ABSTRACT

This research investigated the relation among the humor styles, the employees satisfaction with their leader, and job performance of employees, through a quantitative study. In order to measure the constructs, we used two questionnaires validated in previous studies: The Humor Styles Questionnaire from Martin et al. (2003) and the Job Satisfaction Scale from Siqueira (1995). The score for individual performance was obtained from an instrument of assessment called “assessment 360º” used by the company investigated. We obtained 234 valid answers and studied the relationship between the variables through the Structural Equation Modeling Method, with PLS estimation (Partial Least Squares – Path Modeling). We identified significant positive relationships between the positive styles of humor (affiliative and self-enhancing) and the employees’ satisfaction with their leader, and between satisfaction with their leader and job performance. On the other side, we verified significant negative relations between negative styles (aggressive and self-defeating) and employees’ satisfaction with their leader, with the aggressive humor being responsible for 16.81% of dissatisfaction with their leader. These results suggest that organizations may benefit from the selection of leaders with the proper humor styles to reach specific behavior and organizational results.

Keywords: Humor in the Workplace. Humor Styles. Satisfaction With the Leader. Individual Performance.
RESUMO

Esta pesquisa verificou a relação entre os estilos de humor, a satisfação com o líder e o desempenho dos indivíduos no trabalho, por meio de um estudo de natureza quantitativa. Para a mensuração dos construtos, foram utilizados dois questionários validados em estudos anteriores: o Questionário de Estilos de Humor de Martin et al. (2003) e a Escala de Satisfação no Trabalho de Siqueira (1995). A medida do desempenho individual foi obtida por meio da indicação da nota final da avaliação 360º, praticada internamente na empresa em análise. Foram obtidas 234 respostas válidas e a relação entre as variáveis foi estudada pelo método de Modelagem de Equações Estruturais, com a estimação PLS (Partial Least Squares – Path Modeling). Identificaram-se relações positivas e significantes entre os estilos positivos de humor (afiliativo e autopromovendor) e a satisfação com a chefia, e entre a satisfação com a chefia e o desempenho individual. Por outro lado, foram verificadas relações negativas e significantes entre os estilos negativos (agressivo e autodepreciativo) e a satisfação com a chefia, e o humor agressivo explicou 16,81% da insatisfação com a chefia. Esses resultados sugerem que as organizações podem se beneficiar da seleção de líderes com estilos de humor apropriados para o alcance de comportamentos e resultados organizacionais específicos.


1 INTRODUCTION

Increased competition from globalization demands creativity and innovation from organizations. However, low organizational commitment and increased workplace diversity potentiate internal conflicts (ROMERO and CRUTHIRDS, 2006) and can affect job satisfaction. It is precisely in this context that humor appears as an alternative to people management, as it can induce group cohesion and improve communication (MEYER, 1997), increase subordinate satisfaction (DECKER, 1987), contribute to increased creativity (BROTHERTON, 1996) and productivity (AVOLIO; HOWELL; SOSIK, 1999).

Research has shown that using workplace humor relieves boredom (MALONE, 1980), reduces social distances (SHERMAN, 1988), controls the ill effects of stress (LIPPITT, 1982) and facilitates social interactions in stressful circumstances (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003).

Despite the contribution of these studies, we note the persistence of some research gaps on the topic. First, humor is often seen as a one-way concept (MESMER-MAGNUS; GLEW; VISWESVARAN, 2012), although authors like Martin et al. (2003) and Vecchio et al. (2009) point out that this is a construct which can present positive and negative manifestations. Second, as a result, the possible similarities and differences between the effects that humor types can generate need further investigation (CANN; WATSON; BRIDGEWATER, 2014). Third, when such relationships are handled, this is often done in non-working environments (ROBERT; YAN, 2007). Therefore, in order to better understand the effects of humor styles on the relationship of individuals with their leaders, this study aims to identify the relationship between humor styles, satisfaction with leadership and performance of individuals at work. We conducted quantitative research with professionals from Vale S.A., a large multinational Brazilian company.

The study brings practical contributions to organizations by elucidating the consequences of using humor in the workplace and by presenting this construct as a multifunctional tool for leadership and human resources. The research also contributes to the people management literature by validating which humor styles are most appropriate and inappropriate for achieving specific organizational outcomes, either by a direct or indirect relationship.
2 THEORETICAL FRAMEWORK AND FORMULATION OF HYPOTHESES

2.1 HUMOR AT WORK

Humor is a basic element of human interaction, closely linked to well-being and affection, witnessed in the context of different social entities. Given that this construct has effects on an individual's cognitive, affective, and behavioral responses, it may be suggested that it also influences the quality of workplace interactions (WISSE; RIEZSCHEL, 2014).

Research on humor at work was, until the 1990s, relatively limited due to the emphasis on other behavioral phenomena (WESTWOOD; JOHNSTON, 2013). In the 1990s, research indicated that humor at work can relieve stress, build group cohesion, improve communication (MEYER, 1997), stimulate creativity (BROTHERTON, 1996) and therefore promote the effectiveness of leadership (DECKER; ROTONDO, 2001), increase satisfaction (DECKER, 1987) and employee performance (AVOLIO; HOWELL; SOSIK, 1999). However, this theme remains considerably unexplored, with little theoretical and empirical basis.

