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Predictive ability of psychological capital for psychological flow among administrative employees in Jordanian private universities

Shooroq Mabreah *

Department of Psychological and Family Counseling, Jadara University, Irbid, Jordan

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ABSTRACT

This study assessed the predictive role of psychological capital in the psychological flow of administrative employees at private universities in Jordan. A total of 316 participants were surveyed using the Psychological Capital Scale and the Psychological Flow Scale, both of which demonstrated satisfactory validity and reliability. The results indicated moderate levels of psychological capital and psychological flow among participants. Gender had no significant effect on psychological capital, whereas academic qualification (postgraduate studies) and monthly income (above 700 dinars) were associated with significant differences. For psychological flow, only gender showed a significant effect, with females reporting higher levels. The predictive model was statistically significant ($\alpha = 0.05$), with psychological capital explaining 27.5% of the variance in psychological flow. The standardized regression coefficient revealed that psychological flow increased by 0.524 standard units for each one standard unit increase in psychological capital. The study recommends further investigation into the relationship between psychological capital, psychological flow, and other variables related to mental health and positive psychology, including cognitive capital as a potential enhancer of psychological flow.

1. Introduction

Organizations seek high-performing and adaptable employees who excel despite increasing cognitive demands, contribute proactively, and overcome psychological challenges from routine work pressures.

This focus on employee capabilities and well-being has given rise to the concept of psychological capital in organizational behavior literature. Psychological capital emphasizes an employee's positive psychological state, ability to grow, and readiness for work, centering on positive variables to enhance overall performance (Luthans et al., 2007). The origins of psychological capital can be traced back to the field of positive psychology, coined by psychologists Seligman and Csikszentmihalyi (2000). Seligman's and Csikszentmihalyi's (2000) work advocated a shift toward emphasizing an individual's positive qualities, contending that these innate attributes can facilitate personal development to a high and superior degree, ultimately impacting workplace performance (Rego et al., 2012).

Organizations must typically meet expectations, achieve objectives efficiently, and thrive in a competitive business environment by fostering a positive work environment with psychological capital and work-related flow (Ryff and Singer, 2003). Psychological capital is a positive state-like ability involving confidence, self-efficacy, adaptability, hope, and flexibility. It contributes to creativity and employee performance by enabling individuals to exert effort and make positive attributions. It includes four key characteristics: confidence in task accomplishment, fostering positive determination for success, the commitment to persistently pursue goals while being flexible in adapting goal paths, and the ability to rebound from failure and setbacks. Keleş (2011) highlighted that organizations must actively participate and manage human resources to achieve goals. Emphasizing holistic well-being and performance is crucial for securing a competitive advantage. Developable psychological capital involves managing the positive psychological constructs of self-efficacy/confidence, hope, optimism, and resilience. These four components demonstrate a motivational tendency to

* Corresponding Author.
Email Address: jordan.shooroq@jadara.edu.jo
https://doi.org/10.21833/ijaas.2025.08.008
Corresponding author's ORCID profile:
https://orcid.org/0000-0002-7085-4541

complete goals successfully. These components can be briefly summarized as follows: Self-efficacy, or confidence, is an individual's belief in their ability to perform tasks, influencing motivation and enabling effective task execution. It transcends actual abilities and serves as an internal guiding factor (Özkalp, 2009). Hope, characterized by optimism, plays a significant role in an individual's professional success. Optimistic individuals anticipate positive outcomes, even in the face of adversity, while pessimists tend to expect negative outcomes and are prone to giving up easily (Carver and Scheier, 2003). Resilience, a trait involving endurance, tolerance, and psychological flexibility, allows individuals to adapt positively to complex situations, enhancing their ability to bounce back from adversity (Luthans et al., 2004).

Optimism, a psychological disposition marked by positive expectations, profoundly impacts mental and physical health. It allows individuals to navigate life more effortlessly, avoiding tension, depression, and despair. Optimism can be defined as a general expectation of a brighter future, influencing overall well-being (Çavuş and Gökçen, 2015). According to Csikszentmihalyi (1988), it is not the result of luck or chance but rather of developing and managing one's inner experience, which leads to optimal experiences or "flow" during stimulating and challenging activities that make one feel happy and satisfied. When the task's difficulty and the person's abilities are balanced, psychological flow occurs, inspiring without inciting fear.

