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The mediating of perceived organizational support between ethical leadership and employee engagement at information and communication technology telecommunication in Palestine

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Abstract

This paper recognizes the gaps in previous studies and provides insight into the significance of leadership guided by ethical principles in influencing employee engagement through the mediating role of perceived organizational support (POS). Thus, this paper aims to examine the impact of ethical leadership on employee engagement and to determine whether perceived organizational support (POS) mediates the relationships between both constructs. This study used a quantitative research method and collected data from 328 employees in the Information and Communication Technology telecommunications sector in Palestine. The hypotheses underwent examination through the application of partial least squares structural equation modeling (PLS-SEM). The findings show that 328 people responded to the current study's questionnaire. Ethical leadership the dependent variable was strongly impacted by perceived organizational support (EL \rightarrow POS) at the significant level of 0.01 (β = .697, μ = .0.669, SD=0.035, t=20.104, P=0.000 and f^2= 78% respectively. All of the study's variables had some effect on the dependent variable and employee engagement. Similarly, the remaining hypotheses are verified. When the R-squared adjusted values of the independent variables for the variance of employee engagement were more than 53 percent, the R-squared multiple correlations (R2) for the dependent variables indicated that the model appropriately matched the data.

Keywords: Employee engagement, Ethical leadership, ICT telecommunication, Palestine, Perceived organizational support.

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1. Introduction

Human resource management is a crucial skill for managers with a significant beneficial impact on the organization. Human resource management is described as systems of activities and strategies that concentrate on effectively managing personnel at all levels of a business to accomplish organizational goals [1]. This management style is a planned and

effective instructional approach to manage people in the context of the organization's culture and environment. Human resource management has always been a major challenge in recent years and poor employee engagement in present occupations is a new issue for today's managers [2]. Employee engagement has been characterized as "an individual's participation, contentment and excitement for work" [3].

Employee engagement motivates people to enhance their performance, work environment and company values. People readily use and express themselves physically, intellectually and emotionally during the interaction [4]. Employees who are disengaged lack initiative, take extended pauses (such as prolonging morning tea breaks), are drug addicts, unable to learn new things, introverts and lack vitality. According to Gallup's [5] research, various workers globally are not engaged at work with just 15% of people worldwide engaged. According to the results of this poll, it was found that disengaged employees lacked motivation and were less likely to contribute to the achievement of business objectives and results. Actively disengaged employees are unhappy, perform poorly at work and are more likely to have a negative effect on their coworkers.

Perceived organizational support (POS) is one of the important criteria for increasing employee engagement [6]. According to research, employees develop global perceptions about how much their company values their concerns and contributions to their well-being [7]. Employees are more inclined to engage in their job if they are relied upon to accomplish their tasks, perceived organizational support from management is critical. If workers see organizational support, they will assume that the organization will fulfill its responsibilities of exchange in the future and that they are compelled to reimburse the company. Employees that feel organizational support will be highly engaged in the workplace [8]. Furthermore, employees will stay active if they are encouraged and directed by the organization's cornerstone known as the "leader". Previous research has identified a leader's conduct as a key aspect in defining the organizational environment, since the leader's supervisory style has a significant influence on workers' attitudes and actions either directly or indirectly [9].

Previous research found that a leader's and ethical conduct may impact employee engagement [10-14]. Employee performance [14], job satisfaction [15, 16], innovative work performance turnover intention [17] and organizational citizenship behavior are some examples of ethical leadership [18, 19].

In addition for POS to arise, the ethical leader must reflect personal characteristics (such as integrity, honesty and fairness) while interacting and sustaining relationships with subordinates in the workplace. However, little is known about how ethical leadership and POS are interrelated [18, 20, 21]. Furthermore, when it comes to ethical leadership, employee engagement (EE) is often underestimated and underrepresented. Finally, several mediated processes may exist to strengthen the links between ethical leadership and employee engagement. Prior research looked at POS as a mediator between various leadership styles and constructs. Cheng et al. [22] showed that POS serves as a bridge between ethical leadership and employee well-being. Furthermore, Watto et al. [23] found that POS mediated the association between ethical leadership and job performance. Khan et al. [24] conducted yet another research. They revealed that POS mediated the connection between ethical leadership and creative work behavior in part. However, there is insufficient empirical evidence in the existing research to show whether POS plays an intervening role between ethical leadership style and employee engagement. We employed POS as a link between ethical leadership and employee engagement to solve the existing gaps.

2. Literature Review

2.1. Employee Engagement

Employee engagement is an important method for increasing workplace productivity, motivating employees and minimizing attrition rates. According to Alshaabani et al. [25], employee engagement is an increased emotional and intellectual bond experienced by an employee towards his or her job, company, management or coworkers that leads him or her to apply greater discretionary effort to his or her work. Employee engagement is the eagerness of the members of an organization towards their job and expressing themselves physically, cognitively and emotionally throughout their job [26].

Employee engagement is defined by Hammon et al. [27] as the positive approach of workers towards the organization for which they work as well as the values of the business. Hence, there is a two-way interaction between the employee and the firm in the concept of employee engagement. Shuck and Wollard [28] defined engagement as workers' cognition, emotions and behavior-oriented towards the outcomes desired by the company. According to Ateeq [29], employee engagement is a process in which a company enhances employee commitment and participation to generate better business outcomes. Employee engagement is defined as a person's proclivity to express oneself intellectually, physically and emotionally while executing a job [30].

According to Nawaz et al. [31] if a company gives all of the resources that an employee expects such as access to increase competencies and equal career advancement opportunities, workers will be more engaged in their job, create more, and develop a feeling of loyalty to the organization. There has been surprisingly limited research on how to properly execute them despite the increasing use of employee engagement methods in firms [32, 33]. Employee engagement is widely recognized as a crucial tool for enhancing workplace efficiency and motivation. Thus, workers will stay active if they are encouraged and directed by the organization's pillar which is referred to as the leader. As a result, there is a disparity between research results on the importance of employee engagement and a scarcity of research on how to establish employee engagement methods [34].