There is a history of research related to the attempt to define the humor construct, however, this objective is always hampered due to the complexity of constructing the concept (MARTIN, 2001; MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003; ROBERT; YAN, 2007; WARNARS-KLEVERLAAN; OPPENHEIMER, 1996). For Gray and Watson (2001), humor represents a summary of a person's affective state. Nevertheless, other researchers have defined humor as communication that has the power to evoke laughter or produce a cognitive or affective response (ROBERT; YAN, 2007).

Although this diversity of conceptions exists, most researchers agree that humor is a mechanism of communication and social interaction, producer of cognitions and emotions in an individual, group or organization, whether positive or negative (MARTIN, 1996; MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003; ROMERO; CRUTHIRDS, 2006; THORSON; POWELL, 1993a). Another challenge in defining humor refers to the multidimensionality of this concept, since there are quantitative differences in the way researchers presented different humor styles.

We developed this research developed based on the multidimensional conception of humor by Martin et al. (2003), in which four humor styles are defined by the intersection of two primary dimensions. The first dimension of this model involves intrapsychic styles, in which humor is used for one's own benefit, and interpersonal styles, in which the use of humor is associated with relationships with other individuals. The second dimension of the model determines the positive styles in which the use of humor is relatively benign, and negative styles, which are potentially harmful to both oneself and their interaction with others. Figure 1 indicates that different combinations of the two dimensions give rise to the four humor styles: affiliative, self-promoting, aggressive and self-deprecating.

![Figure 1. Humor Styles](image)

Source: Martin et al. (2003). Adapted by the author.
styles, is found in individuals who tend to amuse others by telling jokes and funny stories and engaging in spontaneous play, in order to facilitate relations and reduce interpersonal tensions (LEFCOURT, 2001).

Self-promoting humor, in turn, comes from the combination of the dimensions of positive and intrapsychic styles, and involves individuals with a humorous outlook on life who tend to have fun even in the face of adversity (MARTIN; KUIPER; OLINGER; DANCE, 1993). It is a defense mechanism avoiding negative emotions such as stress (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003).

The combination of negative and interpersonal style dimensions gives rise to aggressive humor, which is related to the use of sarcasm, irony and teasing (ZILLMAN, 1983) without considering the potential negative impact on others, in addition to the compulsive use of humorous expressions to manipulate people through acts of offending, belittling or ridiculing (JANES; OLSNER, 2000). Finally, self-deprecating humor is determined by combining the dimensions of negative and intrapsychic styles and, involves those individuals who tend to amuse others at their expense, make people laugh at their own weaknesses and even ridicule themselves, in order to get approval and love from others (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003). Although individuals with this style are seen as entertaining, there is an element of emotional neediness and low self-esteem in them that justifies the use of humor as a way of hiding negative feelings (FABRIZI; POLLIO, 1987).

2.2 SATISFACTION WITH MANAGEMENT

Satisfaction with management is a difficult subject in the organizational behavior literature, since several authors approach it as one of the dimensions that compose job satisfaction. Locke (1976), defining job satisfaction as a positive emotional state determined by work-related agents and events, indicated that relationship and satisfaction with the manager is one of the requirements for job satisfaction.

According to Tamayo (2000), job satisfaction is influenced by external factors related to work itself, such as compensation, nature of activity, promotion possibilities, team interaction, organizational support, job stability, personal development and supervisory behavior. Martins (1984) reinforces that it is an affective variable, resulting from the degree of contentment of the individual in relation to the dimensions of their work. From a more recent conceptual perspective, Valle (2007) emphasizes that to assess job satisfaction, it is necessary to evaluate work-related cognitive aspects and their determinants, such as: rewards, distribution and centralization of power, peer-leader relationships, and individual differences. Finally, Siqueira (1995) concludes that job satisfaction is a multidimensional concept, composed of variables sensitive to workers’ perceptions of their work environment, the nature of work and management policies and practices, which involve five theoretical dimensions: 1) satisfaction with colleagues; 2) satisfaction with the salary; 3) satisfaction with management; 4) satisfaction with the nature of work; and, 5) satisfaction with promotions.

The most recent definitions of job satisfaction presented their dimensions in isolation, which allows specific investigations of this variable in the context of organizations (COELHO JR., 2009). It is noteworthy that there are two usual ways to evaluate job satisfaction: the first refers to an overall measure of satisfaction, obtained by the average degree of satisfaction of the individual in relation to the dimensions evaluated; and the second refers to a measure determined by factors that compose the individual’s satisfaction with their work (SIQUEIRA, 1995; ALBUQUERQUE, 2004; MARTINS; SANTOS, 2006). As the first construct evaluated in this research refers to leaders’ humor styles, we chose to analyze just one of the facets of job satisfaction proposed by Siqueira (1995): satisfaction with management. This is the employee’s degree of contentment with their leaders regarding the organization, professional capacity and interest in the work of subordinates.
2.3 INDIVIDUAL WORK PERFORMANCE

Increased competition due to globalization and therefore, the need to adapt to market demands has highlighted the need for individual performance management. In organizational studies, performance is associated with the behavior manifested by the individual in the exercise of his duties (STARBUCK, 2005), the quality and quantity of work done, as well as the cost and time spent. For Armstrong and Baron (1998), performance management is an integrated approach, development of individual capacities to achieve organizational results.

