

# Enhancing employee creativity: The role of ethical and transformational leadership in driving innovation and organizational citizenship in Malaysia's private universities

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# Abstract

This research aims to examine the influence of ethical and transformational leadership on employee creativity. Additionally, it investigates whether organizational citizenship behavior (OCB) serves as a mediating factor in the relationship between these leadership styles and employee creativity. Given the increasing importance of fostering innovation within organizations, understanding these relationships can provide valuable insights for leadership development and organizational effectiveness. The study employed a quantitative research methodology, utilizing a sample of 275 employees from Malaysian private higher education institutions (PHEIs). Data collection was conducted through structured questionnaires measuring leadership styles, OCB, and employee creativity. To test the proposed hypotheses and derive conclusions, the collected data was analyzed using the partial least squares technique (PLS-SEM), a robust method for examining complex relationships between multiple variables. The findings indicate that OCB has a significant positive impact on employee creativity. Ethical leadership positively influences both OCB and employee creativity, highlighting the role of moral leadership in fostering a conducive work environment. Similarly, transformational leadership was found to have a strong and positive effect on OCB and employee creativity, emphasizing the importance of visionary and inspirational leadership in enhancing workplace innovation. Furthermore, the results confirm that OCB serves as a crucial mediating variable between both ethical and transformational leadership and employee creativity. The study underscores the importance of ethical and transformational leadership in promoting employee creativity, with OCB playing a mediating role in this relationship. Leaders who exhibit ethical behavior and transformational qualities contribute to higher levels of OCB, which in turn enhances creativity among employees. This reinforces the notion that leadership styles significantly impact employee innovation through behavioral and psychological mechanisms. Organizations, particularly within the higher education sector, should prioritize leadership development programs that emphasize ethical and transformational leadership qualities. Encouraging OCB among employees can further enhance creative outcomes, leading to improved institutional performance and competitiveness. By fostering a supportive and values-driven work environment, leaders can effectively cultivate a culture of creativity and innovation, ultimately contributing to organizational success in dynamic and knowledge-intensive industries.

**Keywords:** Education quality, Employee creativity, Ethical leadership, Organizational citizenship behavior, Transformational leadership.

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## **1. Introduction**

Businesses today operate in an increasingly volatile environment driven by rapid technological advancements, making creativity and innovation essential for successfully bringing products to market. Numerous studies have highlighted the critical role of employee creativity in shaping a company's growth and profitability [1-3]. Research also emphasizes that fostering creativity within an organization is a key strategy for maintaining competitive advantages and ensuring long-term success. Consequently, many companies continually seek new ways to inspire employees to generate innovative ideas and unique solutions in the workplace [4]. This has led to significant academic interest in understanding the factors that drive employee creativity, particularly those that either enhance or hinder individual innovation [5-8]. Among these factors, leadership style has been widely recognized as a crucial influence on organizational innovation and employees' creative behaviors [9].

Organizations nowadays confront strong competition and difficulties, and they require innovative and motivated employees to assure their survival and success. Previous research has shown that ethical leadership is critical in promoting employee creativity [10-12] and organizational citizenship behaviors [13-16]. Ethical leadership is recognized as the most important leadership style that focuses on fostering beneficial psychological behaviors such as an ethical atmosphere, increased self-awareness, and morality. These behaviors are relatively important since they increase positive sentiments among employees (i.e., creativity and affective commitment). Several studies have already investigated the function of OCB as a crucial mediator between various leadership styles and individual performance [17-19]. In particular, research on ethical leadership (EL) has been critical in clarifying the function of leadership in connection with OCB. Despite the fact that research on EL is increasing, there is a lack of studies on the underlying processes that explain the connection between EL and OCB. This study is significant conceptually because it can shed light on what other factors, apart from EL, affect workers' extra-role behavior. Because of this, it's difficult to find empirical research that confirms the role of OCB as a potential mediator in the relationship between ethical leadership style and employee creativity, even if OCB is linked with the best outcomes.

According to Jordan et al. [10] and Kuenzi et al. [11], the majority of empirical studies on ethical leadership focused on its impact on performance. The authors also stated that the empirical research that has been conducted to evaluate its impact on employee creativity and the processes that may influence this connection is limited. As a result, one essential goal of this study is to contribute to the theory that explains the link between ethical leadership style and employee creativity through the use of a critical mediating variable, OCB.

Transformational leadership has been proven to be favorably connected to employee creativity in studies. Transformational leadership entails actions that inspire people to reconsider how they conduct their jobs and push them to attempt new ways [12, 20]. This leadership style includes actions that motivate employees to be passionate about their jobs and to embrace the challenge of attempting new ways to achieve a set of objectives [21, 22]. Furthermore, transformational leadership has a significant impact on employee creativity and is ideal for identifying innovative ideas that contribute to organizational efficiency [19]. Transformational leadership encourages workers to question the current quo and experiment with new ways that stimulate employee innovation [23, 24]. Furthermore, transformational leaders help their people develop a creative self-concept [25]. Employees should be more confident in trying new techniques and coming up with unique ideas as a result.

Despite the large number of studies on transformational leadership style and employee creativity, the empirical literature yielded mixed results, with some reporting that transformational leadership style has a negative influence on employee creativity [26-28] a few finding stating a significant positive association between both constructs, and others concluding that there is no relationship between them [23, 24]. Despite the fact that several prior research studied certain mediating variables between transformational leadership style and employee creativity [29], the underlying psychological mechanisms that link this style of leadership with employee creativity have not been well explored. Prior studies looked at OCB as a significant mediator between specific leadership styles and employee performance. However, there is insufficient empirical evidence in the existing literature to show whether OCB mediates the relationship between this leadership style and employee creativity. As a result, the purpose of this research is to see if OCB mediates the link between the two notions.

In general, there is rising evidence in the literature that leaders play an important role in fostering OCB among employees [30, 31]. The impact of leadership on OCB, on the other hand, can be determined by employee perceptions. Furthermore, a previous study demonstrated that OCB is critical for developing employee creativity and creative work behavior, and a

considerable quantity of relevant literature demonstrates that OCB has a beneficial influence on employee creativity [32-34]. Employees' activities and behavior that go above and beyond the call of duty can be used to calculate OCB; this behavior is often the result of strong workplace relationships [35] stated that OCB is likely to be revealed at an employee's choice and is unrelated to official regulations and awards in a company. Despite its importance, there have been relatively few studies that have investigated and confirmed whether OCB has any mediating impact on the connections between the stated leadership styles and employee creativity, notably in the Malaysian higher education sector.

The advent and fast growth of PHEIs in Malaysia have drastically altered the landscape. Indeed, globalization of the education industry is a prevalent tendency in emerging nations as a whole [36]. With such fierce competition in this sector, Malaysia's education industry is well aware of the need to satisfy the high expectations of this economic sector in terms of attracting and maintaining an educated and competent workforce [37]. Furthermore, in order to compete on a global scale, human capital development is critical. Education may be seen as a capital good that is utilized to create human capital for social and economic development. In addition to public higher education institutions, PHEIs must be able to respond to and adapt to changes in the dynamic larger world in order to fulfill the current economic, political, and social needs. PHEIs in Malaysia have achieved worldwide recognition, with 10 PHEIs appearing in the 2019 Quacquarelli Symonds (QS) University Ranking [38]. It is a solid sign that PHEIs have risen to the top of Malaysia's higher education market. The need for PHEIs in Malaysia is also increasing, owing to an increase in the number of high school dropouts and improved recruiting and awareness efforts in schools [39]. As of December 31, 2023, the country had 53 private universities, 38 collegiate universities, 14 branch campuses of foreign institutions, and 351 colleges [40, 41]. The data in Table 1 show the total number of PHEIs in Malaysia. As a result, in order to provide empirical insights on these concerns, the current study seeks to contribute to the existing literature and underlying theories by exploring the relationships between two leadership styles and employee creativity in the context of higher education. This study adds to the current research by investigating and confirming the role of OCB in the relationship between the selected leadership styles and employee creativity in the Malaysian higher education setting. The following sections offer an overview of this paper's literature review, followed by the study methodology and findings analysis. Finally, the study concludes with a discussion, implications, conclusion, limitations, and suggestions for further research.

Table 1.

No	Categories Private Higher Education Institutions in Malaysia	Total
	Universities	53
	Branch campus of foreign universities	14
	University Colleges	38
	Colleges	351
	Total	456

Source: Yusoff et al. [42].

### 2. Literature Review

# 2.1. Employee Creativity

Creativity is defined as the generation of innovative, potentially valuable ideas that improve the efficiency and effectiveness of operations [43]. Employee creativity is the production of unique and valuable goods, ideas, and processes by individuals, which serve as the raw ingredients for innovation [24, 44]. Creativity is developed from an individual's accumulated creative thinking, abilities, and knowledge as a result of formal education and previous experiences [45]. Creativity has previously been defined as a person's capacity to produce unique and useful ideas, as opposed to the notion of innovation, which relates to the ability to effectively execute creative ideas [46]. Creating innovative ideas is essential for innovation and allows a company to get a competitive edge [47]. These concepts can be connected to the creation of new processes, physical commodities, or services. The amount of originality spans from minor changes to existing ideas to completely new ones [48]. However, in most businesses, less innovative ideas that include small adjustments to current goods are more prevalent than highly original ones. Prior studies saw creativity as the final result of a three-phase process: issue identification, information search and encoding, and idea production [49, 50]. Employees who participate in the creative process generally produce more innovative results and perform better [48]. As a result, it is critical for businesses that are always seeking new challenges and attempting to achieve a set of goals to engage their people and inspire them to develop innovative ideas.

Previous studies have revealed that creativity meets two criteria: (1) uniqueness or originality Hur et al. [51], and (2) possibly relevant for or beneficial to an organization [52]. We've included employee creativity as a variable since the employee is at the heart of every creative process. Employees must be eager and able to innovate in order to achieve a continual flow of ideas. Employee creativity has been linked to both personal and environmental variables, as well as their interaction aspects. Researchers have made significant attempts to comprehend employee creativity by focusing on individual or person-specific characteristics such as talents (e.g., cognitive capacities, experience, relevant task knowledge, essential technical skills) and desire (e.g., motivated and satisfied) [52, 53]. Nowadays, the business world is extremely competitive and quickly changing; thus, employees are expected to demonstrate creative behavior at work and to be involved in creating useful and innovative ideas to meet growing difficulties. Creativity is crucial for increasing consumer loyalty and happiness, and it also allows a company to secure its long-term survival and growth [54]. As a result, successful businesses are always striving to implement new rules that foster employee innovation and reward excellent performance. A favorable and pleasant

corporate climate encourages employee creativity; therefore, leaders must inspire their followers and create a supportive work atmosphere defined by justice, honesty, and good behavior. As a result, workers acquire a sense of desire to share their views and connect with their managers [55-57].

