to the real situation and minimizes resistance. Thus, future studies should explore how the loss of power and independence in a merger process influence individual acceptance and cooperation.

In line with the interviews, leadership as represented by the directors of the old independent entities was the main agent for disseminating information to the group. Therefore, the leadership's perception of the merger process influenced this dissemination and consequent perception of the group regarding the merger. Thus, if the higher management supported the project, the civil servants did as well. However, if the management did not agree to the project, making this explicit at the independent entity, the civil servants did not believe that the change would be positive. Nastiezaie *et al.* (2016) verified that a leader committed with an ethical behavior improves trust and loyalty of the employees besides promoting level of trust and organizational commitment of them.

LIMITATIONS

Another limitation that must be explored is the issue of time, since, a cross-sectional research was performed for this study. Longitudinal monitoring of the merger process, comprising the preparation, startup, development of the process, conclusion and post-merger follow-up, would also yield results closer to the reality. Despite these limitations, this study presents consistent results that enhance the comprehension of the relationship between the merger processes and the behavior of the individuals involved.

IMPLICATIONS

Although, this study has theoretical and practical implications, it is not without limitations. The main limitation is that the sample size was too small to be able to make generalizations about all federal institutions or other organizations in Brazil. This study must be extended to other contexts so, a national trend can be projected for federal institutions. This would deepen the studies that relate mergers and resistance to change with conclusions that are more realistic for developing practices and tools for managing mergers in Brazil.

REFERENCES

Armenakis, A.A. and A.G. Bedeian, 1999. Organizational change: A review of theory and research in the 1990s. J. Manage., 25: 293-315.

Barnett, V., 1991. Sample Survey Principles and Methods. 2nd Edn., Oxford University Press, Oxford, UK. isBN:9780195209259, Pages: 173.

Behrens, M. and A. Pekarek, 2016. Between strategy and unpredictability: Negotiated decision making in German union mergers. ILR. Rev., 69: 579-604.

Berger, P. and T. Luckmann, 1967. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Doubleday, New York, USA., Pages: 219.

Biggane, J.E., D.G. Allen and L.S. Albert, 2016. The role of positive illusions in employment relationships. Hum. Resour. Manage. Rev., 26: 270-281.

Brown, J.S., 1991. Research that reinvents the corporation. Harv. Bus. Rev., 69: 102-111.

Buono, A.F., J.L. Bowditch and J.W. Lewis III, 1985. When cultures collide: The anatomy of a merger. Hum. Relat., 38: 477-500.

Camargos, M.A. and F.V. Barbosa, 2003. Mergers, acquisitions e takeovers: A theoretical survey of reasons, testable hypotheses and empirical evidence. Res. Notebook USP Administration., 10: 17-38.

Canterino, F., A.B. Shani, D. Coghlan and M.S. Brunelli, 2016. Collaborative management research as a modality of action research: Learning from a merger-based study. J. Appl. Behav. Sci., 52: 157-186.

Cartwright, S. and C.L. Cooper, 2000. HR Know-How in Mergers and Acquisitions. CIPD, London, UK. isBN:0-85292-634-0, Pages: 121.

Cartwright, S. and R. Schoenberg, 2006. Thirty years of mergers and acquisitions research: Recent advances and future opportunities. Br. J. Manage., 17: S1-S5.

Chaves, R.C., A.L. Marques and A.T. Dias, 2005. Validating a measuring instrument of resistance to change. ANPAD, Brasília, Brazil. http://www.anpad.org.br/diversos/trabalhos/EnAN PAD/enanpad_2005/GPR/2005_GPRA515.pdf.

Choi, M., 2011. Employees attitudes toward organizational change: A literature review. Hum. Resour. Manage., 50: 479-500.

Chun, R. and G. Davies, 2010. The effect of merger on employee views of corporate reputation: Time and space dependent theory. Ind. Marketing Manage., 39: 721-727.

Creswell, J.W., 2014. Research Design: Qualitative, Quantitative and Mixed Methods Approaches. 4th Edn., SAGE Publications, California, USA. isBN:978-1-4522-2609-5, Pages: 274.

De Oliveira, O.V., S.H.A.C. Forte and L.A. Aragao, 2007. Mergers and acquisitions from the perspective of competitive advantage: The perdigao agroindustrial SA. Rev. Bus. Manage., 9: 91-108.

Dick, R., J. Ullrich and P.A. Tissington, 2006. Working under a black cloud: How to sustain organizational identification after a merger. Br. J. Manage., 17: S69-S79.

Epstein, M.J., 2005. The determinants and evaluation of merger success. Bus. Horiz., 48: 37-46.

Greenberg, R.A. and J.D. Baron, 1996. Behavior in Organizations. 6th Edn., Prentice Hall, New Jersey, USA.,.

Hair, J.J.F., W.C. Black, B.J. Babin, R.E. Anderson and R.L. Tatham, 2006. Multivariate Data Analysis. 6th Edn., Prentice Hall, Upper Saddle River, New Jersey,.

Hernandez, J.M.D.C. and M.P. Caldas, 2001. [Resistance to change: A critical review (In Portuguese)]. J. Bus. Administration, 41: 31-45.

