



The Power of Ethical Leadership: Fueling Job Satisfaction, Thriving, Performance, and Innovative Behaviors

Carolina Carlos^{*1}, Andreia Vitória¹, Isabel Dimas²

¹GOVCOPP, University of Aveiro, Department of Economics, Management, Industrial Engineering, and Tourism, Portugal

²CeBER, University of Coimbra, Faculty of Economics, Portugal

Abstract

Empirical research relating ethical leadership, job satisfaction and thriving at work is scarce. Therefore, this research aims to explore the impacts of the employee's perception of ethical leadership on their job satisfaction and thriving at work and to examine the impacts of thriving on innovative behaviors and employee performance. We assessed the model within a sample of 216 employees from different sectors. Partial least squares structural equation modelling (PLS-SEM) was used, and results demonstrate that ethical leadership positively impacts employees' job satisfaction and that the employee's job satisfaction also positively impacts their thriving at work. It has also been verified that job satisfaction fully mediates the relationship between ethical leadership and thriving at work. This research emphasizes the significance of the role of ethical leadership within organizations, particularly for employees' behaviors.

Keywords: Leadership; organizational behaviors; employees; ethical leadership

Acknowledgment:

This work was financially supported by the Research Unit on Governance, Competitiveness and Public Policies (UIDB/04058/2020) + (UIDP/04058/2020) + (BD/00303/2023) funded by national funds through FCT - Fundação para a Ciência e a Tecnologia.

Introduction

Nowadays, more than ever, the importance of ethical behaviors in organizations is underscored. The harmful consequences of unethical behaviors and decisions relapse on the organization's image and credibility, as well on several stakeholders, namely employees. The more an organization "implicitly and explicitly incorporates ethics into its decision-making processes" (Singhapakdi & Vitell, 2007, p. 287), the more institutionalized ethics will be. The implementation of ethical practices and standards comes mainly from the conduct of leaders since they play a crucial role in organizations, setting organizational strategies and policies (Avolio & Gardner, 2005).

Ethical leaders are characterized as individuals who defend and live up to their principles, communicating with their employees through ethical standards and responsibility. An ethical leader is described as an honest, reliable, righteous, and selfless person (Brown & Treviño, 2006) who is perceived as a role model with an emphasis on standards and moral conduct practice. Therefore, ethical leaders promote trust in organizations, increasing employees' involvement in their work by adopting an honest, trustworthy, and virtuous stance (Avolio et al., 2004).

Today, more than ever, leaders face numerous challenges arising from internal and external changes that defy their knowledge and capacity to perform their role (Hannah et al., 2008). As a result of current organizational changes, ethics as a decision-making element has gained greater prominence and importance for managers, researchers and society in general (Robertson et al., 2002), mainly due to the positive impact of this type of leadership on the organizational performance and on the conduct and behavior of employees (Treviño et al., 2003).

Despite being aware that ethical leadership does not produce universal positive effects on followers (Keck et al., 2020), there is evidence of its benefits in fostering sustainable organizational goals, such as endorsing work-life balance, health and safety at work, improving working conditions, and nurturing inclusion and diversity (Zhu et al., 2004). Concomitantly, an ethical culture in organizations has also been linked outcomes on the employee and organizational level, namely trust in organizations and employee wellbeing and innovation and organizational performance (Roy et al., 2024).

Consequently, ethical leadership will foster employees' job satisfaction (Brown et al., 2005), as well as a positive organizational climate, which is more likely to be plenty of positive interpersonal relationships, helping employees thrive at work (feeling of vitality and learning) (Spreitzer et al., 2005). Moreover, creating this favorable organizational climate may also impact both employees' performance and creativity in innovative behaviors (Paterson et al., 2014).

Ethical leadership serves as a cornerstone for supporting a positive organizational environment, which calls for understanding on the relevance of this leadership style. By promoting integrity and fairness behaviors, ethical leaders will enhance their employee's job satisfaction and performance, while also creating conditions for their thriving at work and innovative work behaviors. As organizations and their leaders navigate complex challenges, the importance of ethical leadership in driving positive workplace outcomes remains paramount.

Therefore, this research aims to explore the impacts of the perception of ethical leadership on employee job satisfaction and thriving, further exploring the impacts of thriving at work on innovative behaviors and employee performance. The proposed hypothetical theoretical model is shown in Figure 1.

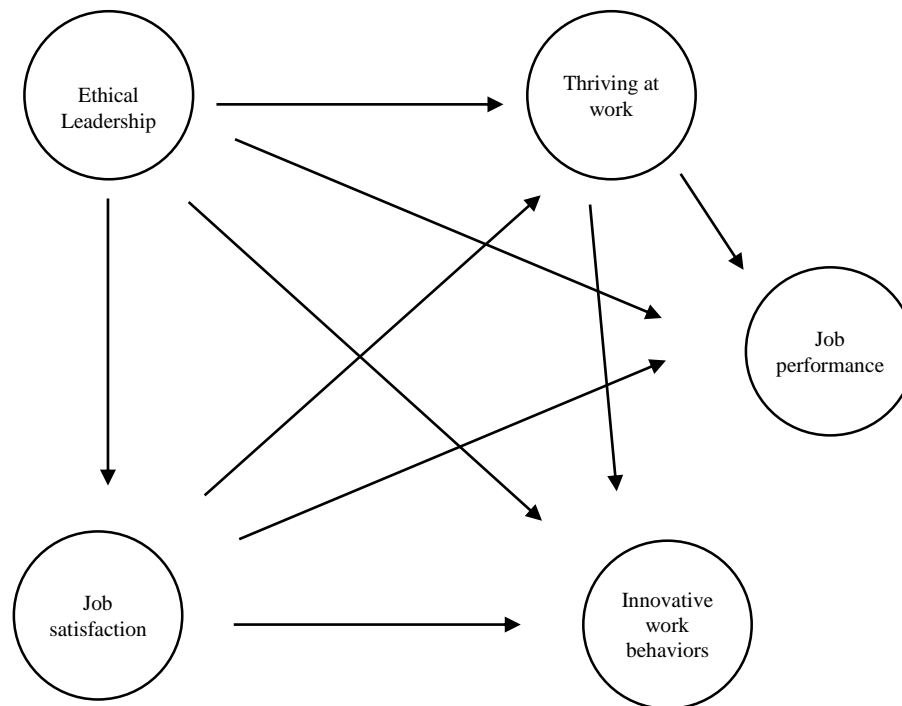


Figure 1- Proposed hypothetical theoretical model

This study increases value to the limited evidence on the benefits of the ethical leadership in the Portuguese context. In addition, highlights the relevance of positive outcomes that arise from an ethical leadership style. Our research has several significant implications. Reinforces the importance of ethical leadership, particularly regarding its impact on job satisfaction while also delving into the relationship between ethical leadership and thriving at work, adding to previous studies that explored the relationship between authentic and transformational leadership and thriving at work (Kleine et al., 2019; Rai et al., 2020). Additionally, our results suggest that thriving is significantly associated with innovative behaviors, strengthening previous empirical evidence (Kark & Carmeli, 2009) and enriching the literature on these topics.