#### 2.2. Organizational Citizenship Behaviour

OCB refers to any activities performed voluntarily by workers that go above and beyond the scope of their job responsibilities and are not linked to a pay system [16]. It is shown at the employee's choice and is unrelated to official incentives or organizational standards Chun et al. [14]. Matta et al. [58] defined OCB as an employee's voluntary contributions to the organization's progress and growth. The author went on to say that OCB has major consequences for an organization's success when individuals display it of their own will without regard for formal job requirements or a compensation system. In recent years, the idea has been more clearly defined and expanded to encompass employee involvement in positive behaviors, such as taking on extra job tasks and supporting colleagues at work [59]. OCB exists in higher education when employees conduct actions that are bigger than their defined work duties with the institution, academic staff, and students for the aim of promoting it and accomplishing desired goals. Employees' OCB raises the institution's educational level by allowing them to participate in instructional pedagogies and other administrative tasks [60]. It also helps people to accept institutional changes and reduces workplace conflicts, Ahmad Bodla et al. [61].

Podsakoff et al. [16] testified that OCB was positively linked with organizational success, providing some evidence that OCB might contribute to employee innovation. Previous study has also shown that OCB has a favorable effect on employee creativity [62]. Based on a study of the available literature, it was discovered that relatively few empirical research studies were conducted to explore the relationships between OCB and employee creativity. As a result, this article contends that an organizational climate in which employees routinely assist one another and share their expertise with coworkers should be positively related to creativity. Therefore, the first hypothesis is suggested:

Hypothesis 1: In the PHEIs, OCB has a positive effect on employee creativity.

### 2.3. Ethical Leadership

Ethical leadership is a well-known leadership paradigm that has piqued the interest of many academics. Despite a substantial amount of study on this idea, many areas remain unexplored. Ethical leadership is demonstrated by a leader's moral character and integrity, as well as the consistency of his or her ideals, words, and behavior. According to Mayer et al. [12], ethical leadership is a style of leadership that is distinguished by specific psychological skills and a well-defined direction for the company, resulting in a leader's increased self-awareness and a beneficial impact on subordinates' actions. Jordan et al. [10] defined ethical leadership style as "*a pattern of leader behavior that draws on and promotes both positive psychological capacities and a positive ethical climate, in order to foster greater self-awareness, an internalized moral perspective, balanced information processing, and relational transparency on the part of leaders working with followers, fostering positive self-development*" (p. 672). This leadership style embodies all of the good characteristics associated with social and psychological well-being, such as self-confidence, ambition, pleasant emotions, and goal achievement.

Ethical leadership stimulates critical thinking among employees to the point that a leader's ethical behavior, especially his or her emotional intelligence, plays a key role in creating and fostering workplace innovation [11]. It has been acknowledged throughout the literature that ethical leaders have distinct characteristics, such as acting on their words, beliefs, and values, and would develop interpersonal relationships with their followers to foster an organizational culture in which creativity is nurtured and rewarded [63]. As a result, real leaders' inventive spirit and motivation are seen to be crucial for promoting creative behavior in the business. According to Eisenbeiss and Van Knippenberg [64], ethical leadership elicits good feelings in employees, which fosters their creativity. Furthermore, Walumbwa et al. [65] found that subordinates of ethical leaders had higher intrinsic motivation as a result of their leaders' support for self-determination, and this drive eventually fosters creativity at work. Ethical leadership has been highlighted in the literature as a major factor of employee creativity, including more recent research that found it to have a beneficial influence on creative outcomes [66, 67].

According to the social exchange hypothesis, when organizational employees consider their leaders' behavior to be fair, they are more inclined to go above and beyond their official job description by exhibiting behaviors that benefit the whole company. According to Avolio and Gardner [68], when a genuine leader fosters a fair and innovative culture, organizational people are more eager to engage in positive behaviors that benefit the business. Ethical leaders strive to encourage citizenship behaviors among workers by raising their understanding of the importance and value of supporting one another at work Paterson and Huang [69]. Walumbwa et al. [65] discovered that ethical leadership style had a beneficial influence on employees' OCB, which is consistent with previous studies. Other researchers have claimed that engaged individuals at work are more likely to exhibit OCB, which would eventually increase the organization's effectiveness, efficiency, and performance [70]. Previous studies have also shown that OCB has a beneficial influence on employee creativity and has the potential to moderate the link between leadership styles and individual performance [69, 71, 72]. For example, discovered that OCB mediates the link between ethical leadership and employee performance. However, according to the existing literature review, it is difficult to locate a study that examined the mediating effect of OCB on the link between ethical leadership style and employee creativity. Thus, this research suggests that:

Hypothesis 2: In the PHEIs, ethical leadership has a positive effect on employee creativity.

Hypothesis 3: In the PHEIs, ethical leadership has a positive effect on organizational citizenship behavior.

Hypothesis 4: In the PHEIs, organizational citizenship behavior mediates the relationship between ethical leadership and employee creativity.

### 2.4. Transformational Leadership

Transformational leadership is a prominent kind of leadership that occurs when organizational connections are designed to achieve a shared goal through changing, inspiring, and enhancing followers' behaviors and ethical goals [21, 73]. Transformational leaders place a premium on developing their subordinates' full potential, excellent value systems, higher needs, moralities, and motivations [22]. This growth motivates subordinates to work together, modify their views, and prioritize organizational objectives above personal interests [19]. Prior research revealed that transformational leadership consists of four different behaviors: the expression of an inspiring vision, intellectual stimulation, idealized influence, and personalized concern [74, 75]. According to Gumusluoglu and Ilsev [32], transformational leaders' actions are the primary drivers of individual creativity. When leaders offer their followers personalized attention, they exhibit support and empathy for their issues and become receptive to fresh proposals or ideas from them [76]. As a result, subordinates can be encouraged to think creatively, to go beyond normal procedures, and to foster innovative behavior without fear [45]. Similarly, intellectual stimulation may boost followers' creativity by pushing them to challenge major assumptions about the formed framework of thinking and everyday actions, as well as to dive into prior issues and circumstances in novel ways. Furthermore, by displaying charismatic behavior (idealized influence) and articulating an inspirational vision, leaders encourage people to go above and beyond expectations and to make extra efforts to develop innovative solutions to workplace challenges [77].

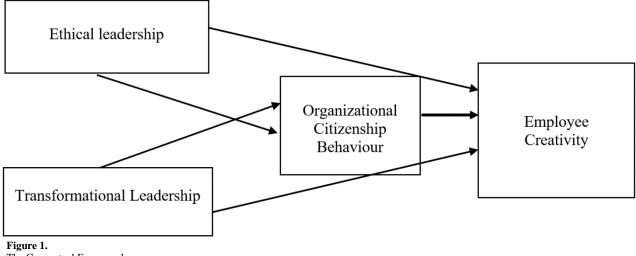
Because transformational leaders have the capacity to inspire their subordinates to go above and beyond their job obligations and to question the status quo, they can increase their efforts in everyday tasks with the goal of exceeding job duties and displaying higher OCB at work [78]. "*Transformational leaders change the way workers think about their jobs, causing them to perceive them as more fulfilling, challenging, and meaningful, which influences the extent to which they participate in citizenship performance,*" [79]. Transformational leadership followers are likely to identify strongly with their leaders and feel driven to contribute above and beyond expectations Eisenbeiss et al. [73]. Bass [78] discovered a favorable link between transformational leadership components and workers' OCB in the preceding research. Similarly, Bush [22] revealed that transformative leadership had a beneficial effect on employees' OCB. Despite extensive studies on transformational leadership and employee OCB, empirical literature on these concepts in underdeveloped countries is sparse.

According to social exchange theory, when transformational leaders inspire and pay close attention to their followers via individualized care, it encourages people to understand their creative potential and worth. As a result, the followers will have a high degree of intrinsic drive, which will lead to increased innovation among them [80]. According to Schaubroeck et al. [81], transformative leaders foster a creative atmosphere. Employees are given opportunities to offer innovative approaches without fear of reprisal in this atmosphere. Transformational leaders inspire their followers to attempt new ways to job completion, which promotes workplace creativity. Mittal and Dhar [24] also said that transformational leaders motivate their people to study and seek out new and innovative methods to complete tasks. Numerous prior studies have also demonstrated that this leadership style has a favorable impact on employee creativity [82]. Furthermore, there are a variety of elements that may serve as a moderator in the relationship between transformational leadership and creativity. OCB has previously been investigated as a major mediating variable between different leadership styles and employee performance. Dong et al. [45] discovered that OCB has an important role in improving the links between transformative leadership and worker long-term performance. However, there is insufficient evidence in the existing literature to support the function of OCB as a mediator between transformational leadership style and employee creativity. Consequently, the following hypotheses are suggested:

Hypothesis 5: In the PHEIs, transformational leadership has a positive effect on employee creativity.

Hypothesis 6: In the PHEIs, transformational leadership has a positive effect on organizational citizenship behavior. Hypothesis 7: In the PHEIs, organizational citizenship behavior mediates the relationship between transformational leadership and employee creativity.

Based on the above discussions, underlying theories, and existing gaps in the literature between the selected constructs, the research framework for this paper is presented as follows.



The Conceptual Framework.

## 3. Methodology

#### 3.1. Ethical Leadership

The ethical leadership questionnaire (ELQ) consists of 15 items, each with a 5-point Likert-style scale. The elements describe many dimensions of ethical leadership, such as honesty, integrity, justice, altruism, behavioral congruence with stated ideals, communication of ethical principles, and offering ethical advice. To preserve some consistency with previous research, we attempted to adapt items from previous scales on ethical leadership, such as the ELQ [83] and the morality and fairness scale created by De Hoogh and Den Hartog [84]. Respondents were asked to rate their supervisor's behavior on a five-point Likert scale (5 corresponding to "strongly agree," 1 corresponding to "strongly disagree"). "My boss has a clear grasp of how others view his/her competence," for example. In this investigation, the scale reliability was 0.85, suggesting a good level of internal consistency.

