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Transformational Leadership and Job Satisfaction: Assessing the Influence of Organizational Contextual Factors and Individual Characteristics

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Abstract

Purpose – In this study we investigate the influence of organizational contextual factors and individual characteristics on the relationship between transformational leadership and job satisfaction.

Design/methodology/approach – Quantitative research, with data collected through electronic questionnaires, answered by 166 individuals from different types of organizations, areas of professional training, and gender, subsequently applying sequential regression analyses.

Findings – The results indicate that the relationship between transformational leadership and job satisfaction is moderated by the followers' gender, being stronger for female followers. The relationship is not affected by the followers' area of professional training, nor by type of organization (public/private). The study also evidenced the importance of taking into account individual affective states in studies of work attitudes.

Originality/value – The research examines boundary conditions for the effect of transformational leaders in modern organizations, expanding the knowledge on organizational contextual factors that strengthen their influence on employee attitudes, while also controlling for individual differences.

Keywords – Transformational Leadership; Organizational Context; Gender; Job Satisfaction



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1 Introduction

Leadership is considered to be essential for motivating organization members and mobilizing resources to fulfill company objectives. As such, the study of leadership remains a central theme in the organizational field (Day & Antonakis, 2012; Antonakis & House, 2014). Particularly, transformational leaders are considered to have a strong influence on the attitudes and behaviors of employees. These kinds of leaders are admirable, visionary, attentive to their subordinates, and encourage those subordinates to achieve extraordinary goals (Avolio & Bass, 2004). Despite this, the results of recent studies on transformational leadership have disputed its efficacy. For instance, Gilmore et al. (2013) verified that transformational leaders do not exert any significant influence on already positive, motivated employees. This observation suggests that the impact of transformational leadership can be stronger or weaker depending on aspects associated with subordinate characteristics and organizational contexts. (Avolio, Walumbwa, & Weber, 2009; Zhu, Avolio, & Walumbwa, 2009). Given the importance of the transformational perspective to leadership studies (Knippenberg & Sitkin, 2013), and its widespread utilization as a basis in development programs, better understanding the effectiveness of the transformational perspective and the factors that condition its results is relevant from both a theoretical and a practical perspective.

This study examines whether the subordinate's gender, area of professional training (technological or non-technological), and the type of company in which they operate (public or private) condition the effects of transformational leadership. Our intention is to contribute to research on organizational contextual factors and individual characteristics that condition the influence of transformational leaders in the work environment, and to expand the field research on this perspective in Brazil (Neto et al., 2012, Cavazotte, Moreno, & Bernardo, 2013). The study analyzes these factors and their interactions, focusing on job satisfaction, one of

the most relevant attitudes for the performance and well-being of individuals in the organizational setting (Barling, Kelloway, & Iverson, 2003; Jackson, Alberti, & Snipes, 2014). Despite there being important references on this subject, few studies focus on the factors that condition the effectiveness of transformational leadership, especially within Brazilian organizations.

Our study was conducted during November and December 2015, with professionals who work in organizations located in Rio de Janeiro, covering public and private institutions in the electric, oil and gas, engineering, IT, financial, legal, communication, health, and education sectors. In view of the observations made by Gilmore et al. (2013), the analysis uses the participants' affective state as a control variable. In addition to learning more about transformational leadership in the Brazilian context, this study's results also contribute to informing training and leadership development initiatives in organizations, by identifying the conditions that make these investments more necessary and that allow their impact on the organizational environment to be capitalized.

We begin with the theoretical framework that supports the formulated hypotheses, highlighting the most important research in the literature on transformational leadership. In the following section, we describe the methodological procedures used to conduct the study. The results of the statistical tests which were used to verify the hypothesis of the study are presented in the analysis section. At the end of the article, the results are discussed, including suggestions for new research paths to better understand the effects of factors associated with the organizational context and individual characteristics on leadership.

2 Theoretical Framework

2.1 Charismatic, Transformational, and Transactional Leadership

In the 1980s, new approaches emerged in leadership studies, which proved to be innovative

in comparison to those that previously existed. The perspectives of charismatic, transformational, and transactional leadership reached notoriety in the field, dominating numerous pages in the most prestigious journals (Antonakis, 2012). Several authors collaborated to develop these concepts, culminating with Bass's leadership model, the most widely used framework to evaluate elements present in transformational and transactional leadership (Avolio, Bass, & Jung, 1999).