This paper is divided into four sections. Section one presents a theoretical framework with the conceptualization of the constructs and the proposed research hypotheses. Section two describes the procedure, sample, and measurement instruments. Section three presents the results of the research, and finally, section four discusses the results, implications for management, as well as some limitations and avenues for future research.

Theoretical Framework and Hypotheses

Ethical leadership

Ethical leadership involves leaders' intention to act in the best interests of their subordinates, encouraging them to have an ethical behavior, using the communication of their ethical standards and rewards to reinforce and encourage the ethical conduct of their subordinates (Stouten et al., 2012).

Ethical leaders engage in ethical behavior consistent with their actions and interpersonal relationships, further promoting this conduct to reinforce and hold their followers accountable

for their actions (Treviño et al., 2003). Hence, they are seen as examples to be followed and admired by their followers who, when identifying themselves with the vision and values of their leaders, wish to be like them. In this sense, the followers of ethical leaders try to give something in return for what they got from them and, as such, replicate such desirable behaviors based on ethical and moral standards (de Hoogh & den Hartog, 2008).

As previously explained, ethical leaders are honest and fair to their followers; they use reward and punishment behaviors to promote standards of ethical conduct and decision-making based on ethical values. All in all, these aspects characterize ethical leadership (Brown et al., 2005).

Job satisfaction

Job satisfaction is a widely studied construct in the context of organizational behavior and human resource management (Ćulibrk et al., 2018). Although several definitions of this concept appear in the literature, the definition proposed by Locke (1969) is the most consensual. According to this author, job satisfaction is a positive emotional state resulting from the individual's work or professional experience assessment. This experience results from a pleasurable emotional state that results from the assessment of the work achieved through the interaction between the individual and their environment.

Kalleberg (1977) argues that this construct comprises two components, namely an intrinsic component, related to work per se, and an extrinsic one, representing the different aspects beyond the work itself regarding a particular task in the work context.

In addition to the initial definition, Brief & Weiss (2002) define satisfaction as a positive or negative judgement by the individual regarding their role or a specific situation inherent to their work. Accordingly, job satisfaction is considered a reaction from the individual's emotional point of view to their work and results from the interaction between the person and the environment in which they operate (Locke, 1969). Extant literature has consistently found that leadership positively influences employee job satisfaction (Chan, 2019) and many more positive organizational outcomes, enhancing the relevance of the leadership role in various work outcomes.

Thriving at work

Thriving at work is a positive psychological state in which one experiences both a sense of learning and vitality at work (Paterson et al., 2014). The two dimensions of this construct interact synergistically with each other and enable the development of feelings of success and progress at work, which would not be achieved by each dimension individually (Paterson et al., 2014). Accordingly, an employee can experience and show vitality at work, which will tend to fade if learning and growth opportunities are not met. Likewise, employees may find themselves constantly learning, but evidence a lack of vitality to effectively apply the knowledge in their work (Paterson et al., 2014). Furthermore, from a generic point of view, it is argued that short-term thriving enhances individual operation on a personal level and, in the long term, enhances the employee's adaptability to the workplace (Spreitzer et al., 2005).

Despite the similarity with other constructs, namely resilience, subjective well-being or self-actualization, Spreitzer et al. (2005) affirm that the distinguishing factor is the need to combine learning with a sense of vitality. As such, experiencing thriving is distinct from the constructs listed, as it highlights the positive aspects of the experience associated with growth (Niessen et al., 2012). Therefore, the potential that 'thriving' has to be experienced by employees depends on the organizational context in which they are immersed (Spreitzer et al., 2012). Reason why some results suggest that employees tend to enjoy better health and well-being and greater

performance when they are embedded in an environment that allows them to thrive (Walumbwa et al., 2018).

Job performance

Performance is defined as the activities and behaviors a person adopts that impact the organization (Campbell et al., 1990). Accordingly, this is a multidimensional (Campbell et al., 1990), dynamic and episodic construct resulting from a three-dimensional dynamic between cognitive skills, personality and learning experiences that add value to the organization (e.g., Carlos and Rodrigues 2016). Additionally, performance is considered to be a behavior that encompasses an assessment component, which can be positive or negative for the individual or the organization (Motowidlo et al., 1997).

According to the performance theory of Motowidlo, Borman, and Schmit (1997), two different types of construct need to be taken into consideration: task performance and contextual performance. Regarding task performance, this dimension can be defined through two types of behaviors: on the one hand, activities and behaviors for transforming raw materials into materials, goods and services that make up the organization's products and services; on the other hand, behaviors that assist and maintain the organization's technical system, so it works effectively and efficiently. In conjunction with the task, such behaviors are commonly known and required by organizations to characterize the working position to be performed (Motowidlo et al., 1997). Concerning contextual performance, this includes activities and behaviors that are not formally part of the employee's work (namely, cooperation between peers to carry out activities and tasks) but that enhance task performance from a social and organizational point of view (Borman & Motowidlo, 1997).

Innovative work behaviors

Innovative work behaviors are determinants of an effective organizational operation (Carmeli & Spreitzer, 2009) beyond creativity. Specifically, innovative behaviors involve the production and implementation of new ideas, which include the search, defence and procurement of resources to implement the idea (Scott & Bruce, 1994). Consequently, innovative behaviors require a different level of thinking, matching this with less adequacy to more conventional standards (Carmeli & Spreitzer, 2009). The most noteworthy distinction between innovative behaviors and creativity is that the former includes implementing new ideas in addition to achieving benefits inherent to behaviors (de Jong & den Hartog, 2010).

Ethical leadership as a predictor of job satisfaction, thriving at work, innovative work behaviors, and performance

By being fair, honest and altruistic, and guiding their performance in a fair and respectful way, ethical leaders tend to develop an environment of trust, which positively influences employee satisfaction and dedication (de Jong & den Hartog, 2010).