It turns out that individual performance is a variable investigated by heterogeneous and multicriteria measures, sometimes quantitative or objective, sometimes qualitative or subjective (SELLITTO; BORCHARDT; PEREIRA, 2006). There are empirical reports that refer to performance self-assessment measures (BABIN; BOLES, 1996; VISWESVARAN; ONES; SCHMIDT, 1996) and measures of performance hetero-evaluation, mainly of 360º (WRIGHT; COPRANZANO, 2000). Gerhart et al. (2000) indicate that the use of these performance perception measures allows investigating situational factors that would not normally be captured in the unilateral leader-employee assessment. It is precisely in this context that the importance of 360º evaluation is evidenced, which is performance feedback from all those who participate in the employee routine.

Previous studies have linked work humor with individual performance: humor can make routine activities more interesting, in addition to relieving pressure from the organizational environment, which favors communication with leaders and, consequently, facilitates clarification of what is expected of followers in terms of performance (AVOLIO; HOWELL; SOSIK, 1999; ROMERO; CRUTHIRDS, 2006; and VECCHIO; JUSTIN; PEARCE, 2009). Employees led by humorous individuals are shown to have higher levels of well-being in the workplace and, as a result, they present higher levels of performance (RYAN; DECI, 2000). However, there is little empirical evidence about the belief that the leader’s posture and humor impact the performance of their followers. The lack of research on this topic may be related to the difficulty of measuring employee performance, which in many researches is seen as the perception of the subject regarding their own performance. Therefore, for the employee performance analysis of this research, we use the 360º performance evaluation applied in the company under analysis.

2.4 FORMULATION OF HYPOTHESES

In any attempt to explain the effects of humor on the leader-follower relationship, it is important to recognize the fact that individuals can use or express humor in different ways (WISSE; RIETZSCHEL, 2014). Although empirical evidence on the effects of humor on organizations is still scarce, a growing body of research demonstrates the important role that humor can play in the context of work, especially in the interaction between leader and follower (AVOLIO; HOWELL; SOSIK, 1999; COOPER, 2008; DECKER; ROTONDO, 2001; ROMERO; CRUTHIRDS, 2006).

The literature mentions that humor at work is related to many organizational behaviors, among them, increased commitment and job satisfaction (BURFORD, 1987; COOPER, 2002; DECKER, 1987; DECKER; ROTONDO, 2001). Burford (1987) indicated that subordinates ‘perceptions of their supervisors’ humors are related to the subordinate’s job satisfaction. Recent studies have found that a leader’s positive humor style is positively correlated with interpersonal relationships with employees (DECKER; YAO; CALO, 2011), affiliative commitment and follower identification (HUGHES; AVEY, 2009).

More specifically, Romero and Arendt (2011) pointed out that the employees’ affiliative humor style is positively related to the satisfaction with the co-workers and, Wisse and Rietzschel (2014) complement by clarifying that, particularly the affiliative humor, positively correlates with
indicators of interpersonal relationships, for example, relationship satisfaction and social life. Therefore, individuals with this style are appreciated by their peers, since the use of this non-hostile humor can ease interpersonal tensions and create a healthy work environment (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003), besides reducing social distance by generating the perception of the leader as a member of the group (ROMERO; CRUTHIRDS, 2006). Given this, we propose that:

**Hypothesis 1: A leader’s humor is positively related to satisfaction with management;**

Self-promoting humor is seen as a coping mechanism for coping with stress and usually, individuals who have such a style have a positive and humorous outlook on life (ROMERO; CRUTHIRDS, 2006). The same authors also point out that when this type of humor is used in organizations, the individual’s intention is to improve their image towards other group members.

In the research by Wisse and Rietzschel (2014) no statistically significant relationships were found regarding the perceived quality of the leader-follower relationship for self-promoting and self-deprecating humor styles. According to the authors, it is still unclear why only some of the styles affect the quality of interpersonal relationships and warn that this may signal fundamental differences between humor styles. Among the positive styles, the literature indicates that individuals who use affiliative humor are more adored and admired than those who use self-promoting humor, which has already been associated with reduced employee proactivity towards the leader (MARTIN, 2007; MARTIN; LASTUK; SCHERMER; JEFFERY; VERNON; VESELKA, 2012; ROMERO; ARENDT, 2011; WISSE; RIETZSCHEL, 2014; YIP; MARTIN, 2006). Therefore, we propose that:

**Hypothesis 2: The self-promoting humor of the leader is negatively related to satisfaction with management;**

Individuals who use aggressive humor generally aim to manipulate others through a threat (JANES; OLSEN, 2000) or ridicule and belittle someone to feel superior (ZILLMAN, 1983). Martin et al., 2003 suggest that aggressive humor is negatively related to affability and positively related to anxiety, depression and burnout.

