INSPIRING MANAGERS: THE MEDIATING ROLE OF ORGANIZATIONAL VIRTUES IN THE RELATION BETWEEN LEADERSHIP AND HUMAN RESOURCE MANAGEMENT PRACTICES

KARLA VELOSO COURA
UNIVERSIDADE DE BRASÍLIA (UNB)

GISELA DEMO
UNIVERSIDADE DE BRASÍLIA (UNB)

FERNANDA SCUSSEL
UNIVERSIDADE FEDERAL DE SANTA CATARINA (UFSC)

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1. INTRODUCTION

One of the main challenges faced by human resource management has been the promotion of healthier work environments, with the purpose of enhancing the level of performance of the empolyees without compromising their work balance (Zheng, Graham, Epitropaki, & Snape, 2020). In a similar effort, research inspired by positive psychology focus on health and quality of life in contrast to sickness and suffering, emphasizing the support for workers in their path for greater well-being, encompassing mental, social and emotional aspects (Singh, David, & Mikkilineni, 2018). Literature recognizes that this path has been contributive to the search of both greater professional fulfillment and business growth (Thompson, Buch, & Glasø, 2020).

Leadership plays a major role in this scenario, orchestraging strategies, policies and practices for a result-based management, particularly in times of crisis and increasing resource limitation (Ayentimi, Burgess, & Brown, 2018). These conditions require the leader to be a model of inspiration and good examples for employees (Buengeler, Leroy, & De Stobbeleir, 2018), context in which the leader must direct his/her practices for the promotion of organizational virtues (Rego, Ribeiro, & Cunha, 2010). Organizational virtues represent the beliefs of employees in relation to an ethical and moral conduct, underlining positive behaviors at work, which will benefit the workers and the management practices (Cameron, Bright, & Caza, 2004; Gomide Jr, Vieira, & Oliveira, 2016).

Along with leadership, human resource managemet practices portray a paramount function in promoting positive attitudes, motivation and engagement in the workplace (Aktar & Pangil, 2018). Scholars recognize human resource management practices as a translation of the organizational strategy and its politics, objectives and guidelines, enabling the sum of efforts to achieve goals at the individual, group and organizational levels (Vakola, Soderquist, & Pratascos, 2007).

Although literature signalizes the relevance of leadership, organizational virtues and human resource management practices for a healthy, functional and effective organizational management, as well as the connection between these three constructs, such association remains unexplored, engendering a literature gap. Therefore, we propose a research model comprising the three variables to pursue the main objective of this paper, which is to test a structural model of mediation between leadership and human resource management, being organizational virtues the mediating variable. This test also enables us to analyze (i) the effect of leadership on organizational virtues, (ii) the effect of organizational virtues on human resource management practices and (iii) the effect of leadership on human resource management practices.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The scientific area of human resource management (HRM) has been developing its theory through the years, based on contributions from economics, finance, psychology and strategy, among others, being the behavioral perspective a growing trend, in which organizations seek an alignment between organizational strategy and other functional strategies in order to direct behaviors (Bianchi, Quishida, & Foroni, 2017). Although this topic is not a recent concern, as Legge (1995) has long advocated by a paradigm shift, arguing that employees are more than resources, Demo, Fogaça and Costa (2018) explain there are questions to be addressed regarding the defense of individuals as protagonists in the workplace, which will lead companies to better results. Thus, human resource management takes on a strategic role.

Leadership has an important role in this context, as it is the result of the relationship between the leader and the team members, a topic of major impact on HRM literature, since the

leader is a connection between organizational strategy and HRM (Bianchi et al., 2017). Leadership has been traditionally understood as a relationship of power, in which the leader is persuasive and influential, leading the members of a team to achieve the collective goals (Bass, 1990). The concept of leadership has evolved from an authoritarian posture to the influential behavior, finally including interdependences between individuals and collaboration (Bianchi et al., 2017). In a contemporary perspective, leadership is a complex and multidimensional concept that arises from the relationships the leader develops with the organizational environment.

In this scenario, we discuss the role of organizational virtues and its contribution to the improvement of the workplace and the social relations it embraces (Bright, Cameron, & Caza, 2006; Cameron et al., 2004; Caza, 2004). Organizational virtues are "the set of befiefs of an employee that the organization he works for has the capacity to manage its relationships truthfully, to fulfill the commitments in the future and to sacrifice its interests in order to reach the interests of its employees" (Gomide Jr. et al., 2016, p. 305). This concept covers individual and collective actions, besides the organizational culture and processes (Cameron et al., 2004), positively affecting the organizational capacity of dealing with adverse situations that could be detrimental to performance (Bright et al., 2006).

According to Bright et al. (2006), organizational virtuousness works as a facilitator of positive organizational behavior, promoting actions in the collective level that would be hard to be accomplished in the individual level. This content finds convergence with the perspective defended by Legge (1995), Armstrong (2014) and Demo et al. (2018) for human resource management. As these scholars agree, the HRM area must establish the strategies that will set the tonic of the organizational culture and define the guidelines to the elaboration of the politics that will, for their turn, be operationalized through the practices.

Martin-Alcázar, Romero-Fernández and Sánchez-Gardey (2005) distinguished the terms human resources strategies, politics and practice. The strategies define the guidelines for the workforce management – the macro level of HRM. The politics coordinate the practices so they are coherent and follow the same direction, working as the meso level. Lastly, the practices, inspired by the politics, are the actions, routines and processes effectivelly executed by the organization, being the micro level of HRM. As proposed by Demo et al. (2018), there is an interplay between strategies, politics and practices. However, the understanding of the effects of each of these elements demands the analysis of a specific level. In the present research, we focus on the micro level of human resource management, addressing the HRM practices. In the following, we analyze the possibilities of association between our research variable, which has led us to the development of the hypotheses to be tested in our research model.

2.1 Leadership and Organizational Virtues

Research on organizational behavior has been emphasizing the relevance of using the internal strengths of the organization in order to to improve its outcomes, shedding light into the need of promoting investigations about well-being at work, health and quality of life (Cunha, Rego, & Lopes, 2013). The rise of the concerns about the context of work las led us to look to the environment in which individuals perform their activities, particularly on the role of leaders on this dynamic.

In this context, the responsible leadership must have virtues as a basis, which will lead individuals to feel better at work and develop their activities properly, generating benefits for all the members and the organization (Cameron, 2011). In organizational terms, virtues have brought new meanings to the process of leadership development, either through attitudes and behaviors, or by the adoption and valorization of strengths of character (Gotsis & Grimani, 2015). Hence, leaders must promote virtuous actions, besides providing support for the employees, indicating that the well-being of the team should take precedent over financial performance.