# 3.2. Transformational Leadership

A 12-item version of Bass [78]'s multifactor leadership questionnaire was used to assess transformational leadership (MLQ). Despite some concerns about the psychometric validity of this measure, it has been widely used in leadership research and is widely regarded as the best validated measure of transformational leadership. The most current version of transformational leadership in the MLQ, Form X [85], covers the following aspects: charismatic leadership, inspiring leadership, customized consideration, and intellectual stimulation components. There are three things in each dimension. Respondents used a five-point answer scale to indicate how frequently their supervisor showed the behavior described in each item, with 1 indicating not at all, 2 indicating once in a while, 3 indicating occasionally, 4 indicating quite regularly, and 5 indicating constantly. This factor has a reliability of  $\alpha = 0.89$ .

## 3.3. Organizational Citizenship Behavior

The scale, which consists of 24 items, was developed by Organ [86] and is largely based on the conceptual work of Podsakoff et al. [87]. The item numbers for the five reverse-scored items on this scale were 11, 12, 13, 14, and 15. The remainder of the goods were given a thumbs up. While analyzing the elements for statistical analysis, due care was given in these respects. The scale's internal consistency was 0.87 (Altruism = 0.83, Courtesy = 0.81, Conscientiousness = 0.79, Civic Virtue = 0.85, Sportsmanship = 0.77). It is crucial to highlight that in this study, rather than supervisory evaluations, an employee self-rating technique was employed. To reflect this shift in emphasis, all items were reworded.

## 3.4. Employee Creativity

Employee creativity may be measured in a variety of methods, including expert evaluation, product approach, supervisor ratings, and self-rated evaluations [88]. The Zhou and George [89] scale was used to measure employee creativity. It is a 13-item scale that was initially used or designed to be rated by employees' supervisors/managers. However, because the current study included data from workers, the original scale was significantly modified to make it a self-report measure. Participants understand what is being evaluated (personality characteristic, values, or inventiveness) and are willing to report correctly [90]. Participants were asked to rate each item on a seven-point Likert scale ranging from "totally disagree" to "absolutely agree." The scale's Cronbach's alpha is  $\alpha = 0.88$ .

#### 3.5. Sampling and Participants

Creswell and Sinley [91] used a quantitative technique to evaluate the behavior and attitudes of the sample size under observation. Because it is useful for gathering quantitative data to analyze the connection between factors, a survey approach was used [92]. The study was performed from March to June 2024 and included participants from Malaysian PHEIs. The survey URL was shared on social media platforms such as Facebook, Telegram, and WhatsApp. The participants were informed that their profiles would be kept private. Because English is the official medium of teaching at Malaysian PHEIs,

the survey questionnaire was not translated into Malay (the national language of Malaysia). A pilot study of 40 samples from the chosen universities was carried out, and small adjustments were made based on ideas and comments from the respondents. Around 350 questionnaires were sent via Google Docs to potential responders from Malaysia's chosen PHEIs. The recipients were mostly full-time professors and administrators who consented to take part in the research. The convenience sampling approach was utilized to speed up the data gathering procedure and get the required results. In addition to its advantages, such as simplicity of use and reduced cost, it was appropriate for data collecting to avoid the difficulties associated with contacting the respondents. In previous research, convenience sampling was also utilized to obtain data from employees in the higher education setting. The non-response bias was examined using [93] guidelines. This was accomplished by comparing the first (15% of received questionnaires) to the last (15% of returned questionnaires by respondents). Independent sample *t*-test results showed that the differences between the means of the first and last participants on each indicator of the key constructs are negligible, indicating that non-response bias is not a problem.

A total of 350 questionnaires were given to eight PHEIs in Peninsular Malaysia, with 290 returned; however, 15 of those received had incomplete information and were deleted. In the study, only 275 valid replies were utilized, giving a 78.5 percent response rate. The descriptive analysis revealed that 172 (62.8 percent) of the respondents were men and 103 (37.2 percent) were females who took part in the study from eight PHEIs in Peninsular Malaysia. The marital status of the participants was as follows: 43.1 percent were married, 31.9 percent were single, 11.6 percent were separated/divorced, 9.6 percent were in a relationship, and 3.8 percent were unidentified. Around 12.2 percent of respondents were between the ages of 20 and 29, 44.3 percent were between the ages of 30 and 39, 27.6 percent were between the ages of 40 and 49, 14.8 percent were between the ages of 50 and 59, and 1.1 percent were above 60. As a result, the majority of the sample's participants were between the ages of 30 and 39. In terms of academic qualification, 70.3 percent held a postgraduate degree, 22.1 percent held a bachelor's degree, 5.2 percent held a diploma qualification, and just 2.4 percent held a high school diploma. In terms of job experience, the descriptive analysis revealed that the vast majority (72.7 percent) had more than 5 years of experience in their institutions. Finally, everyone who volunteered to take part in this study was a full-time employee.

# 4. Data Analysis

The current study made use of structural equation modeling with Smart PLS 3.0. A two-stage method was employed in accordance with the guidelines [94]. The model's psychometric characteristics were investigated in the first stage of the investigation. Individual item loadings, average variance extracted (AVE), and composite reliability (CR) ratings are obtained as a result of the measurement methodology described in Table 1. Items with loadings of 0.50 or higher were maintained using the rule of thumb technique proposed by Risher and Hair Jr [95] and Shmueli et al. [96]. Table 1 shows loadings for the retained items ranging from 0.707 to 0.774. Second, the composite reliability ratings indicated by Fornell and Larcker [97] were attained in a responsive manner based on the 0.60 threshold. The measuring model's results reveal that composite reliability scores range between 0.686 and 0.798. As a result, AVE scores were likewise guaranteed to be 0.50 or higher. The AVE values in Table 2 range from 0.698 to 0.817. Finally, the model's psychometric characteristics were confirmed by validating the internal consistency, reliability, and convergent validity [98].

#### Table 2.

Results of the Measurement Model.

Construct	Indicators	Substantive Factor Loadings (Ra)	Ra <sup>2</sup>	Method Factor Loadings (Rb)	Rb <sup>2</sup>
Ethical Leadership	ELQ1	0.724***	0.711	0.139*	0.022
	ELQ2	0.801***	0.732	-0.033 <sup>NS</sup>	0.001
	ELQ3	0.866***	0.794	0.036 <sup>NS</sup>	0.014
	ELQ4	0.821***	0.727	-0.169*	0.003
	ELQ5	0.776***	0.697	-0.317 <sup>NS</sup>	0.022
	ELQ6	0.873***	0.751	0.170 <sup>NS</sup>	0.011
	ELQ7	0.782**	0.684	0.145 <sup>NS</sup>	0.014
	ELQ8	0.814***	0.882	0.189 <sup>NS</sup>	0.029
	ELQ9	0.879***	0.810	0.143 <sup>NS</sup>	0.052
	ELQ10	0.717**	0.822	0.042 <sup>NS</sup>	0.013
	ELQ11	0.877***	0.714	0.039 <sup>NS</sup>	0.011
	ELQ12	0.901***	0.894	0.045*	0.003
	ELQ13	0.836***	0.788	0.040*	0.012
	ELQ14	0.892***	0.876	-0.039 <sup>NS</sup>	0.003
	ELQ15	0.911***	0.812	0.043 <sup>NS</sup>	0.011
Transformational Leadership	II1	0.867***	0.937	-0.169*	0.003
	II2	0.828***	0.815	0.149 <sup>NS</sup>	0.051
	II3	1.024***	1.135	0.050*	0.029
	IM1	0.841**	0.641	0.149*	0.023
	IM2	0.826***	0.727	-0.218 <sup>NS</sup>	0.029
	IM3	0.874***	0.518	0.142*	0.024
	IS1	0.885**	0.498	0.138*	0.027
	IS2	0.894***	0.512	0.127*	0.024
	IS3	0.861***	0.329	0.151*	0.022

	IC1	0.834***	0.418	0.133*	0.026
	IC2	0.902***	0.420	0.144*	0.028
	IC3	0.865***	0.498	0.151*	0.031
Organizational Citizenship Behavior	OCB1	0.772***	0.783	-0.179**	0.003
	OCB2	0.777***	0.776	0.170 <sup>NS</sup>	0.012
	OCB3	0.796***	0.619	0.263*	0.002
	OCB4	0.817***	0.461	0.225 <sup>NS</sup>	0.025
	OCB5	0.714***	0.630	0.192*	0.021
	OCB6	0.751***	0.718	0.026 <sup>NS</sup>	0.024
	OCB7	0.711***	0.719	0.209*	0.021
	OCB8	0.792***	0.814	0.258*	0.027
	OCB9	0.811***	0.819	0.244*	0.028
	OCB10	0.863***	0.718	0.267*	0.023
	OCB11	0.819**	0.834	0.269*	0.025
	OCB12	0.813***	0.867	-0.255**	0.002
	OCB13	0.881***	0.855	0.254*	0.026
	OCB14	0.889**	0.823	0.239*	0.026
	OCB15	0.825***	0.817	0.279*	0.028
	OCB16	0.810***	0.819	0.289*	0.027
	OCB17	0.883***	0.815	0.269*	0.022
	OCB18	0.844***	0.723	0.258*	0.025
	OCB19	0.901***	0.816	-0.269**	0.001
	OCB20	0.889**	0.810	0.233*	0.028
	OCB21	0.880***	0.878	0.299*	0.021
	OCB22	0.801***	0.856	0.272*	0.024
	OCB23	0.856***	0.734	0.258*	0.028
	OCB24	0.823***	0.829	0.259*	0.026
Employee Creativity	EC1	0.801***	0.732	-0.033 <sup>NS</sup>	0.001
	EC2	0.801***	0.732	-0.031 <sup>NS</sup>	0.001
	EC3	0.866***	0.794	0.036 <sup>NS</sup>	0.014
	EC4	0.821***	0.727	-0.169*	0.003
	EC5	0.876**	0.697	-0.317 <sup>NS</sup>	0.002
	EC6	0.873***	0.751	0.170 <sup>NS</sup>	0.011
	EC7	0.782***	0.684	0.145 <sup>NS</sup>	0.014
	EC8	0.814***	0.882	0.189 <sup>NS</sup>	0.029
	EC9	0.879***	0.810	0.143 <sup>NS</sup>	0.052
	EC10	0.853***	0.894	0.146 <sup>NS</sup>	0.024
	EC11	0.846***	0.891	0.144 <sup>NS</sup>	0.022
	EC12	0.859***	0.904	-0.141 <sup>NS</sup>	0.003
	EC13	0.837***	0.892	0.145 <sup>NS</sup>	0.0021
	Average	0.861***	0.765	-0.001	0.001

# Note: AVE = Average Variance Extracted, CR = Composite Reliability.

## 4.1. Common Method Bias

When survey data is obtained from a single source, common method bias (CMB) is an issue. As a result, in order to assess the level of such bias, the study used a mix of two approaches, namely a procedural and a statistical method. The study used a procedural approach to guarantee clarity of questioning and used a conventional survey technique [99]. The statistical technique is evaluated using a [100] latent factor method approach. "*Factor loadings relating the technique impact latent variable to the substantive indicators were included in the method model*" [101]. The average substantive factor loading explained variance of the construct's indicators is 0.765, as shown in Table 3. The average method factor loading, on the other hand, is -0.001. CMB was unlikely to represent a severe hazard in this investigation since the method factor loading yielded negligible and tiny values.

