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# Supervisor Organizational Embodiment as a Mediator and Psychological Ownership as a Moderator in the Polychronicity–Performance–Engagement Relationship

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## Abstract

Although tourism significantly contributes to the global economy and serves as a major source of foreign earnings for numerous nations, it continues to face persistent challenges. This situation highlights the need to explore factors that can boost organizational productivity. Accordingly, the present research examined how polychronicity influences job performance and work engagement among employees in the tourism sector. The study also tested the mediating effect of the supervisor’s organizational embodiment and the moderating role of psychological ownership. Data were obtained from 733 individuals employed in private tourism establishments in Petra, Jordan, using a structured questionnaire, and analyzed through AMOS-24. The analysis indicated that employees with higher levels of polychronicity display stronger job performance and engagement. Furthermore, the supervisor’s organizational embodiment acted as a positive mediator in both relationships. Psychological ownership further reinforced the connection between polychronicity and the two employee outcomes. Since this research emphasizes work engagement and job performance as critical behavioral indicators, its results can guide tourism and hospitality managers in enhancing workforce engagement and effectiveness. Additionally, scholars examining polychronic behavior in organizational contexts may find this study a useful reference point.

**Keywords:** Polychronicity, Psychological ownership, Supervisor’s organizational embodiment, Job performance, Work engagement

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## Introduction

Globalization and rapid societal transformation have reshaped modern business operations, especially in the hospitality sector [1]. In this fast-evolving industry, employees are increasingly expected to deliver exceptional precision and efficiency [2]. Consequently, organizations face growing difficulty in retaining and engaging skilled workers [3-7]. Since hospitality businesses often require employees to handle multiple tasks at once, adaptability and multitasking have become essential traits [3, 8, 9].

At the same time, modern travelers are more knowledgeable and assertive [10]. They possess greater awareness of their consumer rights and are confident in seeking remedies for unsatisfactory services. As a result, hotel management faces constant pressure to evaluate and elevate service quality [11]. Employee empowerment has been recognized as a viable strategy for improving service standards and performance [12].

Labor shortages also remain a persistent problem within tourism [13]. Since customers’ expectations can only be met by enthusiastic and driven employees [14], organizations rely heavily on frontline workers, who are the first point of contact with guests. Employee engagement, therefore, becomes central to maintaining service excellence [15, 16]. Prior studies have consistently linked engagement to improved performance [17-19]. One factor that can foster both engagement and productivity



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is polychronicity—the ability to perform several activities simultaneously [20-22]. Despite its relevance, research exploring this phenomenon in the tourism workforce, especially within Petra, Jordan, remains limited.

Jordan's tourism landscape is rapidly developing, with Petra as its cornerstone attraction. The city, famous for its Nabataean monuments and archaeological significance [23], was chosen in 2007 as one of the New Seven Wonders of the World [24]. The tourism sector contributed 19.4% to Jordan's GDP in 2016 [25], with Petra playing a key role in promoting both tourism and cultural heritage [26]. A further rise in tourism could enhance this contribution if the regional workforce is effectively managed.

However, workers in Petra's hotels often lack technical support, training, and adequate development opportunities. They are required to juggle multiple responsibilities without proper resources or competitive compensation [27, 28]. This research, therefore, investigates how polychronicity impacts job performance and work engagement, considering the mediating role of supervisor's organizational embodiment and the moderating role of psychological ownership.

A detailed literature review revealed a clear research gap concerning the mechanisms and situational factors through which polychronicity enhances performance and engagement within tourism. To address this, the current study proposes a model connecting these variables and seeks to answer the following research questions:

- Does polychronicity improve employee job performance?
- Does polychronicity strengthen work engagement?
- Does psychological ownership influence the relationship between polychronicity and job performance or engagement?
- Does the supervisor's organizational embodiment mediate the relationship between polychronicity and job performance or engagement?

### *Literature review and hypotheses development*

#### *Person–organization fit (P–O fit) theory*

According to Kristof [29], person–organization fit (P–O fit) describes how well an individual aligns with an organization, which happens when:

- (a) one side fulfills the needs of the other,
- (b) they possess comparable core traits, or
- (c) both of these conditions occur (p. 4).

Essentially, P–O fit reflects the harmony between an employee's personal attributes and their workplace environment. When employees' characteristics mirror those of their organization, they generally hold more positive attitudes toward it [30]. Scholars argue that building a workforce capable of adapting, staying flexible, and remaining loyal to their organization depends heavily on achieving this compatibility [31].

A strong P–O fit also influences how staff members use available job resources and respond to workplace circumstances [32]. Research has shown that employees who experience high P–O fit report stronger job satisfaction [31], better contextual performance [32], a higher sense of value contribution [33], and greater commitment within volunteer organizations [30].