Organizational virtues are also connected to the ethical behavior expected from leaders. Considering that organizational virtues are strongly related to ethics and moral in the organizational environment (Caza, Barker, & Cameron, 2004; Rego et al., 2010), it is reasonable to expert that the behavior of the leader develops a virtuous workplace. In this regard, Manz, Anand, Joshi and Manz (2008) hightlight that, in order to discourage corruption, a significant leadership process must recognize and support organizational virtues.

Additionally, organizations must take advantage of the different types of contributions that leaders can make in the search for greater dissemination and expansion of organizational virtues (Karakas, Sarigollu, & Uygur, 2017). In such a way, literature has been pointing out that future investigation should further explore the relation between leadership and organizational virtues (Ahmed, Rehman, Ali, Ali, & Anwar, 2018), once this association can promote positive behaviors and generate benefits for leaders, emplyees and the organization as a whole (Shahid & Muchiri, 2018). From this, we propose the first hypothesis:

Hypothesis 1 (H₁): leadership is positively related to organzational virtues.

2.2 Organizational Virtues and HRM Practices

Organizational virtuousness is known as a mechanism through which HRM practices conduct to a higher level of positive behavior in the workplace (Pires & Nunes, 2018). Althoug these scholars agree that HRM practices are predictors of organizational virtues, the impact of organizational virtues in such practices remains underexplored. They argue that, since organizational virtues reflect the moral nature and the virtuous aspects of the work context, virtues should precede practices.

Literature already recognizes that organizational virtues enhance the perception of organizational practices (Luo & Chen, 2010). Considering that HRM practices are an element of organizational practices, it is expected that organizational virtues influence HRM practices as well. Similarly, Demo (2010) affirms that, being values and virtues in the core of organizational culture, they will affect the perception of organizational practices, reinforcing our argument that organizational virtuousness can inspire HRM practices.

Furthermore, in the research agenda drawn by Demo et al. (2018), we must focus on the antecedents of HRM practices, since this construct has been traditionally investigated as an independent variable. Likewise, studies indicate the possibility of positive association between virtues and HRM practices, due to the fact that programs that aim to promote ethics and virtues in organizations can establish guidelines for the strategic human resources management, encompacing its politics and practices (Hamrahi, Najafbagy, Musakhani, Daneshfard, & Delavar, 2015). Based on the above discussion, we develop our second hypothesis:

Hypothesis 2 (H₂): organizational virtues are positively related to human resource management practices.

2.3 Leadership and HRM Practices

Human resource management is not a compartmentalized process, demanding a constant interplay between strategy, policies, practices and an effective leadership in order to guide collective behavior into the organizational behavior (Bianchi et al., 2017). In accordance to these scholars, the behavior of a team will be in alignment with the organizational objectives only when the politics and the practices are translated by a leader that acts in name of both the individuals and the organization. In order to contribute with this framework, we shedlight into the relation between leadership and HRM practices.

Research acknowledges that HRM practices improve the level of employee engagement when introduced and managed by a leader that seeks to contribute to the organizational effectiveness in the challenging global environment (Aktar & Pangil, 2018). When there is a match between HRM practices and the behavior of the leader, the relationship employee-

employer will be enhanced, meaning higher commitment by the workers in achieving the organizational goals (Neves, Almeida, & Velez, 2018). In contrast, when HRM practices are innefective, the failures are most of the time attributed to internal communication problems or to the refusal of leaders in supporting such practices (Buengeler et al., 2018). Thus, leaders need to strive to adopt practices that balance the career growth and the employee's well-being (Demo, 2016).

Although previous studies recognize a relation between leadership and HRM practices, the nature of this relationship remains undertheorized. Additionally, Bianchi et al. (2017) indicate a literature gap concerning the role of the leader in the effective implementation of a strategic human resource management. We address this gap by investigating the micro-level of human resource management – the HRM practices (Martin-Alcázar et al., 2005)), investigating the impact of leadership on HRM practices, based on the idea that leadership should encourage and promote the integration between such practices (Ahmed et al., 2018). Considering this discussion, we present the third hypothesis of research:

Hypothesis 3 (**H₃**): leadership is positively related to human resources management practices.

2.4 Leadership, Organizational Virtues and HRM Practices

Considering our purpose of seeking the recognition of the strategic role of the modern human resources management in organizations, we pursue the idea of exploring research variables that affect human resources management practices in order to contribute with the progress of the human resources management literature (Bianchi et al., 2017; Boon, Den Hartog, & Lepak, 2019). Hence, the fourth and last hypothesis of this study aims to analyze the relation between leadership, organizational values and HRM practices in the same research model.

We developed this hypothesis based on the idea that leadership has a major influence on HRM practices (Aktar & Pangil, 2018; Bianchi et al., 2018; Neves et al., 2018). Since literature indicates a connection between organizational virtues and leadership (Gotsis & Grimani, 2015; Karakas et al., 2017), as well as the association between organizational virtues and HRM practices (Pires & Nunes, 2018), we foresee the possibility of organizational virtues acting as mediating variable between leadership and HRM practices. In accordance to the visited studies, in order to the HRM practices be perceived by the employees, the organization must be identified as a place where virtues are necessary to the good development of the leadership (Cameron et al., 2004; Gomide Jr et al., 2016). From this, we built the following hypothesis:

Hypothesis 4 (**H₄**): organizational virtues mediate the relation between leadership and human resources management practices.
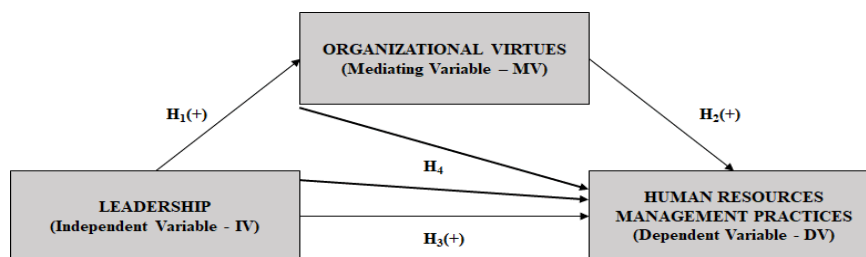
Figure 1 presents the research model.

Figure 1. Research Model

3. METHOD

We tested the hypothesis presented in Figure 1 using structured survey data gathered in Minas Gerais, Brazil. We administered questionnaires face-to-face to a non-probabilistic

4

sample of empolyees from different sectors of the economy (by convenience). The size sample was calculated based on the statistical power of 0.80, as recommended by Cohen (1992). Considering the antecedent variables (leadership as the predictor variable and organizational vitues as the mediating variable) and the five factors, the software GPower indicated a minimum sample of 92 subjects for the statistical power of 0.80 and a minimum sample of 138 for the statistical power of 0.95.

We distributed 1200 questionnaires in private and public companies, reaching 771 responses. The data collected was transferred to the software Statistical Package for the Social Sciences (SPSS). In the data treatment stage, we analyzed data frequency distribution (mean, standard deviation, variance, minimum and maximum). By using the listwise procedude, we excluded 13 questionnaires due to missing values. To identify outliers, we used the Mahalanobis method, following the guidance of Tabachnick and Fidell (2013), excluding 85 outliers.