2.2. Perceived Organizational Support and Employee Engagement

POS is a key concept of the organizational support theory which posits that "employees believe that the organization has a general positive or negative orientation towards them that encompasses both the recognition of their contributions and

concern for their welfare" [35]. Perceived organization support is an important component in describing the social exchange connection between an employer and an employee since it signifies what the company has done for them at least in the workers' opinion [36]. Employees' perceived organizational support is described as their overall perceptions about how much the company values their contributions and shows concern for their well-being. In a subjective sense, perceived organizational support reflects the organization's general expectations of its members as well as acknowledgement of personal importance and contribution to it. The theoretical foundations of research on organizational support and employee engagement have always been "social exchange theory" and "reciprocity principle" [37]. The foundation of the social exchange relationship is that if a person receive benefit for another person, he expects a proportional return from the other person in the future [36]. Conversely, if workers see organizational support, they will assume that the organization will fulfill its responsibilities of exchange in the future and that they are compelled to reimburse the organization. Employees who sense organizational support will demonstrate a high degree of involvement in the workplace. Employee attitudes and behaviour are thought to be influenced by perceived organizational support. According to the findings of research conducted by Dai and Qin [38], perceived organizational support and employee engagement have a highly favorable link. Perceived organizational support has a direct beneficial effect on employee engagement. Sitorus [39] investigated the correlation between organizational support and employee behavior within the organization and showed a strong and direct impact between them. It is a widely held view that employee engagement is a significant ordinal outcome of perceived organizational support [2].

Hypothesis 1: Perceived organizational support has a positive impact on employee engagement.

2.3. Ethical Leadership

Yazdanshenas and Mirzaei [40] distinguished various aspects of ethical leadership, including character and integrity, benevolence, inspiring, empowering encouraging and scientifically. Similar aspects were found by Kalshoven et al. [41] particularly fairness, honesty, people orientation, role clarity, ethical advice and power sharing. According to these qualities, Eisenbeiss [42] established two types of ethical leadership: a humane orientation and a justice orientation.

According to Vasudevan et al. [43], ethical leadership has the following six dimensions: character and integrity, ethical awareness, community or people orientation, inspiring, encouraging and empowering and managing ethical responsibility. Instead, according to Widiastuti and Mulyaningsih [44], ethical leadership has the following seven dimensions: fairness, division of power, role definition, people-oriented conduct, honesty, ethical advice and concern for sustainability.

The importance of ethical leadership has grown. According to Bush et al. [45], ethical leadership is "the presentation of normatively acceptable behavior close to personal activities and interpersonal interactions and encouraging such conduct among followers through bidirectional communication, support and decision-making." As a result, this definition includes three key characteristics of a successful ethical leader: (1) attempts to put what he or she says into reality, (2) believes in fairness and (3) communicates important information.

Leaders who accept the moral person perspective value integrity and prioritize honesty, kindness and fairness [46]. The moral manager also known as "ethical leadership" is a facet of leadership that proactively manages morality. It involves a leader's initiatives to shape subordinates' ethical conduct, including conveying ethical standards and addressing instances of unethical behavior. Rendering fair and principled judgments serving as ethical role models and acknowledging and rewarding ethical actions are additional illustrations of these efforts [46]. According to Mayer et al. [47], the moral manager aspect is the most distinct to the ethical leadership paradigm.

Several studies have shown that leaders' actions and ethical conduct have a significant impact on staff engagement. Employees who have more autonomy and clear guidance from their managers are more likely to be engaged at work [48, 49]. Leaders that act ethically encourage their followers to act ethically as well.

Ethical leaders are noted for creating an environment that favorably impacts employees' objectives and conduct. Furthermore, ethical leadership guarantees that workers have a more positive work view and are more devoted to and involved in their jobs [50].

According to Amghar [51], leaders attain allure and credibility as ethical role models when employees perceive them as both morally upright individuals and ethical leaders. Sugianingrat et al. [52] stated that ethical leadership could implement fairness, power-sharing, role clarification, people-oriented behavior, integrity, guidance and concern for the company's sustainability. This increases vigor dedication, absorption and engagement. Other studies found a positive impact of ethical leadership on employee engagement [10, 13, 14, 53, 54]

2.4. Ethical Leadership and Perceived Organizational Support

Ethical leaders consistently serve as role models demonstrating ethical principles to inspire positive work behaviors and encourage employee voice [55]. Ethical leaders are perceived as role models to the people they lead and are expected to exhibit and promote robust ethical behaviors within the organization [56]. Conceptually, the two main components that support the concept of ethical leaders are as follows: moral people and moral managers. As a moral person, an ethical leader is expected to be fair, principled and exhibit concern for the followers while as a moral manager, an ethical leader sets, communicates and reinforces high ethical standards for followers to emulate Musenze and Mayende [57]. Kumar and Bagga [58] found that ethical leadership had a positive relationship with POS. Perceived organizational support is element that could mediate the relationship between ethical leadership and employee engagement. Ethical leaders amplify the significance of their employees' endeavors by imparting relevant knowledge. Subsequently, employees demonstrate a heightened level of engagement towards departmental objectives by contributing innovative ideas and making decisions

that can influence the company's performance and profitability. Nevertheless, the precise nature of the relationship between ethical leadership and POS remains unclear [18, 20, 21]. In addition, employee's engagement (EE) is often underestimated and under-represented when it comes to ethical leadership [59].

According to Kilroy et al. [60], the development of social exchange relationships between a supervisor and an employee is reliant on trust and reciprocity standards [61]. According to Blau [62], "social trade tends to produce sentiments of personal duty, appreciation and trust." We propose that the more workers see honesty, fairness and caring from their ethical leader, the more trust they acquire and as a result, reciprocate [63, 64]. As a result, we contend that such ethical treatment experienced by workers is seen as positive work experiences that might boost POS levels. Ethical supervisors in leadership positions have a critical role in providing organizational resources and incentives for subordinates and are therefore considered a critical source of organizational support [65, 66]. As a result, ethical leaders may deliver advantages that followers may best use in their performance duties. Supportive actions shown by ethical leaders help followers think that their contributions are appreciated and that the company cares about their well-being which may improve POS [67, 68].

Moreover, previous researchers investigated the role of POS in mediating the connection between ethical leadership style and innovative work behavior [24, 57] and discovered that POS mediates the relationship between ethical leadership and innovative work behavior. Ateeq and Milhem [69] discovered that POS influences the association among ethical leadership and job results. Nonetheless, there is no evidence in the present research to illustrate how POS might mediate the link between ethical leadership and employee engagement. When workers believe that their ethical leader or head has treated them favorably, they will regard their ethical leader or company favorably [70]. As a result, ethical leaders may deliver advantages that followers may best use in their performance duties. Furthermore, several research discovered a favorable relationship between POS and EE [2, 71]. Based on prior research, our understanding of the relationship between ethical leadership is frequently undervalued and inadequately addressed. Notably, earlier studies have identified POS as a mediator in the relationship between ethical leadership, job performance and innovative work behaviors [23, 24]. Despite this, there exists a scarcity of empirical evidence within current research to ascertain whether POS serves as an intervening factor in the link between ethical leadership style and employee engagement. Our approach involves using POS as a crucial intermediary in connecting ethical leadership to employee engagement to address these gaps. As a result, the following hypotheses are proposed:

Hypothesis 2: Ethical leadership has a positive impact on employee engagement.