According to Bippus (2003) and Decker and Rotondo (2001), interacting with individuals who use aggressive humor can have a particularly negative effect on the quality of interpersonal relationships. However, Cooper (2008) warned against an overly simplified perspective on the effects of workplace humor styles; the author advocated the idea that not everyone reacts similarly to different forms of humor and emphasized that negative styles do not necessarily weaken the bond between individuals. Romero and Cruthirds (2006) corroborate by indicating that mild aggressive humor can have positive functions, since seeing others being ridiculed can lead to appropriate behaviors, something constructive in cohesive teams (JANES; OLSEN, 2000). Therefore, when manifested as satire or provocation, mild aggressive humor may represent a strong scolding message with a positive tone (MEYER, 1997) or express disagreement and conflict without negative effect provided the message is delivered in a playful manner.

The literature highlights that aggressive humor is negatively correlated with interpersonal relationships and satisfaction with co-workers, and positively related to hostility towards others (CANN; ZAPATA; DAVIS, 2011; MARTIN, 2007; MARTIN; LASTUK; SCHERMER; JEFFERY; VERNON; VESELKA, 2012; ROMERO; ARENDT, 2011; YIP; MARTIN, 2006). We note that affiliative and aggressive humor styles predict the perceived quality of the relationship with the leader (WISSE; RIETZSCHEL, 2014). Therefore, we propose that:

**Hypothesis 3: The aggressive humor of the leader is negatively related to satisfaction with management;**

Finally, self-deprecating humor is associated with reduced social distance between leader and follower (SMITH; POWELL, 1988), once individuals ridicule themselves in trying to seek accept-
ance from others (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003). Romero and Cruthirds (2006) indicate that leaders who moderately use self-deprecating humor often want to lower their status and become more accessible, and this can be beneficial for interpersonal relationships, because they can leave their followers at ease in the workplace. However, over time, there is a risk that what was initially regarded as funny might give the impression of lack and low self-esteem (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003; ROMERO; ARENDT, 2011). Therefore, we propose that:

**Hypothesis 4: The self-deprecating humor of the leader is negatively related to satisfaction with management;**

Petty et al. (1984), tested the hypothesis that the more satisfied with their work, the higher would be the individual performance levels. In addition, the same authors pointed out that the variables job satisfaction and performance have been significantly related, although small in the organizational context. Therefore, it is necessary to empirically verify such predictive relationship with the addition of other variables (PETTY; MCGEE; CAVENDER, 1984).

Although there is no direct and significant relationship, the satisfaction variable is fundamental for the reduction of negative occurrences related to work performance, for example, turnover, absenteeism and stress, which would influence, even if indirectly, individual and organizational productivity (WRIGHT; KIM, 2004). Babin and Boles (1996) detected a positive correlation between satisfaction with management and performance, so that the individuals most satisfied with the manager perceived their performance more positively than the less satisfied. Thus, the last hypothesis presents satisfaction with leadership as an antecedent of job performance:

**Hypothesis 5: Job satisfaction is positively related to job performance.**

![Figure 2. Layout of the hypotheses](#)

AFH: Affiliative Humor; SPH: Self-Promoting Humor; AGH: Aggressive Humor; SDH: Self Deprecating Humor; SMH: Satisfaction with Management and; PER: Individual Performance

Source: Author’s own elaboration
3 METHODOLOGY

3.1 DATA COLLECTION

We applied a structured questionnaire, made available on a website, whose link was sent via email to several groups of Vale S.A employees, Brazilian multinational corporation in the mining sector. We used the non-probabilistic convenience sampling technique and the data collection period was 30 days, in which 301 responses were obtained. After checking missing values and outliers, 234 responses were considered valid, this indicated that the sample could be considered of adequate size for the research purposes, according to the empirical rule of five to ten cases per variable (HAIR JR; ANDERSON; TATHAM; BLACK, 2005), given that the collection instrument is composed of 36 assertions.

3.2 MEASURES

**Humor Styles.** To evaluate leadership humor styles, we used the Humor Styles Questionnaire by Martin et al. (2003). We requested the original scale via email to the author himself, who promptly sent the original English version and the validated Portuguese translation. Based on a review by three independent judges, the instrument was adapted to Brazilian Portuguese. It is noteworthy that the original questionnaire contains 32 items designed to measure the four humor styles (affiliative, self-promoting, aggressive and self-deprecating) and for each statement participants would rate how much they agree on their humor on a 7-point Likert scale. Given that the first construct of this research is the leader’s humor, we were not able to use two statements on self-promoting humor (“If I feel upset or sad, I often try to think of something funny about the situation to make me feel better” and “If I’m alone and sad, I make an effort to think of something funny and cheer myself up”). Thus, the questionnaire consisted of only 30 assertions.