The obtained sample of 673 subjects were in line with the result from GPower, and sufficiently large to conduct a statistical study based on Structural Equation Modeing – SEM, as literature demands a minimum sample between 100 and 200 subjects (Byrne, 2016; Hair, Black, Babin, Anderson, & Tatham, 2014; Kline, 2015). The next step was to verify the tolerance values, all higher than 0.1; and the value of the variance inflation factor (VIF), all less than 10. These values demonstrates no problems concerning singularity and multicollinearity for the sample (Myers, 1990).

Next, we verified the assumptions for multivariate analysis. We followed Field's (2018) protocol, accessing linearity, homoscedasticity and normality of the data distribution. We used residual graphs and normal probability graphs, as recommended by Hair et al. (2014). No problems were detected. The analysis of multivariate normality was also verified in the AMOS software, without problems, as the asymmetry and kurtosis values were as expected, that is, $|Sk| < 3$ and $|ku| < 10$ (Marôco, 2010).

The final sample comprised 673 workers from companies in the service service, commerce and industry segments, and public sector. Most of the participants were female (51%), between 38 and 47 years old (36%), with Masters' Degree (29%) and an average time of employment between 1 and 5 years (39%).

The research model comprised three variables, namely, leadership, organizational virtues and human resources management practices. To measure **leadership**, we used the Scale of Evaluation of the Managerial Style – SEMS (Melo, 2004), with 19 items divided in three factors: Relationship ($\alpha=0.94$), Task ($\alpha=0.72$) and Situational ($\alpha=0.82$).

To measure **human resources management practices**, we resorted to the Human Resource Policy and Practice Scale – HRPPS (Demo et al., 2014), with 32 items organized in five factors: recruitment and selection ($\alpha=0.81$); involvement ($\alpha=0.91$); training, development and education ($\alpha=0.82$); work conditions ($\alpha=0.81$); performance evaluation and competence ($\alpha=0.86$); and, finally, remuneration and rewards ($\alpha=0.84$).

Finally, to access **organizational virtues**, we used the 24 items of the factors Organizational Goodwill ($\alpha=0.95$) and Organizational Trustworthiness ($\alpha=0.92$) from the Scale of Organizational Moral Virtues Perception Scale – SOMVP (Gomide Jr et al., 2016). In our questionnaire construction, we excluded the third factor of this scale, Organizational Generosity, based on the fact we have private companies' employees in our sample, and private companies constitute a commercial activity based on profits. Since the factor Organizational Generosity is defined as the "spontaneous willingness of the organization in sacrifice its own interests for the unique needs of the employee" (Gomide Jr et al., 2016, p.35), the use of its items would not be coherent. In personal communication, the scholars who developed the scale agreed on the exclusion of this factor considering the scope of the present study and its sample of private companies' employees.

We justify our decision due to the fact the three selected scales are the most recent in the scientific literature and because they present reliable psychometric indices. The final questionnaire, with the three scales sociodemographic questions, comprised 79 items.

We used confirmatory factor analysis via structural equation modeling (SEM) to evaluate the fit of the measurement models for the three variables – leadership, organizational virtues and human resource management practices. Afterwards, we used path analysis to specify and estimate the models of linear relationships between variables in order to test H_1, H_2 and H_3.

Path analysis was also performed by SEM, in the program AMOS. We resorted to the maximum likelihood test, a more robust test regarding violations of normality (Hair et al., 2014; Kline, 2015). Considering the 66 observations and 25 parameters of the proposed research model, we reached 41 degrees of freedom, demonstrating that our research model is a recursive model, classified as identified (just identified). This means our model is suitable for testing by structural equation modeling. Based on this, to test the structural model of mediation (H_4), we once again resorted to path analysis, since it uses bivariate correlations to estimate the relations in a model of structural equations.

4. FINDINGS

With the purpose of answering the hypothesis, the relation between the variables were tested using Structural Equation Modeling, which is formed by two components: (i) the measurement model that demonstrates the way the constructs are represented; and (ii) the structural model, that represents the way the constructs relate to each other (Hair et al., 2014). The measurement model is the first step of the structural model, demonstrating how the variables are represented (Hair et al., 2014). Thus, we performed a Confirmatory Factor Analysis for the three variables of this study in order to access the measurement model and analyze convergent validity, discriminant validity and reliability.

4.1 The Leadership Measurement Model

We start the analysis with an exam of the Scale of Evaluation of the Managerial Syle – SEMS (Melo, 2004). To access the the quality of its items, we must observe the factorial loads as Comrey and Lee (1992) indicate: under 0.32 are poor; between 0.32 and 0.54 are reasonable; between 0.55 and 0.62 are good; between 0.63 and 0.7 are very good; and above 0.7 are excellent. In the analysis of the SEMS, the item L4 was excluded due to poor factorial load (<0.5). The other 18 items vary between 0.63 and 0.82, being 10 excellent and 8 very good, attesting the quality of the items and the internal validity of the scale. All variables were significant considering the p-value <0.01 and the Critical Ratio (CR) greater than | 1.96 |.

To access the model fit, we analyzed the Modification Indexes (MI), and two correlations between errors were added to improve the fit. The correlation between E10 and E11 – in referene to L10 (Stimulates the teams members to share their opinions about work) and L11 (Stimulates the presentation of new ideas at work) – finds theoretical support in the visited literatre. The participative and democratic managerial style is based on relationships and considers not only the organizational goals, but also the opinion of team members as a way to achieve such goals (Olmedo-Cifuentes & Martínez-León, 2014). In this regard, freedom for communication arises in contexts in which decision making considers both the leader and the employess' participation, whereas the leader is seen as an inspiration by other team members (Brow, Treviño, & Harrisson, 2005).

As for the correlation between the errors E16 and E17 – in reference to L16 (Finds time to listen to the members of the group) and E17 (Seems to be accessible to subordinates) – we find theoretical support in Conger and Kanungo (1998). According to them, the leader finds its essence in a charismatic behavior, taking into account the feelings of the subordinates. In addition, the relationship between the leader and the employee must strive for availability and

accessibility, through attitudes of consideration, mutual respect, justice, collective guidance and openness/flexibility (Kimura & Nishikawa, 2016).

According to Hair et al. (2014), a model will have enought information for its appreciation when it presents a normed $\chi 2$ value (CMIN/DF or NC, being CMIN the statistic of the χ^2 and DF the degrees of freedom), Comparative Fit index (CFI) and the Root Mean Square Error of Approximation (RMSEA). As Kline (2015) indicates the values for a satisfactory fit in a structural model should be: NC (CMIN/DF) of 2.0 or 3.0, up to 5.0; CFI equals or above 0.90; and RMSEA bellow 0.5 or, at the maximum, up to 1.0. Additionally, the SRMR (Stardardized Root Mean Square Residual) shows the difference between the observed normalized correlation and the predictable one, being an absolute measure <0.1 (Byrne, 2016; Marôco, 2010).