Several studies have also examined polychronicity—a preference for multitasking—through this theoretical lens [22, 34]. The theory suggests that people who naturally enjoy managing multiple activities tend to fit well in roles requiring such behavior [35]. Grobelna [36] further found that employees demonstrating this fit generally perform more effectively and are less likely to leave their jobs.

#### *Hypotheses development and conceptual framework*

##### *Polychronicity and work engagement*

The concept of polychronicity describes a person's tendency to handle various tasks or alternate between activities within the same time frame [21, 22]. Individuals with this disposition are often more efficient under pressure, maintain stronger focus, and show lower turnover [37]. Numerous investigations have explored this characteristic within tourism and hospitality settings [38-40].

Anser *et al.* [41] observed that such employees are capable of coordinating several duties simultaneously, dealing with interruptions effectively while still achieving their objectives. Importantly, polychronicity is not merely about performing multiple actions at once—it represents an individual's preference and motivation to engage with concurrent tasks [42]. Research suggests that polychronic workers enjoy being immersed in numerous activities, finding this approach personally satisfying and energizing [43, 44]. Consequently, they often display stronger enthusiasm and dedication to their roles [45].

The notion of engagement has been widely applied across academic disciplines—spanning marketing (customer engagement; Barari *et al.* [46]), sociology (civic engagement; Xie *et al.* [47]), and organizational behavior (employee engagement; Sun & Bunchapattanasakda [48]). Taheri *et al.* [49] define engagement as “a condition of deep involvement and commitment to a particular market offering” (p. 322). Within hospitality organizations, identifying employees with higher engagement levels

is crucial for maintaining service quality [50]. Kahn [51] further describes work engagement as the degree to which individuals invest their physical, emotional, and cognitive energy in their tasks.

In restaurant environments, researchers have used the engagement construct to assess employee effectiveness [52]. Findings suggest that workers who naturally multitask exhibit higher attention and involvement [53]. A related study on retail employees indicated that polychronicity enhances job satisfaction through improved perceptions of fairness and fit [54].

Similarly, research by Karatepe *et al.* [45] on full-time frontline hotel employees in the Turkish Republic of Northern Cyprus found that those with higher polychronicity displayed greater enthusiasm, energy, and connection to their work and organization. Within hotel operations, therefore, multitasking tendencies appear to strengthen employee engagement [45]. Comparable evidence from the restaurant industry also supports the positive influence of polychronicity on engagement [40]. Hence, the study proposes the following hypothesis:

H1: There is a positive association between polychronicity and work engagement.

### *Polychronicity and job performance*

Babin and Boles [55] characterize job performance as the extent to which an employee's productivity and behavior compare favorably with those of colleagues in relation to specific job tasks and results. Individuals who display polychronic tendencies—that is, who prefer and are able to handle several duties at once—often achieve effective outcomes that meet organizational and customer expectations. Such employees frequently extend their effort beyond formal job descriptions to deliver superior service experiences [45].

Because they naturally adopt a solution-oriented mindset, polychronic staff members are more adept at navigating demanding, fast-changing service interactions. A front-office employee, for instance, may simultaneously assist multiple guests without perceiving these interruptions as obstacles, resulting in smoother operations. Studies have consistently shown that these individuals possess constructive job-related attitudes and behaviors [45].

Empirical evidence also suggests that polychronic workers tend to report higher satisfaction levels and lower intentions to quit compared with their monochronic counterparts [44, 54]. In alignment with Rich *et al.* [56], Karatepe *et al.* [45] demonstrated that polychronicity has a significant positive impact on employee performance. Scholars have examined this construct across diverse workplace settings and outcomes [57-59], finding a clear link between multitasking preference and performance quality [44, 60].

In the hospitality context, Asghar *et al.* [40] found that multitasking orientation among restaurant employees in Pakistan substantially improved their performance. Since the tourism and hotel sectors demand constant multitasking, understanding this connection remains critical. Therefore, the following hypothesis is proposed:

H2: Polychronicity has a positive effect on job performance.

### *Supervisor's organizational embodiment as a mediator*

According to Eisenberger *et al.* [61], supervisor's organizational embodiment (SOE) refers to the degree to which employees perceive their supervisors as extensions or agents of the organization itself. Employees often interpret their relationship with the company through the behavior and attitudes of their supervisors [62]. When SOE is high, workers view leaders as caring, attentive, and committed—indicating a constructive link between the employee, supervisor, and organization [62-64]. As Zhang and Su [65] observed, leaders play a vital role in cultivating such perceptions by implementing strategies that strengthen employees' trust and sense of connection.