**Satisfaction with management.** To measure satisfaction with the manager, we chose to use the Job Satisfaction Scale, elaborated by Siqueira (1995) and newly validated by Albuquerque (2004), given its consistency and factorial invariance relative to more recent revalidations. It is a multidimensional measure, composed of 25 affirmative and intended to evaluate the degree of contentment of the worker facing five dimensions of work: satisfaction with management, colleagues, salary, promotions and nature of work. However, given that the independent variable of the survey is the humor of the leader, it was convenient to use only the five statements about satisfaction with the leadership, also classified on a 7-point Likert scale.

**Individual performance.** The final score of the 360° evaluation internally applied at Vale S.A. measured the third variable, related to employee performance. In this evaluation, they are scored from 1 to 5, where 1=significant gaps and 5= internal reference, seven items: adaptability/flexibility; interpersonal skills; technical competence; problem analysis and solution; quality; focus on results and; health and safety. The final score comes from the mean of the scores of these seven items.

It is worth mentioning that three demographic questions were inserted in the questionnaire, related to gender, age and position, in order to detect the profile of the respondents. Other data such as location, company time and sector were not requested to preserve the anonymity of the research.

3.3 ANALYSIS PROCEDURES

We coded the data and the reverse questions had their answers recoded for further statistical analysis of the psychometric properties of reliability, convergent and discriminant validity,
which guarantee the quality of the model for the sample used. We performed data analysis by the Structural Equation Modeling method, in order to test the hypotheses presented, based on the PLS estimation (Partial Least Squares – Path Modeling), through SmartPLS 2.0 software.

4 RESULTS ANALYSIS

4.1 DEMOGRAPHIC DATA

Demographic data indicate that most participants belong to the age group of 31 to 35 years old, with 28.63% (67 respondents), followed by the age group of 25 to 30 years, with 24.79% (58 respondents). Of the 234 participants, the male gender predominated, with 65.81% (154 respondents), and only 34.19% (80 respondents) female. Although the sample presents employees of different hierarchical levels, most of the research participants act as analyst (52.14%) and engineer (25.64%). The demographic profile of the sample is shown in Table 1.

Table 1: Demographic data

<table>
<thead>
<tr>
<th>Participant Profile</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Range</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 25 and 30 years of age</td>
<td>58</td>
<td>24.79</td>
</tr>
<tr>
<td>Between 31 and 35 years</td>
<td>67</td>
<td>28.63</td>
</tr>
<tr>
<td>Between 36 and 40 years</td>
<td>51</td>
<td>21.79</td>
</tr>
<tr>
<td>Between 41 and 45 years</td>
<td>27</td>
<td>11.54</td>
</tr>
<tr>
<td>Between 46 and 50 years</td>
<td>20</td>
<td>8.55</td>
</tr>
<tr>
<td>From 51 years of age</td>
<td>11</td>
<td>4.70</td>
</tr>
<tr>
<td><strong>Genre</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>80</td>
<td>34.19</td>
</tr>
<tr>
<td>Male</td>
<td>154</td>
<td>65.81</td>
</tr>
<tr>
<td><strong>Job title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyst</td>
<td>122</td>
<td>52.14</td>
</tr>
<tr>
<td>Engineer</td>
<td>60</td>
<td>25.64</td>
</tr>
<tr>
<td>Supervisor</td>
<td>26</td>
<td>11.11</td>
</tr>
<tr>
<td>Manager</td>
<td>24</td>
<td>10.26</td>
</tr>
<tr>
<td>Director</td>
<td>2</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Source: Author’s own elaboration based on the data collected.

4.2 EVALUATION OF THE MEASUREMENT MODEL

The evaluation of the measurement model consists of the analysis of reliability, convergent validity and discriminant validity. Chin (1998) clarifies that the index called composite reliability denotes the reliability of the model and must be greater than 0.7 for this property to be present. Table 2 shows the presence of the composite reliability for each latent variable: self-deprecating humor (0.81), affiliative humor (0.89), aggressive humor (0.81), self-promoting humor (0.85), and satisfaction with management (0.93).

Table 2: Descriptive Statistics and Correlation between Constructs

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Self Deprecating Humor</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- Affiliative Humor</td>
<td>-0.17</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- Aggressive Humor</td>
<td>0.28</td>
<td>-0.44</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Self-Promoting Humor</td>
<td>-0.03</td>
<td>0.72</td>
<td>-0.46</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>5- Satisfaction with management</td>
<td>-0.27</td>
<td>0.53</td>
<td>-0.63</td>
<td>0.57</td>
<td>0.86</td>
</tr>
<tr>
<td>Mean</td>
<td>2.08</td>
<td>4.67</td>
<td>2.97</td>
<td>3.84</td>
<td>4.72</td>
</tr>
</tbody>
</table>
Hair Jr. et al. (2005) point out that the values of the average variance extracted greater than 50% denote the convergent validity of the model. In this study, all latent variables fully met this parameter: self-deprecating humor (0.62), affiliative humor (0.58), aggressive humor (0.59), self-promoting humor (0.59), and satisfaction with management (0.74).