When attempting to understand transformational leadership theory it is necessary to consider the concept known as charisma, an attribute considered essential to these leaders. (Antonakis, 2012). Charisma has been studied since ancient times by minds such as Aristoteles, who in his book "Rhetoric" argues that every charismatic leader is a wielder of characteristics that differentiate them from others. One of these is the capacity to conquer their listeners through a passionate speech filled with symbolism and emotional connotations guided by the moral orientation of their subordinates. Weber presented one of the best-known definitions of charisma, and describes the charismatic leader as a being endowed with a special personality, which confers to the individual rare, superhuman powers and an enthusiastic personality (Weber, 1968).

Burns (1978) argues that these leaders should be guided by ethical principles in their work environment, and that charisma emerges to aid them in getting their subordinates inspired to achieve collective objectives (Burns, 1978; Calaça & Vizeu, 2015). However, in the eyes of Vieira and Lacerda (2010), charisma is an instrument for leaders who wish to dominate organizational territories. These individuals use their interpersonal abilities and charisma to manipulate and achieve their goals in relationships.

In defining transformational and transactional relationships, concepts that contributed considerably to the construction of the Bass model, Burns (1978) defines the former as relationships in which leader and followers share values and principles, and in which the

leader guides his/her followers towards a common purpose that unites them and that meets the needs of both parties, thus providing a professional environment marked by mutual satisfaction and collaboration. On the other hand, transactional relations are characterized by superficial ties, based on interest exchanges and the pursuit of personal goals, similar to a contractual relationship between leaders and subordinates, and that are based on material and social contingent rewards. Thus, transactional leaders focus on guiding their followers toward organizational objectives, while transformational leaders assume a responsibility that goes beyond the transactional approach, deeply inspiring their followers to transcend their own interests for the general benefits pursued by the group (Burns, 1978).

The Bass leadership model, widely discussed in applied social research, led to the development of the *MLQ (Multifactor Leadership Questionnaire)*, which assesses the presence of behaviors associated with transformational and transactional leadership (Avolio & Bass, 2004). Transformational leadership was structured in four dimensions, the first being *idealized influence*, which embodies the emotional component of this framework. It describes leaders who are models to their followers, who identify with them and seek to replicate their behavior. This dimension is further split into two categories: *attributed idealized influence*, which corresponds to the attributions of such characteristics in a leader made by his or her followers; and *behavioral idealized influence*, which refers to the observation of such characteristics in a leader by his or her followers. The second dimension, *inspirational motivation*, corresponds to the leader's ability to communicate a high degree of expectations, inspiring followers to share the vision and internalize a sense of mission with regard to those purposes. The third dimension, *intellectual stimulation*, seeks to instigate creativity and innovation, thoughtfulness directed toward one's own values, and the solution of day to day challenges. Lastly, *individualized consideration* is the ability to offer personalized attention to his

or her followers, advising and providing support when necessary (Avolio & Bass, 2004).

The transactional components are grouped into three categories: *contingency rewards*, which entail acknowledging subordinates by way of material and psychological gifts when they meet goals and exceed expectations in their professional roles; *management by exception*, which is characterized by more active intervention by the leader on some occasions, versus less active intervention on others, in order to prevent possible behavioral deviations from norms of conduct; and *laissez-faire leadership*, which is considered to be more passive than the other two, and in which the leader relinquishes decision making and the exercise of authority over his or her followers (Avolio & Bass, 2004).

2.2 Effects of leadership on job satisfaction: Contextual factors

Job satisfaction is one of the most analyzed attitudes in the organizational behavior field and is defined as the degree to which the individual positively evaluates his or her job experiences (Yang, 2016). It is considered to be a particularly important factor because, when missing, it is associated with undesired outcomes in the work environment, such as voluntary turnover, absenteeism, and occupational illness. When present, job satisfaction is associated with positive outcomes such as organizational citizenship, affective commitment, effective performance, professional fulfillment, and general life satisfaction (Barling, Kelloway, & Iverson, 2003; Jackson, Alberti, & Snipes, 2014).

Job satisfaction is a multidimensional construct (Spector, 2002) which reflects worker attitudes in relation to the many aspects of a job, including rewards (salaries and benefits), growth opportunities (development programs, promotion opportunities), work relationships (supervisors and colleagues), physical working conditions (safety and comfort at work), and the nature of the work in and of itself. Accumulated studies on satisfaction indicate that it is influenced by

characteristics associated with working conditions, person-job fit, and individual characteristics (Natarajan & Nagar, 2011; Porter & McLaughlin, 2006). This study focuses on the influence of leadership on satisfaction, as well as the impact of contextual and individual characteristics on this relationship.