Construct	Indicators	Substantive Factor Loadings (Ra)	Ra <sup>2</sup>	Method Factor Loadings (Rb)	Rb <sup>2</sup>
Ethical Leadership	ELQ1	0.724***	0.711	0.139*	0.022
*	ELQ2	0.801***	0.732	-0.033 <sup>NS</sup>	0.001
	ELQ3	0.866***	0.794	0.036 <sup>NS</sup>	0.014
	ELQ4	0.821***	0.727	-0.169*	0.003
	ELQ5	0.776***	0.697	-0.317 <sup>NS</sup>	0.022
	ELQ6	0.873***	0.751	0.170 <sup>NS</sup>	0.011
	ELQ7	0.782**	0.684	0.145 <sup>NS</sup>	0.014
	ELQ8	0.814***	0.882	0.189 <sup>NS</sup>	0.029
	ELQ9	0.879***	0.810	0.143 <sup>NS</sup>	0.052
	ELQ10	0.717**	0.822	0.042 <sup>NS</sup>	0.013
	ELQ11	0.877***	0.714	0.039 <sup>NS</sup>	0.011
	ELQ12	0.901***	0.894	0.045*	0.003
	ELQ12 ELQ13	0.836***	0.788	0.040*	0.012
	ELQ14	0.892***	0.876	-0.039 <sup>NS</sup>	0.003
	ELQ15	0.911***	0.812	0.043 <sup>NS</sup>	0.003
Transformational Leadership	III	0.867***	0.937	-0.169*	0.003
Transformational Leadership	III2	0.828***	0.815	0.149 <sup>NS</sup>	0.051
	II3	1.024***	1.135	0.050*	0.029
	IM1	0.841**	0.641	0.149*	0.023
	IM1 IM2	0.826***	0.727	-0.218 <sup>NS</sup>	0.023
	IM2 IM3	0.826***	0.727	0.142*	0.029
	INIS IS1	0.885**			
			0.498	0.138*	0.027
	IS2	0.894***	0.512	0.127*	0.024
	IS3	0.861***	0.329	0.151*	0.022
	IC1	0.834***	0.418	0.133*	0.026
	IC2	0.902***	0.420	0.144*	0.028
	IC3	0.865***	0.498	0.151*	0.031
Organizational Citizenship Behavior	OCB1	0.772***	0.783	-0.179**	0.003
	OCB2	0.777***	0.776	0.170 <sup>NS</sup>	0.012
	OCB3	0.796***	0.619	0.263*	0.002
	OCB4	0.817***	0.461	0.225 <sup>NS</sup>	0.025
	OCB5	0.714***	0.630	0.192*	0.021
	OCB6	0.751***	0.718	0.026 <sup>NS</sup>	0.024
	OCB7	0.711***	0.719	0.209*	0.021
	OCB8	0.792***	0.814	0.258*	0.027
	OCB9	0.811***	0.819	0.244*	0.028
	OCB10	0.863***	0.718	0.267*	0.023
	OCB11	0.819**	0.834	0.269*	0.025
	OCB12	0.813***	0.867	-0.255**	0.002
	OCB13	0.881***	0.855	0.254*	0.026
	OCB14	0.889**	0.823	0.239*	0.026
	OCB15	0.825***	0.817	0.279*	0.028
	OCB16	0.810***	0.819	0.289*	0.027
	OCB17	0.883***	0.815	0.269*	0.022
	OCB18	0.844***	0.723	0.258*	0.025
	OCB19	0.901***	0.816	-0.269**	0.001
	OCB20	0.889**	0.810	0.233*	0.028
	OCB21	0.880***	0.878	0.299*	0.021
	OCB22	0.801***	0.856	0.272*	0.024
	OCB23	0.856***	0.734	0.258*	0.028
	OCB24	0.823***	0.829	0.259*	0.026
Employee Creativity	EC1	0.801***	0.732	-0.033 <sup>NS</sup>	0.001
r	EC2	0.801***	0.732	-0.031 <sup>NS</sup>	0.001
	EC3	0.866***	0.794	0.036 <sup>NS</sup>	0.0014
	EC4	0.821***	0.794	-0.169*	0.003
	EC4 EC5	0.8214444	0.727	-0.317 NS	0.003
	LCJ	0.070***	0.097	-0.517	0.002

Table 3.

EC7	0.782***	0.684	0.145 <sup>NS</sup>	0.014
EC8	0.814***	0.882	0.189 <sup>NS</sup>	0.029
EC9	0.879***	0.810	0.143 <sup>NS</sup>	0.052
EC10	0.853***	0.894	0.146 <sup>NS</sup>	0.024
EC11	0.846***	0.891	0.144 <sup>NS</sup>	0.022
EC12	0.859***	0.904	-0.141 <sup>NS</sup>	0.003
EC13	0.837***	0.892	0.145 <sup>NS</sup>	0.021
Average	0.861***	0.765	-0.001	0.001

Note(s): \*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05, NS = not significant.

## 4.2. Descriptive Statistics and Correlations

Table 4 shows the descriptive statistics for chosen variables, including mean values, standard deviations, and correlations. The mean values varied from 3.73 to 4.24, as seen in the table. It also demonstrates that the lowest number for standard deviation is 0.42 and the maximum value is 0.69. The research also revealed a favorable relationship between ethical leadership and both OCB (r = 0.568, p < 0.01) and employee creativity (r = 0.524, p < 0.01). Furthermore, transformational leadership is linked to OCB (r = 0.471, p < 0.01) and employee creativity (r = 0.601, p < 0.01). It was also shown that there is a positive association between OCB and employee creativity (r = 0.398, p < 0.01). Finally, the study found that ethical leadership is associated with transformative leadership (r = 0.614, p < 0.01). All of the factors are positively and substantially linked with each other, according to these data.

#### Table 4.

Descriptive Statistics and Correlations.

Constructs	Mean	SD	1	2	3	4
1. Ethical Leadership	4.17	0.42	1.000			
2. Transformational Leadership	4.24	0.46	0.614**	1.000		
3. OCB	3.98	0.61	0568**	0.471**	1.000	
4. Employee creativity	3.73	0.69	0.524**	0.601**	0.398**	1.000

Note: Correlation is significant at \*\*p<0.01.

## 4.3. Discriminant Validity

We considered the two main methods for assessing discriminant validity. First, we compared the root-squared values of AVEs with the corresponding correlation coefficients. As shown in Table 5, the root-squared values of AVEs are higher than the pair of correlation coefficients for the associated constructs, thereby satisfying the conditions for discriminant validity [102]. Also, no individual correlations are found to be greater than their respective composite reliabilities, while most of the correlation coefficients are consistently smaller than the cut-off value of 0.70 [42]. All these results indicate satisfactory discriminant validity.

#### Table 5.

Constructs	1	2	3	4
1. Ethical Leadership	0.835			
2. Transformational Leadership	0.526	0.886		
3. OCB	0.597	0.611	0.891	
4. Employee creativity	0.499	0.397	0.634	0.808

Note: 1= Ethical leadership, 2= Transformational leadership, 3= Organizational citizenship behavior, 4= Employee creativity.

To test the discriminant validity of variance-based estimators, Tabachnick et al. [102] suggested a higher boundary criterion known as the Heterotrait-Monotrait (HTMT) ratio of correlation, which we aim to utilize in this study. Though we acknowledge that HTMT was originally developed for variance-based or partial least squares structural equation modeling (PLS-SEM), we believe it is applicable in this study despite its use of covariance-based (CB) SEM on the basis that the items measuring the factors must be evaluated in terms of their variance (or variability), as in the case of running a factor analysis, which provides and r Furthermore, HTMT has been shown to achieve higher specificity and sensitivity rates (97 % - 99 %) when compared to cross loadings (0.00 %) and Fornell and Larcker's criteria (20.82 %) [100]. Specifically, discriminant validity may be tested by comparing the HTMT values of two constructs, where the HTMT value of two components should ideally be less than 0.85, but can reach as high as 0.90 if the constructs are conceptually comparable [42, 102, 103]. The HTMT ratio test findings vary from 0.187 to 0.462, indicating that all constructs are independent of one another and, as a result, discriminant validity exists in this study (see Table 6).

Table 6.	
Heterotrait-Monotrait Ratio Test (HTMT	).

Constructs	1	2	3	4
1. Ethical Leadership	-			
2. Transformational Leadership	0.404	-		
3. OCB	0.213	0.321	-	
4. Employee creativity	0.187	0.241	0.462	-

Note: 1= Ethical leadership, 2= Transformational leadership, 3= Organizational citizenship behavior, 4= Employee creativity.

## 4.4. Structural Model

After achieving acceptable factor loadings, reliability and validity assumptions, the structural model was constructed. Through this model, the hypotheses of the study which were presented in the literature review section were verified. Table 7 shows the values of path estimates regarding the relationships among constructs. The analysis indicated that OCB has a positive impact on employee creativity ( $\beta = 0.428$ , t-value=5.213, p < 0.01); therefore, H1 is accepted. It was also found that ethical leadership style positively and significantly impacts employee creativity ( $\beta = 0.241$ , t-value=3.272, p < 0.01); thus, H2 is confirmed. The positive effect of ethical leadership on OCB is also confirmed in this study ( $\beta = 0.408$ , t-value=3.119, p < 0.01), therefore, H3 is supported. Additionally, the results showed that transformational leadership has a positive influence on employee creativity ( $\beta = 0.201$ , t-value=2.674, p < 0.01), hence, H5 is accepted. Further, the analysis showed that transformational leadership positively influences OCB ( $\beta = 0.399$ , t-value=3.216, p < 0.01); therefore, H6 is supported.