After the introduction of these alterations, the results indicated that the unifactorial model presented worst fit indexes (NC=11.01; CFI=0.81; RMSEA=0.12; SRMR=0.07) incomparison to the multifactorial model (NC=6.51; CFI=0.90; RMSEA=0.09; SRMR=0.05). The three-factor model has a satisfactory fit, as the values for CFM, RMSEA and SRMR meet the criteria. The NC was not in the reference values since this index is sensitive to sample size and tends to be inflated for bigger samples (Hair et al., 2014), without compromising the analysis. Figure 2 presents the final measurement model for Leadership, obtained from the confirmatory factor analysis of the SEMS.
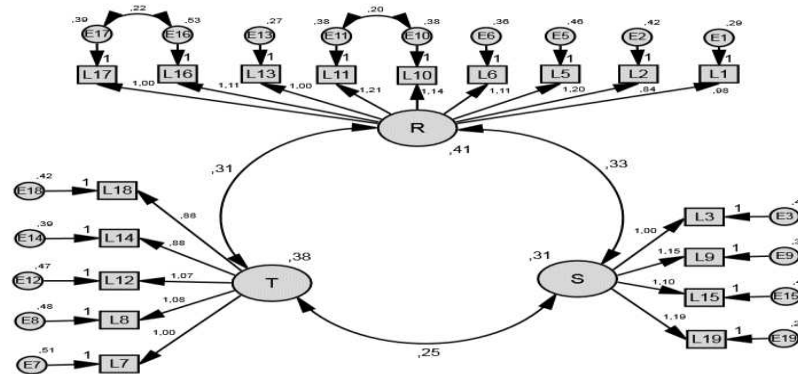

Figure 2. CFA for the Scale of Evaluation of the Managerial Syle – SEMS
Note. $\chi 2(130)=846.49$; $p<0.001$; NC=6.51; CFI=0.90; RMSEA=0.09; SRMR=0.06

The quality of the items that compose the variable and the average variance extracted are considered evidence of convergent validity (Hair et al., 2014). In the case of SEMS, all the items had factorial loads above 0.50 and the extracted variance was 0.45 for Task, 0.55 for Situational and 0.51 for Relationship. Although the factor Task reached 0.45, this is an acceptable value as it is very close to the criteria. Therefore, we confirm the convergent validity for the three dimensions of leadership. We also confirm discriminant validity. As proposed by Fornell and Lacker (1981), the estimated extracted variance of each factor was greater than the square value of the covariance between them, proving that the three factors on this scale measure different constructs.

Reliability was accessed by the Jöreskog Rho, a more precise measure for SEM when compared to Cronbach alfa, based on factor loads and not the observed correlations betwee variables (Chin, 1998). Values superior to 0.7 are considered satisfactory and above 0.8 very satisfactory. The analysis of the Jöreskog Rho for the SEMS's factors indicated $\rho=0.8$ for Task; 0.91 for Relationship; and 0.81 for Situational. All the values are very satisfactory (Chin, 1998), confirming the realiability of the scale.

4.2 The Organizational Virtues Measurement Model
The CFA performed to access the Scale of Organizational Moral Virtues Perception – SOMVP (Gomide Jr et al., 2016) revealed that all the items were between 0.67 and 0.90 – 2

items classified as very good and 22 items as excellent, confirming the quality of the items and the internal validity of the scale. All the items were significant at the 0.01 level and that the CR> | 1.96 |.

Next, we analyzed the MI, identifying two correlations between errors that have led us to add two double arrows to improve the model fit. The relation between E3 and E4 corresponds to the items V3 (acts in an ethical way) and V4 (Distinguishes what is right and wrong), and it is associated to the growing emphasis on ethical and moral in the workplace, demanding the improvement of organizational virtues (Malik & Naeem, 2016). This scenario asks for the adoption of attitudes and behaviors that reflect positivity, protecting the institution from negative consequences (Caza et al., 2004). Moreover, McCullough and Snyder (2000) consider moral goodwill as a key attribute of organizational virtues, underlining what is good, correct and worthy to be cultivated in the organization.

The errors E6 and E7 are connected to the items V6 (Provides precise information about its reality) and V7 (Privides true information about its reality). The purpose of linking good faith and veracity is because organization must be governed by the maximum of truth and authenticity, based on transparency, honesty and integrity (Comte-Sponville, 2009). In this way, it is plausible to say that positive psychology, a stream of research in which virtues are inserted, should not be focused only on fixing what is wrong, but fostering what is right (Seligman, 2002). From this, we understand that precise and true information walk together in the workplace.

Figure 3 illustrates the measurement model for Organizational Virtues after the inclusion of the MI. The unifactorial model showed unsatisfactory indexes (NC=15.43; CFI=0.77; RMSEA=0.15; SRMR=0.07) in comparison to the multifactorial model (NC=7.22; CFI=0.90; RMSEA=0.09; SRMR=0.05). About the absolute index NC, although the result does not fit the criteria, we consider the same justification presented for SEMG's AFC. The NC, as it is very sensitive to size sample, tends to reveal a high value (Hair et al., 2014), which is the case of the present research (N>600).
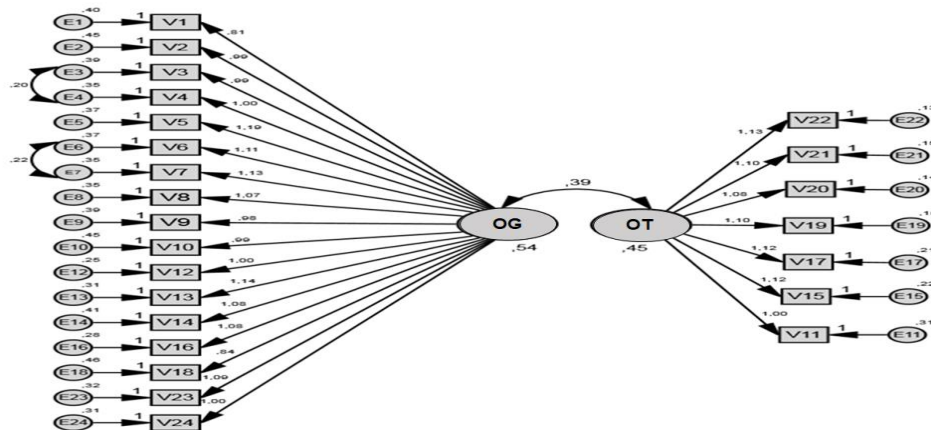

Figure 3. CFA for the Scale of Organizational Moral Virtues Perception – SOMVP
Note. $\chi 2(249)=1796.90$; p<0.001; NC=7.22; CFI=0.90; RMSEA=0.09; SRMR=0.05

Considering the quality of the items, based on the factorial loads above 0.5, and the extracted variance of 0.96 for the factor Organizational Goodwill and 0.95 for the factor Organizational Trustworthiness, above 0.5, we confirm convergent validity. Based on the Fornell-Larcker criteria (1981), we also attest discriminant validity, as the two factors measure different constructs. Regarding reliability, the Jöreskog Rho was ρ=0.96 for the factor Organizational Goodwill and ρ=0.95 for the factor Organizational Trustworthiness, all considered satisfactory as they are above 0.7 (Chin, 1998).