Transformational leaders serve as an inspiration to their followers by engaging in effective communication that encourages trust, commitment, and consequently greater satisfaction. Based on this premise, many researchers have dedicated themselves to empirically examining the relationship between transformational leadership and job satisfaction (Riaz & Haider, 2010; Yang, 2016). In a quantitative literature review based on studies from 1994 to 2004, Judge and Piccolo (2004) noticed a strong association between transformational leadership and job satisfaction.

The relationship between transformational leadership and job satisfaction has recently become one of the main focuses of studies in Brazilian organizations. Research on the relationship between leaders' style as perceived by employees and their job satisfaction showed that transformational leaders were more capable of exerting a significant and positive influence on the employees' satisfaction. (Fonseca, Porto, & Barroso, 2012; Toda et al., 2014; Batista, Kilimnik, & Neto, 2016; Silva, Nascimento & Cunha, 2017).

Based on such observations, we assume the following hypothesis:

H1: *Transformational leadership is positively associated with job satisfaction.*

The influence of the organizational context on the effects of leadership has also been the subject of theoretical and empirical studies. Since the 1990s, there has been a growing call from the literature for greater attention to be paid to the organizational environment as an important factor that could influence leadership

behaviors and outcomes (Porter & Mclauchlin, 2006). These studies have sought to organize and structure the research that considered organizational contextual factors, with most relating these factors as moderators in the context of the charismatic and transformational leadership perspectives. In their meta-analysis of the influence of organizational context on leadership, Porter and Mclauchlin (2006) identified six big moderating factors: cultures and atmospheres, objectives and purposes, people and team composition, processes, states and conditions, and structure. As far as objectives and purposes are concerned, the studies tend to address how the emergence, perception, and effects of a particular style of leadership are influenced by a company's nature or focus on objectives, such as organizations with lucrative versus voluntary purposes, those that are public or private, and those that focus on research or on production (Porter & Mclauchlin, 2006).

According to Tosi (1991) in his analysis of the influence of the organizational context on leadership, the most effective leadership skills and styles differ according to the nature and characteristics of the organization, and he adopts the concept of "situational force" to characterize organizational contexts as more or less favorable to directive or supportive leadership styles. The author draws attention to the fact that an organization is composed of different organizational subsystems often with different characteristics in terms of operation, atmosphere, and leader power level, which requires different leadership behaviors for better company results. The author lists different contextual factors capable of influencing leadership effectiveness, such as the degree of formalization, type of technology employed, form of selection and socialization, and reward systems (Tosi, 1991).

On the other hand, in their extensive meta-analytical review of works that have used the MLQ scale of transformational leadership, Lowe, Kroeck, and Sivasubramanian (1996) analyzed the moderation effect of certain organizational aspects, and concluded that the organization's legal

type, whether it is public or private, influences the occurrence of transformational leadership and its effectiveness in terms of promoting positive employee attitudes. Mechanistic organizational characteristics dominate public institutions, where performance is largely determined by bureaucracy and the role of leadership is replaced by organizational processes. Meanwhile, in private, market-focused companies that are in an increasingly competitive environment, managers need to encourage their subordinates to rise to challenges and to meet high standards for the organization's success. Based on the authors' observations, this study proposes and investigates the following hypothesis:

H2: *The effect of transformational leadership on job satisfaction varies according to an organization's type: in a private environment, the relationship between transformational leadership and job satisfaction is stronger.*

Regarding the worker's area of professional training and its relationship with his or her job satisfaction, Natarajan and Nagar (2011) observed in their study on employees from a public Indian organization that the ones who held technical managerial positions, and had a degree in engineering, presented different attitudes and reactions to work environment elements when compared to executive officers or those with administrative functions who had a background in social, human, and non-technological sciences (Natarajan & Nagar, 2011). According to their research, individuals with technical occupations tend to present a higher level of job satisfaction. They attribute this tendency to the type of work developed within the technical areas of the organization, which generates greater intrinsic satisfaction related to non-material factors such as recognition and growth. This relationship makes the job satisfaction of employees who execute more technical activities less dependent on leadership style. Thus, this study investigates the following hypothesis:

H3: *The effect of transformational leadership on job satisfaction varies according to an employee's area of training: among workers with technological backgrounds, the relationship between transformational leadership and job satisfaction is less intense.*