Research by Dai *et al.* [66] highlighted that the degree of SOE influences how employees interpret organizational concern and fairness. Drawing from regulatory focus theory, the extent to which workers perceive advancement or job security can affect engagement levels. The interaction between employees' regulatory focus (a personal factor) and supervisors' embodiment (a contextual factor) has a notable effect on work engagement [67, 68]. When employees see their supervisor's actions as reflecting the company's stance, engagement increases; weak embodiment, by contrast, diminishes enthusiasm and focus [69]. Based on this reasoning:

H3: Supervisor's organizational embodiment positively influences work engagement.

Afsar *et al.* [3] emphasize that job performance in the service sector depends on the efficiency with which employees carry out organizational objectives. Similarly, Sekhar *et al.* [70] confirm that support from immediate supervisors enhances staff performance. The broader concept of perceived organizational support (POS)—the belief that an organization values its employees—has also been proven to improve both satisfaction and productivity [71]. As Karatepe *et al.* [45] found, such perceptions are directly linked to better performance outcomes. Hence:

H4: Supervisor's organizational embodiment is positively associated with job performance.

Engagement is often described as a multidimensional state encompassing physical, cognitive, and emotional involvement in one's work [56]. Scholars argue that engaged employees channel their full energy into their roles, inspiring others and exceeding expectations. The emotional dimension represents enjoyment and satisfaction in performing tasks; the physical

component concerns motivation and personal drive; and the cognitive aspect reflects immersion and attention [51, 72]. Together, these dimensions foster dedication, vigor, and absorption—core elements of engagement [73].

Further, Su *et al.* [64] demonstrated that SOE moderates the link between creative self-efficacy and developmental feedback, while Zhang and Su [65] found that it strengthens the connection between leader humor and engagement. Similarly, perceived supervisor support can increase job satisfaction and commitment, shaping how employees use their time and approach multitasking [74]. Since hospitality work typically requires high adaptability [75], these factors are crucial.

Asghar *et al.* [20] also note that organizational support enhances polychronic employees' engagement, satisfaction, and retention. Thus, when supervisors embody the organization effectively, they can reinforce the link between polychronicity and both engagement and performance. Grounded in Person–Organization Fit Theory, the following hypotheses are developed:

H5: Supervisor's organizational embodiment mediates the relationship between polychronicity and work engagement.

H6: Supervisor's organizational embodiment mediates the relationship between polychronicity and job performance.

### *Psychological ownership as a moderator*

Within organizational behavior research, psychological ownership serves as a vital contextual factor influencing how employees' promotion focus shapes their engagement at work [69]. This construct is derived from the wider notion of possession [76]. In organizational settings, it refers to the personal sense of "mine" that workers mentally develop toward their company through internalized experiences [77]. When such ownership feelings are strong, employees generally demonstrate higher levels of performance and engagement [78, 79].

In the hotel sector, individuals with greater psychological ownership tend to remain committed to their current employer [69]. Similarly, Rapti [80] argued that both preventive focus and psychological ownership meaningfully enhance engagement levels. Prior work also shows that psychological ownership acts as a link between job demands and work engagement. Moreover, Dai *et al.* [69] confirmed that it functions as a moderator between regulatory foci and engagement. This suggests its potential to influence the strength of the associations between polychronicity and engagement as well as polychronicity and performance.

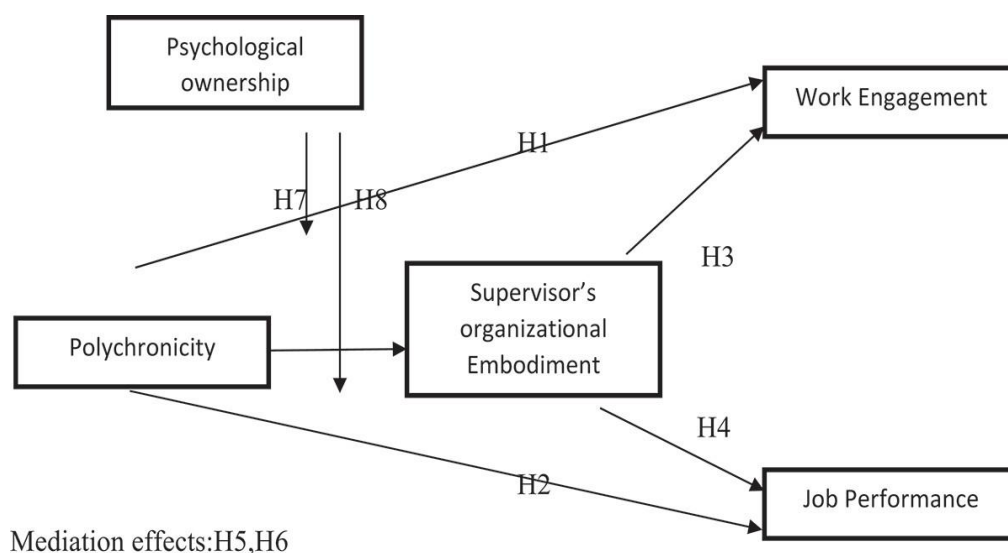
Accordingly, the study puts forth the following assumptions:

H7: Psychological ownership moderates the link between polychronicity and work engagement.