A more realistic approach to measuring psychological flow involves individuals self-assessing their flow experiences. This method requires participants to reflect on whether they recognize descriptions of flow experiences as something they are currently undergoing or have experienced in the past (Csikszentmihalyi, 1988). Asakawa (2004) illustrated the usefulness of this approach in a study involving university employees in Japan, demonstrating that it enables the evaluation of the quality of flow experiences by asking participants to score the intensity of their emotions towards loss, confidence, and focused concentration.

Psychological flow is an essential state that promotes human development by assisting individuals in controlling their thoughts and emotions. It improves motivation, inventiveness, independence, and self-assurance. This mood, which entails intense engagement in activities, might happen at home, at work, or during leisure activities like sports and reading. People in flow are focused on their work and lose awareness of their environment and themselves (Csikszentmihalyi, 1988; Belbaqara, 2018). It significantly impacts an individual's success by enhancing energy, self-awareness, and task immersion, leading to better performance and reduced psychological stress. It enables individuals to confront work pressures and actively pursue their goals (Csikszentmihalyi and Larson, 2014; Jackson and Marsh, 1996; Nakamura and Csikszentmihalyi, 2009). Research shows that psychological capital predicts prosperity, performance, and emotional intelligence (Ho and Chan, 2022; Ansari and Jasti, 2020; Simsek and Aktas, 2016).

Achieving psychological flow, in which people are completely absorbed in their work and function nearly subconsciously, unaffected by interruptions, requires concentrating on the activity. University staff members are essential to comprehending and exhibiting psychological flow since their work affects the school's success. How they approach activities and their chances of success are influenced by their self-perception, which is altered by experiences and feedback (Allen and McCarthy, 2016). Employee performance, which reflects proficiency and accomplishment, is essential for professional and personal growth. Focusing on employee performance and well-being enables organizations to accomplish their objectives quickly, with high-quality results and low expenses.

Numerous investigations have examined the connection between psychological capital and psychological flow, some of which have concentrated on populations comparable to the ones in this study. According to Peterson et al. (2011), there is a direct correlation between psychological capital and performance, with more substantial psychological capital having a beneficial impact on job immersion and performance later. Zubair and Kamal (2015a) discovered that psychological capital and flow were positively connected among workers in Rawalpindi and Islamabad. Men had higher levels of both, and longer workdays enhanced flow. Moreover, Wu (2024) investigated psychological capital among school teachers and found high PsyCap overall, with male teachers demonstrating significantly higher efficacy and resilience than female teachers, aligning with similar gender disparities observed in higher-education staff.

Da et al. (2024) employed a quantitative (descriptive-analytic) design to examine how psychological capital, specifically self-efficacy, hope, optimism, and resilience, relates to job performance among 1,079 university faculty in China. They found moderate positive levels of PsyCap and performance, with significant positive relationships between PsyCap dimensions and performance metrics. Each PsyCap dimension had a unique mediation effect on task, contextual, and adaptive performance, with resilience showing more complex indirect effects. These findings closely parallel Jabari's (2018) results regarding moderate PsyCap and its relationship to employee performance, as well as distinct effects of individual PsyCap components.

Moreover, Jia and Zhang (2025) found a significant positive relationship between psychological capital and job performance among government employees. The study demonstrated that higher levels of psychological capital were associated with increased performance at work, with psychological capital contributing substantially to the explained variance in performance outcomes.

Research has shown a positive correlation between psychological capital, empowerment, and psychological flow among employees. Shah et al. (2019) studied 411 employees in Islamabad and found that psychological capital positively influences employee behavior, fostering job innovation, creativity, performance, and commitment. Similarly, Zubair and Kamal (2015b) examined 277 Pakistan administration and programming workers, revealing a significant positive relationship between psychological capital, work-related flow, and employee creativity.

Zheng and Gunasekara (2022) examined how mindfulness at work contributes to psychological flourishing, which in turn is positively associated with job satisfaction and affective commitment, conceptually analogous to psychological flow predicting satisfaction via mindfulness. Montero-Marin et al. (2020) evaluated a workplace mindfulness intervention and found that increases in trait mindfulness were associated with higher job satisfaction, with mindfulness acting as a mediator in this relationship.