Hypothesis 3: Ethical leadership has a positive impact on POS.

Hypothesis 4: POS mediates the relationship between ethical leadership and employee engagement.

The study's hypothesized model is depicted in Figure 1.

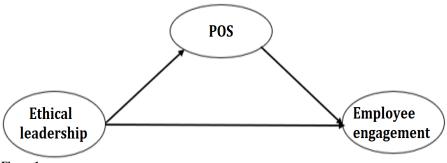


Figure 1.

The conceptual framework of the study. **Source:** Dawwas [2].

3. Methodology

The current research gathered primary data from full-time employees at ICT telecommunication in Palestine through a structured survey. We approached employees at ICT telecommunication in Palestine and invited them to participate in data collection. The chosen method for data collection was drop-in survey, deemed most suitable for our purposes. The survey scales were initially crafted in English and then translated into Arabic. The Arabic version underwent back translation into English with an impartial linguist examining both versions to ensure comparability.

The survey was distributed to participants at various times throughout the day and data collection took place over a two-week periods. This approach was adopted to mitigate potential issues associated with common bias methods. During the data collection phase, we employed a convenience sampling method to achieve the desired number of responses.

The first section of the survey focused on respondents' demographic details including gender, age, qualification, and work experience. The second section delved into the measurement of ethical leadership, POS and employee engagement through a series of questions. A total of 328 personnel working in ICT telecommunication responded to all survey questions.

All items in the designed survey were assessed using a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Ethical leadership perceptions were evaluated using a 10-item scale adapted from while POS was measured

with seven items adapted from Eisenberger et al. [7]. Employee engagement was assessed with a nine-item scale adapted from Gupta et al. [72].

4. Results

4.1. Reliability and Composite Reliability

Internal consistency for various measures is provided by reliability measurement as shown in Table 1. Reliability must be greater than 0.70. SPSS version 28 was used to calculate the composite reliability and Cronbach's alpha. Cronbach's alpha ranged from 0.887 to 0.870 while composite reliability (CR) ranged from 0.887 to 0.881. It is shown that the square root of AVE is more than 0.50 and indicates discriminant validity. As a result, the model had no extraneous components. As a result, Cronbach's alpha, AVE and composite dependability all met the approval standards. Cronbach's alphas exceed 0.7 and composite estimates of dependability exceed 0.90. This is really dependable. The result was valid due to consistency and consistency [73].

Table 1. Reliability and composite reliability

| Constructs | Cronbach's alpha | Composite reliability | The average variance extracted (AVE) | | |
|------------|------------------|-----------------------|--------------------------------------|--|--|
| EE | 0.887 | 0.887 | 0.640 | | |
| EL | 0.877 | 0.881 | 0.506 | | |
| POS | 0.870 | 0.877 | 0.566 | | |

ote: Cronbach's alpha measures internal consistency with values below 0.7 being acceptable for EFA. Composite reliability (CR) is preferred for CFA and assesses overall scale reliability. Average variance extracted (AVE) measures construct variance with 0.5 as the acceptable threshold [74]

4.2 Assessment of Measurement Model

This graphic (see Figure 2) illustrates the conceptual framework and hypothesis model emphasizing the relationships between Ethical Leadership (EL), Perceived Organizational Support (POS) and Employee Engagement (EE). The model incorporates path coefficients and significance values to indicate the magnitude and statistical importance of these associations.

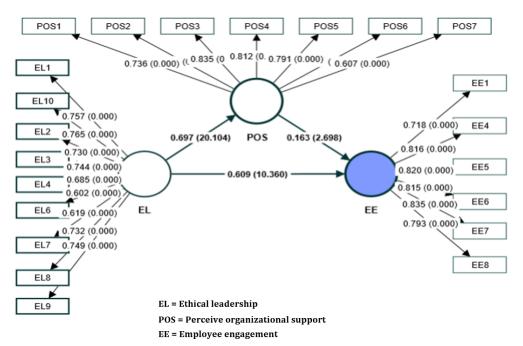


Figure 2. Assessment of measurement model.

4.3. Convergent Validity

Convergent validity is the degree to which a number of variables serving as measurements of the same concept agree with one another [75]. Convergent validity requires several checks and proofs to assure accuracy. We used the prescribed methodologies to estimate factor loadings, composite reliability and average extracted variance to achieve these objectives [76]. As a result, item loadings were investigated. All items were found to have loadings greater than 0.50 which is a respectable quantity [77, 78].

The consistency with which a combination of parts represents the concept under consideration is measured by composite reliability. Table 2 shows CR values ranging from 0.887 to 0.881 which exceed the minimum requirement of 0.7.

These results confirm the model's convergence. Analyses of AVE values were undertaken to ensure model fit convergence. The AVE is the average measurement error variance across a set of items. The more precise AVE measures

the variance of the indicator to the variance of the measurement error [79]. Table 4 shows the calculated AVE values. Since all constructs had AVE values greater than 0.5, the model's convergent validity ranged from 0.640 to 0.566(see Table 2).

Table 2. The convergent validity analysis

| Constructs | Code | Number of items | Factor loading | CR | (AVE) |
|---------------------------------|------|--------------------|-------------------|-------|-------|
| Ethical leadership | EL | 9 | 0.709 | 0.887 | 0.640 |
| Perceive organizational support | POS | 7 | 0.850 | 0.749 | 0.506 |
| Employee engagement | EE | 6 | 0.799 | 0.877 | 0.566 |

Note: Factor loading indicates variance explained by a variable on a factor with values ≥0.7 being acceptable [80]. Composite reliability (CR) measures the overall scale reliability preferred in CFA. Average variance extracted (AVE) assesses construct variance with 0.5 as acceptable.

4.4. Discriminant Validity for Latent Variables

Table 3 illustrates evidence of discriminant validity by showing that distinct structures do not intersect [81]. Constructs are used to measure different ideas and there is more variation between concepts and measurements than within constructs [82, 83]. This guarantees that objects with distinct configurations do not clash. All variables in this study demonstrate satisfactory discriminant validity as the average variance extracted (AVE) for each variable exceeds the correlations across variables.

