KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 26 July 2024
Revised 29 August 2024
Accepted 11 September 2024
Published online 10 October 2024

Journal of Adolescent and Youth Psychological Studies

Volume 5, Issue 10, pp 99-107

E-ISSN: 2981-2526

The Mediating Role of Self-Esteem in the Relationship Between Psychological Capital, Academic Engagement, and Academic Procrastination with Psychological Well-Being Among Al-Diwaniyah Students in Iraq

Layth Khalid Abdlhussein. Almurumudhe[1], Ali. Mehdad[2*], Ahmed Abdulkadhim. Johni[3], Zahra. Yousefi[4]

[1] PhD Student, Department of Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran
[2] Associate Professor, Department of Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran
[3] Assistant Professor, Department of Psychology, University of Al-Qadisiya, Al-Qadisiya, Iraq
[4] Assistant Professor, Department of Psychology, faculty of Education and Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

*** Corresponding author email address**: alimahdad.am@gmail.com

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Almurumudhe, L. K. A., Mehdad, A., Johni, A. A., & Yousefi, Z. (2024). The Mediating Role of Self-Esteem in the Relationship Between Psychological Capital, Academic Engagement, and Academic Procrastination with Psychological Well-Being Among Al-Diwaniyah Students in Iraq. *Journal of Adolescent and Youth Psychological Studies, 5*(10), 99-107.
http://dx.doi.org/10.61838/kman.jayps.5.10.12

A B S T R A C T

Objective: This study aimed to investigate the mediating role of self-esteem in the relationship between psychological capital, academic engagement, and academic procrastination with the psychological well-being of high school students in Al-Diwaniyah, Iraq.

Methods and Materials: This applied, descriptive-correlational study employed a structural equation modeling design. The statistical population included all high school students in Al-Diwaniyah, Iraq, during the first semester of the 2023-2024 academic year. A total of 250 students were selected using a multi-stage cluster random sampling method, and finally, 194 students completed the questionnaires. The questionnaires used in this study included Ryff's Psychological Well-Being Scale (1989), Solomon and Rothblum's Academic Procrastination Scale (1984), Fredericks et al.'s Academic Engagement Scale (2004), Nguyen et al.'s Psychological Capital Questionnaire (2012), and Rosenberg's Self-Esteem Scale (1965). Data were analyzed using SPSS version 26 and AMOS version 24.

Findings: The results indicated a significant positive relationship between psychological capital and academic engagement with self-esteem and psychological well-being ($p < .01$) and a significant negative relationship between academic procrastination with self-esteem and psychological well-being ($p < .01$). Additionally, there was a significant positive relationship between self-esteem and psychological well-being ($p < .01$). Furthermore, self-esteem partially mediated the relationship between psychological capital, academic engagement, and academic procrastination with psychological well-being.

Conclusion: Based on the findings of the present study, it can be concluded that fostering self-esteem through the development of psychological capital, increasing academic engagement, and reducing procrastination can improve the psychological well-being of high school students in Al-Diwaniyah, Iraq.
Keywords: *Academic Engagement, Academic Procrastination, Psychological Well-Being, Psychological Capital.*

1. Introduction

The school period is a time when children and adolescents experience significant changes in their physical, emotional, and social development (Orth & Robins, 2022). Psychological and social well-being, particularly in the school environment, is one of the most challenging tasks in adolescent care (Darbani & Parsakia, 2023). Among the research conducted in Iraq, few studies have focused on mental health issues and their prevalence (Darya, 2022). The examination of the prevalence of mental disorders among Iraqi children and adolescents showed that school refusal (3.2%), learning disorders, and conduct disorders (each 2.5%) were observed, with psychological problems being more prevalent among children aged 10 to 15 years (49.2%). Most Iraqi teachers stated that they were not aware of important issues related to the psychological well-being of students and considered training in this area necessary (Darya, 2022).