The fact that employees are treated fairly and through ethical conduct will positively influence their work perceptions. In addition, this positive influence leads to a sense of satisfaction with their work conditions and their leaders (Ahmad et al., 2019). The genuineness and fairness that characterize the conduct of ethical leaders will impact employees' behavior in the workplace. Moreover, the behaviors and attitudes of these leaders can be shown and reflected, namely through their openness to communication, career development opportunities and the merit of their employees (e.g., Brown et al., 2005). Evidence has also been recently suggesting the positive influence of ethical leadership on job satisfaction (Shuwen et al., 2024).

The relationship between leadership and employees thriving at work has been explored in the literature, particularly in the context of authentic and transformational leadership (Kleine et al., 2019; Rai et al., 2020). It is, thus, essential to explore new possible relationships with other types of leadership, as is our objective in this study, when considering ethical leadership.

Although similar and with characteristics in common with other types of leadership, such as authentic, transformational and spiritual, at a conceptual and empirical level (Brown et al., 2005), ethical leadership differs from the others listed here. It should be noted that ethical leadership stands out for its particular focus on standards and moral management, which are distinct and unique characteristics combined with the characterization and exercise of this type of leadership (Brown & Treviño, 2006).

As ethical leaders communicate through their ethical stance, this allows their employees not to feel embarrassed or discouraged from expressing their ideas (Walumbwa & Schaubroeck, 2009). Consequently, the positive climate arising from interpersonal relationships contributes to the sense of vitality experienced in the workplace (Spreitzer et al., 2005), this being one of the factors that enable the experience of thriving at work. Given the above, we postulate the following hypotheses:

H1: Ethical leadership positively predicts employees' job satisfaction.

H2: Ethical leadership positively predicts thriving.

H3: Ethical leadership positively predicts innovative work behaviors.

H4: Ethical leadership positively predicts performance.

Job satisfaction as a predictor of thriving at work, innovative work behaviors, and performance

The thriving experience is a positive state and an indicator of the employee's internal assessment. Experiencing this psychological state is determinant since it helps the individual promote their self-development and increase their adaptability to the workplace (Spreitzer et al., 2005).

Job satisfaction relates to the fact that the person enjoys their work, assesses it positively, and, therefore, also makes a positive assessment of how they feel about their work and the different components it encompasses (Spector, 1997). Some studies consider job satisfaction as a consequence of thriving at work (e.g., Ali et al. 2018), in which the premise is that individuals who feel they have more vitality when developing their work tasks will probably show greater satisfaction with their work (Kleine et al., 2019). It is our understanding that the construction of the assumption can be reversed. Therefore, we explore job satisfaction as an antecedent of thriving, with the rationale that when an individual feels greater satisfaction in their work, this will influence their psychological state of vitality and learning, impacting and contributing to the experience of thriving at work. It is expected that the work characteristics, when assessed in a positive way, will foster greater job satisfaction among employees. Thriving is also a positive assessment of prosperity at work through vitality and learning. Therefore, it is plausible to assume that thriving at work positively influences job satisfaction. For which we establish the following hypotheses:

H5: Job satisfaction positively predicts thriving at work.

H6: Job satisfaction positively predicts innovative work behaviors.

H7: Job satisfaction positively predicts performance.

Thriving at work as a predictor of performance

As mentioned previously, research on thriving has had a greater emphasis on the outcomes of the experience of combining vitality with learning in the workplace. Consequently, there are already some empirical studies that focus on attitudinal consequents (job satisfaction, commitment and turnover) and performance (task performance and creative performance) (e.g., Kleine et al., 2019).

Considering that employees who experience thriving feel a greater motivation in their work (Carmeli & Spreitzer, 2009), this is expected to positively impact employees' individual performance. Additionally, some studies have already reported a positive relationship between the two constructs, showing the relationship between thriving and performance (Paterson et al., 2014; Porath et al., 2012). Thus, we formulate the following hypothesis:

H8: Thriving at work positively predicts individual performance.

Thriving at work as a predictor of innovative work behaviors

Thriving is an internal indicator that allows for a personal assessment of the employee's performance (Spreitzer et al., 2012; Walumbwa et al., 2018). For Spreitzer et al. (2012), employees who experience this positive psychological state feel encouraged to grow and develop through the creation of new resources and interpersonal relationships that contribute to self-development translated into better performance and well-being in the workplace. The relationship between thriving at work and performance has been previously demonstrated (Porath et al., 2012). Regarding innovative behaviors in the workplace, the experience of thriving is a stimulating factor for such a phenomenon to occur (Carmeli & Spreitzer, 2009). Simultaneously, learning as a cognitive component of thriving enables employees to acquire experience and knowledge in order to perform their duties effectively (Amabile, 1998). Consequently, through this knowledge and learning, employees have greater potential to identify problems and suggest different and new solutions for them. Thus, this inherent learning improves employees' self-confidence, predisposing them to a greater capacity for innovation and innovative behaviors (Carmeli & Spreitzer, 2009).

While considering that the motivation felt in their work comes from a greater experience of thriving (Carmeli & Spreitzer, 2009), it is therefore likely that employees have different outlooks and also seek new opportunities (Spreitzer et al., 2012). It is plausible to suggest that when employees experience a vital and thriving atmosphere in their workplace, they will be more actively involved in the search for new ideas, which are inherent to innovative behaviors. We established the hypothesis:

H9: Thriving at work positively predicts innovative work behaviors.

Job satisfaction as a mediator of the relationship between ethical leadership and thriving

An ethical leader fosters an ethical environment in the workplace, which is consistent with their ethical conduct, honesty and selflessness. To this end, they use these standards to communicate with their employees (Brown et al., 2005; Brown & Treviño, 2006). Since leadership involves a process of influence (Yulk, 2013) and an emphasis on ethical leadership, as seen in this research, it is plausible to assume that employees can feel more satisfied with the work when they perceive their leader as a selfless and upright person. Additionally, this relationship has been previously tested in the literature, whereby some studies advocate the positive influence of ethical leadership on job satisfaction (e.g., Brown et al., 2005; Neubert et al., 2009). Concomitantly, job satisfaction is conceptualized as the way a person feels about their work also being considered an extension of what the person likes or dislikes about their work

(Spector, 1997). Thus, for Neubert et al. (2009), people tend to be more satisfied and committed to their work when they develop their work in an honest and fair environment characterized by an ethical conduct. The characteristics of such an environment can come from the presence of an ethical leader in the organization, thus reinforcing the relevant character of this type of leadership, not only because of the impact they have on employees but also on the organization itself.