4.3 The Human Resource Management Practices Measurement Model

The 32 items from the Human Resource Policy and Practice Scale – HRPPS (Demo et al., 2014) presented factorial loads between 0.52 and 0.88 (2 were reasonable, 5 very good and 25 excellent). All the items were significant at the 0.01 level, with CR> | 1.96 |. The next step was to check the MI, and six arrows were included to improve the model fit.

In the Recruitment and Selection factor, the items P5 (The organization where I work discloses to candidates information about the phases and criteria of the selection process) and P6 (The organization where I work communicates to candidates their performance at the end of the selection process) have a positive correlation. Since they address the initial and final stages of the process, these items show that the recruitment process must be permeated by ethics and care in evry step, in accordance to Dessler (2010).

For the Involvement factor, three correlations were identified. The first one is between P7 (The organization where I work is concerned with my well-being) and P8 (The organization where I work treats me with respect and attention). These items indicate a fair, respectful and conscientious treatment in all organizational levels to reach a favorable organizational climate (Dibben, Klerk, & Wood, 2011), which, in turn, translates into greater trust in the organization and well-being at work (Horta, Demo, & Roure, 2012). The second association is between P12 (In the organization I work, employees and their managers enjoy the constant exchange of information for the good performance of functions) and P13 (In the organization I work, there is a climate of understanding and trust from the bosses in relation to the employees). This correlation is in line with the ideia defended by Wang, Lu and Liu (2017), in the sense that the organization demonstrates involvement, information sharing and participation in decision-making, scenario in which trust between the parties is a paramount element of the practice.

Lastly, the connection between P13 and P14 (In the organization I work, there is a climate of trust and cooperation between coworkers) indicate the climate of trust and cooperation between bosses and employees and among co-workers. In an environment marked by stress and pressure for results, engagement practices are seen as an effort by the organization to seek healthier relationships between employees and their work (Costa, Demo, & Paschoal, 2019).

The last two arrows were added to the Work Conditions factor. The first one is between P19 (The organization where I work is concerned with my health and quality of life) and P21 (In the organization I work, there are actions and programs to prevent accidents and deal with incidents). Such connection concerns the appropriate conditions of the workplace so the teams can perform their activities, considering the physical and mental health of the employees (Tiecher & Diehl, 2017). This practices comproce accident prevention, incident handling programs and safety and health initiatives. According to the authors, the continuous improvement of work conditions tends to cause greater satisfaction among employees.

The second arrow represent the correlation between P20 (The organization where I work offers me basic benefits; ex: health insurance, transportation aid, food aid, etc.) and P21. These items seems to be essential and required by law in order to enable the helthy functioning of the organization as well as preventing risks (Lírio, Gallon, Costa, & Pauli, 2020).

Figure 4 illustrates the measurement model for HMR practices after the inclusion of the MI. The unifatorial model (NC = 12.54; CFI = 0.64; RMSEA = 0.13; SRMR = 0.10) presented fit indexes worse than the multifactorial one (NC = 4.41; CFI = 0.90; RMSEA = 0.07; SRMR = 0.06). From this, we state that the six-factor structure has a good fit, since all parameters are within the recommended criteria.
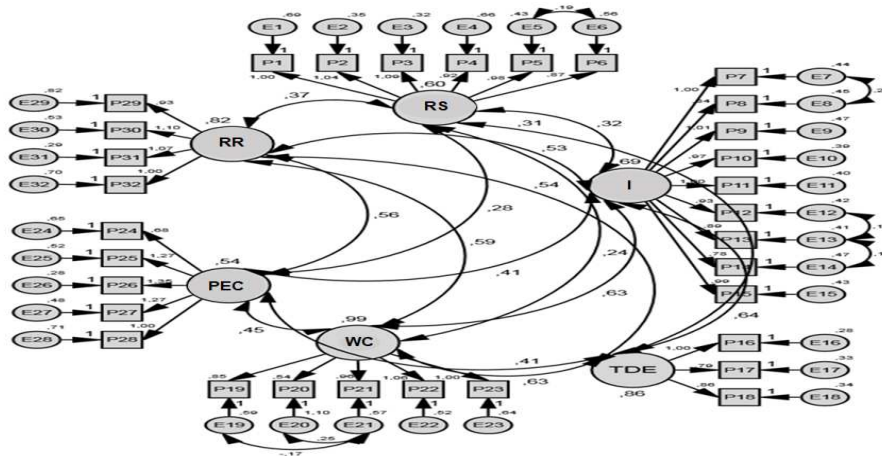
Figure 4. CFA for the Human Resource Policy and Practice Scale – HRPPS
Note. χ2(443)=1951.96; p<0.001; NC=4.41; CFI=0.90; RMSEA=0.07; SRMR=0.06

Concerning convergent validity, all the conditions were satisfied, since the extracted variances were all above 50% or 0.5: RS=0.55; I=0.58; TDE=0.68; WC=0.53; PEC=0.55; and RR=0.60; and the factorial loads were greater than 0.50. All the Jöreskog Rhos were greater than 0.70, confirming the realiablity of the scale. To attest to the discriminant validity, following the recommendation of Fornell-Larcker (1981), we confirmed that the six factors of the scale are, in fact, distinct.

Our analysis of the previous measurement models also addressed the nomological validity of the three scales analyzed. The nomological validity expresses the capacity of a scale to behave in relation to other constructs as proposed by literature (Hair et al., 2014). Hence, we must test if the correlations between the constructs are in alignment to the theory. We confirmed the nomological validity for the above-mentioned scales during the test of the structural model. we observed a significant relation between leadership and organizational virtues (r=0.52, p<0.01), corroborating previous literature (Ahmed et al., 2018; Caza et al., 2004; Gotsis & Grimani, 2015). We also found a significant correlation between leadership and HRM practices (r=0.51, p<0.01), ratifying previous studies (Aktar & Pangil, 2018; Neves et al., 2018). The correlation between organizational virtues and HRM practices was also significant (r=0.71, p<0.01), ratifying previous studies (Luo & Chen, 2010; Pires & Nunes, 2018).