According to Jackson, Alberti, and Snipes (2014), there are few international studies dedicated to investigating the impact of an employee's gender on job satisfaction. However, according to Collins and Singh (2006), women in general are more sensitive and emotional, are more focused on communal aspects and interpersonal and social abilities, and find it easier to share power. Some leadership studies suggest that women tend to have characteristics that align with transformational leadership (Hoyt, 2010). On the other hand, men tend to be more pragmatic, and more focused on formality and power detention, tending toward leadership that is more aligned with the transactional style (Hoyt, 2010). These individual differences between men and women not only influence their leadership styles, but also lead them to cherish different leadership types, with women more highly valuing leadership characteristics focused on people and change, which are typical of the transformational style, compared to men (Bellou, 2011). Assuming that women tend to show more intense reactions to the presence or absence of transformational characteristics in a leader, our study proposes and investigates the following hypothesis:

H4: *The effect of transformational leadership on job satisfaction varies according to an employee's gender: among female workers, the relationship between transformational leadership and job satisfaction is more intense.*

As previously referenced, individual characteristics can influence attitudes such as job satisfaction. One of these characteristics is employee affectivity, which has been frequently

associated with employee attitudes and behavior (Joseph et al., 2015). The degree of an employee's positive affectivity reflects his or her enthusiasm in the work environment. An elevated degree of positive affectivity corresponds to a state of high energy and satisfaction (Watson, Clark, & Tellegen, 1988). This affective state is associated with positive emotional experiences, which amplify an individual's attention, cognition, and activity. Furthermore, his or her physical, intellectual, and social resources also benefit from these affective states. Therefore, people who experience an elevated degree of positive affectivity, in general, exhibit better engagement levels and demonstrate more disposition and proactivity towards executing their work duties. This behavior differs from that of an individual in a state of negative affectivity, which is pervaded by discouragement and is frequently associated with dissatisfaction (Gooty et al., 2010; Tee, 2015). Furthermore, researchers point to the importance of affective states as conditioning factors for the influence of transformational leaders (Gilmore et al., 2013). Due to the possibility that a follower's state of affectivity can replace or reduce the effect of transformational leadership on job satisfaction, we decided to include it as a control variable in this study.

3 General Analysis Model

The research constructs and their relationships are presented in Figure 1. As will be described in the Analysis section, we verified the model's validity in terms of its capacity to predict job satisfaction, by testing the hypotheses concerning direct effects of leadership and affective states. Then, we analyzed variations in the model's explanatory capacity for different contextual conditions associated with the organization (organizational type) and the employee profile (area of professional training and gender). We were aiming to identify moderating effects of these factors and characteristics on the relationship between transformational leadership and job satisfaction.

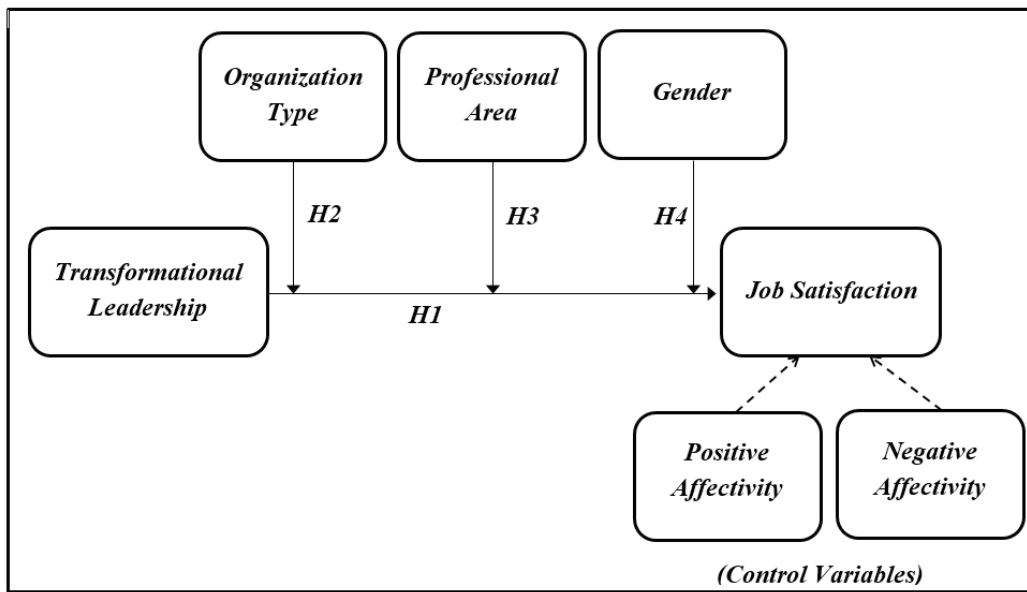


Figure 1. General research model.