#### Table 7

Result of Structural Modelling.

Hypotheses	Constructs	β	<i>t</i> -value	P-value	Decision
Hypothesis 1	OCB → EC	0.428	5.213	0.001	Supported
Hypothesis 2	EL> EC	0.241	3.272	0.005	Supported
Hypothesis 3	EL → OCB	0.408	3.119	0.002	Supported
Hypothesis 5	TL → EC	0.201	2.674	0.001	Supported
Hypothesis 6	TL → OCB	0.399	3.216	0.000	Supported

Note: OCB= Organizational citizenship behavior, EL= Ethical leadership, TL= Transformational leadership, EC= Employee creativity.

The recommendations of Berg et al. [104] were followed to test the mediating impact of OCB between the independent variables (ethical leadership and transformational leadership) and the dependent variable (employee creativity). First, the indirect influence of an independent variable on the dependent variable should be computed. According to the authors, if it is substantial and positive, the first criterion for the mediation test is met [104]. The values of the lower and upper bounds should then be computed. If there is no zero between the values of the lower and upper bounds of the 95% Confidence Intervals (CIs), the indirect impact is considerable, and there is a mediation. Otherwise, no evidence exists to support the mediating impact.

In H4, it was anticipated that OCB mediates the linkages amongst ethical leadership style and employee creativity. The analysis presented in Table 8 showed that the indirect effect of ethical leadership on employee creativity is positive and significant ( $\beta = 0.210$ , p < 0.05). The results also showed that there is no zero between the lower bound (0.022) and upper bound (0.323); thus, OCB mediates the relationship among ethical leadership style and employee creativity, and this confirms that H4 is supported. Finally, it was proposed in H7 that OCB mediates the association between transformational leadership and employee creativity. Through the analysis, it was found that the indirect effect of transformational leadership on employee creativity is positive and statistically significant ( $\beta = 0.187$ , p < 0.05). The results also showed that there is no zero between the lower bound (0.021) and upper bound (0.243); therefore, OCB mediates the relationship among transformational leadership style and employee creativity, and this means that H7 is accepted.

# Table 8.

Result of Mediation Test.									
Constructs	Indirect	SE	<i>t</i> -value	Р-	95%	95%	Decision		
	Effect			value	LL	UL			
$EL \longrightarrow OCB \longrightarrow EC$	0.210*	0.085	2.422	0.001	0.022	0.323	Supported		
$TL \longrightarrow OCB \longrightarrow EC$	0.187*	0.073	2.346	0.002	0.021	0.243	Supported		
	Constructs $EL \longrightarrow OCB \longrightarrow EC$	ConstructsIndirect Effect $EL \longrightarrow OCB \longrightarrow EC$ $0.210^*$	ConstructsIndirect EffectSE $EL \longrightarrow OCB \longrightarrow EC$ $0.210^*$ $0.085$	ConstructsIndirect EffectSE t-value $EL \longrightarrow OCB \longrightarrow EC$ $0.210^*$ $0.085$ $2.422$	ConstructsIndirect EffectSE t-valuet-value value $EL \longrightarrow OCB \longrightarrow EC$ $0.210^*$ $0.085$ $2.422$ $0.001$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		

Note: \*p<0.05, OCB= Organizational citizenship behavior, EL= Ethical leadership, TL= Transformational leadership, EC= Employee creativity.

## 5. Discussion

The principal goal of this research was to investigate the impact of ethical and transformational leadership styles on employee creativity, as well as to see if OCB mediates the link between these characteristics. According to the research, OCB has a good effect on employee creativity. Podsakoff et al. [16] also confirmed that OCB had a positive impact on organizational effectiveness, lending credence to the potential linkages between OCB and employee creativity. According to De Clercq and Pereira [105], since employees' creative behavior is dependent on their knowledge, which may be fostered through organizational training or information transfer among coworkers, it is critical to encourage employees to assist and support one another [106]. During the assessment of published literature, it was discovered that there is a scarcity of studies

that examined the empirical influence of OCB on employee creativity. Thus, our research adds to the literature by demonstrating that OCB is favorably associated to employee creativity.

This study also found that ethical leadership has a favorable influence on OCB and employee creativity. These findings are consistent with previous research, which found that workers' views of their leaders' ethical leadership influence their OCB [107] as well as workplace creativity [108]. That is, an ethical leader who acts honestly, with relational transparency, and in a balanced manner will be able to create an open and honest connection with his or her followers [109]. As a result, ethical leaders foster an organizational culture that fosters and encourages OCB and employee innovation. Furthermore, the study's findings indicated that OCB mediates the relationship between ethical leadership style and employee creativity. This finding suggests that an ethical leadership style might generate employees' emotive commitment to the business, which will eventually drive their creativity. According to Ruiz-Palomino and Martínez-Cañas [62], certain characteristics of ethical leaders play a critical role in developing favorable exchange relationships with their subordinates because these leaders arouse confidence, inspire hope and optimism, and elicit positive emotions in their subordinates, who reciprocate with greater OCB. As a result, in order to display innovative behavior, employees must be psychologically comfortable [110].

According to the findings of this study, transformational leadership has a beneficial influence on employee creativity. This conclusion was supported by earlier research that found transformational leadership had a substantial influence on employee creativity, Kuenzi et al. [11]. Bush [22] also confirmed that employees are more likely to stay committed and rely heavily on a transformational leader who inspires and directs them to a new work approach. This might be due to the fact that transformational leaders focus on increasing their followers' skills to generate new ideas and change the present status quo [109]. Furthermore, transformative leaders are known to show empathy, personalized concern, and support to their followers. Such characteristics may empower employees to question the present status quo without fear, resulting in more workplace innovation. Furthermore, the results indicated the beneficial influence of transformational leadership style on OCB. This conclusion is consistent with earlier empirical research, which found a positive connection between the two constructs [16, 18, 59, 111]. This indicates that transformational leaders have a significant impact on influencing the behaviors of their followers in the organization and motivating them to go above and beyond the expectations and work tasks [100, 112]. Finally, the findings confirmed that OCB mediates the relationship between transformational leadership style and employee creativity. This implies that employees' attitudes about their transformational leaders might boost their organizational emotional attachment, promoting their creativity at work.

## **6.** Practical Implications

The purpose of this study was to investigate the direct and indirect impacts of ethical and transformational leadership styles on employee creativity in the higher education sector, using OCB as a mediator. According to the findings, ethical leadership has a favorable influence on employee creativity and OCB. Furthermore, the data suggested that the involvement of OCB is mediating this impact. In other words, ethical leaders have the ability to cultivate OCB in their followers, resulting in increased creativity. These findings suggest that higher education institutions should prioritize the development of leaders who value transparency and self-awareness in their interactions with followers, and who demonstrate an inner moral perspective in addition to balanced information processing, in order to ensure positive outcomes at the individual and organizational levels. Furthermore, this study indicates that higher education institutions should prioritize recruiting leaders with ethical and transformational characteristics in order to increase views of these leadership styles, since this may favorably affect employees.

The results also indicated that transformative leadership improves OCB and employee creativity. The mediating impact of OCB on transformational leadership style and creativity was also experimentally investigated and confirmed by statistically significant results. When transformational leaders instill OCB in their followers, it inspires people to become creative through the brainstorming of innovative ideas, which eventually supports the organization's competitiveness. According to these findings, the qualities of transformational leaders may be extended to cope with the diverse demands of workers who exhibit innovative behavior in the higher education sector. To enhance employee engagement, higher education institutions should also create attractive work environments. Management is responsible for ensuring that workers perceive a balance between their personal, institutional, and family lives. At the same time, leaders must exhibit trustworthiness, honesty, respect, and politeness in the workplace in order to increase their reputation and, as a result, improve OCB and creativity among their followers.

## 7. Theoretical Implications

The current study also makes an important contribution to the existing literature by investigating the impact of ethical and transformational leadership on employee creativity. It sought to close existing gaps by investigating the mediating impact of OCB between transformational leadership style and individual creativity in the setting of higher education. This study responds to a need for further empirical research into how ethical and transformational leadership impacts employees' creativity and what factors may moderate these interactions. It also intended to broaden the theory of ethical leadership and social exchange theory by evaluating the stability and validity of these ideas across different cultures using a Malaysian sample. The empirical research has yet to investigate the mediating influence of OCB on the association between the selected leadership styles (ethical and transformational leadership) and employee creativity. As a result, the current study attempted to include these factors into a novel research paradigm. This is one of the first studies to investigate the role of OCB as a moderator between these factors. According to the findings, transformational leaders' characteristics can positively affect employee creativity. Nonetheless, such influence may be efficiently cultivated through OCB given by transformative leaders. The current study's findings provide an important addition to the understanding of the links between selected leadership styles

and employee creativity as mediated by OCB since they provide a foundation for theoretical growth and innovative empirical inquiry in this area. When ethical and transformational leaders foster a pleasant work environment and maintain strong connections with their followers, their followers tend to exhibit better attitudes and higher creativity at work, which benefits the entire organization.

# 8. Conclusion

This study is one of the first to attempt to correlate ethical and transformational leadership styles with employee creativity in a higher education environment using OCB. The findings indicated that ethical and transformational leadership behaviors affect employee creativity, which may be reinforced when workers demonstrate good OCB. As a result, businesses should establish methods to help them build ethical and transformational leaders in order to foster employees' OCB and creativity. These leadership approaches can inspire higher education personnel to think more dichotomously and to build thought processes that result in a wider pool of creative ideas and innovative solutions. As a result, it is thought that employees who display creative behavior may be effectively managed when leaders use ethical and transformational leadership styles and inspire them to exhibit OCB that allows creative problem-solving. The results provided significant support for the hypothesis that OCB mediates the connection between the chosen leadership styles (ethical and transformational leadership) and employee creativity in Malaysian PHEIs. These findings also have practical and theoretical implications that may be useful for various higher education scholars and business practitioners when developing human resource strategies.