Leaders who adopt ethical leadership influence the attitudes of the organization's members through their actions, conduct and interpersonal relationships (Brown & Treviño, 2006), so an ethical climate positively influences employees' attitudes. Additionally, satisfaction influences employees' physical and psychological health, and it is remarkable how this relationship is reflected in organizations (Martinez & Paraguay, 2003). As such, and since the experience of thriving is an internal indicator of personal assessment (Walumbwa et al., 2018) and a positive psychological state (Paterson et al., 2014), the vitality and learning experienced under this psychological state may be due to greater job satisfaction.

From another perspective, ethical leaders foster a positive organizational climate by guiding their actions and communication through an ethical stance towards their employees (Walumbwa & Schaubroeck, 2009). They use equally positive interpersonal relationships that contribute to the vitality experienced in the workplace (Spreitzer et al., 2005). Thus, given this positive organizational climate, ethical leadership can positively impact employees' thriving, fostering their experience vitality and learning.

In the context of positive organizational studies, thriving is one of the most recently considered and researched topics in the literature (Paterson et al., 2014) and a key assumption. One must consider the need for the joint experience of vitality and learning for the thriving experience. It should be noted that “although each dimension can signify some progress toward growth and personal development at work, it is only in concert that they enhance one another to form the experience of thriving” (Spreitzer et al., 2012, p. 251). A person who experiences thriving is characterized as having a high degree of knowledge and enjoying their work (Porath et al., 2012). Furthermore, it should also be highlighted that the pleasure of working derives from job satisfaction.

It is suggested that ethical leadership contributes to job satisfaction and thriving of employees. As such, given that ethical leadership influences job satisfaction and the latter influences thriving, it is plausible to assume that job satisfaction may mediate the relationship between ethical leadership and thriving, hence the following hypothesis:

H10: Job satisfaction mediates the relationship between ethical leadership and thriving at work.

Method

Sample and procedures

The sample consists of 216 employees working in organizations that operate in Portugal in different business sectors (60% in services and 40% in manufacturing). Most of the participants are female (64.4%). The mean age is 35.09 years ($SD = 9.057$). Regarding academic qualifications, most employees (86.1 %) have higher education qualifications.

Since we used the same questionnaire to measure all constructs, common method bias (CMB) should be a concern. Thus, to assess whichever influence of CMB, we used the method proposed by Kock (2015) that suggests a collinearity diagnosis, assessing variance inflation factors (VIF) for each latent variable in the model. For any VIF greater than 3.3, the model may be harmed by CMB. Therefore, we calculated VIF for all latent variables in the model, and values ranging from 1.0 to 2.8, i.e. below the reference value (3.3). Considering these results, we can assume that CMB is not a critical issue in our study.

In the context of the new Coronavirus SARS-CoV-2 pandemic, the data collection process was implemented using an online questionnaire. Respondents were informed about data protection in line with the General Data Protection Regulation, and the questionnaire was available online from July to October 2020. It was shared by email and social media.

Measurement Instruments

Ethical Leadership

Ethical leadership was assessed based on ten items on a five-point scale (1 - Strongly disagree, (...) 5 - Strongly agree) developed by Brown et al. (2005). Sample items are: My leader: (a) "Defines success not just by results, but also the way that they are obtained"; (b) "Makes fair and balanced decisions"; (c) "Sets an example of how to do things the right way in terms of ethics". A first translator translated the items from English into Portuguese. A second independently translated those items back into English. The first author compared the back-translated version with the original and solved discrepancies through an iterative discussion with both translators. The final version was compiled and analyzed by two organizational members (Brislin, 1970). The scale's internal consistency proved to be adequate, with Cronbach's alpha of .90.

Job satisfaction

Job satisfaction was measured using the translated and validated version of the Portuguese population of the Minnesota Satisfaction Questionnaire by Weiss et al. (1967) and the Portuguese version developed by Ferreira et al. (2009). This instrument comprises twenty items to be assessed on a five-point scale (1 - Very dissatisfied, (...) 5 - Very satisfied). Sample items are: How satisfied am I with this aspect of my job? (a) "Being able to keep busy all the time" (intrinsic satisfaction); (b) "Recognition for a job well done" (extrinsic satisfaction); (c) "The way my co-workers get along with each other" (global satisfaction). To obtain a satisfactory level of internal consistency, two of the items from the intrinsic dimension were excluded. Internal consistency of 0.90 was obtained for the overall scale, and the values for intrinsic satisfaction, extrinsic satisfaction, and global satisfaction were .90, .90, and .60, respectively.

Thriving at work

To measure this construct, we used the instrument of Porath et al. (2012), comprising ten items, assessed on a five-point scale (1 - 'I completely disagree with the statement', (...) 5 - 'I completely agree with the statement'). Sample items were: (a) "I feel alive and with vitality" (vitality); (b) "I continue to learn, more and more, with time" (learning). To translate the scale from English to Portuguese, we used the same procedure as for the ethical leadership scale. The internal consistency of the overall scale was .90, which was also the value for both dimensions it encompasses.

Job performance

Employee performance was measured by adapting six items for self-report of the instrument proposed by Lynch et al (1999) composed of sixteen items to be assessed through a five-point scale (1 - 'Strongly disagree', (...) 5 - 'Strongly agree'). Sample items are: (a) "This employee performs the expected tasks"; (b) "This employee fulfils the responsibilities specified for his/her work"; (c) "This employee continually looks for new ways to improve the effectiveness

of his/her work". The process of translation followed the procedure already explained. Cronbach's alpha for this instrument was .80.

Innovative work behaviors

Innovative work behaviors were measured using the instrument of Scott and Bruce (1994) questioning employees about their degree of agreement with the six statements in the scale, using a five-point scale (1 – ‘Totally disagree’, (...) 5 – ‘Totally agree’). Sample items are: (a) “I generate creative ideas at work”; (b) “I promote and champion ideas to others at work”; (c) “I am innovative”. All the procedures were the same to translate the scale from English to Portuguese. This instrument's internal consistency index, Cronbach's alpha, was 0.80.

Results

Hypotheses were tested through IBM SPSS 24 statistical software (with descriptive statistics and correlation analyses) and PLS-SEM (Structural Equation Modelling) using the SmartPLS 3.0 Software. The assessment of the model using this software is done in two phases: assessment of the measurement model and assessment of the structural model.