4 Methodological procedures

We collected data over three weeks using electronic questionnaires, sent by email to potential respondents. First, we built a database with 450 employees using a list of workers from different companies, and students from master's and MBA courses. We aimed to obtain a sample that contained the necessary diversity regarding the moderator variables to allow us to validate them and the research model. Of a total of 450 emails sent, 169 were answered, with three of these being eliminated due to their incompleteness. The questionnaire first introduced the general research context, its objectives and answering mechanics, followed by the instruments for data collection, which are:

- i) Transformational leadership questionnaire adapted from the Avolio and Bass (2004) *MLQ* questionnaire. It is composed of 22 questions with the first 15 associated with aspects of transformational leadership, using the 5 point Likert scale, and validated for use in Portuguese by Fonseca and Porto (2003). These evaluated the dimensions “idealized behavioral influence” (e.g. “My supervisor expresses his/her most important

values and beliefs”), “idealized attributed influence” (e.g. “My supervisor makes me proud to work with him/her”), “inspirational motivation” (e.g. “My supervisor empowers me to use my own judgment when dealing with my duties”), “intellectual stimulation” (e.g. “My supervisor inspires me to look at problems from different angles”), and “individualized consideration” (e.g. “My supervisor dedicates time to advise me”);

- ii) Job satisfaction questionnaire with 12 questions adapted from the Smith, Kendall, and Hulin (1969) *JDI* (*Job Descriptive Index*), validated for use in Portuguese by Jesuino, Soczka, and Matoso (1983), and using the 5 point Likert scale. It assesses intrinsic job satisfaction motivational factors (e.g. “I do meaningful work” and “My work is challenging”);
- iii) Questionnaire about the respondent's affectivity level, composed of 15 questions, adapted from the McNair, Lorr, and Droppleman (1992) *POMS* (*Profile of Mood States*), and validated by Viana, Almeida, and Santos (2001), using a 7 point Likert scale encompassing states of

positive affectivity (e.g. “*I feel happy*” and “*I feel secure*”) and negative affectivity (e.g. “*I feel irritated*” and “*I feel demotivated*”); and

- iv) An additional questionnaire gathering demographic data on the respondent’s personal characteristics, such as gender, age, educational level, company tenure, the legal nature of his or her company, the respondent’s area of professional training, and his or her position. We verified the direct supervisors’ personal characteristics, such as gender.

The data gathered were transferred to the statistical package *SPSS (Statistical Package for Social Sciences)* in order to run the model analysis. Considering that all model variables in the dataset were gathered using self-reports, we proceeded to evaluate the presence of common method bias effects, utilizing Harman’s test. The scale reliability was evaluated using Cronbach’s alpha, and the study’s moderation hypotheses were evaluated through multiple linear regression analysis, with variable centralization.

5 Analyses

5.1 Descriptive Statistics

The sample was balanced in terms of gender, with 58% being male and 42% being

female. Furthermore, 40% of the respondents were less than 30 years old, 34% had between 30 and 49 years of age, and 26% were more than 50 years old. Given our interest in organizational environments more centered on knowledge capital, we focused our research on employees with university degrees – the participants had at least a college degree, and 44% had an MBA, master’s, or doctorate degree. In relation to the type of organization, 59% of the participants worked in direct or indirect public administration, with 39% from legal or private institutions. In the sample collected, 70% of direct supervisors were men and 30% were women. Fifty-three percent were from technological areas of professional training, including respondents with backgrounds in Engineering, Exact Sciences, and Earth Sciences, while 47% had non-tech backgrounds. We calculated the distribution averages and standard deviations for the model variables, considering the answers from the 166 questionnaires in both an aggregated and an individualized manner, as far as the groups of interest were concerned. Table 1 shows the statistical parameters referring to each of the general model variables.

The predictor variables show expressive variations in the data, which supports adequate conditions for evaluating correlational aspects.