Psychological well-being refers to the subjective evaluation of one's life both cognitively and emotionally. Until recently, psychological well-being was perceived as the absence of negative states (Li et al., 2023). For example, psychological well-being was considered as not being stressed or depressed, and therefore, low scores on depression, anxiety, stress, or other negative traits indicated higher psychological well-being. Today, the emphasis has shifted to positive aspects, defining psychological well-being as having happiness or life satisfaction (Wang et al., 2023). Positive aspects of well-being include at least six main variables: autonomy, self-acceptance, purpose in life, positive relations with others, personal growth, and environmental mastery (Prasath et al., 2022). Academic procrastination is one of the variables that negatively affect students' psychological well-being (Bu et al., 2021).

Procrastination, in its simplest form, is delaying tasks and postponing them. Before the term procrastination became prevalent in behavioral literature, the term "unjustifiable delay" was used (Junça Silva et al., 2024). However, nowadays, the term procrastination or delay is commonly used (Kuftyak, 2022). Procrastination means postponing tasks and doing less necessary tasks instead. In other words, tasks that are more pleasurable or less painful are prioritized in the daily activity list, regardless of their actual importance and necessity (Gündoğan, 2023). Procrastination becomes a problem and a behavioral disorder when it has the following three characteristics: it reduces efficiency, appears in necessary tasks and activities, and generally causes delays in performing activities (Berber Çelik & Odaci, 2022). The negative consequences of procrastination include stress, anxiety, guilt, creating a crisis or perceiving a crisis, reduced health, and decreased useful output and productivity (Bu et al., 2021; Salguero-Pazos & Reyes-de-Cózar, 2023). Another variable affecting students' psychological well-being is academic engagement (Babosalam et al., 2022).

Academic engagement is one of the most important areas of study in educational research. Academic engagement is a multidimensional construct that includes behavioral, cognitive, and emotional components (Najafi, 2023). Behavioral engagement refers to participation in education, activities such as attention and voluntary participation, positive performance, and school involvement. Emotional engagement includes emotional attitudes toward school and adapting to it and a sense of belonging to the school. Cognitive engagement comprises components of self-regulation, learning value and personal goals, self-governance, access to education, and the use of metacognitive strategies (Acosta-Gonzaga, 2023). Academic engagement is defined with strength, dedication, and absorption in a concept contrary to academic burnout. Engagement involves behavioral involvement like effort; emotional involvement like high levels of willingness with low levels of anxiety and fatigue; cognitive involvement like the use of learning and self-regulation strategies; and agentic involvement, like the extent of conscious effort to enrich the learning experience (Junça Silva et al., 2024). Psychological capital during education helps create engagement (Bageri et al., 2022) and reduce procrastination (Saman & Wirawan, 2021), positively impacting psychological well-being (Wang et al., 2023).

In positive psychology, personal positive psychological resources or strengths are conceptualized as psychological capital (Prasath et al., 2022). Psychological capital refers to a set of resources that an individual can use to enhance their

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

performance and success, including four different resources: self-efficacy, optimism, hope, and resilience (Li et al., 2023). Positive psychological strengths such as resilience and hope help individuals cope with emerging challenges and enhance mental health and well-being (Amini et al., 2020). Psychological capital leads to perseverance in achieving goals and changing direction when necessary (hope), creating positive attributions about the present and future (optimism), persistence and bouncing back and even beyond when facing problems and adversities (resilience), and having confidence in trying to succeed and performing challenging tasks (self-efficacy) (Prasath et al., 2022). Psychological capital, as a positive psychological parameter, combined with variables such as self-efficacy, resilience, optimism, and hope, along with academic engagement in various cognitive, behavioral, and emotional dimensions, plays an important role in an individual's psychological well-being (Alsultan et al., 2023). Numerous studies have shown that psychological capital reduces stress and negative emotions (Li et al., 2023) and affects the choice of coping strategies for problems (Wang et al., 2023). Psychological capital has been linked to positive psychological outcomes in many areas, such as psychological well-being, students' life satisfaction, success, and happiness (Mohammadi et al., 2021). Individuals with higher levels of psychological capital perceive the academic environment more positively and find it less distressing (Amini et al., 2020). Psychological capital and engagement in education affect procrastination, improving academic performance and self-esteem. Low self-esteem is a variable that causes depression and boredom, affecting well-being and increasing procrastination (Salguero-Pazos & Reyes-de-Cózar, 2023).