4.4 The Structural Model of Mediation

The final step of our analysis concerns the structural model or path model, which illustrates the relation between the variables in a research model (Hair et al., 2014; Kline, 2015). In this section, we aim to answer the main objective of this paper, which is to test a structural model of mediation between leadership and human resource management, being organizational virtues the mediating variable. These findings enables us to evaluate (i) the effect of leadership on organizational virtues, (ii) the effect of organizational virtues on human resource management practices and (iii) the effect of leadership on human resource management practices. Moreover, the results from this section allows to confirm/reject the hypothesis.

A mediation model explains the different ways in which the antecedent variable influences the criterion variable, being characterized by a relationship that changes the influence of the antecedent variable more or less on the criterion variable (Sousa & Mendonça, 2009). After performing CFA for each variable of the model (all significant, p-value<0.01), we analyzed the modification indexes to access the model fit. We have found a high MI between E10 and E11, the reason why we inserted an arrow between the variables (Figure 5).

Literature theoretically supports the association between Performance Evaluation and Competencies (PEC) and Remuneration and Rewards (RR), corresponding to E10 and E11.

The evaluation of performance and competences must be carried out in a systematic, periodic and impartial manner, revealing aspects that can enhance both the development and the remuneration of employees (Qazi & Jeet, 2017). When performance evaluation contributes to an effective competence development plan that affects the system of remuneration and rewards, instead of being merely punitive, there is a substantial improvement in employee commitment, satisfaction and productivity (Javed, Rashid, Hussain, & Ali, 2019).

The next step was the construction of the path model to test if the variable organizational virtues (OV) mediates the relationship between leadership (L) and human resource management practices (HRMP) – H_4. The validation of the mediation model enabled us to test four conditions simultaneously, as proposed by Baron and Kenny (1986). First, we test if the antecedent variable significantly predicts the mediating variable (the effect of leadership on organizational virtues – H_1). Next, we test if the mediating variable predicts the criterion variable significantly (the effect of organizational virtues on human resource management practices – H_2). Third, we test if the antecedent variable significantly predicts the criterion variable (the effect of leadership on human resource management practices – H_3). Finally, we test if, in the presence of the antecedent variable and the mediating variable, the relation previously found to be significant between antecedent and criterion decreases or disappears (H_4).

All the hypotheses were confirmed based on the results for H_1 (β=0.51; R^2=27%; p-value <0.01), H_2 (β=0.77; R^2=59 %; p-value <0.01) and H_3 (β=0.50; R^2=25%; p-value <0.01). Concerning H_4, the relationship between leadership and HRM practices (β=0.14; p-value <0.01) and between organizational virtues and HRM practices (β=0.70; p-value <0.01) were also significant. The partial mediation was confirmed and the indirect effect was significant (p-value <0.01) and estimated at 0.37. The R^2 regression coefficient was 62%. In other words, leadership and organizational virtues explain 62% of the dependent variable, human resource management practices. According to Cohen (1992), this prediction has a great effect, as it was greater than 26%. Table 1 summarizes these results and Figure 5 illustrates the final mediation model.

Table 1

Hypothesis Test

Hypothesis	Relation	β	R²	Result
H_1	L → OV	0.51**	27%	Confirmed
H_2	OV → HRMP	0.77**	59%	Confirmed
H_3	L → HRMP	0.50**	25%	Confirmed
H_4	L → HRMP	0.14**	62%	Confirmed
	OV → HRMP	0.70**		

Note. **p-value<0,01

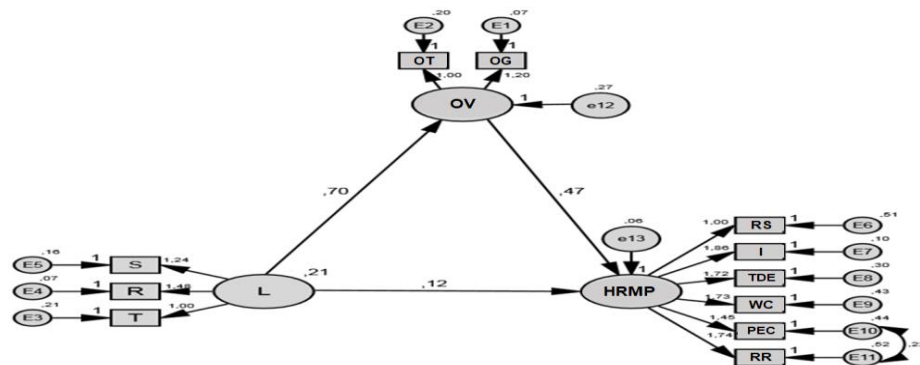*Figure 5.* Structural Model of Mediation
Note. χ2(40)=171.79; p<0.001; NC=4.29; CFI=0.97; RMSEA=0.07; SRMR=0.04

In summary, the results demonstrate that the direct relationship between leadership and HRM practices weakens in the presence of the mediating variable. Hence, the relationship between leadership and HRM practices is not direct, but mediated by organizational virtues.

5. DISCUSSION, CONTRIBUTIONS, LIMITATIONS AND FUTURE RESEARCH

The main objective of this paper was to test a structural model of mediation between leadership and human resource management, being organizational virtues the mediating variable. Since all research hypotheses were confirmed, the structural model was validated. The results confirm that organizational virtues mediate the relationship between leadership and human resource management practices. Such considerations indicate that the leader has the function of highlighting, celebrating and promoting virtuous actions (Cameron et al., 2003), going beyond ethical behavior and embracing virtuosity (Caza et al., 2004; Karakas et al., 2017; Rego et al., 2010), so management practices are more effective in the perception of employees. In this sense, organizational virtues must be recognized and supported by a meaningful leadership process (Manz et al., 2008), being essential for a good relationship between the leader and other team members.

Our findings also confirm the influence of leadership on organizational virtues, filling the gap indicated by Ahmed et al. (2018). As Karakas et al. (2017) proposed, the leader must estimulate the expansion of organizationsl virtues, contributing the improvement of the workplace of his/her team. Consequently, the perception of organizational virtues will increase the perception of organizational practices, including those related to HRM practices (Luo & Chen, 2010). In this sense, organizational virtues also act as a mechanism through which HRM practices lead to higher levels of commitment (Pires & Nunes, 2018). The willingness on the part of the employee to contribute to the organization's performance is reinforced when there is an alignment between the HRM practices and the leader's behavior (Neves et al., 2018), which will ultimately contribute to the company's growth (Aktar & Pangil, 2018; Thompson et al., 2020).

As theoretical contributions, this study presents an unexplored model in the scientific literature, with emphasis on a mediation test. For this reason, it advances in the research streams of human resource management and organizational behavior, particularly regarding investigations that deal with antecedents of HRM practices, since this construct is generally studied as a predictor variable (Demo et al., 2018). We also shed light into the relation between leadership and HRM practices, pursuing the agenda drawn by Bianchi et al. (2017), revealing its drivers related to organizational behavior.