Research indicates that psychological flow predicts job satisfaction more strongly than mindfulness. The psychological capital significantly enhanced employees' creative behavior, especially through optimism and self-efficacy. Similarly, Aloulou et al. (2025) demonstrated that among organizational employees, higher psychological capital, particularly self-efficacy and optimism, was significantly and positively associated with innovative and creative behaviors.

Reviewing previous research highlights differences in study objectives, settings, measurement tools, and demographics. Notably, no prior studies have simultaneously examined the two key variables of the present research, psychological capital and psychological flow, whether in Arabic or foreign contexts. This study's uniqueness lies in its focus on predicting psychological flow based on psychological capital among administrative employees in private Jordanian universities.

Employees at private universities in Jordan deal with various stressors, such as increased responsibility, financial hardships, and demanding workloads. These difficulties can cause psychological and emotional instability, which can impact workers' psychological flow and well-being, especially when coupled with the industry's drive for consistency and perfection. Their performance and professionalism may suffer as a result. The significance of human resources increases as organizational responsibilities become more complicated due to globalization and technological improvements. Because poor mental health is associated with reduced performance, which leads to both physical and intangible costs, such as withholding incentives and limited recognition, institutions realize more and more the need to support their staff.

This study emphasizes psychological capital, which includes self-efficacy, optimism, hope, flexibility, and personal well-being, and how these factors affect workers' psychological flow and performance at all organizational levels. Specifically, the study addresses the following research questions:

1. What is the level of psychological capital among administrative employees in private Jordanian universities?
2. What is the level of psychological flow among administrative employees in private Jordanian universities?
3. Are there statistically significant differences at (α = 0.05) in psychological capital among administrative employees in private Jordanian universities attributable to gender, educational qualification, and monthly income?
4. Are statistically significant differences (at α = 0.05) in psychological flow among administrative employees in private Jordanian universities attributable to gender, educational qualification, and monthly income?
5. To what extent can psychological capital predict psychological flow among administrative employees in private Jordanian universities?

This study is significant both theoretically and practically. Theoretically, it examines the impact of psychological capital and personal well-being on the psychological flow of employees in private Jordanian universities, contributing to existing knowledge and providing a foundation for further research. Practically, it explores the predictive relationship between these variables, leading to the development of a valuable measurement tool in positive psychology. The findings can aid specialists in designing counseling programs for evaluation and diagnosis. The study is limited to administrative employees in private Jordanian universities in the north and center during the first semester of the 2023-2024 academic year. Its results are based on the psychological capital measurement tool used.

2. Methods and procedures

The study employed the predictive approach of correlational studies, which examines the relationship between variables to reach an in-depth understanding of them.

The study population consisted of all administrative employees (n = 875) working in private Jordanian universities based on the statistics of their personnel affairs departments A total of 316 individuals were selected using by simple random method. Table 1 shows the distribution of the participants according to the variables (gender, educational qualification, and monthly income).

2.1. Instruments

The Psychological Capital Scale (PCS): The translated version of the psychological capital inventory developed by Sapyaprapa et al. (2013) was used in this study to detect the level of

psychological capital among administrative employees in private Jordanian universities. The initial version of the measure consisted of 24 items. It includes four dimensions: self-efficacy, optimism, hope, and resilience.

Table 1: Distribution of participants by variables

Variables	Category	Frequency	%
Gender	Male	144	45.60
	Female	172	54.40
Academic qualification	Bachelor's	237	75.00
	Postgraduate	79	25.00
Monthly income	< JD 400	162	51.30
	JD 400-700	43	13.60
	< JD 700	111	35.10
Total		316	100

JD: Jordanian dinar

The face validity of the scale was assessed by presenting the initial Arabic translation of the scale to a panel of eight experienced arbitrators in the fields of psychological counseling and educational psychology working in Jordanian universities to evaluate the scale's translation accuracy and content validity. They provided feedback on the following aspects: the appropriateness of item measurement for each dimension, the clarity of linguistic wording in the paragraphs, their relevance, and suggestions for additions, modifications, or deletions as deemed necessary. Based on the arbitrators' feedback, appropriate amendments were made to the wording of some items within the scale. Following this review process, the scale retained a total of 24 items, categorized into four dimensions: work self-efficacy (items 1-6), optimism (items 7-12), hope (items 13-18), and resilience (items 19-24).