# 9. Limitations and Future Research

The article contains a few limitations that should be considered in future research. First and foremost, the nature of the cross-sectional method may limit the capacity to draw convincing conclusions about causation. The favorable correlations discovered in this study may be regarded as correlational rather than causative. Positive connections between ethical leadership, transformational leadership, employee creativity, and OCB, for example, would become complicated as they changed over time. As a result, the longitudinal approach may be more appropriate for assessing the positive connections revealed in this research. Second, self-reported data was used in this study to validate the hypotheses, which may have resulted in some bias. Despite the fact that the statistical analysis indicated that the test of common method variance does not pose a significant problem in this study, the collection of data from other sources is likely to improve its quality. As a result, future studies can use multiple sources of data to compare variables in order to minimize bias and achieve impartiality. Furthermore, the data was gathered from personnel in the higher education industry, allowing future research to explore the factors in other contexts. Finally, only OCB was regarded as a mediator between the identified leadership styles and employee creativity in this study. Indeed, the findings confirmed OCB's position as a moderator in the connections between certain leadership styles (ethical and transformational leadership) and employee creativity. As a result, future research should look at other mediators to better understand how and why both ethical and transformational leadership styles impact employee creativity in PHEIs.

# References

- [1] Y. Chen, D. Liu, G. Tang, and T. M. Hogan, "Workplace events and employee creativity: A multistudy field investigation," *Personnel Psychology*, vol. 74, no. 2, pp. 211-236, 2021. https://doi.org/10.1111/peps.12399
- [2] Y. H. Chiang and K. P. Hung, "Team control mode, workers' creativity, and new product innovativeness," *R&D Management*, vol. 44, no. 2, pp. 124-136, 2014. https://doi.org/10.1111/radm.12044
- [3] J. Jiang, S. Wang, and S. Zhao, "Does HRM facilitate employee creativity and organizational innovation? A study of Chinese firms," *International Journal Of Human Resource Management*, vol. 23, no. 19, pp. 4025-4047, 2012. https://doi.org/10.1080/09585192.2012.690567
- [4] N. Stojcic, I. Hashi, and E. Orlic, "Creativity, innovation effectiveness and productive efficiency in the UK," *European Journal of Innovation Management*, vol. 21, no. 4, pp. 564-580, 2018. https://doi.org/10.1108/EJIM-11-2017-0166
- [5] C. J. Chen, J. W. Huang, and Y. C. Hsiao, "Knowledge management and innovativeness: The role of organizational climate and structure," *International journal of Manpower*, vol. 31, no. 8, pp. 848-870, 2010. https://doi.org/10.1108/01437721011088548
- [6] P. M. Gichohi, "The role of employee engagement in revitalizing creativity and innovation at the workplace: A survey of selected libraries in Meru County-Kenya," *Library Philosophy and Practice*, vol. 2014, no. 1, p. 0\_1, 2014.
- [7] M. Nastase, N. Bibu, A.-I. Munteanu, I. Mircioi, and M. S. Florescu, "The specific elements of strategic human resources management for competitive business development," *Industria Textila*, vol. 70, no. 6, pp. 579-586, 2019. https://doi.org/10.35530/IT.070.06.1749
- [8] A. Olsson, K. M. B. Paredes, U. Johansson, M. Olander Roese, and S. Ritzén, "Organizational climate for innovation and creativity-a study in Swedish retail organizations," *The International Review of Retail, Distribution and Consumer Research*, vol. 29, no. 3, pp. 243-261, 2019. https://doi.org/10.1080/09593969.2019.1598470
- [9] S.-G. Roibu, A.-M. Nica, and R.-I. Hornoiu, "Transformational or transactional leadership? The impact of romanian leadership styles on hotel employees commitment to business excellence," *Quality-Access to Success*, vol. 20, no. 171, 2019.
- [10] J. Jordan, M. E. Brown, L. K. Treviño, and S. Finkelstein, "Someone to look up to: Executive-follower ethical reasoning and perceptions of ethical leadership," *Journal of management*, vol. 39, no. 3, pp. 660-683, 2013. https://doi.org/10.1177/0149206311398136
- [11] M. Kuenzi, D. M. Mayer, and R. L. Greenbaum, "Creating an ethical organizational environment: The relationship between ethical leadership, ethical organizational climate, and unethical behavior," *Personnel Psychology*, vol. 73, no. 1, pp. 43-71, 2020. https://doi.org/10.1111/peps.12356
- [12] D. M. Mayer, K. Aquino, R. L. Greenbaum, and M. Kuenzi, "Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership," *Academy of management journal*, vol. 55, no. 1, pp. 151-171, 2012. https://doi.org/10.5465/amj.2008.0276

- [13] M. C. Bolino, H.-H. Hsiung, J. Harvey, and J. A. LePine, ""Well, I'm tired of tryin'!" Organizational citizenship behavior and citizenship fatigue," *Journal of Applied Psychology*, vol. 100, no. 1, pp. 56-74, 2015. https://doi.org/10.1037/a0037583
- [14] J. S. Chun, Y. Shin, J. N. Choi, and M. S. Kim, "How does corporate ethics contribute to firm financial performance? The mediating role of collective organizational commitment and organizational citizenship behavior," *Journal of management*, vol. 39, no. 4, pp. 853-877, 2013. https://doi.org/10.1177/0149206311419662
- [15] N. P. Podsakoff, P. M. Podsakoff, S. B. MacKenzie, T. D. Maynes, and T. M. Spoelma, "Consequences of unit-level organizational citizenship behaviors: A review and recommendations for future research," *Journal of Organizational Behavior*, vol. 35, no. S1, pp. S87-S119, 2014. https://doi.org/10.1002/job.1911
- [16] N. P. Podsakoff, S. W. Whiting, P. M. Podsakoff, and B. D. Blume, "Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis," *Journal of applied Psychology*, vol. 94, no. 1, pp. 122-141, 2009. https://doi.org/10.1037/a0013079
- [17] J. Cho and D. C. Treadway, "Organizational identification and perceived organizational support as mediators of the procedural justice–citizenship behaviour relationship: A cross-cultural constructive replication," *European Journal of work and organizational psychology*, vol. 20, no. 5, pp. 631-653, 2011. https://doi.org/10.1080/1359432X.2010.487363
- [18] E.-J. Kim and S. Park, "The role of transformational leadership in citizenship behavior: Organizational learning and interpersonal trust as mediators," *International journal of manpower*, vol. 40, no. 7, pp. 1347-1360, 2019. https://doi.org/10.1108/IJM-12-2018-0413
- [19] W. J. Kwak and H.-K. Kim, "Servant leadership and customer service quality at Korean hotels: Multilevel organizational citizenship behavior as a mediator," *Social Behavior and Personality: an international journal*, vol. 43, no. 8, pp. 1287-1298, 2015. https://doi.org/10.2224/sbp.2015.43.8.1287
- [20] E. Kearney and D. Gebert, "Managing diversity and enhancing team outcomes: The promise of transformational leadership," *Journal of applied psychology*, vol. 94, no. 1, pp. 77-89, 2009. https://doi.org/10.1037/a0013077
- [21] J. Antonakis and R. J. House, "Instrumental leadership: Measurement and extension of transformational-transactional leadership theory," *The leadership quarterly*, vol. 25, no. 4, pp. 746-771, 2014. https://doi.org/10.1016/j.leaqua.2014.04.005
- [22] T. Bush, "Transformational leadership: Exploring common conceptions," *Educational Management, Administration & Leadership*, vol. 46, no. 6, pp. 883-887, 2018. https://doi.org/10.1177/1741143218795731
- [23] Y. Gong, J.-C. Huang, and J.-L. Farh, "Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy," *Academy of management Journal*, vol. 52, no. 4, pp. 765-778, 2009. https://doi.org/10.5465/AMJ.2009.43670890
- [24] S. Mittal and R. L. Dhar, "Transformational leadership and employee creativity: mediating role of creative self-efficacy and moderating role of knowledge sharing," *Management decision*, vol. 53, no. 5, pp. 894-910, 2015. https://doi.org/10.1108/MD-07-2014-0464
- [25] M. Kasımoğlu and D. Ammari, "Transformational leadership and employee creativity across cultures," *Journal of Management Development*, vol. 39, no. 4, pp. 475-498, 2020. https://doi.org/10.1108/JMD-05-2019-0153
- [26] N. Henker, S. Sonnentag, and D. Unger, "Transformational leadership and employee creativity: The mediating role of promotion focus and creative process engagement," *Journal of Business and Psychology*, vol. 30, pp. 235-247, 2015. https://doi.org/10.1007/s10869-014-9348-7
- [27] X. Ma, W. Jiang, L. Wang, and J. Xiong, "A curvilinear relationship between transformational leadership and employee creativity," *Management Decision*, vol. 58, no. 7, pp. 1355-1373, 2020. https://doi.org/10.1108/MD-07-2017-0653
- [28] M. Saleem and F. Mahmood, "Transformational leadership and employees' creativity: A multi-mediation model," *Journal of Management and Research*, vol. 5, no. 1, pp. 1-21, 2018. https://doi.org/10.29145/jmr/51/0501005
- [29] A. Chaubey, C. K. Sahoo, and N. Khatri, "Relationship of transformational leadership with employee creativity and organizational innovation: A study of mediating and moderating influences," *Journal of Strategy and Management*, vol. 12, no. 1, pp. 61-82, 2019. https://doi.org/10.1108/JSMA-07-2018-0075
- [30] J. Jyoti and M. Dev, "The impact of transformational leadership on employee creativity: The role of learning orientation," *Journal of Asia Business Studies*, vol. 9, no. 1, pp. 78-98, 2015. https://doi.org/10.1108/JABS-03-2014-0022
- [31] H. H. Tse, M. L. To, and W. C. Chiu, "When and why does transformational leadership influence employee creativity? The roles of personal control and creative personality," *Human Resource Management*, vol. 57, no. 1, pp. 145-157, 2018. https://doi.org/10.1002/hrm.21855
- [32] L. Gumusluoglu and A. Ilsev, "Transformational leadership, creativity, and organizational innovation," *Journal of business research*, vol. 62, no. 4, pp. 461-473, 2009. https://doi.org/10.1016/j.jbusres.2007.07.032
- [33] N. K. Jaiswal and R. L. Dhar, "Fostering employee creativity through transformational leadership: Moderating role of creative self-efficacy," *Creativity Research Journal*, vol. 28, no. 3, pp. 367-371, 2016. https://doi.org/10.1080/10400419.2016.1195631
- [34] T. S. Suifan, A. B. Abdallah, and M. Al Janini, "The impact of transformational leadership on employees' creativity: The mediating role of perceived organizational support," *Management Research Review*, vol. 41, no. 1, pp. 113-132, 2018. https://doi.org/10.1108/MRR-02-2017-0032
- [35] D. G. Bachrach, B. C. Powell, B. J. Collins, and R. G. Richey, "Effects of task interdependence on the relationship between helping behavior and group performance," *Journal of Applied Psychology*, vol. 91, no. 6, p. 1396, 2006.
- [36] A. R. A. Arokiasamy, "Moderating influence of school culture on the relationship between transformational leadership and organizational health of secondary school teachers in Malaysia," *Economics, Management and Sustainability*, vol. 2, no. 1, pp. 19-35, 2017. https://doi.org/10.14254/jems.2017.2-1.2
- [37] A. Arokiasamy and H. Tat, "Exploring the influence of transformational leadership on work engagement and workplace spirituality of academic employees in the private higher education institutions in Malaysia," *Management Science Letters*, vol. 10, no. 4, pp. 855-864, 2020. https://doi.org/10.5267/j.msl.2019.10.011
- [38] Q. Q. S. Limited, "QS World University Rankings: Asia. https://www.qs.com/reports-whitepapers/2019-qs-world-university-rankings-asia-supplement/," 2019.
- [39] M. H. Yaakub and Z. A. Mohamed, "Measuring the performance of private higher education institutions in Malaysia," *Journal of Applied Research in Higher Education*, 2019.
- [40] J. I. Lyn Chan and R. Muthuveloo, "Antecedents and influence of strategic agility on organizational performance of private higher education institutions in Malaysia," *Studies in Higher Education*, vol. 46, no. 8, pp. 1726-1739, 2021.