Table 1

General model variable descriptive statistics

Variables	N	Min	Max	Mean	Standard deviation
Transformational Leadership	166	1.40	5.00	3.47	0.86
Job Satisfaction	166	2.08	5.00	3.85	0.63
Positive Affective State	166	0.83	5.00	3.55	0.81
Negative Affective State	166	0.71	4.92	2.23	0.92

5.2 Common method bias effect on analysis

To evaluate the impact of data collection based solely on self-reports, we analyzed the magnitude of common method variance utilizing Harman's test, with the results presented in Table 2.

Table 2

Harman test for common method variance

Total Variance Explained	Total Variance Extracted by the 1st Variable	%
67.14%	30.92%	46.05%

Harman's test showed that the magnitude of common method variance present in the model is not significant (amount of variance explained by the first extraction factor < 50% of total variance extraction explained), suggesting that its influence is non-substantial in the analyzed dataset.

5.3 Correlation Study

5.3.1 General model validation

In Table 3, it is possible to see significant statistic correlations between all variables and job satisfaction, which also confirms the effect of negative affectivity as an inhibiting factor for the assessments of transformational leadership. The results of the multivariate regression model are seen in Table 4. As observed, the model showed a strong capacity to predict Job Satisfaction ($R^2 = 0.59$), with statistically significant results for all variables, thus corroborating various studies that have shown the positive relationship between transformational leadership and job satisfaction, and confirming Hypothesis 1. We also observed the relevance of considering affective states as control variables.

Table 3

Pearson correlation between general model variables

Variables		1	2	3	4
1.	Transformational Leadership	(0.930)			
2.	Positive Affective State	0.272**	(-0.855)		
3.	Negative Affective State	-0.241**	-0.673**	(0.882)	
4.	Job Satisfaction	0.624**	0.575**	-0.521**	(0.861)

Notes. Elaborated by the authors. (**) Correlation significant at 0.01 level. (*) Correlation significant at 0.05 level. (a) Cronbach's alpha for each diagonal instrument between parentheses.

Table 4

Multivariate regression (model summary)

Multiple Linear Regression		1	2	
		β	β	B
1	Transformational Leadership (TFL)	0.624***	0.493***	0.360
2	Positive Affective State (PAS)		0.313***	0.242
	Negative Affective State (NAS)		-0.191**	-0.131
Constant				2.037
R ²		0.39	0.59	
ΔR^2		0.39	0.20	
F _{model}		104.41***	76.63***	
ΔF		104.41***	38.73***	

Notes. Elaborated by the authors. (*) $p < 0.05$. (**) $p < 0.01$. (***) $p < 0.001$.
Dependent variable: JSA (Job Satisfaction). N = 166.

In the following sections, we investigate the influence of organizational factors and individual characteristics on transformational leadership, analyzing the moderating effects of organization type, employee area of professional training, and gender on the relationship between transformational leadership and job satisfaction.

5.3.2 *Type of organization*

Table 5 presents the results of the sequential regression analysis for the moderating effects of type of organization on the relationship between transformational leadership and job satisfaction, considering whether the organization is public or private (hypothesis H2).

Table 5

Moderation by organization type

Multiple Linear Regression		1	2	3	4	
		β	β	β	β	B
1	Transformational Leadership (TFL)	0.624***	0.493***	0.492***	0.492***	0.360
2	Positive Affective State (PAS)		0.313***	0.311***	0.312***	0.242
	Negative Affective State (NAS)		-0.191**	-0.192**	-0.191**	-0.131
3	Type of Organization (TO)			-0.013	-0.013	-0.017
4	TFL x TO				-0.010	-0.015
Constant						2.037
R ²		0.39	0.59	0.59	0.59	
ΔR^2		0.39	0.20	0.00	0.00	
F _{model}		104.41***	76.63***	57.16***	45.46***	
ΔF		104.41***	38.73***	0.06	0.04	

Notes. Elaborated by the authors. (*) $p < 0.05$. (**) $p < 0.01$. (***) $p < 0.001$.
Dependent variable: JSA (job satisfaction). N = 166.

The analysis did not show evidence of any moderation by the type of organization on the relationship between transformational leadership and job satisfaction, since the coefficient for interaction between transformational leadership and type of organization did not present statistical significance. Thus, hypothesis H2 was not confirmed. This result contrasts with the evidence presented by Lowe, Kroeck, and Sivasubramanian (1996), which suggested that the organization's legal nature, whether public or private, influences the effectiveness of transformational leadership.