The instrument was administered to a pilot sample (n = 30) to assess its construct validity using Pearson correlation coefficients, as shown in Table 2.

Table 2: Results of the values of the correlation coefficients of the psychological capital scale

N	Correlation		N	Correlation		N	Correlation	
	Dimension	Total		Dimension	Total	Dimension	Total	Dimension
1	0.60*	0.55*	9	0.69*	0.50*	17	0.70*	0.66*
2	0.64*	0.50*	10	0.74*	0.51*	18	0.56*	0.45*
3	0.75*	0.59*	11	0.68*	0.53*	19	0.63*	0.54*
4	0.72*	0.58*	12	0.49*	0.40*	20	0.57*	0.43*
5	0.67*	0.51*	13	0.50*	0.49*	21	0.66*	0.59*
6	0.76*	0.66*	14	0.59*	0.54*	22	0.62*	0.51*
7	0.79*	0.64*	15	0.56*	0.43*	23	0.64*	0.53*
8	0.74*	0.64*	16	0.71*	0.68*	24	0.70*	0.66*

*: Statistical significance level at $\alpha = 0.05$

Table 2 reveals that the correlation coefficients of the scale ranged from 0.49 to 0.79 with their respective dimensions and from 0.40 to 0.68 with the total score of the scale.

All these values were statistically significant at $\alpha = 0.05$. The correlation of all items with the dimension and the total scale score exceeded 0.20. These values are considered acceptable for retaining the items within the scale, following recommendations in the literature, which suggest keeping items with item-total correlations above 0.20 or 0.30 in exploratory phases. As a result, all the items in the scale were accepted, and the scale remained in its final form, consisting of 24 items distributed across four dimensions.

The Cronbach's Alpha equation was used to determine the internal consistency reliability of the psychological capital scale and its dimensions. The tool was applied to a pilot sample comprising 30 individuals twice. The reliability values of the test-retest were also verified using the Pearson correlation coefficient (Table 3).

Table 3: Values of the internal and test-retest reliability coefficients for the psychological capital scale and its dimensions

Scale/dimensions	Test-retest	Internal consistency reliability	Items
Work self-efficacy	0.82	0.81	6
Optimism	0.81	0.78	6
Hope	0.83	0.80	6
Resilience	0.84	0.82	6
Psychological capital scale	0.85	0.83	24

Table 3 presents the test-retest reliability, internal consistency, and the dimensions of the Psychological Capital Scale. The test-retest reliability for the total score was 0.85, while the reliability values for the individual dimensions ranged from 0.81 to 0.84. The internal consistency reliability, measured using Cronbach's alpha, was 0.83 for the overall scale. The internal consistency values for the dimensions ranged between 0.78 and 0.82. These values are considered acceptable and indicate a reliable scale.

The final version of the Psychological Capital Scale consists of 24 items distributed across four dimensions. Respondents rate each item using a five-point Likert scale, where "strongly agree" is scored as 5, "agree" as 4, "neutral" as 3, "disagree" as 2, and "strongly disagree" as 1. Items with a positive orientation are scored directly, while the negatively worded item, specifically item number 12, is scored in reverse.

To classify the average responses objectively, the class interval was calculated by subtracting the minimum value (1) from the maximum value (5), resulting in 4. This value was then divided by 3, giving a class interval of approximately 1.33. Based on this, scores below 2.34 are considered low, scores between 2.34 and 3.67 are considered moderate, and scores above 3.67 are considered high.

This study also employed the Psychological Flow Scale (PFS) to assess the level of psychological flow among administrative employees working at private universities in Jordan. The first version of the scale included 25 items organized into three dimensions: goal orientation, integration, re-evaluation, and feedback. The face validity of the PFS was confirmed by presenting the initial version to a group of eight experts in psychological counseling and educational psychology from Jordanian universities. These experts reviewed the items for clarity, linguistic appropriateness, and content relevance. As no modifications were recommended, the scale retained its original structure. The final version of the PFS includes 25 items. Items 1 to 9 measure goal orientation, items 10 to 17 assess integration, and items 18 to 25 relate to re-evaluation and feedback. To confirm the construct validity of the scale, it was administered to a pilot sample of 30 participants. The Pearson correlation coefficient was used to determine the relationship between each item and the total score of the scale. The correlation values are presented in Table 4 and show statistically significant relationships between all items and the overall score, indicating that the scale has acceptable construct validity.