Table 3.
Discriminant validity analysis

| Constructs | EE | EL | POS |
|------------|-------|-------|-------|
| EE | 0.800 | | |
| EL | 0.723 | 0.712 | |
| POS | 0.588 | 0.697 | 0.752 |

Note: "The square root of the average variance extracted is represented by a diagonal while the other elements reflect the correlation estimate [84]".

4.5. The Prediction Relevance of the Model

The R-square of an endogenous construct provides the variance of a variable characterized by predictor variables [74, 85]. A greater R2 reflects a model's increased predictive ability [86, 87]. R2 must be larger than 0.75 with a precision greater than 0.25 to be meaningful. Table 4 illustrates that the dependent variables in the model of this research reflect the data appropriately. In this research, the model can explain 53% of the variance in ethical leadership. $R^2 = 1 - \frac{Rss}{Tss}$

Table 4. R square.

| Constructs | R-square | R-square adjusted | | |
|------------|----------|-------------------|--|--|
| EE | 0.537 | 0.534 | | |
| POS | 0.486 | 0.485 | | |

Note: *"Higher value is preferred: 0.67 substantial, 0.33 average, 0.19 weak [88]".

4.6. Effect Size f²

Effect size is used to examine the influence and relationship between factors in this study. According to Mukherjee et al. [89], the ideal effect size is less than 0.02 (0.02 = small, 0.15 = moderate, and 0.35 = large). In Table 7, EL to EE has the largest effect size influence on JP performance while POS to EL has the smallest effect size impact as demonstrated in Table 5 and Figure 3. Table 5 and Figure 3 show that out of all the independent variables, $E \rightarrow EL$ had the highest effect size 82%. Impact size for the POS $\rightarrow EL$ was the lowest but any value above 0.66% was considered substantial by Milhem, et al. [90]. This was still considered acceptable. When compared to the other variables in this analysis, the POS \rightarrow JP value of 0.281 places it in the second rank.

Table 5.

| Constructs | EE | EL | POS |
|------------|-------|-------|-----|
| EE | | | |
| EL | 0.820 | | |
| POS | 0.666 | 0.789 | |

Note: " $f^2 = (R^2 \text{ included} - R^2 \text{ excluded}) / (1 - R^2 \text{ included})$ ".

" \mathbf{f}^2 0.02 weak, 0.15 moderate, 0.35 strong effects" [73].

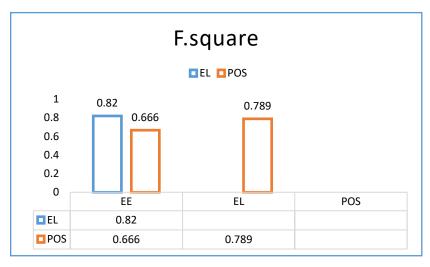


Figure 3. Effect size f2.

Table 6. Mean, STDEV, T values, P values and decision.

| No. | Hypothesis | В | μ | SD | T. value | P values | Decision |
|-----|------------|-------|-------|-------|----------|----------|-----------|
| H1 | EL -> EE | 0.609 | 0.612 | 0.059 | 10.360 | 0.000 | Supported |
| H2 | EL -> POS | 0.697 | 0.699 | 0.035 | 20.104 | 0.000 | Supported |
| НЗ | POS -> EE | 0.163 | 0.161 | 0.061 | 2.698 | 0.004 | Supported |

Note: Beta (β); values from -1 to +1. Assess significance and confidence intervals. P-values; significance value is based on the degrees of freedom p < 0.05 [77]".

4.7. The Assessment of the Inner Model and Hypotheses Testing Procedures

The bootstrapping method was performed in association with Smart PLS4 to verify the path coefficients' statistical significance in this investigation. The p-values for the hypotheses were also computed by the researcher and those results can be observed in Table 6. Typically, bootstrapping was used to determine the t-values for the different path coefficients. Ethical leadership, the dependent variable was strongly impacted by perceived organizational support (EL -> POS) at the significant level of 0.01 (β = .697, μ = 0.669, SD=0.035, t=20.104, P=0.000) suggesting that the P-values for the hypotheses were also determined. However, the EL -> EE was supported at the level of 0.01 (β = 0.0609, μ = 0.612, SD=0.059, T=10.360, p=.000) whereas the POS -> EE is the lowest positively impacted among the rest variables at the level of significance of 0.01 (β = 0.163, μ = 0.161, SD=0.061, t=2.698, p=.004). All the relationships mentioned above positively impacted on JP.

4.8. Testing the Level of Significance of the Indirect Effect

Hypothesis 4: POS mediates the relationship between ethical leadership and employee engagement.

This study attempted to assess the magnitude to which POS may serve as a mediator between EL and EE using the bootstrap method included in Smart PLS. According to Table 7, the results reveal that POS at ICT partly mediates the association between relationships between EL and EE accounting for 11% of the variation in the relationship between EL and EE.

This finding demonstrated the importance of POS as a mediator between EL and EE (see Table 7).

Table 7. Mediation analysis

| No. | Hypothesis | Indirect effect | SD | T. value | P values | Decision | Mediation type |
|-----|-------------------------------------|-----------------|-------|----------|----------|-----------|-------------------|
| H4 | $EL \rightarrow POS \rightarrow EE$ | 0.114 | 0.043 | 2.674 | 0.004 | Supported | Partial mediation |

Note: "Larger than 20% and less than 80% characterized as partial mediation [82]".

EL= Ethical leadership, EE= Employee engagement, POS= Perceived organizational support.

5. Discussion

The primary objective of the paper was to examine the relationship between ethical leadership and employee engagement within the ICT telecommunications sector in Palestine. Additionally, the study investigated the impact of POS on this relationship. This study makes a valuable contribution to the field of leadership studies by shedding light on the significance of ethical leadership in promoting favorable outcomes in the ICT telecommunications industry in Palestine. Employee engagement in ICT telecommunications in Palestine has become a crucial topic for researchers to address given the growing importance of human capital in this sector. This study assessed the perceives organizational and ethical leadership on support employee engagement at an ICT company in Palestine using a web-based structured questionnaire. According to studies, EL has a substantial effect on the job POS and EE as well. EL was identified as the most influential variable on the EE in ICT telecommunication with a total effect of 282% and had a positive impact on POS. POS -> EE

was seen as having the lowest statistically significant effect on the participants due to the highest SD and the lowest mean and t-value at the significance level of $0.01~01(\beta = 0.163, m=0.161, SD=0.61, t=2.698, P=0.000)$.