Concerning managerial implications, the present discussion works as a diagnosis to inspire managers to promote a more strategic human resource management by means of more effective leadership (Bianchi et al., 2017). In this scenario, the presence of a strong leadership tends to influence the organizational culture, strengthening the associations between the variables that compose it, such as the organizational virtues and HRM practices. According to Pires and Nunes (2018), management strategies, policies and practices whose contents are guided by altruistic reasons help to extract a richer meaning from the functions performed by the employee. In terms of social implications, we aim to contribute to healthier work environments, which advocate for inspiring leadership, virtuous workplaces and HRM practices that value and develop employees. We believe these efforts will translate into better inter-organizational relationships and a more effective service delivery to customers, citizens and society.

Regarding limitations, we point out the transversal character of the study, so the results are restricted to the investigated sample, preventing possibilities of generalization. However, the variance of the commom method does not explain the results by itself, since the unifactorial models tested in this research did not present a good fit, following the guidance of Byrne (2016), eliminating the problem of the variance of the commom method.

Note that the quantitative nature of the research did not allow capturing aspects of the model that would be essential to understand the phenomena under investigation as a whole, beyond the relations between leadership, the organizational virtues and HMR practices that compose the model. Therefore, we recommend future studies to use longitudinal approaches and multi-method research strategies, seeking the so-called triangulation as a way to better comprehend the objects of the research, as the combination of methods unveil important nuances that numbers by themselves do not show. Furthermore, we encourage the comparison of the results obtained in the different sectors investigated, public and private. In this sense, another limitation lies in the scales used, considering they were not specific for the public and private sectors. Thus, we suggest the validation of specific scales involving the variables in question, in order to cover specificities of each sector.

Finally, we recommend the adaptation and improvement of the model tested in this research, seeking to investigate both the predictive role of organizational virtues and the mediating role of virtues and HRM practices in different relations of prediction, involving other gaps such as organizational citizenship, organizational identity and resilience at work, as previously proposed by Gomide Jr et al. (2016).

6. CONCLUSION

This study has achieved its main purpose, since the four hypotheses of the research model were confirmed, revealing the effect of leadership on organizational virtues and the effect of organizational virtues on HRM practices, besides confirming the mediating role of organizational virtues on the relation between leadership and HRM practices. This research represents a seminal step in the investigation of the joint relationship between these variables, through a structural mediation model, and intends to inspire new investigations that consolidate the tests of relationships between different variables of organizational behavior. Beyond the contributions of this paper, our findings open opportunities for new perspectives and different possibilities of relating leadership to organizational variables, identifying potential mediators and, from this, promoting more effective HRM practices. In organizational contexts where more and more crises need to be faced, virtues need to be stimulated and people need to be valued, better results, both at the individual and organizational level, will be the result of an increasingly humanized and responsible people management.

REFERENCES

Ahmed, I., Rehman, W. U., Ali, F., Ali, G., & Anwar, F. (2018). Predicting employee performance through organizational virtuousness: Mediation by affective well-being and work engagement. *Journal of Management Development*, *37*(6), 493-502.

Aktar, A., & Pangil, F. (2018). Mediating role of organizational commitment in the relationship between human resource management practices and employee engagement: Does black box stage exist?. *International Journal of Sociology and Social Policy*, (just-accepted), 00-00.

Armstrong, M. (2014). *Armstrong's handbook of human resource management practice* (11ª ed.). London: Kogan Page.

Ayentimi, D. T., Burgess, J., & Brown, K. (2018). HRM development in post-colonial societies: The challenges of advancing HRM practices in Ghana. *International Journal of Cross Cultural Management*, *18*(2), 125-147.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

Bass, B. M. (1990). *Bass and stogdill's handbook of leadership: theory, research, and managerial applications* (3rd ed.). New York: Free Press.

Bianchi, E. M. P. G., Quishida, A., & Foroni, P. G. (2017). A Leader's Role in Strategic People Management: Reflections, Gaps and Opportunities. *Revista de Administração Contemporânea*, *21*(1), 41-61.

Boon, C., Den Hartog, D. N., & Lepak, D. P. (2019). A systematic review of human resource management systems and their measurement. *Journal of management*, *45*(6), 2498-2537.

Bright, D. S., Cameron, K. S., & Caza, A. (2006). The amplifying and buffering effects of virtuousness in downsized organizations. *Journal of Business Ethics*, *64*(3), 249-269.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*(2), 117-134.

Buengeler, C., Leroy, H., & De Stobbeleir, K. (2018). How leaders shape the impact of HR's diversity practices on employee inclusion. *Human Resource Management Review*, *28*(3), 289-303.

Byrne, B. M. (2016). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.

Cameron, K. (2011). Responsible leadership as virtuous leadership. In *Responsible Leadership* (pp. 25-35). Springer, Dordrecht.

Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist*, *47*(6), 766-790.

Caza, A., Barker, B. A., & Cameron, K. S. (2004). Ethics and ethos: The buffering and amplifying effects of ethical behavior and virtuousness. *Journal of Business Ethics*, *52*(2), 169-178.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, *295*(2), 295-336.

Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, *112*(1), 155-159.

Comrey, A. L., & Lee, H. B. (1992). A First Course in Factor Analysis. 2nd Edn. Hillsdale, NJ: L.

Comte-Sponville, A. (2009). *Pequeno tratado das grandes virtudes* (2a ed., E. Brandão, Trad.). São Paulo: Martins Fontes.

Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Sage Publications.

Costa, A. C., Demo, G., & Paschoal, T. (2019). Do human resources policies and practices produce resilient public servants? Evidence of the validity of a structural model and measurement models. *Revista Brasileira de Gestão de Negócios*, *21*(1), 70-85.

Cunha, M. P., Rego, A., & Lopes, M. P. (2013). Comportamento organizacional positivo. *Análise Psicológica*, *4*(31), 313-328.

Demo, G. (2010). Políticas de gestão de pessoas, valores pessoais e justiça organizacional. *Revista de Administração Mackenzie*, *11*(5), 55-81.

Demo, G. (2016). Políticas e práticas de gestão de pessoas: possibilidades de diagnóstico para gestão organizacional. In Mendonça, H., Ferreira, M. C., Neiva, E. R. (eds.), *Análise e diagnóstico organizacional: teoria e prática* (pp. 117-147). São Paulo: Vetor.

Demo, G., Fogaça, N., & Costa, A. C. (2018). Políticas e práticas de gestão de pessoas nas organizações: cenário da produção nacional de primeira linha e agenda de pesquisa. *Cadernos EBAPE. BR*, *16*(2), 250-263.

Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. (2014). Políticas e práticas de recursos humanos. In Siqueira, M. M. M. (Org.), *Novas Medidas do Comportamento Organizacional: Ferramentas de Diagnóstico e de Gestão* (pp. 240-245). Porto Alegre: Artmed.

Dessler, G. (2010). *Administração de Recursos Humanos*. (2ed.). São Paulo: Prentice Hall.