Table 4: Values of correlation coefficients of the psychological flow scale

N	Correlation		N	Correlation		N	Correlation	
	Dimension	Total		Dimension	Total		Dimension	Total
1	0.66*	0.51*	10	0.59*	0.48*	19	0.58*	0.47*
2	0.57*	0.46*	11	0.62*	0.45*	20	0.72*	0.64*
3	0.67*	0.58*	12	0.78*	0.63*	21	0.66*	0.47*
4	0.76*	0.66*	13	0.80*	0.67*	22	0.63*	0.54*
5	0.62*	0.52*	14	0.60*	0.48*	23	0.76*	0.66*
6	0.75*	0.65*	15	0.63*	0.57*	24	0.59*	0.52*
7	0.77*	0.67*	16	0.61*	0.43*	25	0.72*	0.62*
8	0.71*	0.54*	17	0.64*	0.42*			
9	0.69*	0.56*	18	0.73*	0.69*			

*: Statistical significance at α = 0.05

Table 4 shows that the values of the correlation coefficients for the scale items ranged between 0.57-0.80 with their dimensions and between 0.42-0.69 with the total score.

All values were statistically significant at the 0.05 level. The correlation between each item and its related dimension, as well as the total score, was greater than 0.20. According to Rosi et al. (2020), this level of correlation is acceptable and supports keeping the item in the scale. Thus, all scale items were accepted, and the scale in its final version consisted of 25 items distributed over three dimensions. To estimate the internal consistency reliability of the Psychological Flow Scale and its dimensions, Cronbach's Alpha equation was used for the first application of the pilot sample (n = 30) individuals. The test-retest reliability was also verified by re-applying the measure to the previous sample, with a time difference of two weeks between the first and second applications. The Pearson correlation coefficient was calculated between the first and second applications, as shown in Table 5.

Table 5: Values of the test-retest reliability and internal consistency coefficients for the psychological flow scale

Scale	Internal consistency	Test-retest	N
Goal orientation	0.81	0.79	9
Integrations	0.82	0.78	8
Re-evaluation and feedback	0.85	0.81	8
Psychological Flow	0.87	0.82	25

Table 5 shows that the overall internal consistency reliability of the scale was 0.87, with the reliability values of its dimensions ranging from 0.81 to 0.85. The overall test-retest reliability was 0.82, and the values for the individual dimensions ranged from 0.78 to 0.81. These values indicate acceptable reliability. The final version of the Psychological Flow Scale includes 25 items, distributed across three dimensions. Respondents rate the items using a five-point Likert scale, with the following options: "strongly agree" (5 points), "agree" (4 points), "neutral" (3 points), "disagree" (2 points), and "strongly disagree" (1 point). For positively worded items, the scoring is applied as stated. For negatively worded items, specifically items 15, 17, 19, 21, and 24, the scoring is reversed. To assess the average responses of the participants, the range of the response categories was calculated by subtracting the lowest score from the highest (5 - 1 = 4), and then dividing the result by 3 (4 ÷ 3 = 1.33). Based on this, the mean scores were classified as follows: low (less than 2.34), medium (2.34–3.67), and high (greater than 3.67).

3. Results and discussion

3.1. Results of the first question

What is the level of psychological capital among administrative employees in private Jordanian universities? Means and standard deviations were computed to answer this question. Table 6 reveals that the psychological capital level among administrative employees in private Jordanian universities is medium. All dimensions of psychological capital fall within this moderate range, with the dimensions ranked as follows: Resilience, followed by work self-efficacy in the second position,

hope in the third position, and optimism in the fourth and final position. This result can be attributed to the extent of the administrative workers' dedication to their institutions, their strong affiliation with the workplace, their capability to invest effort effectively, and their capacity to navigate challenges and manage the numerous tasks assigned to them. Moreover, it reflects their self-confidence in developing innovative solutions and novel approaches for overcoming obstacles and achieving improved results, reinforcing the need for sustained diligence and perseverance.