Self-esteem is a comprehensive evaluation of positive and negative self-assessments. Individuals with high self-esteem are more active, optimistic, and socially engaged compared to those with low self-esteem (Orth & Robins, 2022). Self-esteem plays a major role in positive development and is important in an individual's psychological resilience. According to the literature, self-esteem mediates among many variables, for example, between physical activity and procrastination (Ren et al., 2023), between psychological capital and anxiety (Li et al., 2023), and between positive parenting, academic procrastination, and academic achievement (Syeda, 2020). However, it has been less explored in the academic field.

Studies have shown a relationship between procrastination and self-esteem (Acosta-Gonzaga, 2023; Ren et al., 2023; Turki et al., 2023; Yang et al., 2023). Student procrastination can reflect their self-worth, so if they anticipate failure, they might think that they are not only unsuccessful in the current task but also as a person. Therefore, to maintain their self-worth, they avoid the task. It has also been proven that there is a significant positive relationship between self-esteem and psychological capital (Li et al., 2023).

Thus, based on the review of theoretical and research foundations and considering the role and importance of psychological well-being on students' mental health, and since no research was found that examined the mediating role of self-esteem in the relationship between psychological capital, academic engagement, and academic procrastination with psychological well-being among Iraqi students. This research was conducted to answer the question: Does self-esteem mediate the relationship between psychological capital, academic engagement, and academic procrastination with the psychological well-being of students in Al-Diwaniyah, Iraq?

2. Methods and Materials

2.1. Study Design and Participants

This study is applied in terms of its purpose, quantitative in terms of execution, and descriptive-correlational in terms of research method with a structural equation modeling design. The statistical population included all high school students in Al-Diwaniyah, Iraq, during the first semester of the 2023-2024 academic year. After obtaining permission from the Directorate General of Education and Culture of Al-Diwaniyah Province, a list of schools in Al-Diwaniyah was prepared, and five schools were selected using a multi-stage cluster random sampling method. Out of all the ongoing classes in the selected schools, 12 classes were chosen, and all students in these classes participated in the study (totaling 250 students). After distributing the research questionnaires among the students of these classes, 194 completed questionnaires were analyzed. It should be noted that all questionnaires were translated and back-translated; first, a psychologist fluent in Arabic translated them from Persian to Arabic, and then an Arabic language expert translated them back to Persian. After matching the two stages, discrepancies were corrected and then implemented.

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

2.2. Measures

2.2.1. Psychological Well-Being

Designed by Ryff in 1989 and revised in 2002. This questionnaire has 18 items on a 6-point scale (1 = strongly disagree to 6 = strongly agree). The six dimensions of this questionnaire include autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Cronbach's alpha for the six factors was reported as 0.51, 0.76, 0.75, 0.52, 0.73, 0.72, and 0.71 for the overall scale (Babosalam et al., 2022). In the present study, Cronbach's alpha for this questionnaire was 0.740.

2.2.2. Academic Procrastination

Designed by Solomon and Rothblum in 1984, this questionnaire has 21 main items and 6 additional items to assess two characteristics: discomfort with procrastination and the desire to change the habit. It is constructed on a 5-point Likert scale (1 = never to 5 = always) and has three subscales: preparation for exams (1-8), preparation for assignments (9-19), and preparation for end-term papers (20-27). Jokar and Delaurparvar (2007) reported Cronbach's alpha for the entire scale as 0.91. In the study by Zarkouipour et al. (2022), the overall reliability using Cronbach's alpha was 0.85 (Zarkouipour et al., 2022). In the present study, Cronbach's alpha for this questionnaire was 0.760.