Correlations

Table 1 presents the correlations between the variables under study. All mean values are moderately high. All variables correlate with each other. The highest value of all correlations of $r=0.682$ (a high effect, according to Howell 2002) is found between ethical leadership and extrinsic satisfaction. Regarding extrinsic satisfaction, except for the correlation between innovative behaviors with a moderate effect ($r=.475$), all others showed a high correlation effect between variables, with values between $r=.511$ and $r=.675$. Innovative behaviors are the variable with the most correlations with a small effect (D. C. Howell, 2012), namely the relationship with ethical leadership ($r=.163$), extrinsic satisfaction ($r=.241$) and overall satisfaction ($r=.232$).

Table 1- Correlations among variables

	M	DP	1	2	3	4	5	6	7	8	9	10	11
1. Ethical Leadership	3,66	0,781	-										
2. Intrinsic Satisfaction	3,80	0,659	0,489**	-									
3. Extrinsic Satisfaction	3,21	0,839	0,682**	0,675**	-								
4. Overall Satisfaction	3,81	0,769	0,382**	0,555**	0,547**	-							
5. Learning	4,04	0,687	0,446**	0,631**	0,505**	0,471**	-						
6. Vitality	3,74	0,724	0,442**	0,680**	0,536**	0,418**	0,587**	-					
7. Innovative Work Behaviors	3,80	0,546	0,163*	0,475**	0,241**	0,232**	0,311**	0,436**	-				
8. Job Performance	4,13	0,519	0,181**	0,511**	0,280**	0,313**	0,320**	0,417**	0,550**	-			
9. Gender	-	-	0,020	0,102	0,080	0,033	-0,041	0,106	0,069	0,983	-		
10. Age	35,09	9,057	0,041	0,082	0,032	-0,035	0,014	0,217**	0,138*	0,157	0,187**	-	
11. Teleworking	-	-	-0,039	-0,106	-0,124	-0,153*	-0,099	-0,056	-0,035	0,019	-0,126	0,061	-

Regarding the control variables, gender is the only variable that does not show significant correlations with the constructs under study. Age correlates with vitality ($r=.217$) and innovative behavior ($r=.138$), albeit with a small effect. Finally, teleworking only presents a significant negative correlation with overall satisfaction ($r=-.152$), whereby employees who found themselves working under this scheme reported less satisfaction with their work conditions and with the way they related to their colleagues.

Assessment of the measurement model

The measurement model was assessed through internal consistency, construct reliability, convergent validity and discriminant validity. Although the global satisfaction dimension presents a Cronbach's alpha value of .60, below the recommended value of .70 (Nunnally, 1978), this value is found acceptable by some authors (Price & Mueller, 1986) and should thus not be excluded from this dimension.

The t-values, loadings and cross-loadings for the scales were assessed, and the cross-loadings' values ranged from 0.662 to 0.910. Although the table provided items with values below .7,

we decided not to exclude them since they are close to the cut-off value. As such, these items were preserved, and only items under .60 were excluded, namely items EL1, EL4, JS1 and TAW5.

Table 2 shows the values of average variance extracted (AVE), composite reliability (CR) and the correlations for each latent variable in the model under study. Note that the CR values are higher than the recommended minimum value of .7 (Hair et al., 2019), indicating adequate reliability. Additionally, the AVE values for each construct are higher than the minimum expected value of 0.5 (Götz et al., 2010), which makes it possible to confirm the convergent validity of the constructs. Finally, to evaluate the discriminant validity for each construct, the Fornell and Larcker criteria (1981) was used, according to which the square root of the AVE must be higher than the absolute value of all correlations with other constructs, and the cross-loadings should be lower than the loading values for all metrics. All conditions are verified, so it can be assumed that all constructs have discriminant validity.

Table 2- Convergent and discriminant validity

	AVE	CR	Correlations							
			1	2	3	4	5	6	7	8
1. Ethical Leadership	0.695	0.948	0.834							
2. Intrinsic Satisfaction	0.555	0.917	0.489	0.745						
3. Extrinsic Satisfaction	0.598	0.899	0.682	0.675	0.773					
4. Overall Satisfaction	0.650	0.787	0.382	0.555	0.547	0.806				
5. Learning	0.761	0.927	0.446	0.631	0.505	0.471	0.872			
6. Vitality	0.714	0.926	0.442	0.680	0.536	0.418	0.587	0.926		
7. Job Performance	0.535	0.873	0.163	0.475	0.241	0.232	0.311	0.436	0.731	
8. Innovative Work Behaviors	0.535	0.873	0.181	0.511	0.280	0.313	0.320	0.417	0.50	0.731

Note: Values in bold are the square root of the AVE

Assessment of the structural model

The results of the structural model in Figure 2 show that, except for the relationship between ethical leadership and thriving, all other relationships are statistically significant, which makes it possible to support all the hypotheses proposed for this research except H2. Concerning the explained variance (R^2), the results also indicate that ethical leadership explains 54.3 % of the variation in thriving and 40.3 % of the variation in job satisfaction. On the other hand, thriving explains 20.9 % of the variation in innovative behaviors and, in a slightly lower percentage, explains 18.9 % of the variation in performance.

Since age correlates significantly with some dependent variables, it was added to the model as a control variable. Table 3 highlights the results showing that there are statistically significant direct relationships between (1) ethical leadership and (a) job satisfaction ($\beta=0.627$), (b) innovative behaviors ($\beta=0.223$) and (c) performance ($\beta=0.221$); (2) job satisfaction and (a) thriving ($\beta=0.689$), (b) innovative behaviors ($\beta=0.305$), (c) and performance ($\beta=0.301$); (3)

thriving and (a) performance ($\beta=0.436$), and (c) innovative work behaviors ($\beta=0.442$). On the other hand, the direct relationship between ethical leadership and thriving is not statistically significant, so ethical leadership does not directly influence thriving at work.