Table 6: Results of means and standard deviation of the PCS

Rank	Dimension	Mean	Standard deviation	Level
1	Resilience	3.61	0.55	Medium
2	Work self-efficacy	3.49	0.76	Medium
3	Hope	3.47	0.75	Medium
4	Optimism	3.45	0.48	Medium
	PCS overall	3.50	0.46	Medium

Conversely, some employees exhibit a lower propensity to explore alternative solutions and encounter challenges, resulting in less effective goal achievement and a reduced ability to adapt to workplace dynamics. As such, the findings of this study align with those of Da et al. (2024), who also reported a moderate level of psychological capital.

3.2. Results of the second question

What is the level of psychological flow among administrative employees in private Jordanian universities? To answer this question, arithmetic means and standard deviations were calculated for psychological flow among administrative employees in private Jordanian universities, as shown in Table 7. Table 7 demonstrates that the level of psychological flow among administrative employees in private Jordanian universities was assessed as medium. Specifically, the dimension related to goal orientation exhibited a high level, while the dimensions of re-evaluation, feedback, and integration were rated at the medium level. The hierarchy of dimensions appeared as follows: goal orientation ranked first, followed by re-evaluation and feedback in the second position, with integration occupying the third and final position. This outcome can be attributed to the administrative employees' capacity to establish clear administrative objectives and their openness to embracing new experiences to achieve mastery in their roles by prioritizing tasks. However, these employees may face challenges related to the re-evaluation and feedback processes, as evidenced by the results. They indicate that feedback is often subjective, lacks realism, and is not consistently applied, which could impede the employees' commitment to self-improvement, innovation, and progress.

Additionally, the moderate level of integration suggests room for improvement in achieving a complete and unwavering focus on tasks devoid of intrinsic satisfaction in performance. This implies that tasks require high concentration and precision to attain the desired objectives. This is consistent with the results of Jia and Zhang (2025) and Wu (2024).

3.3. Results of the third question

Are there statistically significant differences at (α = 0.05) in psychological capital among administrative employees in private Jordanian universities attributable to gender, educational qualification, and monthly income? Means and standard deviations were calculated to answer this question, as shown in Table 8.

Table 7: Results of means and standard deviation of the psychological flow scale

Rank	Dimensions	Mean	Standard deviation	Level
1	Goal orientation	3.68	0.59	High
2	Re-evaluation and feedback	3.23	0.28	Medium
3	Integrations	3.19	0.51	Medium
	Psychological flow	3.38	0.35	High

Table 8: Arithmetic means and standard deviations of psychological capital among the study sample

Variables	Categories	Psychological capital	
		Mean	Standard deviation
Gender	Male	3.47	0.43
	Female	3.53	0.48
Academic qualifications	Bachelor's	3.32	0.44
	Postgraduate	3.57	0.47
Monthly income	< JD 400	3.38	0.42
	JD 400-700	3.39	0.56
	< JD 700	3.61	0.43

Statistically significant differences were observed between the arithmetic means of psychological capital among administrative employees in private Jordanian universities attributable to different categories of variables (gender, educational qualification, and monthly income). A three-way analysis of variance (3-way ANOVA) was conducted to determine these differences, as shown in Table 9.

Table 9: Results of the Three-way ANOVA for psychological capital among administrative employees

Variance source	Sum of squares	Degree of freedom	Mean squares	Calculated F	P-value
Gender	0.150	1	0.150	0.781	0.377
Academic qualifications	2.231	1	2.231	11.650	0.001*
Monthly income	2.682	2	1.341	7.002	0.001*
Error	59.552	311	0.191		
Total	64.615	315			

*: Statistically significant at 0.05

Results in Table 9 reveal that no statistically significant gender differences were observed at the significance level (α = 0.05) between the arithmetic averages of psychological capital among the administrative employees in private Jordanian universities. However, statistically significant differences were found at the significance level (α = 0.05) between the arithmetic means of psychological capital among the administrative employees in private Jordanian universities due to the educational qualification variable, favoring the (postgraduate) category. Statistically significant differences at the significance level (α = 0.05) were exhibited between the arithmetic averages of psychological capital in administrative employees in private Jordanian universities, attributable to the monthly income variable. The Scheffe test was performed for multiple-dimensional comparisons to determine the variations between the arithmetic averages, as shown in Table 10.