2.2.3. Academic Engagement

Designed by Fredericks et al. in 2004, this questionnaire has 15 items on a 5-point Likert scale (1 = very little to 5 = very much), with subscales for behavioral engagement (1-4), emotional engagement (5-10), and cognitive engagement (11-15). Cronbach's alpha was reported as 0.86 by the creators. In the study by Abbasi et al. (2015), Cronbach's alpha for this questionnaire was 0.66 (Mehdad & Sajadi, 2019), and in the present study, it was 0.747.

2.2.4. Psychological Capital

Designed by Nguyen and Nguyen in 2012, this questionnaire has 13 items including four subscales: hope, resilience, optimism, and self-efficacy, each with six items. It uses a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree). Mehdad and Sajadi (2019) reported its reliability using Cronbach's alpha as 0.87 (Mehdad & Sajadi, 2019). In the present study, Cronbach's alpha was 0.915.

2.2.5. Self-Esteem

Designed by Rosenberg in 1965, this questionnaire has 10 items on a 4-point scale (0 = strongly disagree to 3 = strongly agree, with reverse scoring for five items). Cronbach's alpha was reported as 0.93 by Rosenberg, with a test-retest reliability of 0.85. Rajabi and Bohlool (2001) reported Cronbach's alpha as 0.84 (Rajabi & Behlool, 2001), and in the present study, it was 0.770.

2.3. Data analysis

The collected responses were entered into SPSS version 26, where central tendency and dispersion indices (mean, mode, standard deviation, cumulative percentage of groups) were calculated at the descriptive level. At the inferential level, statistical calculations were performed using correlation tests and path analysis in AMOS version 24.

3. Findings and Results

Out of the total sample of 194 individuals, the fathers of most participants had education levels of high school diploma and bachelor's degree, respectively, with 89 and 80 individuals (equivalent to 45.9% and 41.2%). The mothers of most participants had education levels of bachelor's degree and high school diploma, respectively, with 140 and 37 individuals (equivalent to 72.2% and 19.1%).

Table 1

Descriptive Statistics for Research Variables

Variable	Mean (M)	Standard Deviation (SD)
Psychological Well-Being	4.35	0.87
Self-Esteem	3.65	0.74
Psychological Capital	4.10	0.92
Academic Engagement	3.85	0.79
Academic Procrastination	2.55	0.68

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

The descriptive statistics for the study variables are presented in Table 1. The mean score for psychological well-being was 4.35 (SD = 0.87), indicating a relatively high level of well-being among the students. Self-esteem had a mean score of 3.65 (SD = 0.74), suggesting that the participants generally had a positive evaluation of themselves. Psychological capital had a mean score of 4.10 (SD = 0.92), reflecting that the students possessed a good level of psychological resources such as hope, resilience, and self-efficacy. Academic engagement had a mean score of 3.85 (SD = 0.79), indicating a high level of involvement and enthusiasm in their academic activities. Lastly, academic procrastination had a mean score of 2.55 (SD = 0.68), showing a moderate level of procrastination behaviors among the students. These descriptive statistics provide a comprehensive overview of the participants' levels on the measured variables, which are crucial for understanding the relationships explored in this study.

Table 2 presents the relationship between psychological capital, academic engagement, academic procrastination, self-esteem, and psychological well-being.

Table 2

Correlation between Self-Esteem, Psychological Capital, Academic Engagement, Academic Procrastination, and Psychological Well-Being

Variable	Self-Esteem ppp (Significance)	Self-Esteem rrr (Correlation)	Psychological Well-Being ppp (Significance)	Psychological Well-Being rrr (Correlation)
Psychological Capital	0.000	0.196	0.000	0.436
Academic Engagement	0.005	0.143	0.000	0.249
Academic Procrastination	0.000	-0.305	0.003	-0.152
Self-Esteem	-	-	0.000	1.000

As shown in Table 2, the variables psychological capital and academic engagement have a significant and direct relationship with self-esteem and psychological well-being ($p < .01$). Academic procrastination has a significant and inverse relationship with self-esteem and psychological well-being ($p < .01$). There is a significant and direct relationship between self-esteem and psychological well-being ($p < .01$).