Finally, to evaluate the discriminant validity it should be observed whether the assertions presented have higher correlations in their respective constructs when compared to the other ones (CHIN, 1998). Table 3 shows that this parameter was also met. Another way to assess discriminant validity is to observe if the correlations between the constructs are smaller than the square root of the average variance extracted (CHIN, 1998) and, by this criterion, the discriminant validity of the model was also confirmed.

### Table 3: Cross loadings Matrix

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Indicators</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Self-deprecating</td>
<td>HAD5) Often demeans oneself too much when joking or trying to be funny;</td>
<td>0.99</td>
<td>-0.20</td>
<td>0.29</td>
<td>-0.06</td>
<td>-0.28</td>
</tr>
<tr>
<td>Humor</td>
<td>HAD6) When in a group, he often seems to be the target of jokes.</td>
<td>0.71</td>
<td>0.13</td>
<td>0.05</td>
<td>0.18</td>
<td>-0.05</td>
</tr>
<tr>
<td>2- Affiliative Humor</td>
<td>HAF2) He does not have to try hard to make people laugh – He seems to be a naturally humorous person.</td>
<td>-0.13</td>
<td>0.82</td>
<td>0.48</td>
<td>0.74</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>HAF5_rev) He does not usually like to tell jokes or entertain people.</td>
<td>-0.22</td>
<td>0.79</td>
<td>0.31</td>
<td>0.47</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>HAF6) He likes to make people laugh.</td>
<td>-0.04</td>
<td>0.72</td>
<td>0.22</td>
<td>0.53</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>HAF7_rev) He does not joke with his friends.</td>
<td>-0.28</td>
<td>0.73</td>
<td>0.29</td>
<td>0.37</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>HAF8_rev) Usually he does not say funny things when he's with other people.</td>
<td>-0.08</td>
<td>0.70</td>
<td>0.31</td>
<td>0.40</td>
<td>0.38</td>
</tr>
<tr>
<td>3- Aggressive Humor</td>
<td>HAG1) If someone makes a mistake, they will usually make fun of them.</td>
<td>0.27</td>
<td>-0.22</td>
<td>0.71</td>
<td>-0.20</td>
<td>-0.39</td>
</tr>
<tr>
<td></td>
<td>HAG2_rev) People never feel offended or hurt by their sense of humor.</td>
<td>0.13</td>
<td>-0.42</td>
<td>0.76</td>
<td>-0.50</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>HAG7) If he does not like someone, he often uses humor or teasing to denigrate them.</td>
<td>0.27</td>
<td>-0.35</td>
<td>0.82</td>
<td>-0.30</td>
<td>-0.51</td>
</tr>
<tr>
<td>4- Self-Promoting Humor</td>
<td>HAP1) When he is sad or upset he usually rejoices in humor.</td>
<td>-0.04</td>
<td>0.44</td>
<td>-0.38</td>
<td>0.70</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>HAP2) Even when alone, he can enjoy the adversities of life.</td>
<td>0.02</td>
<td>0.63</td>
<td>-0.29</td>
<td>0.81</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>HAP5) For him, thinking of some fun aspect of a situation is often a very effective way to deal with problems.</td>
<td>0.02</td>
<td>0.58</td>
<td>-0.34</td>
<td>0.79</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>HAP6) He does not have to be with other people to feel fun – I often see him laughing even by himself.</td>
<td>-0.07</td>
<td>0.56</td>
<td>-0.38</td>
<td>0.79</td>
<td>0.47</td>
</tr>
</tbody>
</table>
5- Satisfaction with management

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH1) With the way my boss organizes the work of my industry.</td>
<td>-0.18</td>
<td>0.41</td>
<td>-0.48</td>
<td>0.46</td>
<td>0.80</td>
</tr>
<tr>
<td>SCH2) With my boss's interest in my work.</td>
<td>-0.21</td>
<td>0.41</td>
<td>-0.48</td>
<td>0.41</td>
<td>0.84</td>
</tr>
<tr>
<td>SCH3) With the understanding between me and my boss.</td>
<td>-0.21</td>
<td>0.48</td>
<td>-0.60</td>
<td>0.56</td>
<td>0.92</td>
</tr>
<tr>
<td>SCH4) With the way my boss treats me.</td>
<td>-0.24</td>
<td>0.54</td>
<td>-0.64</td>
<td>0.58</td>
<td>0.92</td>
</tr>
<tr>
<td>SCH5) With my boss's professional ability.</td>
<td>-0.33</td>
<td>0.44</td>
<td>-0.51</td>
<td>0.42</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Source: Authors' own elaboration
Note: Items with the suffix "_rev" had their scales reversed (1→7, 2→6, 3→5, 4→4, 5→3, 6→2 e 7→1);

The assertive HAD1, HAD2, HAD3, HAD4, HAD7, HAF1, HAG3, HAG4, HAG5, HAG6, HAG8, HAP3 and HAP4 presented a low factor loading with their respective constructs and were eliminated, interspersed by repeated data processing, until the measurement model meets the necessary requirements for the measurements to be considered satisfactory for the hypothesis testing.

### 4.3 STRUCTURAL MODEL ASSESSMENT

This model assumes that humor styles predict satisfaction with management, that employee performance is a consequence of satisfaction with management. Figure 3 shows the path indices between humor styles, satisfaction with management and job performance, to analyze the hypotheses formulated.