Table 10 presents statistically significant differences at a significance level of (α = 0.05) in the means of psychological capital among a sample of administrative employees in private Jordanian universities based on the variable of monthly income. These differences favor individuals earning more than 700 dinars compared to those earning less than 400 dinars and those earning more than 700 dinars compared to those earning between 400 to 700 dinars. This result can be attributed to individuals' capacity to possess psychological capital, irrespective of gender. A positive psychological state influences individuals' perceptions, attitudes, and behaviors, contributing to psychological equilibrium and personal growth. This positive state inclines individuals to be motivated toward their goals, providing them with the ability to chart a path toward success, believe in their capacity to achieve it, and overcome obstacles and challenges encountered along the way. As individuals accumulate knowledge and experience, they tend to be more self-aware and develop enhanced positive psychological capabilities. With time, an individual's personality matures, leading to more conscious and profound perceptions. This deepened awareness allows individuals to broaden and deepen their psychological wealth, expanding their reservoir of personal experiences and competencies.

Moreover, individuals working in supportive and positive environments, where their efforts are recognized and they receive compensation that covers their basic needs, often feel valued and respected. Such circumstances give them a psychological boost and bolster their well-being and work performance. This psychological energy further motivates employees, fostering hope, optimism, and the ability to remain goal-oriented. Consequently, it increases the likelihood of job satisfaction, dedication, and persistence in their professional endeavors. The study results are consistent with the study (Belbaqara, 2018).

3.4. Results of the fourth question

Are there statistically significant differences (at α = 0.05) in psychological flow among administrative employees in private Jordanian universities attributable to gender, educational qualification, and monthly income? To answer this question, the mean and standard deviations were calculated. The results are presented in Table 11. Table 11 shows significant differences between the arithmetic means of psychological flow among administrative employees in private Jordanian universities, resulting from different categories of variables (gender, educational qualification, and monthly income); therefore, a three-way analysis of variance (3-way ANOVA) was conducted to determine which variable has a significant impact. Results are shown in Table 12. Table 12 presents that statistically significant differences, based on the gender variable, were found at a significance level of α = 0.05 in the mean scores of psychological flows among administrative employees in private Jordanian universities, favoring female employees.

However, no statistically significant differences were observed at a significance level of α = 0.05 in the mean scores of psychological flows among administrative employees in private Jordanian universities due to educational qualifications and monthly income. This result can be attributed to female employees exhibiting higher engagement and enthusiasm. They experience a sense of profound psychological well-being as they work towards achieving their objectives. During this state, they remain highly focused and emotionally engaged, brimming with positive energy and vitality. The perception of time fades away as they become fully absorbed in their work. They also experience an increased sense of personal worth and happiness. This flow state, which culminates in an ideal experience, is not constrained by educational level or monthly income. The state of flow is a comprehensive mental and emotional condition resulting from immersion in a task, accompanied by heightened performance and activity. During this state, work progresses seamlessly, reaching its peak, and time ceases to be a factor. Consequently, the flow represents an unconscious state of complete integration and goal-focused concentration. This

finding corroborates the results and aligns with the study (Belbaqara, 2018).

3.5. Results of the fifth question

To what extent can psychological capital predict psychological flow among administrative employees in private Jordanian universities? Here, simple linear regression analysis was used using the Stepwise method to enter the predictive variables into the regression equation in the predictive model, as shown in Tables 13 and 14. Table 13 reveals that the predictive model of psychological capital and psychological flow was statistically significant at the significance level (α = 0.05), as psychological capital explained (27.50%) of the variance in psychological flow. As shown in Table 14, nonstandard and standard regression weights and t-test values were calculated for the predictor variable (psychological capital) and the predicted variable (psychological flow) in the predictive model. Table 14 indicates that the level of psychological flow increases by 0.524 standard units for every one standard unit (standard deviation) increase in psychological capital. Based on this result, the regression equation for predicting psychological flow is: $\hat{y} = 1.675 + 0.537x_1$, where, $\hat{y}$ is psychological flow and x_1 is psychological capital.