Table 6

Moderation by employee's area of professional training

Multiple Linear Regression		1	2	3	4	B
		β	β	β	β	
1	Transformational Leadership (TFL)	0.624***	0.493***	0.493***	0.491***	0.359
2	Positive Affective State (PAS)		0.313***	0.306***	0.300***	0.232
	Negative Affective State (NAS)		-0.191**	-0.204**	-0.201**	-0.138
3	Area of Professional Training (APT)			0.038	0.038	0.047
4	TFL x APT				0.060	0.088
Constant						2.022
R ²		0.39	0.59	0.59	0.59	
ΔR^2		0.39	0.20	0.00	0.00	
F _{model}		104.41***	76.63***	57.45***	46.34***	
ΔF		104.41***	38.73***	0.54	1.39	

Notes. Elaborated by the authors. (*) $p < 0.05$. (**) $p < 0.01$. (***) $p < 0.001$.

Dependent variable: JSA (job satisfaction). N = 166.

The analysis did not show any moderation by the employee's area of professional training on the relationship between job satisfaction and transformational leadership, since the interaction coefficient of transformational leadership and the employee's area of training did not present statistical significance. Thus, hypothesis H3 was not confirmed. This result contrasts with the evidence presented by Natarajan and Nagar

5.3.3 *Employee's area of training*

Table 6 presents the results of the sequential regression for the moderating effects of the employee's area of professional training on the relationship between transformational leadership and job satisfaction, considering whether the employee had a technological background (such as in engineering) or not.

(2011), which suggested that employees whose work is of a technical nature are less dependent on the transformational style of leadership.

5.3.4 *Employee gender*

Table 7 presents the results of the sequential regression for the moderating effects of employee gender on the relationship between transformational leadership and job satisfaction.

Table 7

Moderation by employee gender

Multiple Linear Regression		1	2	3	4	
		β	β		β	B
1	Transformational Leadership (TFL)	0.624***	0.493***	0.496***	0.482***	0.353
2	Positive Affective State (PAS)		0.313***	0.321***	0.334***	0.258
	Negative Affective State (NAS)		-0.191**	-0.188**	-0.162*	-0.111
3	Gender (GEN)			0.058	0.060	0.077
4	TFL x GEN				0.107*	0.155
Constant						1.858
R ²		0.39	0.59	0.59	0.60	
ΔR ²		0.39	0.20	0.00	0.01	
F _{model}		104.41***	76.63***	57.91***	48.15***	
ΔF		104.41***	38.73***	1.31	4.33*	

Notes. Elaborated by the authors. (*) $p < 0.05$. (**) $p < 0.01$. (***) $p < 0.001$.

Dependent variable: JSA (job satisfaction). N = 166.

The model's determination coefficient was statistically significant ($R^2 = 0.60$; $F = 48.15$; $p < 0.001$), and the coefficient for the interaction term (transformational leadership and the employee's gender) was also statically significant ($b = 0.107$; $p < 0.05$). This result confirms hypothesis H4. The evidence supports the findings of Bellou (2011), which suggested that the relationship between transformational leadership and job satisfaction is moderated by the employee's gender, i.e., female employees are more susceptible to the effects of transformational leadership than male employees.

In order to graphically represent how this moderation occurs, the regression lines for employee gender regarding the effects of transformational leadership on job satisfaction were plotted (Figure 2), based on representative points for low, middle, and high degrees of transformational leadership ($\mu - 1,75\sigma$; μ ; $\mu + 1,75\sigma$), controlling for the employee's affective state (μ). The regression lines allow us to see that the female employees had a more accentuated response to a leader's transformationality as far as their job satisfaction was concerned.



Figure 2. Moderation by employee gender.

6 Discussion and Conclusion

We investigated the relationships between transformational leadership in supervisors and their subordinates' job satisfaction in Brazilian organizations, while considering the subordinates' affective state. Our analysis confirmed the positive association between transformational leadership attributed by the subordinate to his or her supervisor, and his or her job satisfaction. These results confirmed our expectations based on the literature on transformational leadership.

Although there are references in the literature to a higher acceptance of transformational leadership in private organizations, such an effect was not confirmed in this study when we considered the institution's legal type (public or private). Initially, this result would suggest that the association between transformational leadership and job satisfaction is independent of a company's legal type. Nevertheless, in the studies in which this hypothesis was originally proposed, a stronger or weaker effect of transformational leadership is attributed to company characteristics such as its degree of mechanicism, which is supposed to create environments that are less prescriptive of leadership roles that entail inspiring results that exceed normal expectations (Porter & Mclauchlin, 2006). Thus, the distinction between the organization's legal type, whether it is public or private, may not specifically discriminate specific characteristics of the organizational environment, which may explain why this hypothesis was not confirmed in the Brazilian context, particularly given that some public companies in Brazil are going through a process of change to become more competitive. We suggest that, in future studies, the distinction between company legal types is addressed by examining specific, typical aspects of the cultural environment in which work interactions take place.