Hirschey, M., 1986. Mergers, buyouts and fakeouts. Am. Econ. Rev., 76: 317-322.

Jacobson, W.S., J.E. Sowa and K.T. Lambright, 2014. Do human resource departments act as strategic partners? Strategic human capital management adoption by county governments. Rev. Public Personnel Administration, 34: 289-301.

Judson, A.S., 1991. Changing Behavior in Organizations: Minimizing Resistance to Change. Basil Blackwell, Cambridge, Massachusetts isBN:9780631178033, Pages: 221.

KPMG., 2011. KPMGs global network of D and A professionals helps turn data into value. KPMG, Amstelveen, Netherlands. https://home.kpmg.com/ca/en/home/insights.html.

Kloeckner, G.O., 1994. Mergers and acquisitions: Reasons and empirical evidence. J. Manage., 29: 42-58.

Kruglanski, A.W., A. Pierro, E.T. Higgins and D. Capozza, 2007. On the move or staying put: Locomotion, need for closure and reactions to organizational change1. J. Appl. Soc. Psychol., 37: 1305-1340.

Lantara, N.F., 2016. The use of human resources information system for organization and motivation of South Sulawesi Gubernatorial Of?ce staffs. Intl. Bus. Manage., 10: 385-390.

Lines, R., 2005. The structure and function of attitudes toward organizational change. Hum. Resour. Dev. Rev., 4: 8-32.

Liu, B. and J.L. Perry, 2016. The psychological mechanisms of public service motivation: A two-wave examination. Rev. Public Personnel Administration, 36: 4-30.

Lundqvist, S., 2012. Post-merger integration issues: The importance of early appointment of new managers for successful PMI. Prob. Manage. 21st Century, 3: 63-80.

March, J.G., 1981. Footnotes to organizational change. Administrative Sci. Q., 26: 563-577.

Marks, M.L., 1999. Surviving a merger. Electr. Perspect., 24: 26-35.

Marques, A.L., R.S.G. Borges, and K. Morais, 2011. A resistance measurement model for change in public organizations. ANPAD, Joao Pessoa Paraiba, Brazil. http://www.anpad.org. br/diversos/trabalhos /EnGPR/engpr_2011/2011_ENGPR168.pdf.

Martelanc, R., R. Pasin and F. Cavalcante, 2005. Businesses Evaluation: A Guide to Mergers and Acquisitions and Value Management. Prentice Hall, Sao Paulo, Brazil,.

Mehrnoosh, N. and H.R. Dolatabadi, 2016. Analysing the impact of attitudes, subjective norms and perceived behavioural control on information technology adoption and employee performance. Intl. Bus. Manage., 10: 611-618.

Minardi, A., L. Borroni and C.N. Goldstein, 2009. The success of mergers. GV. Executivo, 8: 14-17.

Mirvis, P.H. and M.L. Marks, 1992. Managing the Merger: Making it Work. Prentice Hall, Englewood Cliffs, New Jersey isBN:9780135446362, Pages: 371.

Mohammadi, M. and B. Molaee, 2016. The relationship between quality of work life and productivity of human resources among health workers bahmaei. Intl. Bus. Manage., 10: 3537-3541.

Nastiezaie, N., M. Bameri and S. Salajage, 2016. Predicting employees trust and organizational commitment based on the ethical leadership style. Intl. Bus. Manage., 10: 3479-3485.

Oreg, S., 2003. Resistance to change: Developing an individual differences measure. J. Applied Psychol., 88: 680-693.

Oreg, S., 2006. Personality, context and resistance to organizational change. Eur. J. Work Organiz. Psychol., 15: 73-101.

Oreg, S., M. Vakola and A. Armenakis, 2011. Change recipients reactions to organizational change: A 60-year review of quantitative studies. J. Appl. Behav. Sci., 47: 461-524.

Ross, S.A., R.W. Westerfield and B.D. Jordan, 2003. Fundamentals of Corporate Finance. 6th Edn. McGraw-Hill Irwin Publications, New York isBN: 0-07-246974-9, pp: 167.

Rousseau, D.M., 1995. Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements. SAGE Publication, Thousand Oaks, CA. isBN: 9780803971042, Pages: 242.

Safavi, M. and O.O. Tehrani, 2015. Resist or comply: The power dynamics of organisational routines during merger. Acad. Manage. Proc., 2015: 11578-11578.

Sinkovics, R.R., S. Zagelmeyer and V. Kusstatscher, 2011. Between merger and syndrome: The intermediary role of emotions in four cross-border M and As. Intl. Bus. Rev., 20: 27-47.

Sung, W., M.L. Woehler, J.M. Fagan and G. Labianca, 2015. Individuals responses to organizational mergers. Acad. Manage. Proc., 2015: 13851-13851.

Triches, D., 1996. Mergers, acquisitions and other ways of association between companies in Brazil. J. Manage., 31: 14-31.

Yan, S. and Y. Zhu, 2013. Impact of psychological contract violation on interpersonal trust during mergers and acquisitions. Soc. Behav. Personality Intl. J., 41: 487-495.

Yin, R.K., 2008. Case Study Research: Design and Methods. 4th Edn., Sage Publications, Thousand Oaks, California is BN:978-1-4129-6099-1, Pages: 131.