The researcher explains that psychological capital helps individuals develop a positive self-image, leading to greater confidence, a strong sense of ability, and the motivation to set personal and professional goals. It gives individuals the skills to find different ways to reach these goals, supports perseverance, and helps them deal with challenges by seeing them in a positive light. These qualities improve their ability to set goals and perform tasks at a high level. Kamei et al. (2018) stated that individuals with well-balanced psychological capital have key traits needed for success. They are active in their environments, optimistic about achieving their goals, and able to handle difficulties. They are willing to face challenges in the process of reaching their goals.

Moreover, Ho and Chan (2022) uncovered a statistically significant correlation between psychological capital and psychological flourishing. Similarly, Ansari and Jasti's (2020) study indicated that psychological capital is pivotal in predicting performance. A study by Simsek and Aktas (2016) further highlighted the association between psychological capital and emotional intelligence. However, Liang et al. (2025) found a significant relationship between psychological flow and cognitive consistency.

Table 10: Results of the Scheffe test (post-hoc comparisons) of psychological capital in administrative employees at private Jordanian universities by monthly income

Monthly income groups	Mean	Compared with < JD 400	Compared with JD 400–700
< JD 400	3.385	—	0.010
JD 400–700	3.394	0.010	—
> JD 700	3.613	0.228*	0.219*

*: Statistically significant at 0.05

Table 11: Arithmetic means and standard deviations of psychological flow among administrative employees in private Jordanian universities by the study variables

Variables	Categories	Psychological flow	
		Mean	Standard deviation
Gender	Male	3.22	0.36
	Female	3.52	0.33
Academic qualifications	Bachelor's	3.31	0.36
	Postgraduate	3.40	0.30
Monthly income	< JD 400	3.35	0.36
	JD 400-700	3.39	0.37
	< JD 700	3.41	0.31

Table 12: Results of Three-way ANOVA for psychological flow among administrative employees at private Jordanian universities by the study variables

Variance source	Sum of squares	Degree of freedom	Mean squares	Calculated F	P-value
Gender	0.585	1	0.585	4.970	0.027*
Academic qualifications	0.338	1	0.338	2.872	0.091
Monthly income	0.161	2	0.081	0.684	0.505
Error	36.586	311	0.118		
Total	37.741	315			

*: Statistically significant at .05

Table 13: Results of the simple linear regression analysis of psychological capital with psychological flow

Sub model	R	R^2	Adjusted R^2	Standard error	Statistics change				
					R^2 change	F change	DF nominator	DF denominator	P-value
1	0.524	0.275	0.273	0.517	0.275	18.593	1	314	0.000

*: Statistically significant at 0.05; 1: Predictors: (regression constant), psychological capital

Table 14: Non-standardized and standardized weights for predicting psychological capital and psychological flows

Predictors	Standardized weights		Non-standardized weights	T	P
	B	Standardized error	B		
(regression constant)	1.675	0.140		11.982	0.000*
Psychological capital	0.537	0.055	0.524	9.764	0.000*

*: Statistically significant at 0.05

4. Recommendations

Based on the study findings, the researcher recommends the following:

- Holding periodic open meetings with employers in these institutions to discuss the employees' issues and concerns.
- Holding training courses and workshops on how to raise employees' psychological capital and enhance their affiliation with their institutions by building strong bonds contributes to their psychological flow.
- Conduct periodic feedback on employees' performance and work within the improvement plan, which includes periodic procedures that rely on feedback to develop the administrative process, the process of self-evaluation, and comprehensive evaluation.
- More studies should examine mental health concepts and positive psychology, such as psychological happiness, personal well-being, personal prosperity, and research into cognitive capital, which enhances professional competence and adds a new dimension to psychological flow.
- More studies should be conducted that address psychological capital and its relationship to some variables for administrative workers, such as personal traits and self-esteem.

Compliance with ethical standards

Ethical considerations

This study was conducted in accordance with ethical research standards. Participation was voluntary, and informed consent was obtained from all participants prior to data collection. The anonymity and confidentiality of respondents were maintained throughout the research process. No personal identifying information was collected, and participants were informed of their right to withdraw at any stage.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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