Employee engagement (EE) is often overlooked and undervalued when it comes to ethical leadership [91]. This paper was conducted to explore the impact of ethical leadership on EE. The results showed that employee engagement is positively correlated with ethical leadership. The actions and ethical conduct of leaders have a significant impact on employee engagement. Employees who are given more freedom and clear guidance from their leaders are more likely to be engaged in their work. Previous research by Nikolova et al. [92] has also revealed that an ethical leadership style is positively related to employee engagement. When employees feel that their superiors are fair in allocating responsibilities, treat everyone equally, reward without prejudice and communicate openly, they tend to have a positive attitude at work. Ethical leadership creates a better work environment and increases employee commitment and involvement in their job [50]. The aim of this paper was also to examine the mediating effect of POS on the relationship between EL and EE. The results showed that POS plays a crucial role in mediating between the two constructs.

The study found that POS plays a key role in the connection between ethical leadership and employee engagement. Previous research has confirmed that ethical leadership is a significant factor in determining POS as cited in works by Sulaiman et al. [20], Zahra and Waheed [21] and Tan et al. [18]. The study further explains that employees are more likely to remain engaged when they feel supported and guided by their leader [14]. Receiving ethical treatment from their leader leads employees to view their work experience as positive which can then boost their levels of POS. The study also seeks to demonstrate that ethical leaders' supportive behaviors help employees feel valued and that the organization cares about their well-being ultimately leading to higher levels of employee engagement. Therefore, the ICT telecommunications industry needs to make a greater effort to understand the impact of ethical leadership on creating a positive perception of organizational support and enhancing employee engagement.

6. Practical Implications

This paper adds new insights to the current body of research on ethical leadership. It reveals that employees within the ICT telecommunications sector in Palestine exhibit heightened levels of perceived organizational support (POS) when led by ethical leaders. This aligns with findings from previous studies across various industries, underscoring the significance of having ethical leaders in supervisory roles. The study further outlines how ethical leaders can bolster POS within the ICT telecommunications industry, a critical factor for organizational success and competitiveness. This research advances our comprehension of the interplay between leadership style, employee engagement and the mediating role of POS. The results suggest a contemporary employee preference for ethical leadership styles that are personalized and responsive to their needs. Consequently, ICT telecommunications sector is advised to promote the adoption of ethical leadership practices among supervisors. The study emphasizes the impact of employee trust in leaders on engagement outcomes emphasizing that individuals are more likely to flourish under the guidance of trustworthy leaders. The contemporary workforce increasingly seeks ethical leadership styles that prioritize personalization. Therefore, supervisors in the ICT telecommunications sector in Palestine should be encouraged to embrace ethical leadership practices and reflect personal characteristics (such as integrity, honesty and fairness) while interacting and sustaining relationships with subordinates in the workplace. Therefore, this study underscores the pivotal role of employee confidence in leaders and its impact on engagement. In the presence of trustworthy leaders, individuals are more inclined to thrive. Thus, our findings contribute valuable insights to the current understanding of how leadership behavior shapes employee engagement.

7. Limitations and Future Research

Like other studies, this paper has several limitations that should be addressed in future research. Firstly, this paper only focused on leadership style and its impact on employee engagement. Future studies should consider exploring other leadership styles such as servant leadership. Secondly, the data was analyzed using PLS-SEM to test the hypotheses and reach conclusions. It is recommended that future studies use a longitudinal approach to gain a more comprehensive understanding of the potential effect of ethical leadership on employee engagement. Thirdly, demographic variables were not included in the analysis of this study. Future research should examine the moderating effect of demographic factors such as age, work experience and gender on the relationship between EL and EE. Additionally, this study used POS as a mediator between EL and EE, therefore, it is suggested that future research consider other mediators to better understand how ethical leadership affects employee engagement. Finally, the survey data for this study was collected from employees in the ICT telecommunications industry. Further research in other sectors and cultures is needed to determine if the theories used to explain the relationships explored in this study are context-sensitive and if the findings can be generalized to different contexts.

8. Conclusion

This research aimed to determine the mediating role of POS in the connection between EL and EE. The results indicate that POS can mediate the relationship between ethical leadership and employee engagement. This study adds value to existing knowledge by empirically and statistically examining the relationship between POS in the ICT telecommunications sector in Palestine. Unlike many previous studies that established a connection between EL and EE without elucidating the extent of this relationship through a mediating factor like POS, our findings provide clarity.

It is recommended that studies employ other mediators to better understand how ethical leadership affects employee engagement to enhance the robustness of future research. Additionally, other industry sectors or countries could replicate this study using different factors or sets of practices to validate and extend the results presented here.