H8: Psychological ownership moderates the link between polychronicity and job performance.

In this research model, polychronicity serves as the independent variable, while work engagement and job performance act as dependent variables. Supervisor's organizational embodiment and psychological ownership were incorporated as mediating and moderating variables, respectively. Based on these theoretical links, a conceptual framework was designed, illustrated in

**Figure 1.**



**Figure 1.** Conceptual Framework

## Materials and Methods

### *Population and sampling*

This investigation focused on employees of private tourism establishments located in Petra, Jordan. Official figures obtained directly from the Petra Development and Tourism Commission reported 1,607 individuals working within this sector. From this population, 1,220 online questionnaires were distributed randomly, resulting in 748 valid responses. Participants

represented diverse social backgrounds and worked in multiple types of businesses, such as hotels, restaurants, travel agencies, bazaars, and tourist camps. Data were collected through email, WhatsApp, and Facebook Messenger.

After excluding 15 incomplete responses, the final number of usable questionnaires was 733. Both conceptual and statistical checks were conducted to ensure sampling adequacy. According to Saunders *et al.* [81], for a population of about 2,000, a sample size of 696 provides a 3% margin of error. Hence, the obtained sample of 733 from a population of 1,607 represents excellent adequacy for quantitative analysis. Further assessment using the Kaiser–Meyer–Olkin (KMO) statistic and Bartlett’s test of sphericity confirmed data suitability, as reported in **Table 1**. A KMO score of 0.90 indicates a superb level of adequacy, exceeding the 0.80 threshold recommended by Hair *et al.* [82]. The Bartlett test was also significant, confirming that factor analysis could be reliably performed.

**Table 1.** KMO and Bartlett’s Test

Kaiser-Meyer-Olkin measure of sampling adequacy.		0.900
Bartlett’s Test of Sphericity	Approx. Chi-Square	10094.414
	Df	496
	Sig.	0.000

### Instrument design

A structured survey instrument was employed. To avoid measurement bias, each construct was adopted from previously validated scales:

- Polychronicity — 10 items from Bluedorn *et al.* [43]
- Work engagement — 9 items from Balducci *et al.* [83]
- Job performance — 7 items from Babin and Boles [84]
- Psychological ownership — 3 items adapted from Dai *et al.* [69]
- Supervisor’s organizational embodiment — 5 items from Eisenberger *et al.* [62]

All questions were rated using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.”

## Results and Discussion

### Descriptive statistics and data normality

Descriptive outcomes are summarized in **Table 2**, where the mean values vary between 2.81 and 3.51. Data distribution was examined through skewness and kurtosis, as recommended by Kline [85] and Hair *et al.* [86]. According to Byrne [87], normality is assumed when kurtosis falls within  $-7$  to  $+7$ . As shown in **Table 2**, skewness ranged between  $-0.39$  and  $-0.37$ , and kurtosis between  $-1.17$  and  $-0.66$ , supporting the assumption of normality.

**Table 2.** Descriptive Statistics

Construct	Average	Std. Dev.	Skew	Kurtosis
Polychronicity	2.81	0.96	0.37	-0.70
Supervisor’s Organizational Embodiment	3.42	0.96	-0.39	-0.66
Work Engagement	2.82	1.01	0.28	-1.06
Job Performance	3.32	0.86	-0.12	-0.26
Psychological Ownership	3.51	1.13	-0.26	-1.17

### Confirmatory factor analysis (CFA)

The study used AMOS 24 to confirm the reliability and validity of all constructs. Results are presented in **Table 3**. Composite reliability (CR) values were used to assess internal consistency. Following Fornell and Larcker [88], all CR values surpassed the 0.70 criterion. Both convergent and discriminant validities were established: for convergence,  $CR > 0.70$  and  $AVE \geq 0.50$  are required, while for discrimination, the square root of AVE must exceed inter-construct correlations [89]. As reflected in **Table 3**, each CR value exceeded 0.70, AVE values were above 0.50, and the square roots of AVE were higher than correlation coefficients, confirming that the data were both reliable and valid.