Similarly, we did not confirm that individuals with backgrounds in non-technological areas more highly value transformational leaders. Although this might be the case, we should observe that in the study by Natarajan and Nagar (2011), the relationship found between type of work and intrinsic satisfaction was associated with the existence of subcultures in the technical areas of the organization in which the research was developed, which could lead employees to have a more favorable perception of their working conditions. In our study, the data gathered refer to the respondent's area of professional training, whether it is technological or non-technological, which in some cases may not correspond to the area in which that same employee works.

The moderation analysis for the interaction between the employee's gender and his or her reaction to transformational leaders confirmed the predicted influence: female subordinates react more strongly to transformational leadership. In other words, female individuals seem to be more susceptible to the transformational leadership style. In the sample studied, when the leader is perceived as lacking in transformationality, women tend to present lower levels of job satisfaction than men, and when that leader is perceived as presenting strong transformationality, women tend to show higher levels of job satisfaction than men.

It is worth noting that the impact of the participant's affective state on his or her job satisfaction was controlled for in this study. This way, both the positive association of transformational leadership with job satisfaction, and the differences in the magnitude of such an association caused by the employee's gender, were independent and observed above and beyond the participants' state of affectivity. Since this state also influences satisfaction, it is essential for studies that investigate attitudes to include this variable, to avoid their results being biased due to individual differences.

The results we observed contribute to the studies on transformational leadership and its impact on organizations by noting that such behavior is associated with positive attitudes in employees, even when their inherent state regarding negative and positive affectivity is considered, which reinforces the importance of developing transformational competences among those who hold positions of leadership in organizations. The results found for the female respondents suggest more volatile reactivity to transformational behaviors, or their lack thereof, in leaders. Therefore, efforts to develop transformational attributes in supervisors and managers are likely to have a more intense impact in occupational areas and environments with a higher female count, as is the case with certain segments of the service industry, such as education and health. In relation to the

other factors and characteristics we studied, it is not possible to conclude that the type of organization or employees' professional training in technological fields necessarily condition the impact of transformational leadership on them.

This allows us to conclude that such contextual aspects, i.e., type of organization and area of professional training, do not constrain the reach of transformational leaders. However, we recommend that new studies address the factors discussed in the literature that are at the root of such contextual effects, such as specific cultural aspects of public companies and the nature of the work executed by employees in an organization.

One notable limitation of this study is that it was done using a survey design; this prevented the testing of causal relationships between the studied variables. Despite the sample being quite diverse in terms of gender, area of professional training, and company type, it is still possible that the omission of some variable may have altered the results. However, the absence of substantive method effects in the sample and control over an important individual difference (positive and negative affectivity) were helpful to reduce this problem. Besides that, keeping in mind that the study was done using many different companies, the influence of some other specific organizational environment variable on the observed effects of transformational leadership should not be ignored. Future studies could further increase our knowledge on the subject, by including objective variables such as employee performance indicators and specific dimensions of organizational culture.

This study reinforces the importance of transformational attributes in leaders for companies that intend to promote positive employee attitudes and work climates, particularly Brazilian ones, and it highlights contextual conditions regarding individual and organizational characteristics that call for this leadership paradigm. Based on this study's results, we can affirm that the effects of transformational leaders on employee job satisfaction seem to be robust and not altered by organization type or by the employees' area of

professional training. However, since our findings diverge from other studies in the academic literature, we recommend the continuation of research on the influence of organizational context and individual characteristics on the effectiveness of transformational leadership, thus promoting a better understanding of additional factors that can leverage or thwart influence processes between leaders and followers in contemporary organizations.

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1. Definition of research problem			√
2. Development of hypotheses or research questions (empirical studies)	√	√	
3. Development of theoretical propositions (theoretical work)	√	√	
4. Theoretical foundation/ Literature review	√		√
5. Definition of methodological procedures		√	√
6. Data collection	√	√	
7. Statistical analysis		√	√
8. Analysis and interpretation of data		√	√
9. Critical revision of the manuscript			√
10. Manuscript writing	√	√	√