References

- [1] M. R. Azizi, R. Atlasi, A. Ziapour, J. Abbas, and R. Naemi, "Innovative human resource management strategies during the COVID-19 pandemic: A systematic narrative review approach," *Heliyon*, vol. 7, no. 6, p. e07233, 2021.
- [2] M. I. Dawwas, "Employee perception of talent management practices and employee engagement: A multiple mediator model," *Specialusis Ugdymas*, vol. 1, no. 43, pp. 2105-2134, 2022.
- [3] A. A. Oluwatayo and O. Adetoro, "Influence of employee attributes, work context and human resource management practices on employee job engagement," *Global Journal of Flexible Systems Management*, vol. 21, no. 4, pp. 295-308, 2020.
- [4] M. Meswantri and A. Ilyas, "Determinant of employee engagement and its implications on employee performance," *International Review of Management and Marketing*, vol. 8, no. 3, pp. 36-44, 2018.
- [5] Gallup, "Employee engagement," 2017, Available: http://www.gallup.com/topic/employee_engagement.aspx.
- P. Sihag, "The mediating role of perceived organizational support on psychological capital—employee engagement relationship: A study of Indian IT industry," *Journal of Indian Business Research*, vol. 13, no. 1, pp. 154-186, 2021.
- [7] R. Eisenberger, R. Huntington, S. Hutchison, and D. Sowa, "Perceived organizational support," *Journal of Applied Psychology*, vol. 71, no. 3, pp. 500-507, 1986.
- [8] A. B. Bakker, "The social psychology of work engagement: State of the field," *Career Development International*, vol. 27, no. 1, pp. 36-53, 2022.
- [9] J. Zhou and J. M. George, "Awakening employee creativity: The role of leader emotional intelligence," *The Leadership Quarterly*, vol. 14, no. 4-5, pp. 545-568, 2003.
- [10] I. A. P. W. Sugianingrat, "The influence of ethical leadership on employee performance through employee engagement," 2017.
- [11] I. Ahmad and Y. Gao, "Ethical leadership and work engagement: The roles of psychological empowerment and power distance orientation," *Management Decision*, vol. 56, no. 9, pp. 1991-2005, 2018.
- [12] M. Asif, M. Qing, J. Hwang, and H. Shi, "Ethical leadership, affective commitment, work engagement, and creativity: Testing a multiple mediation approach," *Sustainability*, vol. 11, no. 16, p. 4489, 2019.
- [13] F. Ashfaq, G. Abid, and S. Ilyas, "Impact of ethical leadership on employee engagement: Role of self-efficacy and organizational commitment," *European Journal of Investigation in Health, Psychology and Education*, vol. 11, no. 3, pp. 962-974, 2021.
- [14] W. Adawiyah, B. Baliartati, and A. Rafi, "The impact of ethical leadership on employee performance: The mediating role of employee engagement and organizational citizenship behavior (OCB)," in *Proceedings of the First Lekantara Annual Conference on Public Administration, Literature, Social Sciences, Humanities, and Education, LePALISSHE 2021, August 3, 2021, Malang, Indonesia, 2022.*
- [15] K. Guo, "The relationship between ethical leadership and employee job satisfaction: The mediating role of media richness and perceived organizational transparency," *Frontiers in Psychology*, vol. 13, p. 885515, 2022.
- [16] A. B. Perez, "Ethical leadership, organizational commitment and job satisfaction in local colleges," *Asia Pacific Journal of Academic Research in Business Administration*, vol. 8, no. 1, pp. 81-90, 2022.
- [17] V. A. Wiriatmaja, S. Haryono, and M. K. P. Rahayu, "The effect of ethical leadership, career distributive justice on turnover intention through trust in leader," *The International Journal of Business Management and Technology*, vol. 5, no. 1, pp. 124-133, 2021.
- [18] L. P. Tan, C. S. Yap, Y. O. Choong, K. L. Choe, P. Rungruang, and Z. Li, "Ethical leadership, perceived organizational support and citizenship behaviors: The moderating role of ethnic dissimilarity," *Leadership & Organization Development Journal*, vol. 40, no. 8, pp. 877-897, 2019.
- [19] M. Seth, D. Sethi, L. K. Yadav, and N. Malik, "Is ethical leadership accentuated by perceived justice?: Communicating its relationship with organizational citizenship behavior and turnover intention," *Corporate Communications: An International Journal*, vol. 27, no. 4, pp. 705-723, 2022.
- [20] M. Sulaiman, M. A. Ragheb, and M. Wahba, "Perceived organization support role in creating an innovative work behavior," *Open Access Library Journal*, vol. 6, no. 5, pp. 1-14, 2019.
- [21] T. T. Zahra and A. Waheed, "Influence of ethical leadership on innovative work behavior: Examination of individual-level psychological mediators," *Pakistan Journal of Commerce and Social Science*, vol. 11, no. 2, pp. 448-470, 2017.
- [22] J. Cheng, L. Zhang, Y. Lin, H. Guo, and S. Zhang, "Enhancing employee wellbeing by ethical leadership in the construction industry: The role of perceived organizational support," *Frontiers in Public Health*, vol. 10, p. 935557, 2022.
- [23] W. A. Watto, Z. Khan, A. Monium, and M. Abubakar, "How do ethical leadership and organizational justice affect work outcomes? Does perceived organizational support mediate the relationships?," *Business Perspective Review*, vol. 1, no. 1, pp. 53-70, 2019.
- [24] A. Khan, S. A. Jan, and M. Anwar, "Linkages between ethical leadership, perceived organizational support, and innovative work behaviors in HEIS," *Journal of Social Research Development*, vol. 3, no. 2, pp. 116-127, 2022.
- [25] A. Alshaabani, F. Naz, R. Magda, and I. Rudnák, "Impact of perceived organizational support on OCB in the time of COVID-19 pandemic in Hungary: Employee engagement and affective commitment as mediators," *Sustainability*, vol. 13, no. 14, p. 7800, 2021.
- [26] F. Thabit, Q. Almaamari, M. Abdulrab, Y. H. AlMamary, and H. Alshammari, "The role of employee satisfaction as mediator in the relationship between rewards, work environment, and employee performance," *International Journal of Intellectual Human Resource Management*, vol. 3, no. 01, pp. 42-53, 2022.
- [27] S. D. Hammon, W. E. Gillis, and M. L. Icenogle, "From social responsibility to employee engagement: evidence from the public sector," *Journal of Management and Governance*, vol. 27, no. 4, pp. 1223-1247, 2023.
- [28] B. Shuck and K. Wollard, "Employee engagement and HRD: A seminal review of the foundations," *Human Resource Development Review*, vol. 9, no. 1, pp. 89-110, 2010.
- [29] A. Ateeq, "The mediating role of engagement in the relationship between," *Management*, vol. 21, no. 3, pp. 435-447, 2023.
- [30] N. M. Maina-Okori, J. R. Koushik, and A. Wilson, "Reimagining intersectionality in environmental and sustainability education: A critical literature review," *The Journal of Environmental Education*, vol. 49, no. 4, pp. 286-296, 2018.
- [31] A. Nawaz *et al.*, "Epidemic spread and its management through governance and leadership response influencing the arising challenges around COVID-19 in Pakistan—a lesson learnt for low income countries with limited resource," *Frontiers in Public Health*, vol. 8, p. 573431, 2020.
- [32] W. H. Macey and B. Schneider, "The meaning of employee engagement," *Industrial and Organizational Psychology*, vol. 1, no. 1, pp. 3-30, 2008.
- [33] M. Sow, P. Anthony, and M. Berete, "Relationship between affective commitment and turnover intention among U.S. Healthcare internal auditors," *The International Journal of Business & Management*, vol. 3, no. 10, pp. 2321–8916, 2015.
- [34] D. Trismiyanti, M. R. Linda, and R. Yonita, "The impact of job satisfaction and employee engagement on organizational commitment," *Dinasti International Journal of Education Management And Social Science*, vol. 2, no. 1, pp. 55–66, 2020.
- [35] D. G. Allen and L. R. Shanock, "Perceived organizational support and embeddedness as key mechanisms connecting socialization tactics to commitment and turnover among new employees," *Journal of Organizational Behavior*, vol. 34, no. 3, pp. 350-369, 2013.