**Table 3.** Reliability and Validity Analysis

Construct	Composite Reliability	Average Variance Extracted	1	2	3	4	5
1. Polychronicity	0.885	0.564	<b>0.751</b>				
2. Supervisor’s Organizational Embodiment	0.753	0.580	0.474***	<b>0.762</b>			

3. Work Engagement	0.895	0.589	0.642***	0.551***	<b>0.767</b>
4. Job Performance	0.861	0.551	0.298***	0.790***	0.258***
5. Psychological Ownership	0.851	0.504	-0.033	0.130**	-0.051
					0.195***
					<b>0.710</b>

N = 733; Bold diagonal values = square roots of AVE; AVE = Average Variance Extracted.

Measurement model assessment

After confirming both reliability and validity of the dataset, the adequacy of the measurement model was evaluated, and the corresponding findings are summarized in Table 4. To determine overall model fitness, the indices  $\chi^2/df$ , RMSEA, IFI, CFI, and TLI were employed, as these are the most widely used indicators in covariance-based structural equation modeling (SEM). The outcomes in Table 4 show that the original five-factor model did not meet the recommended fit levels proposed by Hu and Bentler [90], suggesting inadequate model fitness. Specifically, the initial model yielded  $\chi^2/df = 3.22$ , IFI = 0.75, TLI = 0.73, CFI = 0.75, and RMSEA = 0.09. To refine the model, several item correlations were added according to the modification indices, which substantially enhanced the fit. The final revised model demonstrated a good fit with  $\chi^2/df = 2.68$ , IFI = 0.96, TLI = 0.95, CFI = 0.96, and RMSEA = 0.06. The final structure is illustrated in Figure 2.

Table 4. Measurement Model (N = 733)

Measurement Models	$\chi^2$	Df	$\chi^2/df$	RMSEA	IFI	TLI	CFI
5- Factor Baseline Model	1902.39	454	4.19	0.07	0.85	0.84	0.85
5- Factor Revised Model	1202.01	448	2.68	0.06	0.96	0.95	0.96
Recommended Values [90]			< 3.0	<0.08	≥0.95	≥0.95	≥0.95

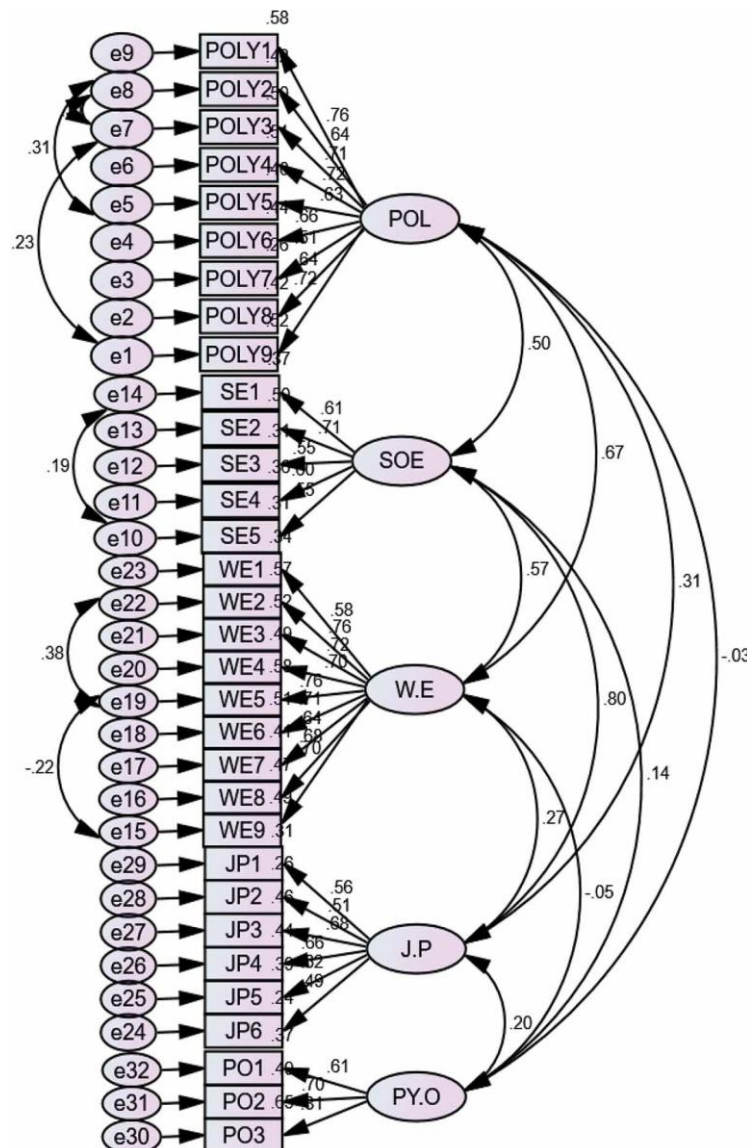


Figure 2. Finalized Measurement Model

*Hypotheses testing*

Once the model fit was established, SEM was employed to assess both direct and indirect relationships, with results presented in **Table 5**. The direct effects revealed that polychronicity significantly and positively predicted work engagement ( $\beta = 0.631$ ,  $p < .001$ ) and job performance ( $\beta = 0.187$ ,  $p < .001$ ), confirming H01 and H02. Additionally, supervisor's organizational embodiment exerted a significant positive influence on work engagement ( $\beta = 0.409$ ,  $p < .001$ ) and job performance ( $\beta = 0.366$ ,  $p < .001$ ), leading to the acceptance of H03 and H04.