Dibben, P., Klerk, G., & Wood, G. (2011), *Employment Relations*, CIPD, London

do comportamento organizacional: Ferramentas de diagnóstico e de gestão (pp. 139-143). Porto Alegre: Artmed.

Field, A. (2018). *Descobrindo a estatística usando o SPSS*. Porto Alegre: Artmed.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Gomide Jr, S., Vieira, L. E., & Oliveira, Á. D. F. (2016). Percepção de virtudes morais organizacionais: evidências de validade de um instrumento de medida para o contexto brasileiro. *Revista Psicologia Organizações e Trabalho*, *16*(3), 298-307.

Gotsis, G., & Grimani, K. (2015). Virtue theory and organizational behavior: an integrative framework. *Journal of Management Development, 34*(10), 1288-1309.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2014). Multivariate data analysis. Essex, England.

Hair, J., Babin, B., Money, A., & Samouel, P. (2005). *Fundamentos de métodos de pesquisa em administração*. Bookman Editora.

Hamrahi, M., Najafbagy, R., Musakhani, M., Daneshfard, K., & Delavar, A. (2015). Factor effecting on promoting organizational virtuousness in Iran state agencies. *Indian Journal of Fundamental and Applied Sciences*, *5*(1), 4772-4779.

Horta, P., Demo, G., & Roure, P. (2012). Políticas de Gestão de Pessoas, confiança e bem-estar no trabalho: estudo em uma multinacional. *Revista de Administração Contemporânea*, *16*(4), 566-585.

Javed, M., Rashid, M. A., Hussain, G., & Ali, H. Y. (2019). The effects of corporate social responsibility on corporate reputation and firm financial performance: Moderating role of responsible leadership. *Corporate Social Responsibility and Environmental Management*, 1-15.

Karakas, F., Sarigollu, E., & Uygur, S. (2017). Exploring the diversity of virtues through the lens of moral imagination: A qualitative inquiry into organizational virtues in the Turkish context. *Journal of Business Ethics, 141*(4), 731-744.

Kimura, T., & Nishikawa, M. (2016). Ethical leadership and its cultural and institutional context: An empirical study in Japan. *Journal of Business Ethics*, 1-18.

Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.

Legge, K. (1995). *Human resource management: Rethorics and realities*. London: Macmillan.

Lirio, A. B., Gallon, S., Costa, C., & Pauli, J. (2020). Percepções da qualidade de vida no trabalho nas diferentes gerações. *Gestão & Regionalidade*, *36*(107).

Luo, X., & Chen, W. (2010). The concept and realization of organizational virtuousness. Working paper, Proceedings of 2010 *International Conference on Management Science and Engineering*.

Malik, S. Z., & Naeem, R. (2016). Organizational Virtuousness, Perceived Organizational Support and Organizational Citizenship Behavior: A Mediation Framework. *Journal of Behavioural Sciences*, *26*(1), 113-129.

Manz, C., Anand, V., Joshi, M., & Manz, K. (2008). Emerging paradoxes in executive leadership: A theoretical interpretation of the tensions between corruption and virtuous values. *Leadership Quarterly*, *19*, 385-392.

Marôco, J. (2010). *Análise de equações estruturais: Fundamentos teóricos, software & aplicações*. ReportNumber, Lda.

Martín-Alcázar, F., Romero-Fernández, P. M., & Sánchez-Gardey, G. (2005). Strategic human resource management: integrating the universalistic, contingent, configurational and contextual perspectives. *International Journal of Human Resource Management*, *16*(5), 633-659.

McCullough, M. E., & Snyder, C. R. (2000). Classical sources of human strength: Revisiting an old home and building a new one. *Journal of Social and Clinical Psychology*, *19*(1), 1-10.

Melo, E. A. D. A. (2004). Escala de avaliação do estilo gerencial (EAEG): desenvolvimento e validação. *Revista Psicologia Organizações e Trabalho*, *4*(2), 31-62.

Myers, R. H. (1990). Detecting and combating multicollinearity. *Classical and modern regression with applications*, 368-423.

Neves, P., Almeida, P., & Velez, M. J. (2018). Reducing intentions to resist future change: Combined effects of commitment-based HR practices and ethical leadership. *Human Resource Management*, *57*(1), 249-261.

Olmedo-Cifuentes, I., & Martinez-León, I. M. (2014). Influence of management style on employee views of corporate reputation. Application to audit firms. *BRQ Business Research Quarterly*, *17*(4), 223-241.

Pires, M. L., & Nunes, F. (2018). The mediating role of virtuousness in human resource management and job outcomes. *Revista de Administração de Empresas, 58*(4), 380-392.

Qazi, S., & Jeet, V. (2017). Impact of prevailing HRM practices on job satisfaction: A comparative study of public and private higher educational institutions in India. *International Journal of Business and Management*, *12*(1), 178-187.

Rego, A., Ribeiro, N., & Cunha, M. P. (2010). Perceptions of organizational virtuousness and happiness as predictors of organizational citizenship behaviors. *Journal of Business Ethics, 93*(2), 215-235.

Seligman, M. E. (2002). Positive psychology, positive prevention, and positive therapy. *Handbook of positive psychology*, *2*(2002), 3-12.

Shahid, S., & Muchiri, M. (2018). Positivity at the workplace: Conceptualising the relationships between authentic leadership, psychological capital, organisational virtuousness, thriving and job performance. *International Journal of Organizational Analysis*, 1-30.

Singh, S., David, R., & Mikkilineni, S. (2018). Organizational virtuousness and work engagement: Mediating role of happiness in India. *Advances in Developing Human Resources, 20*(1), 88-102.

Sousa, I. F. D., & Mendonça, H. (2009). Burnout em professores universitários: impacto de percepções de justiça e comprometimento afetivo. *Psicologia: teoria e pesquisa*, *25*(4), 499-508.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics (6th ed.)*. San Francisco, CA: Allyn and Bacon.

Thompson, G., Buch, R., & Glasø, L. (2020). Abusive retaliation of low performance in low-quality LMX relationships. *Journal of General Management*, *45*(2), 57-70.

Tiecher, B., & Diehl, L. (2017). Qualidade de vida no trabalho na percepção de bancários. *Pensamento & Realidade*, *32*(1), 41.

Vakola, M., Soderquist, K. E., & Pratascos, G. P. (2007). Competence management in support of organizational change. *International Journal of Manpower, 28*(3/4), 260-275.

Wang, H., Lu, G., & Liu, Y. (2017). Ethical leadership and loyalty to supervisor in china: The roles of interactional justice and collectivistic orientation. *Journal of Business Ethics*, *146*(3), 529-543.

Zheng, Y., Graham, L., Epitropaki, O., & Snape, E. (2020). Service leadership, work engagement, and service performance: The moderating role of leader skills. *Group & Organization Management*, *45*(1), 43-74.