Table 3- Direct, indirect, total, and specific indirect effects

	Direct effects		Indirect effects		Total effects		Specific indirect effects	
	Loadings	t-values (p-values)	Loadings	t-values (p-values)	Loadings	t-values (p-values)	Loadings	t-values (p-values)
Ethical Leadership -> Satisfaction	0.635	14.114 (0.000)			0.635	14.114 (0.000)		
Ethical Leadership -> Thriving	0.067	1.331 (0.184)	0.440	9.645 (0.000)	0.507	10.068 (0.000)		
Satisfaction -> Thriving	0.692	13.112 (0.000)			0.692	13.112 (0.000)		
Thriving -> Performance	0.435	8.260 (0.000)			0.435	8.260 (0.000)		
Thriving -> Innovative work behaviors	0.440	7.047 (0.000)			0.440	7.047 (0.000)		
Ethical Leadership -> Satisfaction -> Thriving							0.440	9.645 (0.000)

To assess the significance of the structural model coefficients, we used the bootstrapping technique with 1000 iterations. Except for the relationship between ethical leadership and thriving, the total effects between the other constructs relationships under study are visibly significant, making it possible to support nine of the hypotheses proposed for this study. Although the direct effect of ethical leadership on thriving is not significant, an indirect effect between ethical leadership and thriving and a statistically significant total effect can be observed. In addition, there is a significant indirect specific effect between ethical leadership, job satisfaction and thriving. In this way, job satisfaction is shown to play a mediating role (total mediation) between ethical leadership and thriving at work.

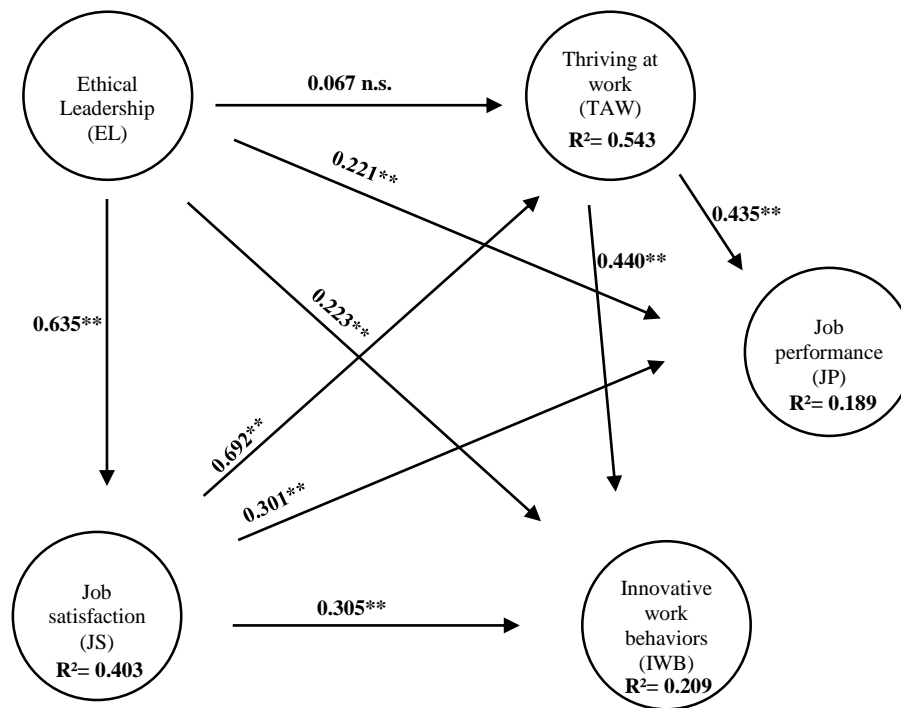


Figure 2 – Structural model

n.s. – non significant | **p<0.01

Discussion and Conclusions

Main findings

Our research suggests that when employees comprehend their leaders' conduct as ethical and moral, seeing them as honest and fair individuals, they tend to experience greater job satisfaction. Indeed, the positive impact that ethical leadership has on employee job satisfaction has been studied in the literature (e.g., Ramlawati et al., 2023). The behavior of the ethical leader, who listens and has their employees' best interests in mind, sets the example of how to act ethically, gives the possibility for employees to make decisions for themselves, to perform their work independently and on their own, to progress professionally, thus benefitting from positive effects on their job satisfaction.

The results also highlight that job satisfaction is related to thriving, hinting at a bidirectional relationship between these constructs. This is an interesting result. However, as job satisfaction is commonly considered a consequence of thriving rather than an antecedent (Ali et al., 2018), further investigation is needed. This result supports the idea that employees who report greater job satisfaction tend to experience more thriving at work through enhanced vitality and learning in the workplace. Therefore, promoting job satisfaction among employees plays a relevant role in how they experience more thriving at their workplace.

Other studies have shown that authentic and transformational leadership positively relates to thriving at work (Rai et al., 2020). However, research that addresses the relationship between ethical leadership and thriving is still sparse. Although our results did not corroborate that ethical leadership has a direct influence on employees thriving, we found out that there is a mediating relationship between these two constructs through job satisfaction. In this way, employees who perceive their leader as ethical experience greater job satisfaction and as a

result of that satisfaction, they experience more thriving at work. As such, job satisfaction assumes a mediating role through total mediation. Hence, our research points out a fascinating finding: ethical leadership only shows its effect on thriving at work *via* job satisfaction. Moreover, it shows that leaders with an altruistic attitude who delegate responsibilities, listen, and discuss ethical values with their employees positively impact their job satisfaction and, consequently, their thriving. Notwithstanding, thriving at work has recently been addressed as an important outcome of ethical leadership, which contributes to enhancing literature on these topics (Rahaman et al., 2022).

Spreitzer et al. (2012) emphasize thriving as an important phenomenon that increases employee performance. The results of this research reinforce those authors' work, showing a positive relationship between these two constructs. Another result from this study concerns the relationship between thriving and innovative behaviors, with thriving as a predictor of innovative behaviors. Consequently, when individuals with vitality are learning in the workplace, they can recognize and implement opportunities for improvement while exploring new ideas and innovative behaviors (Kark & Carmeli, 2009). Organizations should encourage their employees to thrive to feel they are learning and experiencing the energy, vitality, and enthusiasm for their work. Such an environment will foster new ideas in the workplace.

It should also be highlighted that thriving at work enhances employees' innovative behaviors and performance, positively influencing themselves and their work in organizations. For Spreitzer et al. (2005), thriving can occur in the absence or presence of adversity. However, this phenomenon is even more relevant than ever, given the disruptive pandemic context faced by the world during 2020 and 2021. Inevitably, in terms of mental health, we have witnessed an increase in anxiety and depression-related conditions, with an emotional impact and emotional vulnerabilities stemming from the COVID-19 pandemic (Dwivedi et al., 2020) and we will still have to deal with its consequences on these upcoming years.