**Table 5.** Direct Effects

No.	Hypothesized Path	Estimate	p	Result
H01	Polychronicity → Work Engagement	0.631	***	Accepted
H02	Polychronicity → Job Performance	0.187	***	Accepted
H03	Supervisor's Organizational Embodiment → Work Engagement	0.409	***	Accepted
H04	Supervisor's Organizational Embodiment → Job Performance	0.366	***	Accepted

$p < .001$

*Mediation testing*

The mediating function of the supervisor's organizational embodiment in the links between polychronicity, work engagement, and job performance is reported in **Table 6**. The findings indicate that polychronicity exerts a significant indirect influence on work engagement through supervisor's organizational embodiment ( $\beta = 0.110$ ,  $p < .01$ , CI = 0.08–0.14). Likewise, a significant indirect pathway from polychronicity to job performance through the same mediator was found ( $\beta = 0.238$ ,  $p < .001$ , CI = 0.19–0.29). As both confidence intervals exclude zero, mediation is confirmed, thereby supporting H05 and H06.

**Table 6.** Indirect Effects

Hypothesis	Indirect Path	Effect	SE	LLCI	ULCI
H05	Polychronicity → Supervisor's Organizational Embodiment → Work Engagement	0.110**	0.01	0.079	0.138
H06	Polychronicity → Supervisor's Organizational Embodiment → Job Performance	0.238***	0.02	0.191	0.287

Note: SE = Standard Error; LLCI = Lower Confidence Limit; ULCI = Upper Confidence Limit;

$p < .01$ ,  $p < .001$

*Moderation testing*

To evaluate moderating effects, the Hayes Process Macro and slope analysis were utilized, and the findings are presented in **Tables 7–8**. Graphical representations are shown in **Figures 3 and 4**, reflecting interaction effects at high and low (mean  $\pm$  SD) levels of the moderator. Results in **Table 7** show that changes in  $R^2$  ( $\Delta R^2 = 0.02$ ) and F statistics ( $F = 23.60$ ) are significant, verifying that psychological ownership moderates the link between polychronicity and work engagement. As seen in **Figure 3**, individuals with low polychronicity and low psychological ownership exhibit reduced engagement, while those with higher ownership, even at low polychronicity, demonstrate stronger engagement. When both variables are high, engagement peaks. Similarly, **Table 8** and **Figure 4** illustrate that psychological ownership moderates the relationship between polychronicity and job performance. At low levels of both, performance declines, but when psychological ownership is high, performance rises—even when polychronicity is low. The highest performance occurs when both are high, thus validating H07 and H08.

**Table 7.** Conditional Effects of Polychronicity at Different Levels of Psychological Ownership

Moderator Level (Psychological Ownership)	Conditional Effect	SE	p	95% CI Lower	95% CI Upper
One SD below mean	0.170		<.001	0.077	0.263
At the mean	0.324		<.001	0.261	0.474
One SD above mean	0.513		<.001	0.348	0.753

*Test of highest-order unconditional interaction (X × W)*

- $R^2$ -change = .0198\*\*\*
- $F = 23.604$
- $p < .001$

**Table 8.** Conditional Effects of Polychronicity at Different Levels of Psychological Ownership

Moderator Level (Psychological Ownership)	Conditional Effect	SE	p	95% CI Lower	95% CI Upper
One SD below mean	0.239		<.001	0.133	0.344
At the mean	0.425		<.001	0.358	0.492

Test of highest-order unconditional interaction ( $X \times W$ )