As shown in Figure 3, we identified a positive and significant relationship between affiliative humor and satisfaction with management (p<0.05), which does not allow us to reject hypothesis 1 (“Affiliative humor is positively related to satisfaction with management”). Contrary to expectations, self-promoting humor also had a positive and significant relationship with satisfaction with management (p<0.01), which leads to the rejection of hypothesis 2 (“self-promoting humor is negatively related to satisfaction with management”).
The relationship between aggressive humor and satisfaction with the boss was negative and highly significant (p<0.001), fact indicating the non-rejection of hypothesis 3 (“aggressive humor is negatively related to satisfaction with management”). It is noteworthy that the coefficient of paths between the constructs “aggressive humor” and “satisfaction with management” was -0.41, and that means 16.81% (R²=0.1681) of dissatisfaction with leadership was associated with the use of aggressive humor.

The result of the relationship between self-deprecating humor and satisfaction with management was negative and significant (p<0.05), which does not allow to reject hypothesis 4 (“self-deprecating humor is negatively related to satisfaction with management”). It is also worth noting that the path coefficients previously presented between the constructs indicate the contribution (R²) of each style of humor for satisfaction with management: 1.44% of affiliative humor, 8.41% of self-promoting humor, 16.81% of aggressive humor and 1.69% of self-deprecating humor.

Finally, hypothesis 5 (“satisfaction with management is positively related to job performance”) could not be rejected either, given the positive and significant relationship between satisfaction with management and job performance (p<0.05).

5 DISCUSSION OF RESULTS

The results presented suggest that there is a positive and significant relationship between positive humor styles and satisfaction with management, whereas this relationship is negative and significant for negative styles. When analyzing the literature, it is possible to notice that the positive humor style of the leader is positively correlated to the interpersonal relationship with the employees (DECKER; HONG; THOMAS, 2011), affective commitment and follower identification (HUGHES; AVEY, 2009). Although it is assumed that the perceived quality of the leader-led relationship is promoted by a positive humor style and made difficult by a negative style, the empirical evidence is inconclusive (CANN; ZAPATA; DAVIS, 2011; ROMERO; CRUTHIRDS, 2006; WISSE; RIETZSCHEL, 2014; WOOD; BECHMANN; ROSSITER, 2011). Given this research gap, this study examined the effects of humor styles on individuals’ relationships with their leaders.

Analysis of the results indicates that leaders’ positive humors are important predictors of leadership satisfaction. Regarding affiliative Humor, this result complements the studies by Romero and Arendt (2011) and Wisse and Rietzschel (2014), which pointed to a positive relationship between such style and another facet of job satisfaction, satisfaction with co-workers. The literature indicates that this positive relationship can be explained by considering that the use of this non-hostile humor reduces interpersonal conflicts, and provides a healthy work environment (MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003), in addition to reducing social distance by generating the perception of the leader as a member of the group (ROMERO; CRUTHIRDS, 2006).

Although previous studies have shown that individuals who use affiliative humor are more adored and admired than those who use self-promoting humor (MARTIN, 2007; MARTIN; LASTUK; SCHERMER; JEFFERY; VERNON; VESELKÁ, 2012; ROMERO; ARENDT, 2011; WISSE; RIETZSCHEL, 2014; YIP; MARTIN, 2006), The present research detected, among the positive styles, a stronger and more significant relationship between self-promoting humor and satisfaction with management. Contrary to expectations, self-promoting humor correlated positively with satisfaction with management, which may be related to the fact that this style involves leaders who use humor to motivate their subordinates in the face of adversity. It is worth mentioning that hypothesis 2 of the research assumed a negative relationship between self-promoting humor and satisfaction with management, in convergence with the study by Wisse and Rietzschel (2014), which indicated that leaders using intrapsychic styles are generally less adored and respected. However, the result found is similar to
previous research (CANN; ZAPATA; DAVIS, 2011), this indicates that this style, which is conducive to minimizing conflicts, is associated with higher levels of satisfaction.

Regarding negative styles, the results indicated that both aggressive and self-deprecating humor are important antecedents of dissatisfaction with management, fact similar to the one exposed in the study by Cann et al. (2011), which related the use of these styles to reduced satisfaction with interpersonal relationships. It is worth reiterating that the literature is still scarce regarding the harmful effects of humor in organizations, given the emphasis on positive effects. Specifically, aggressive humor was cited as the largest and most significant predictor of dissatisfaction with management. The results show that 16.81% of dissatisfaction with management was explained by the use of the aggressive style. This finding may be supported by previous studies, which suggested that interacting with individuals with aggressive humors can have a particularly negative effect on the quality of interpersonal relationships (BIPPUS, 2003; DECKER; ROTONDO, 2001) and therefore on satisfaction with co-workers (ROMERO; ARENDT, 2011).