- [36] R. P. Settoon, N. Bennett, and R. C. Liden, "Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity," *Journal of Applied Psychology*, vol. 81, no. 3, p. 219, 1996.
- [37] M. I. Dawwas, "The relationship between talent management practices, organizational justice, and employee engagement," *Specialusis Ugdymas*, vol. 1, no. 43, pp. 2084-2104, 2022.
- [38] K. Dai and X. Qin, "Perceived organizational support and employee engagement: Based on the research of organizational identification and organizational justice," *Open Journal of Social Sciences*, vol. 4, no. 12, pp. 46-57, 2016.
- [39] F. Sitorus, "The influence of perceived organizational support and internal communication toward work engagement," presented at the 2nd International Conference on Social and Political Development (ICOSOP 2017). Atlantis Press, 2017.
- [40] M. Yazdanshenas and M. Mirzaei, "Leadership integrity and employees' success: role of ethical leadership, psychological capital, and psychological empowerment," *International Journal of Ethics and Systems*, vol. 39, no. 4, pp. 761-780, 2023.
- [41] K. Kalshoven, D. N. Den Hartog, and A. H. De Hoogh, "Ethical leadership at work questionnaire (ELW): Development and validation of a multidimensional measure," *The Leadership Quarterly*, vol. 22, no. 1, pp. 51-69, 2011.
- [42] S. A. Eisenbeiss, "Re-thinking ethical leadership: An interdisciplinary integrative approach," *The Leadership Quarterly*, vol. 23, no. 5, pp. 791-808, 2012.
- [43] A. Vasudevan *et al.*, "Ethical leadership on employee engagement in construction industry during pandemic in Malaysia: Mediating role of organizational culture (Market Culture)," *RES MILITARIS*, vol. 13, no. 2, pp. 1507-1530, 2023.
- [44] I. Widiastuti and M. Mulyaningsih, "Analyse the role of leadership ethics in organisations," *Journal of Law Science*, vol. 6, no. 2, pp. 303-308, 2024.
- [45] J. T. Bush, D. T. Welsh, M. D. Baer, and D. Waldman, "Discouraging unethicality versus encouraging ethicality: Unraveling the differential effects of prevention-and promotion-focused ethical leadership," *Personnel Psychology*, vol. 74, no. 1, pp. 29-54, 2021.
- [46] A. Sharma, R. Agrawal, and U. Khandelwal, "Developing ethical leadership for business organizations: A conceptual model of its antecedents and consequences," *Leadership & Organization Development Journal*, vol. 40, no. 6, pp. 712-734, 2019.
- [47] 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.
- [48] A. Murangi and L. Bailey, "Employee engagement of special needs teachers in Windhoek, Namibia: The moderating role of job crafting," *SA Journal of Industrial Psychology*, vol. 48, no. 1, pp. 1-10, 2022.
- [49] W. Tao, Y. Lee, R. Sun, J.-Y. Li, and M. He, "Enhancing Employee Engagement via Leaders' Motivational Language in times of crisis: Perspectives from the COVID-19 outbreak," *Public Relations Review*, vol. 48, no. 1, p. 102133, 2022.
- [50] M. E. Brown, L. K. Treviño, and D. A. Harrison, "Ethical leadership: A social learning perspective for construct development and testing," *Organizational Behavior and Human Decision Processes*, vol. 97, no. 2, pp. 117-134, 2005.
- [51] A. Amghar, "Ethical leadership: Implications for enhancing quality in higher education," *Journal: La Revue Marocaine de la Pensee Contemporaine-IMIST-ma*, vol. 3, no. 10, pp. 1-7, 2022.
- [52] I. A. P. W. Sugianingrat, S. R. Widyawati, C. A. D. J. da Costa, M. Ximenes, S. D. R. Piedade, and W. G. 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.
- [53] M. N. Khuong and D. T. T. Dung, "The effect of ethical leadership and organizational justice on employee engagement—the mediating role of employee trust," *International Journal of Trade, Economics and Finance*, vol. 6, no. 4, pp. 235-240, 2015.
- [54] I. Ahmad, Y. Gao, and S. M. Hali, "A review of ethical leadership and other ethics-related leadership theories," *European Scientific Journal*, vol. 13, no. 29, pp. 10-23, 2017.
- [55] A. Ateeq, Ethical paradigms at work: A comparative analysis of consequentialism, deontology, and islamic perspectives. In the AI Revolution: Driving Business Innovation and Research. Cham: Springer Nature Switzerland, 2024.
- [56] 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.
- [57] I. A. Musenze and T. S. Mayende, "Ethical leadership (EL) and innovative work behavior (IWB) in public universities: examining the moderating role of perceived organizational support (POS)," *Management Research Review*, vol. 46, no. 5, pp. 682-701, 2023.
- [58] S. Kumar and S. K. Bagga, "The relationship of transformational leadership and perceived organisational support with organizational commitment: The mediating role of employee engagement," *BBR. Brazilian Business Review*, vol. 21, no. 2, p. e20221196, 2024.
- [59] A. Al-Tahitah, M. M. A. Muthaliff, M. Abdulrah, and Q. A. Al-Maamari, "Paper review on the relationship between transformational leadership and readiness for change," *International Journal of Energy Policy and Management*, vol. 3, no. 1, pp. 1-7, 2018.
- [60] J. Kilroy, T. Dundon, and K. Townsend, "Embedding reciprocity in human resource management: A social exchange theory of the role of frontline managers," *Human Resource Management Journal*, vol. 33, no. 2, pp. 511-531, 2023.
- [61] A. W. Gouldner, "The norm of reciprocity: A preliminary statement," *American Sociological Review*, pp. 161-178, 1960.
- [62] P. M. Blau, Exchange and power in social life. New York: Wiley, 1964.
- [63] T. Islam, M. M. Khan, F. N. Khawaja, and Z. Ahmad, "Nurses' reciprocation of perceived organizational support: The moderating role of psychological contract breach," *International Journal of Human Rights in Healthcare*, vol. 10, no. 2, pp. 123-131, 2017.
- [64] A. Luksyte and C. Spitzmueller, "When are overqualified employees creative? It depends on contextual factors," *Journal of Organizational Behavior*, vol. 37, no. 5, pp. 635-653, 2016.
- [65] G. M. A. Naji, A. S. N. Isha, M. Alzoraiki, O. Sharafaddin, E. A. Ghaleb, and A.-A. Ammar, "Executive compensation-ethical issues in human resource," *International Journal of Intellectual Human Resource Management*, vol. 3, no. 01, pp. 17-22, 2022.
- [66] L. Qi, B. Liu, X. Wei, and Y. Hu, "Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator," *PloS One*, vol. 14, no. 2, p. e0212091, 2019.
- [67] R. Eisenberger and F. Stinglhamber, *Perceived organizational support: Fostering enthusiastic and productive employees*. Washington DC: American Psychological Association. https://doi.org/10.1037/12318-000, 2011.
- [68] Q. Almaamari^o and Z. Abdulhusain, "Leadership, organization culture and job satisfaction influence employee performance in private companies in Bahrain," *Baltic Journal of Law & Politics*, vol. 15, no. 1, pp. 352-361, 2022.
- [69] A. Ateeq and M. Milhem, Integrating ethical principles in corporate strategy: A comprehensive analysis of business ethics in contemporary enterprises. In the AI Revolution: Driving Business Innovation and Research. Cham: Springer Nature Switzerland, 2024.
- [70] S. D. Hansen, B. J. Alge, M. E. Brown, C. L. Jackson, and B. B. Dunford, "Ethical leadership: Assessing the value of a multifoci social exchange perspective," *Journal of Business Ethics*, vol. 115, pp. 435-449, 2013.
- [71] M. S. Shams, M. M. Niazi, and F. Asim, "The relationship between perceived organizational support, employee engagement, and organizational citizenship behavior: Application of PLS-SEM approach," *Kardan Journal of Economics and Management Sciences*, vol. 3, no. 1, pp. 35-55, 2020.