- $R^2$ -change = .0275\*\*\*
- $F = 34.990$
- $p < .001$

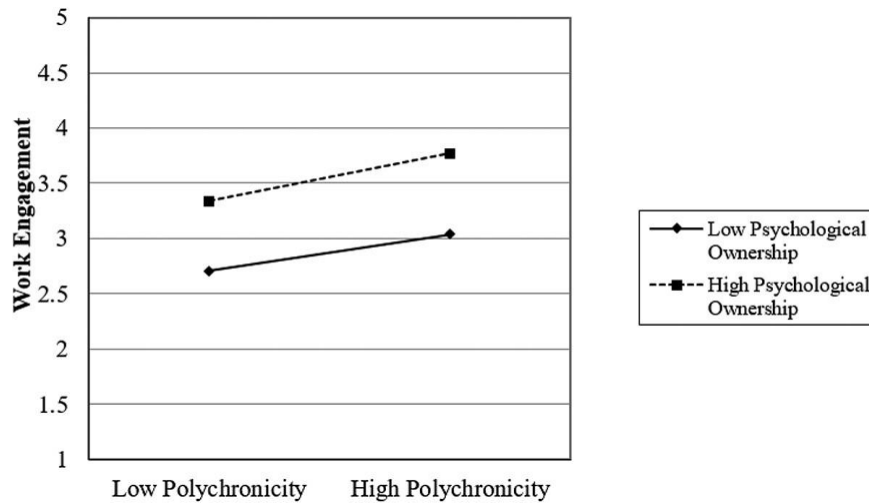


Figure 3. Moderation Graph (DV = Work Engagement)

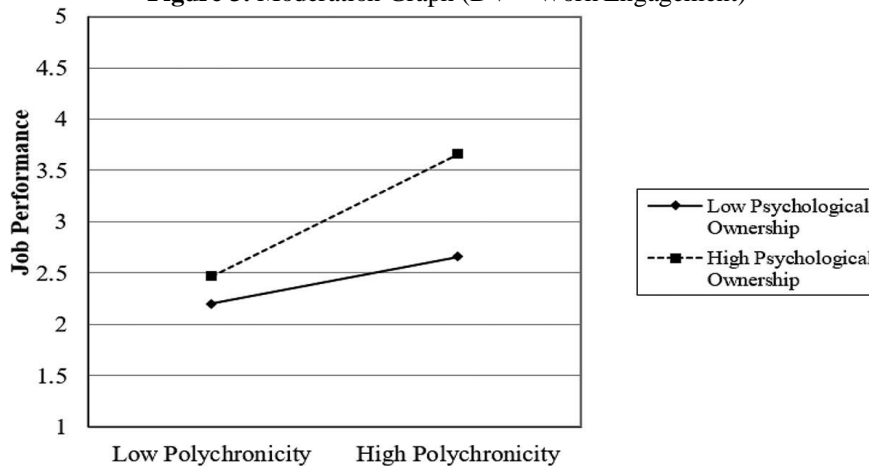


Figure 4. Moderation Graph (DV = Job Performance)

Globally, the tourism sector has become one of the key engines of economic progress, contributing about 10.4% of global GDP [91]. It is also among the largest employment generators, creating one out of every ten jobs worldwide [91]. Besides job creation, it serves as a significant channel for foreign currency inflow in many nations. Within Arab economies, tourism not only supports trade balance but also accelerates infrastructure expansion, making it an indispensable component of national development [92]. Regions where tourism is still emerging can reap major socio-economic advantages from it. The industry enhances living standards by creating new employment opportunities and delivering modern amenities [93]. Additionally, tourism development encourages the preservation of cultural and environmental attractions [94] while energizing local markets. The rising number of visitors also benefits hospitality-related services like restaurants and hotels [95]. Furthermore, research by Lazer and Layton [96] found that one direct job in tourism can yield approximately 1.5 indirect positions, underscoring its multiplier impact on national employment systems.

The present investigation broadened the understanding of polychronicity by exploring its role in diverse work-related outcomes. It expands the theoretical and empirical discussions surrounding employee engagement, job efficiency, supervisor embodiment, and psychological ownership. Initially, the study addressed how polychronic behavior influences engagement and performance among workers, a topic of high relevance to the hotel sector, where employee turnover remains elevated and multitasking is routine [74]. To frame these relationships, two key perspectives were integrated — Person–Organization Fit (PO-fit) and Organizational Support Theory (OST) — which help explain the dynamics of polychronicity and supervisor-related perceptions. As proposed by Eisenberger *et al.* [97], OST argues that supervisors act as primary agents of social exchange between workers and organizations. The research also analyzed how supervisors' organizational embodiment mediates outcomes and how psychological ownership moderates these associations.