- [41] M. M. Munusamy and A. Hashim, "Internationalisation of higher education in Malaysia: Insights from higher education administrators," *AEI Insights*, vol. 5, no. 1, pp. 21-39, 2019.
- [42] A. S. M. Yusoff, F. S. Peng, F. Z. A. Razak, and W. A. Mustafa, "Discriminant validity assessment of religious teacher acceptance: The use of HTMT criterion," presented at the In J. Phys.: Conf. Ser (Vol. 1529, pp. 42045): IOP Publishing, 2020.
- [43] W. Pan, L.-Y. Sun, and L. W. Lam, "Employee–organization exchange and employee creativity: A motivational perspective," *The International Journal of Human Resource Management*, vol. 31, no. 3, pp. 385-407, 2020. https://doi.org/10.1080/09585192.2017.1331368
- [44] G. Hirst, R. Van Dick, and D. Van Knippenberg, "A social identity perspective on leadership and employee creativity," *Journal* of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, vol. 30, no. 7, pp. 963-982, 2009. https://doi.org/10.1002/job.600
- [45] Y. Dong, K. M. Bartol, Z. X. Zhang, and C. Li, "Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership," *Journal of organizational behavior*, vol. 38, no. 3, pp. 439-458, 2017. https://doi.org/10.1002/job.2134
- [46] A. H. Hon and S. S. Lui, "Employee creativity and innovation in organizations: Review, integration, and future directions for hospitality research," *International Journal of Contemporary Hospitality Management*, vol. 28, no. 5, pp. 862-885, 2016. https://doi.org/10.1108/IJCHM-09-2014-0454
- [47] T. González-González and D. J. García-Almeida, "Frontline employee-driven innovation through suggestions in hospitality firms: The role of the employee's creativity, knowledge, and motivation," *International Journal of Hospitality Management*, vol. 94, p. 102877, 2021. https://doi.org/10.1016/j.ijhm.2021.102877
- [48] S. J. McKersie, R. A. Matthews, C. E. Smith, C. L. Barratt, and R. T. Hill, "A process model linking family-supportive supervision to employee creativity," *Journal of Occupational and Organizational Psychology*, vol. 92, no. 4, pp. 707-735, 2019. https://doi.org/10.1111/joop.12276
- [49] C. O. Antwi *et al.*, "Job demand stressors and employees' creativity: A within-person approach to dealing with hindrance and challenge stressors at the airport environment," *The Service Industries Journal*, vol. 39, no. 3-4, pp. 250-278, 2019. https://doi.org/10.1080/02642069.2018.1520220
- [50] C. Jin Nam and T. A. V. Anderson, A., "Contextual inhibitors of employee creativity in organizations: The insulating role of creative ability," Group å Organization Management, vol. 34, no. 3, pp. 330-357, 2009 https://doi.org/10.1177/1059601108329811
- [51] W.-M. Hur, T.-W. Moon, and S.-H. Ko, "How employees' perceptions of CSR increase employee creativity: Mediating mechanisms of compassion at work and intrinsic motivation," *Journal of Business Ethics*, vol. 153, no. 3, pp. 629-644, 2018. https://doi.org/10.1007/s10551-016-3321-5
- [52] S. Martono, N. A. Wulansari, and M. Khoiruddin, "The role of empowering leadership in creating employee creativity: Moderation - mediation mechanism," presented at the In Iop Conf. Ser.: Earth Environ. Sci (Vol. 485, pp. 12060): IOP Publishing, 2020.
- [53] Y. Zhang, L. Long, and J. Zhang, "Pay for performance and employee creativity: The importance of procedural justice and willingness to take risks," *Management Decision*, vol. 53, no. 7, pp. 1378-1397, 2015. https://doi.org/10.1108/MD-11-2013-0596
- [54] S. X. Li and T. Sandino, "Effects of an information sharing system on employee creativity, engagement, and performance," *Journal of Accounting Research*, vol. 56, no. 2, pp. 713-747, 2018. https://doi.org/10.1111/1475-679X.12202
- [55] J. Hong, B. Hou, K. Zhu, and D. Marinova, "Exploratory innovation, exploitative innovation and employee creativity: The moderation of collectivism in Chinese context," *Chinese Management Studies*, vol. 12, no. 2, pp. 268-286, 2018. https://doi.org/10.1108/CMS-11-2016-0228
- [56] A. Ismail, A. H. A. Majid, M. A. Rahman, N. A. Jamaluddin, A. I. Susantiy, and C. I. Setiawati, "Aligning Malaysian SMEs with the megatrends: The roles of HPWPs and employee creativity in enhancing Malaysian SME performance," *Global Business Review*, vol. 22, no. 2, pp. 364-380, 2021. https://doi.org/10.1177/0972150918811236
- [57] İ. Yıkılmaz and L. Sürücü, "Leader-member exchange as a mediator of the relationship between authentic leadership and employee creativity," *Journal of Management & Organization*, vol. 29, no. 1, pp. 159-172, 2023. https://doi.org/10.1017/jmo.2021.23
- [58] F. K. Matta, B. A. Scott, J. Koopman, and D. E. Conlon, "Does seeing "eye to eye" affect work engagement and organizational citizenship behavior? A role theory perspective on LMX agreement," *Academy of Management Journal*, vol. 58, no. 6, pp. 1686-1708, 2015. https://doi.org/10.5465/amj.2014.0106
- [59] P. E. Spector, J. A. Bauer, and S. Fox, "Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know?," *Journal of applied psychology*, vol. 95, no. 4, pp. 781-790, 2010. https://doi.org/10.1037/a0019477
- [60] T. Farid, S. Iqbal, J. Ma, S. Castro-González, A. Khattak, and M. K. Khan, "Employees' perceptions of CSR, work engagement, and organizational citizenship behavior: The mediating effects of organizational justice," *International journal of environmental research and public health*, vol. 16, no. 10, p. 1731, 2019. https://doi.org/10.3390/ijerph16101731
- [61] A. Ahmad Bodla, N. Tang, R. Van Dick, and U. R. Mir, "Authoritarian leadership, organizational citizenship behavior, and organizational deviance: Curvilinear relationships," *Leadership & Organization Development Journal*, vol. 40, no. 5, pp. 583-599, 2019. https://doi.org/10.1108/LODJ-08-2018-0313
- [62] P. Ruiz-Palomino and R. Martínez-Cañas, "Ethical culture, ethical intent, and organizational citizenship behavior: The moderating and mediating role of person-organization fit," *Journal of business ethics*, vol. 120, pp. 95-108, 2014. https://doi.org/10.1007/s10551-013-1650-1
- [63] C. Men, P. S. Fong, W. Huo, J. Zhong, R. Jia, and J. Luo, "Ethical leadership and knowledge hiding: a moderated mediation model of psychological safety and mastery climate," *Journal of Business Ethics*, vol. 166, pp. 461-472, 2020. https://doi.org/10.1007/s10551-018-4027-7
- [64] S. A. Eisenbeiss and D. Van Knippenberg, "On ethical leadership impact: The role of follower mindfulness and moral emotions," *Journal of Organizational Behavior*, vol. 36, no. 2, pp. 182-195, 2015. https://doi.org/10.1002/job.1968