An explanation found in the literature for self-deprecating humor also sets up as an antecedent of dissatisfaction with leadership refers to the inherent risk of using this style: what may initially seem funny may expose low self-esteem and emotional neediness (FABRIZI; POLLIO, 1987, MARTIN; PUHLIK-DORIS; LARSEN; GRAY; WEIR, 2003; ROMERO; ARENDT, 2011). On the other hand, this result differs from the idea that leaders with such a style aim to become more accessible, and this may be beneficial to interpersonal relationships (ROMERO; CRUTHIORS, 2006).

It should also be noted that recent studies on humor at work have not found statistically significant relationships regarding the perceived quality of the leader-follower relationship for self-promoting and self-deprecating humor styles (ROMERO; ARENDT, 2011; WISSE; RIETZSCHEL, 2014), which suggests that such styles do not constitute important predictors of satisfaction with management. However, the results of the present research suggest that both intrapsychic styles are configured as important antecedents of satisfaction with management.

Finally, the results indicated a positive and significant correlation between the satisfaction with management and the individual performance of the subordinates. However, only 1.69% of individual performance could be explained via job satisfaction. The literature explains that this weak recurring correlation can be explained by the number of other variables involved in this relationship (GUZZO; SHEA, 1992), for example, learning support and organizational commitment. In this research, the small prediction may have been affected because the model included only one dimension of job satisfaction. Another possible explanation refers to the idea that the satisfaction variable can indirectly influence individual performance by reducing negative occurrences related to organizational behavior, such as: turnover, absenteeism and stress (WRIGHT; KIM, 2004).

Overall, the results suggest that positive leadership styles are important antecedents of leadership satisfaction, while negative styles can determine dissatisfaction with the boss, and satisfaction with the leader enhances the individual performance of those being led.

6 FINAL CONSIDERATIONS

The research carried out has some limitations that correspond to suggestions for future research. First, the humor scale used was based on a questionnaire in which individuals should answer about their own humor, however in the present survey the questions were adjusted for employees to answer about their leaders’ humor. In addition, the original scale is in the English language and, to obtain the Brazilian Portuguese version, two translation processes were required, which may have caused interference with data processing. It is also worth noting that a greater number of specific style assertions were eliminated, from which important information can be extracted for a future scale.
Second, since the leader’s humor have been set as important predictors of satisfaction with management, further studies may further explore this relationship between the constructs. Given that people do not have a single style of humor and possibly, the use of these styles alterations and variations throughout life, future research can profile leaders with a mix of styles through cluster analysis.

Third, the study is limited to analyzing satisfaction with management, to the detriment of other dimensions of job satisfaction. Given that humor styles can impact other dimensions as well, future research may explore the other facets of the job satisfaction construct.

Fourth, to measure individual performance, we used the company’s 360º assessment. Although the above-mentioned limitation of leader-follower unilateral assessment had been overcome, it was not possible to eliminate the subjectivity inherent in this kind of perception-based assessment. For a better interpretation of the results, we recommend that other types of measurements be used in future studies.

Although the present research has presented such limitations, it is important to highlight some practical implications that can contribute to the improvement of human capital management in organizations. First, we hope that the theme studied will help in understanding the effects of humor styles and their consequences on the workplace.

Second, humor can be viewed as a multifunctional management tool, because different styles can trigger behaviors that impact organizational results, either by direct or indirect relationship. Therefore, the humor analysis of leaders who have followers with low levels of satisfaction may be indicative of the need for human resources, for example, leader job rotation or recruiting and selecting new leaders.

Third, given that the organizational environment is highly unstable, working with leaders who adopt positive, humorous attitudes, as a coping mechanism to deal with corporate stress, certainly increase admiration and satisfaction with management which, in turn, can trigger various other behaviors, for example, commitment and organizational climate.

Finally, although there are positive effects associated with moderate use of aggressive humor and self-deprecating humor, caution is needed when using these negative styles, as a humorous act can characterize moral harassment, a subject in evidence in the workplace.

REFERENCES

ALBUQUERQUE, A. S. Bem-Estar Subjetivo e sua relação com personalidade, coping, suporte social, satisfação conjugal e satisfação no trabalho. Tese (Doutorado) - Instituto de Psicologia, Universidade de Brasília, Brasília, 2004.


COELHO JR., F. A. *Suporte à aprendizagem, satisfação no trabalho e desempenho*: um estudo multinível. Tese (Doutorado) - Universidade de Brasília, Brasília, 2009.


MARTINS, M. C. F. Satisfação no trabalho: elaboração de instrumento e variáveis que afetam a satisfação. Dissertação (Mestrado) - Instituto de Psicologia, Universidade de Brasília, Brasília, 1984.


<table>
<thead>
<tr>
<th>Contribution</th>
<th>[Author 1]</th>
<th>[Author 2]</th>
<th>[Author 3]</th>
<th>[Author 4]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definition of research problem</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Development of hypotheses or research questions (empirical studies)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3. Development of theoretical propositions (theoretical work)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4. Theoretical foundation / Literature review</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5. Definition of methodological procedures</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>6. Data collection</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7. Statistical analysis</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Analysis and interpretation of data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>9. Critical revision of the manuscript</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>10. Manuscript writing</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>