The first hypothesis (H1) proposed that polychronicity positively influences work engagement, suggesting that employees who enjoy multitasking exhibit stronger engagement at work. The statistical findings supported this view, showing that polychronic individuals are more effective in managing simultaneous tasks [98] and that this orientation enhances engagement levels [20, 45]. The notion of polychronicity originally defined individuals who prefer performing multiple tasks concurrently. Those who display this tendency perceive themselves as more capable in multitasking settings compared to individuals who prefer focusing on one task [98]. Furthermore, the trait is distinct from the Big Five personality factors—openness, conscientiousness, extraversion, agreeableness, and neuroticism—since it remains relatively stable over time [99]. Findings by Conte and Gintoft [100] demonstrated that polychronicity correlates positively with extraversion and negatively with conscientiousness. This capacity enables individuals to divide attention efficiently across multiple responsibilities, allocating focus to several objectives instead of concentrating on a single one [101, 102]. Evidence supporting H1 from the Jordanian hospitality workforce in Petra confirmed that multitasking-oriented employees show higher engagement with their roles. Research in hotel management has long emphasized variables affecting employees' attitudes (e.g., satisfaction) and behaviors (e.g., job performance) [45]. This study extended that discourse by positioning polychronicity as a major predictor and developing the second hypothesis (H2) to assess its effect on job performance. Prior studies have identified numerous performance-enhancing factors; however, this work recognized polychronicity as a notable contributor. Alongside it, the supervisor's embodiment of the organization also emerged as a factor promoting both engagement and performance. Consequently, H3 and H4 examined the positive influence of supervisor embodiment on these variables. Supervisors are essential intermediaries—they guide, appraise, and mentor subordinates toward achieving organizational goals [103]. According to OST, workers differ in the extent to which they perceive their supervisors' behavior as reflecting organizational intent. It is vital for employees to recognize that a supervisor's conduct often stems from shared goals and institutional norms. Therefore, individuals form varied judgments regarding how closely their supervisor represents the organization's identity [61]. Findings for H3 align with Dai *et al.* [69], showing that weaker supervisor embodiment diminishes employee engagement, while H4 corresponds with Karatepe *et al.* [45], who demonstrated a positive connection between perceived organizational support (POS) and job performance.

The findings for H5 underscored the vital function of supervisor's organizational embodiment (SOE) in clarifying how polychronicity affects work engagement. While earlier research employed multiple constructs to assess organizational support, the present study specifically focused on SOE as a key dimension. In this framework, H5 examined SOE as a mediating variable between polychronicity and work engagement, whereas H6 tested the same mediating mechanism for job performance. As stated by Lei and Chen [104], polychronicity plays a crucial role in the recruitment and training processes of employees and contributes meaningfully to their career progression. Similarly, this research verified SOE as a significant mediator, confirming that its presence clarifies how polychronicity enhances both engagement and performance. Supporting this, Stinglhamber *et al.* [105] reported that SOE moderates the link between leader–member exchange and affective commitment, which subsequently influences job outcomes. In alignment, Asghar *et al.* [20] emphasized that organizational support substantially heightens the engagement level of polychronic employees.

The seventh hypothesis (H7) predicted that psychological ownership would moderate the connection between polychronicity and work engagement, while H8 proposed the same moderating impact for job performance. Both propositions were supported, indicating that psychological ownership strengthens the positive influence of polychronicity on employee engagement and job effectiveness.

### *Implications*

Organizational behavior encompasses various elements shaping employee conduct, and this study sheds light on several determinants that influence engagement and performance. Consequently, it offers both practical and academic implications. From a theoretical standpoint, the research redirects attention toward the interconnected problems of work engagement and performance, exploring them through lenses that could mitigate such issues. Within the tourism sector, two frameworks were integrated: PO-Fit theory, which advocates aligning individuals to suitable roles to achieve organizational objectives [59], and OST, emphasizing the supervisor's function in social exchanges between employees and organizations [97].

This investigation enriches academic discourse on polychronicity, SOE, psychological ownership, work engagement, and job performance. Since the relationship between polychronicity and both engagement and performance remains underexplored, the study contributes novel insights. The research uniquely identifies SOE as a mediator and psychological ownership as a moderator, distinguishing it from previous studies. Therefore, scholars focusing on employee engagement or performance can refer to these findings for theoretical direction, while practitioners confronting low productivity or limited engagement can adopt the highlighted variables to improve workforce outcomes.

### *Limitations and future recommendations*

Although the study provided robust evidence linking behavioral factors like work engagement and performance to specific antecedents, several limitations exist. Future research can address these to extend the current framework.

1. The data were confined to Petra (Jordan); hence, subsequent studies might replicate the model in other Jordanian cities or cross-cultural contexts.
2. While this research identified multiple predictors of engagement and performance, other potential influencers remain unexplored. For instance, regulatory focus could be examined for its impact on both variables [69].
3. The conceptual structure can be broadened by including internal marketing as a moderating factor, which has been shown to affect employee outcomes [106, 107].
4. Since the current work examined employees from private tourism facilities in Petra, future investigations might narrow the scope to specific job categories—for instance, managers.
5. Lastly, upcoming studies should complement questionnaires with interviews to gain a deeper understanding of how polychronicity influences job performance.

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