- [65] F. O. Walumbwa, D. M. Mayer, P. Wang, H. Wang, K. Workman, and A. L. Christensen, "Linking ethical leadership to employee performance: The roles of leader–member exchange, self-efficacy, and organizational identification," *Organizational behavior and human decision processes*, vol. 115, no. 2, pp. 204-213, 2011. https://doi.org/10.1016/j.obhdp.2010.11.002
- [66] J. Fu, Y. Long, Q. He, and Y. Liu, "Can ethical leadership improve employees' well-being at work? Another side of ethical leadership based on organizational citizenship anxiety," *Frontiers in psychology*, vol. 11, p. 1478, 2020. https://doi.org/10.3389/fpsyg.2020.01478
- [67] J. Toby, R. L. Greenbaum, W. J. Craig, and B. D. Edwards, "Employee Entitlement, Engagement, and Performance: The Moderating Effect of Ethical Leadership," *Journal of Business Ethics*, vol. 168, no. 4, pp. 813-826, 2021. https://doi.org/10.1007/s10551-019-04246-0
- [68] B. J. Avolio and W. L. Gardner, "Authentic leadership development: Getting to the root of positive forms of leadership," *The leadership quarterly*, vol. 16, no. 3, pp. 315-338, 2005.
- [69] T. A. Paterson and L. Huang, "Am I expected to be ethical? A role-definition perspective of ethical leadership and unethical behavior," *Journal of Management*, vol. 45, no. 7, pp. 2837-2860, 2019. https://doi.org/10.1177/0149206318771166
- [70] H. Al Halbusi, K. A. Williams, T. Ramayah, L. Aldieri, and C. P. Vinci, "Linking ethical leadership and ethical climate to employees' ethical behavior: the moderating role of person–organization fit," *Personnel Review*, vol. 50, no. 1, pp. 159-185, 2021. https://doi.org/10.1108/PR-09-2019-0522
- [71] A. Presbitero and M. Teng-Calleja, "Ethical leadership, team leader's cultural intelligence and ethical behavior of team members: Implications for managing human resources in global teams," *Personnel Review*, vol. 48, no. 5, pp. 1381-1392, 2019. https://doi.org/10.1108/PR-01-2018-0016
- [72] D. B. Strydom, "Ethical leadership and performance: The effect of follower individualism-collectivism," *International Journal of Cross Cultural Management*, vol. 21, no. 2, pp. 261-283, 2021. https://doi.org/10.1177/14705958211013395
- [73] S. A. Eisenbeiss, D. Van Knippenberg, and S. Boerner, "Transformational leadership and team innovation: integrating team climate principles," *Journal of applied psychology*, vol. 93, no. 6, p. 1438, 2008. https://doi.org/10.1037/a0012716
- [74] S. Braun, C. Peus, S. Weisweiler, and D. Frey, "Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust," *The leadership quarterly*, vol. 24, no. 1, pp. 270-283, 2013. https://doi.org/10.1016/j.leaqua.2012.11.006
- [75] D. Van Dierendonck, D. Stam, P. Boersma, N. De Windt, and J. Alkema, "Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes," *The leadership quarterly*, vol. 25, no. 3, pp. 544-562, 2014. https://doi.org/10.1016/j.leaqua.2013.11.014
- [76] S. A. Eisenbeiß and S. Boerner, "A double-edged sword: Transformational leadership and individual creativity," *British Journal of Management*, vol. 24, no. 1, pp. 54-68, 2013. https://doi.org/10.1111/j.1467-8551.2011.00786.x
- [77] A. H. Awang, M. Haron, I. Zainuddin Rela, and S. Saad, "Formation of civil servants' creativity through transformative leadership," *Journal of Management Development*, vol. 39, no. 4, pp. 499-515, 2020. https://doi.org/10.1108/JMD-04-2019-0142
- [78] B. M. Bass, "Two decades of research and development in transformational leadership," *European journal of work and organizational psychology*, vol. 8, no. 1, pp. 9-32, 1999.
- [79] M. R. Hamstra, N. W. Van Yperen, B. Wisse, and K. Sassenberg, "Transformational-transactional leadership styles and followers' regulatory focus," *Journal of personnel psychology*, vol. 10, no. 4, pp. 182-186, 2011. https://doi.org/10.1027/1866-5888/a000043
- [80] A. Richter, U. von Thiele Schwarz, C. Lornudd, R. Lundmark, R. Mosson, and H. Hasson, "iLead—a transformational leadership intervention to train healthcare managers' implementation leadership," *Implementation Science*, vol. 11, pp. 1-13, 2015. https://doi.org/10.1186/s13012-016-0475-6
- [81] J. Schaubroeck, S. S. Lam, and S. E. Cha, "Embracing transformational leadership: team values and the impact of leader behavior on team performance," *Journal of applied psychology*, vol. 92, no. 4, pp. 1020-1030, 2007. https://doi.org/10.1037/0021-9010.92.4.1020
- [82] A. M. Grant, "Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership," *Academy of management journal*, vol. 55, no. 2, pp. 458-476, 2012. https://doi.org/10.5465/amj.2010.0588
- [83] L. Langlois, C. Lapointe, P. Valois, and A. de Leeuw, "Development and validity of the ethical leadership questionnaire," *Journal of Educational Administration*, vol. 52, no. 3, pp. 310-331, 2014. https://doi.org/10.1108/JEA-10-2012-0110
- [84] A. H. De Hoogh and D. N. Den Hartog, "Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study," *The leadership quarterly*, vol. 19, no. 3, pp. 297-311, 2008.
- [85] N. Muenjohn and A. Armstrong, "Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership," *Contemporary management research*, vol. 4, no. 1, 2008.
- [86] D. W. Organ, *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books/DC Heath and Com, 1988.
- [87] P. M. Podsakoff, S. B. MacKenzie, R. H. Moorman, and R. Fetter, "Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors," *The leadership quarterly*, vol. 1, no. 2, pp. 107-142, 1990.
- [88] C. E. Shalley, J. Zhou, and G. R. Oldham, "The effects of personal and contextual characteristics on creativity: Where should we go from here?," *Journal of management*, vol. 30, no. 6, pp. 933-958, 2004. https://doi.org/10.1016/j.jm.2004.06.007
- [89] J. Zhou and J. M. George, "When job dissatisfaction leads to creativity: Encouraging the expression of voice," Academy of Management journal, vol. 44, no. 4, pp. 682-696, 2001. https://doi.org/10.2307/3069410
- [90] J. A. Allen, R. Reiter-Palmon, J. Crowe, and C. Scott, "Debriefs: Teams learning from doing in context," *American Psychologist*, vol. 73, no. 4, pp. 504-516, 2018. https://doi.org/10.1037/amp0000246
- [91] J. W. Creswell and R. C. Sinley, "Developing a culture-specific mixed methods approach to global research," *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, vol. 69, pp. 87-105, 2017. https://doi.org/10.1007/s11577-017-0453-2
- [92] U. Sekaran and R. Bougie, *Research methods for business: A skill building approach*. John Wiley & Sons, 2019.
- J. S. Armstrong and T. S. Overton, "Estimating nonresponse bias in mail surveys," *Journal of marketing research*, vol. 14, no. 3, pp. 396-402, 1977. https://doi.org/10.1177/002224377701400320

- [94] J. F. Hair, M. Sarstedt, T. M. Pieper, and C. M. Ringle, "The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications," *Long range planning*, vol. 45, no. 5-6, pp. 320-340, 2012.
- [95] J. Risher and J. F. Hair Jr, "The robustness of PLS across disciplines," Academy of Business Journal, vol. 1, pp. 47-55, 2017.
- [96] G. Shmueli *et al.*, "Predictive model assessment in PLS-SEM: guidelines for using PLSpredict," *European journal of marketing*, vol. 53, no. 11, pp. 2322-2347, 2019. https://doi.org/10.1108/EJM-02-2019-0189
- [97] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of marketing research*, vol. 18, no. 1, pp. 39-50, 1981. https://doi.org/10.1177/002224378101800104
- [98] J. F. Hair, C. M. Ringle, and M. Sarstedt, "Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance," *Long range planning*, vol. 46, no. 1-2, pp. 1-12, 2013. https://doi.org/10.1016/j.lrp.2013.01.001
- [99] Y.-C. Huang, L. L. Chang, and K. F. Backman, "Detecting common method bias in predicting creative tourists behavioural intention with an illustration of theory of planned behaviour," *Current Issues in Tourism*, vol. 22, no. 3, pp. 307-329, 2019. https://doi.org/10.1080/13683500.2018.1424809
- [100] M. R. Ab Hamid, W. Sami, and M. H. Mohmad Sidek, "Discriminant validity assessment: Use of fornell & larcker criterion versus HTMT criterion," *Journal Of Physics. Conference Series*, vol. 890, no. 1, p. 12163, 2017. https://doi.org/10.1088/1742-6596/890/1/012163
- [101] J. Henseler, C. M. Ringle, and M. Sarstedt, "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *Journal of the academy of marketing science*, vol. 43, pp. 115-135, 2015. https://doi.org/10.1007/s11747-014-0403-8
- [102] B. G. Tabachnick, L. S. Fidell, and J. B. Ullman, Using multivariate statistics. Boston, MA: Pearson, 2007.
- [103] K. J. Preacher and A. F. Hayes, "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models," *Behavior research methods*, vol. 40, no. 3, pp. 879-891, 2008. https://doi.org/10.3758/BRM.40.3.879
- [104] S. T. S. Berg, A. Grimstad, M. Škerlavaj, and M. Černe, "Social and economic leader-member exchange and employee creative behavior: The role of employee willingness to take risks and emotional carrying capacity," *European Management Journal*, vol. 35, no. 5, pp. 676-687, 2017. https://doi.org/10.1016/j.emj.2017.08.002
- [105] D. De Clercq and R. Pereira, "Knowledge-sharing efforts and employee creative behavior: the invigorating roles of passion for work, time sufficiency and procedural justice," *Journal of Knowledge Management*, vol. 24, no. 5, pp. 1131-1155, 2020. https://doi.org/10.1108/JKM-06-2019-0274
- [106] I. Ayu Putu Widani Sugianingrat, S. Rini Widyawati, C. Alexandra de Jesus da Costa, M. Ximenes, S. Dos Reis Piedade, and W. Gede Sarmawa, "The employee engagement and OCB as mediating on employee performance," *International Journal of Productivity and Performance Management*, vol. 68, no. 2, pp. 319-339, 2019. https://doi.org/10.1108/IJPPM-03-2018-0124
- [107] Q. Yang and h. Wei, "The impact of ethical leadership on organizational citizenship behavior: The moderating role of workplace ostracism," *Leadership & Organization Development Journal*, vol. 39, no. 1, pp. 100-113, 2018. https://doi.org/10.1108/LODJ-12-2016-0313
- [108] C. Ko, J. Ma, M. Kang, A. S. English, and M. H. Haney, "How ethical leadership cultivates healthy guanxi to enhance OCB in China," Asia Pacific Journal of Human Resources, vol. 55, no. 4, pp. 408-429, 2017. https://doi.org/10.1111/1744-7941.12120
- [109] A. Newman, K. Kiazad, Q. Miao, and B. Cooper, "Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organisational citizenship: A case of the head leading the heart?," *Journal of business ethics*, vol. 123, no. 1, pp. 113-123, 2014. https://doi.org/10.1007/s10551-013-1803-2
- [110] D. B. Strydom, "Ethical leadership and performance: The effect of follower individualism-collectivism," *International journal of cross cultural management : CCM*, vol. 21, no. 2, pp. 261-283, 2021. 10.1177/14705958211013395
- [111] T. A. Fatima and D. A. Siddiqui, "Ethical leadership and organizational citizenship behaviour: the mediating role of ethical climate, trust, and justice," *International Journal of Human Resource Studies*, vol. 10, no. 1, pp. 70103-70103, 2020. https://doi.org/10.5296/ijhrs.v10i1.15954
- [112] W. C. Hoo, W. C. Tatt, and T. S. Teck, "The influence of perceived organizational support on employee commitment: A systematic review," WSEAS Transactions on Business and Economics, vol. 21, pp. 121-129, 2024.