- [72] V. Gupta, U. A. Agarwal, and N. Khatri, "The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement," *Journal of Advanced Nursing*, vol. 72, no. 11, pp. 2806-2817, 2016.
- [73] M. Alzoraiki, A. R. Ahmad, A. Ateeq, and M. Milhem, "The role of transformational leadership in enhancing school culture and teaching performance in Yemeni public schools," *Frontiers in Education*, vol. 9, p. 1413607, 2024.
- [74] A. Ateeq, S. Ebrahim, and R. Al-Ghatam, "The impact of stress and its influencing factors among dentists during the COVID-19 pandemic in Kingdom of Bahrain," *F1000Research*, vol. 11, p. 930, 2022.
- [75] A. Ateeq, M. Alzoraiki, M. Milhem, and M. Al-Absy, "Impact of employee loyalty on job performance: Mediating role of job satisfaction on the example of Zain Company, Bahrain," *Problems and Perspectives in Management*, vol. 21, no. 2, pp. 470-481, 2023.
- [76] J. Hair, C. L. Hollingsworth, A. B. Randolph, and A. Y. L. Chong, "An updated and expanded assessment of PLS-SEM in information systems research," *Industrial Management & Data Systems*, vol. 117, no. 3, pp. 442-458, 2017.
- [77] J.-H. Cheah, R. Thurasamy, M. A. Memon, F. Chuah, and H. Ting, "Multigroup analysis using SmartPLS: Step-by-step guidelines for business research," *Asian Journal of Business Research*, vol. 10, no. 3, pp. 1-19, 2020.
- [78] A. Y. M. Alastal and A. Ateeq, Exploring the relationship between ESG practices and corporate financial performance. In the AI Revolution: Driving Business Innovation and Research. Cham: Springer, 2024.
- [79] R. Ali, A. Ateeq, Z. Al Ani, and S. A. A. Al Samarai, "A critical review of contemporary trends and challenges in human resource management," *International Journal of Intellectual Human Resource Management*, vol. 4, no. 02, pp. 22-27, 2023.
- [80] T. Mukherjee, I. Sangal, B. Sarkar, Q. Almaamari, and T. M. Alkadash, "How effective is reverse cross-docking and carbon policies in controlling carbon emission from the fashion industry?," *Mathematics*, vol. 11, no. 13, p. 2880, 2023.
- [81] A. A. Ali and N. Habtoor, "Islamic work ethics and its impact on enhancing organizational commitment in Bahraini private educational universities," *International Journal of Intellectual Human Resource Management*, vol. 3, no. 02, pp. 33-42, 2022.
- [82] A. A. A. Ali, "The relationship between islamic work ethics and employee performance among medical staff in the public health sector in Bahrain: Employee commitment as mediating variable," Doctoral Dissertation, Universiti Sains Islam Malaysia, 2022.
- [83] U. Schimmack, "The implicit association test: A method in search of a construct," *Perspectives on Psychological Science*, vol. 16, no. 2, pp. 396-414, 2021.
- [84] A. Y. M. Alastal, A. Ateeq, M. I. Dawwas, M. Alzoraiki, and M. Milhem, "Convergence of management and environmental control systems: A key to sustainable organizational performance in Jordan the ai revolution: Driving business innovation and research," vol. 1: Springer, 2024, pp. 191-199.
- [85] F. Saeed *et al.*, "The impact of forecasting strategy and training and development strategy on preparing leadership competencies administrative support in the sultanate of Oman," *International Journal of Intellectual Human Resource Management*, vol. 3, no. 1, pp. 34-41, 2022.
- [86] A. A. A. Ali, M. Alzoraiki, M. Al-Shaibah, and Q. Almaamari, "Enhancing contextual performance through Islamic work ethics with mediating role of normative commitment," *Mathematical Statistician and Engineering Applications*, vol. 71, no. 4, pp. 8668-8683, 2022
- [87] L. Plonsky and H. Ghanbar, "Multiple regression in L2 research: A methodological synthesis and guide to interpreting R2 values," *The Modern Language Journal*, vol. 102, no. 4, pp. 713-731, 2018.
- [88] M. Sarstedt, C. M. Ringle, and J. F. Hair, *Partial least squares structural equation modeling. In Handbook of market research. In Handbook of Market Research.* Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8, 2021.
- [89] T. Mukherjee, I. Sangal, B. Sarkar, T. M. Alkadash, and Q. Almaamari, "Pallet distribution affecting a machine's utilization level and picking time," *Mathematics*, vol. 11, no. 13, p. 2956, 2023.
- [90] M. M. Milhem, H. Muda, and K. Ahmed, "The effect of perceived transactional leadership style on employee engagement in Palestinian ICT industry," *Journal of Advanced Research in Business and Management Studies*, vol. 14, no. 1, pp. 42-51, 2019.
- [91] G. L. Brady and N. Sivanathan, "More than meets the eye: the unintended consequence of leader dominance orientation on subordinate ethicality," *Organization Science*, vol. 35, no. 4, pp. 1322-1341, 2024.
- [92] I. Nikolova, W. Schaufeli, and G. Notelaers, "Engaging leader–Engaged employees? A cross-lagged study on employee engagement," European Management Journal, vol. 37, no. 6, pp. 772-783, 2019.