Since in this study age is correlated with both vitality, as a dimension of thriving, and innovative work behaviors, it can be said that older employees experience greater vitality and also report more innovative behaviors. Thus, older employees, as opposed to younger ones, seem to feel more alert, energetic, and enthusiastic about each new day of work, and such feelings may have a positive impact on the search and implementation of new ideas and techniques in the workplace. Despite the prevailing stereotype that older employees are averse to change and less innovative (Ng & Feldman, 2013), evidence of such an assumption is still scarce, which calls for further studies in this area (Hernaus et al., 2019). It should also be noted that the experience and knowledge acquired throughout working life can be embodied in new ideas, creativity, and innovative behaviors (Ericsson, 1999), evidencing the relationship between employees' age and innovation. As such, these results suggest that older employees show more innovative behaviors, which is a result supported by the literature (Martín et al., 2007).

Furthermore, it was also found that employees who were teleworking reported lower job satisfaction (overall satisfaction). In fact, the pandemic context, together with the mandatory teleworking regime, has changed the way employees work. Thus, teleworking became imperative and reconciling family and professional life in a productive way was one of the biggest challenges experienced by employees in this context (Gonçalves & Roque, 2020). Teleworking suddenly appeared alongside the global pandemic outbreak. Thus, there is a need to identify and investigate which practices and technologies must be implemented so that employees can maintain their levels of job satisfaction and productivity (Dwivedi et al., 2020). This study suggests the relevance of the leader's ethical behaviors while also considering the importance of experiencing thriving at work, enhancing job performance and stimulate

employee's innovative behaviors. In this way, given the critical role portrayed by leaders in organizations (e.g., Avolio & Gardner, 2005), fostering ethical leadership through human resource practices will be fundamental for the organizations.

Limitations and suggestions for future research

This study is not without limitations. Although satisfaction is considered a mediator, other mediators or moderators may impact the variation of thriving, such as subjective well-being. This construct is relevant for employees *per se* and organizations; better performance and better interpersonal relationships are some of the positive impacts that can come from experiencing well-being (Diener & Seligman, 2004). Consequently, this construct is an opportunity for future studies due to the positive impacts it can generate on employees and organizations.

When considering the importance of a positive organizational climate as a moderator of the relationship between ethical leadership and job satisfaction or thriving, the fact that it is not assessed in the study also constitutes a limitation.

Literature shows that leaders who experience thriving at work, positively influence their followers through contagion (Porath et al., 2012); ; future studies may find it relevant to assess this construct not only with the help of employees but also their leaders, just as it may be important for new studies to consider contextual factors, such as virtuosity and organizational support, resilience and effectiveness, as variables that enhance or inhibit the experience of thriving (Shahid et al., 2021).

Regarding job satisfaction, caution is required when analyzing the results obtained. It will also be relevant to explore the inverse relationship centred on the predictive relationship between satisfaction and thriving, but on a bidirectional relationship since literature already underscores the positive relationship between job satisfaction and thriving at work (Kleine et al., 2019).

References

- Ahmad, I., Donia, M. B. L., & Shahzad, K. (2019). Impact of Corporate Social Responsibility Attributions on Employees' Creative Performance: The Mediating Role of Psychological Safety. *Ethics & Behavior*, 29(6), 490–509. <https://doi.org/10.1080/10508422.2018.1501566>
- Ali, M., SHEN, L., Shi-Jie, Z., & Rahman, M. A. (2018). Empowering Leadership and Employee Performance: A Mediating Role of Thriving at Work. In *International Journal of Asian Business and Information Management* (Vol. 9). <https://doi.org/10.4018/IJABIM.2018040101>
- Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review*, 76(5), 76–87.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315–338. <https://doi.org/https://doi.org/10.1016/j.leafqua.2005.03.001>
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: a look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15(6), 801–823. <https://doi.org/https://doi.org/10.1016/j.leafqua.2004.09.003>
- Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>

- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616. <https://doi.org/https://doi.org/10.1016/j.leaqua.2006.10.004>
- 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. <https://doi.org/https://doi.org/10.1016/j.obhdp.2005.03.002>
- Carmeli, A., & Spreitzer, G. (2009a). Trust, Connectivity, and Thriving: Implications for Innovative Behaviors at Work. *The Journal of Creative Behavior*, 43(3), 169–191. <https://doi.org/10.1002/j.2162-6057.2009.tb01313.x>
- Carmeli, A., & Spreitzer, G. M. (2009b). Trust, Connectivity, and Thriving: Implications for Innovative Behaviors at Work. *The Journal of Creative Behavior*, 43(3), 169–191. <https://doi.org/10.1002/j.2162-6057.2009.tb01313.x>
- de Jong, J., & den Hartog, D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Diener, E., & Seligman, M. E. P. (2004). Beyond Money: Toward an Economy of Well-Being. *Psychological Science in the Public Interest*, 5(1), 1–31. <https://doi.org/10.1111/j.0963-7214.2004.00501001.x>
- Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N. P., Sharma, S. K., & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*, 55, 102211. <https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2020.102211>
- Ericsson, K. A. (1999). Creative Expertise as Superior Reproducible Performance: Innovative and Flexible Aspects of Expert Performance. *Psychological Inquiry*, 10(4), 329–333. <http://www.jstor.org/stable/1449456>
- Ferreira, J., Fernandes, R., Haase, R., & Santos, E. (2009). Minnesota Satisfaction Questionnaire – Short Form: estudo de adaptação e validação para a população portuguesa. *Revista Psychologica*. https://doi.org/10.14195/1647-8606_51_15
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Gonçalves H, & Roque A. (2020, July 8). *A ética nas empresas em tempos de pandemia - resultados do inquérito*. Ver - Valores, Ética e Responsabilidade.
- Götz O, Liehr-Gobbers K, & Krafft M. (2010). Evaluation of Structural Equation Models Using the Partial Least Squares (PLS) Approach. In V. Esposito, H. Chin, & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications* (pp. 691–711). Springer. https://doi.org/10.1007/978-3-540-32827-8_30
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hernaus, T., Maric, M., & Černe, M. (2019). Age-sensitive job design antecedents of innovative work behavior. *Journal of Managerial Psychology*, 34(5), 368–382. <https://doi.org/10.1108/JMP-10-2018-0478>
- Howell, D. (2002). Statistical Methods For Psychology. In *The Statistician* (Vol. 43). <https://doi.org/10.2307/2348956>

- Howell, D. C. (2012). *Statistical methods for psychology* (8th ed.). Wadsworth Cengage Learning.
- Kark, R., & Carmeli, A. (2009). Alive and creating: the mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behavior*, 30(6), 785–804. <https://doi.org/https://doi.org/10.1002/job.571>
- Keck, N., Giessner, S. R., van Quaquebeke, N., & Kruijff, E. (2020). When do Followers Perceive Their Leaders as Ethical? A Relational Models Perspective of Normatively Appropriate Conduct. *Journal of Business Ethics*, 164(3), 477–493. <https://doi.org/10.1007/s10551-018-4055-3>
- Kleine, A.-K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta-analysis. *Journal of Organizational Behavior*, 40(9–10), 973–999. <https://doi.org/https://doi.org/10.1002/job.2375>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11, 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Lynch, P. D., Eisenberger, R., & Armeli, S. (1999). Perceived organizational support: Inferior versus superior performance by wary employees. *Journal of Applied Psychology*, 84, 467–483. <https://doi.org/10.1037/0021-9010.84.4.467>
- Martín, P., Salanova, M., & Peiro, J. (2007). Job demands, job resources and individual innovation at work: Going beyond Karasek's model? *Psicothema*, 19, 621–626.
- Martinez, M. C., & Paraguay, A. I. B. B. (2003). Satisfação e saúde no trabalho: aspectos conceituais e metodológicos. *Cadernos de Psicologia Social Do Trabalho*, 6, 59–78. <https://doi.org/10.11606/issn.1981-0490.v6i0p59-78>
- Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A., & Chonko, L. B. (2009). The Virtuous Influence of Ethical Leadership Behavior: Evidence from the Field. *Journal of Business Ethics*, 90(2), 157–170. <https://doi.org/10.1007/s10551-009-0037-9>
- Ng, T. W. H., & Feldman, D. C. (2013). A meta-analysis of the relationships of age and tenure with innovation-related behaviour. *Journal of Occupational and Organizational Psychology*, 86(4), 585–616. <https://doi.org/https://doi.org/10.1111/joop.12031>
- Nunnally, J. C. (n.d.). *Psychometric Theory*.
- Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior*, 35(3), 434–446. <https://doi.org/https://doi.org/10.1002/job.1907>
- Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work: Toward its measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior*, 33(2), 250–275. <https://doi.org/https://doi.org/10.1002/job.756>
- Price, J., & Mueller, C. (1986). *Handbook of organizational measurement*. Pitman.
- Rahaman, H. M. S., Stouten, J., Decoster, S., & Camps, J. (2022). Antecedents of employee thriving at work: The roles of formalization, ethical leadership, and interpersonal justice. *Applied Psychology*, 71(1), 3–26. <https://doi.org/https://doi.org/10.1111/apps.12308>
- Rai, A., Kim, M., & Hazarika, D. (2020). Transformational Leadership and Followers' Thriving at Work: An Examination of Underlying Mechanisms. *Academy of Management Proceedings*, 2020(1), 16700. <https://doi.org/10.5465/AMBPP.2020.16700abstract>
- Ramlawati, R., erang, S., Arminas, A., Junaidi, J., & Wicaksono, R. (2023). The role of ethical leadership on employee commitment to the organization: The mediating role of job satisfaction and job engagement. *Организационная Психология*, 13, 73–91. <https://doi.org/10.17323/2312-5942-2023-13-1-73-91>

- Robertson, C. J., Crittenden, W. F., Brady, M. K., & Hoffman, J. J. (2002). Situational Ethics Across Borders: A Multicultural Examination. *Journal of Business Ethics*, 38(4), 327–338. <https://doi.org/10.1023/A:1016067231599>
- Roy, A., Newman, A., Round, H., & Bhattacharya, S. (2024). Ethical Culture in Organizations: A Review and Agenda for Future Research. *Business Ethics Quarterly*, 34(1), 97–138.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *The Academy of Management Journal*, 37(3), 580–607. <https://doi.org/10.2307/256701>
- Shahid, S., Muchiri, M. K., & Walumbwa, F. O. (2021). Mapping the antecedents and consequences of thriving at work. *International Journal of Organizational Analysis*, 29(1), 78–103. <https://doi.org/10.1108/IJOA-09-2019-1881>
- Shuwen, L., Ruiqian, J., Seufert, J. H., Jinlian, L., & Limin, G. (2024). A meta-analysis of main, moderating and mediating effects of ethical leadership on employees' work outcomes. *European Journal of International Management*, 24(2), 243–266. <https://doi.org/10.1504/EJIM.2024.140922>
- Singhapakdi, A., & Vitell, S. J. (2007). Institutionalization of ethics and its consequences: a survey of marketing professionals. *Journal of the Academy of Marketing Science*, 35(2), 284–294. <https://doi.org/10.1007/s11747-007-0030-8>
- Spector P. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. SAGE Publications.
- Spreitzer, G., Porath, C. L., & Gibson, C. B. (2012). Toward human sustainability: How to enable more thriving at work. *Organizational Dynamics*, 41(2), 155–162. <https://doi.org/10.1016/j.orgdyn.2012.01.009>
- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A Socially Embedded Model of Thriving at Work. *Organization Science*, 16(5), 537–549. <https://doi.org/10.1287/orsc.1050.0153>
- Treviño, L. K., Brown, M., & Hartman, L. P. (2003). A Qualitative Investigation of Perceived Executive Ethical Leadership: Perceptions from Inside and Outside the Executive Suite. *Human Relations*, 56(1), 5–37. <https://doi.org/10.1177/0018726703056001448>
- Walumbwa, F. O., Muchiri, M. K., Misati, E., Wu, C., & Meiliani, M. (2018). Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work. *Journal of Organizational Behavior*, 39(3), 249–261. <https://doi.org/https://doi.org/10.1002/job.2216>
- Walumbwa, F., & Schaubroeck, J. (2009). Leader Personality Traits and Employee Voice Behavior: Mediating Roles of Ethical Leadership and Work Group Psychological Safety. *The Journal of Applied Psychology*, 94, 1275–1286. <https://doi.org/10.1037/a0015848>
- Weiss, D. J., Dawis, R. V., & England, G. W. (1967). Manual for the Minnesota Satisfaction Questionnaire. *Minnesota Studies in Vocational Rehabilitation*, 22, 120.
- Yulk, G. (2013). *Leadership in Organizations*. Pearson Education.
- Zhu, W., May, D. R., & Avolio, B. J. (2004). The Impact of Ethical Leadership Behavior on Employee Outcomes: The Roles of Psychological Empowerment and Authenticity. *Journal of Leadership & Organizational Studies*, 11(1), 16–26. <https://doi.org/10.1177/107179190401100104>