Figure 1 presents the mediation model of self-esteem in the relationship between psychological capital, academic engagement, academic procrastination, and psychological well-being. Table 3 presents the results of the mediation model for the mediating role of self-esteem in the relationship between psychological capital, academic engagement, academic procrastination, and psychological well-being.

Table 3

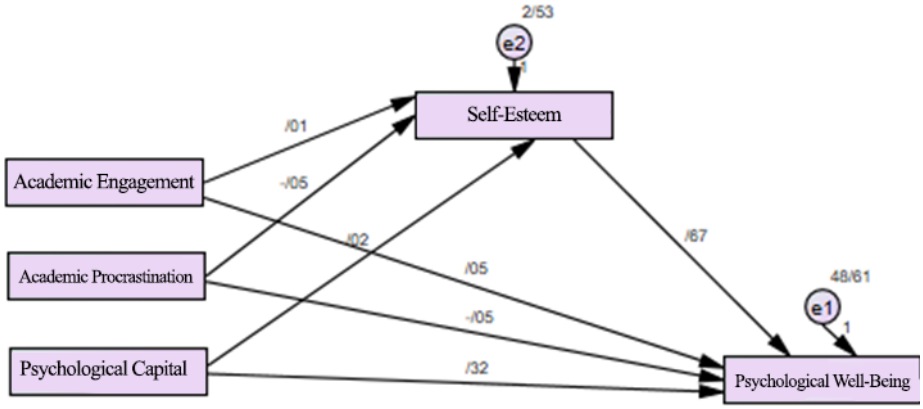
Results of the Mediation Model of Self-Esteem in the Relationship between Psychological Capital, Academic Engagement, Academic Procrastination, and Psychological Well-Being

Path	Boot p	Estimate (B)	C.R.	S.E.	Lower CI	Upper CI	Indirect Effect (p)	Lower CI	Upper CI	Direct Effect (p)
Academic Procrastination → Self-Esteem	0.000	-0.046	-6.404	0.007	-0.034	-0.064	(0.001)	-0.046	-0.010	Partial
Psychological Capital → Self-Esteem	0.014	0.021	2.448	0.009	0.038	0.006	(0.010)	0.021	0.014	Direct
Academic Engagement → Self-Esteem	0.001	0.010	3.202	0.003	0.014	0.006	(0.001)	0.010	0.047	Direct
Self-Esteem → Psychological Well-Being	0.003	0.673	3.020	0.223	1.282	0.004	(0.048)	0.673	0.317	Direct
Psychological Capital → Psychological Well-Being	0.000	0.317	8.183	0.039	0.386	0.249	(0.001)	0.317	0.048	Direct
Academic Procrastination → Psychological Well-Being	0.152	-0.048	-1.432	0.033	-0.011	-0.084	(0.006)	-0.048	-0.047	Indirect
Academic Engagement → Psychological Well-Being	0.000	0.047	3.563	0.013	0.068	0.027	(0.001)	0.047	0.047	Direct

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

Figure 1

Mediation Model of Self-Esteem in the Relationship between Psychological Capital, Academic Engagement, Academic Procrastination, and Psychological Well-Being



As shown in Table 3, the direct effect of academic procrastination (B = -0.046, t = -6.404, p < .01), psychological capital (B = 0.021, t = 2.448, p < .05), and academic engagement (B = 0.010, t = 3.202, p < .01) on self-esteem was significant. Additionally, the direct effect of self-esteem (B = 0.673, t = 3.020, p < .01), psychological capital (B = 0.317, t = 8.183, p < .01), and academic engagement (B = 0.047, t = 3.563, p < .01) on psychological well-being was significant. However, the direct effect of academic procrastination (B = -0.048, t = -1.432, p > .05) on psychological well-being was not significant. The indirect effect of psychological capital (b = 0.014, p = 0.036), academic procrastination (b = -0.031, p = 0.047), and academic engagement (b = 0.006, p = 0.031) on psychological well-being was significant. Therefore, the path analysis results indicate that self-esteem partially mediates the relationship between psychological capital, academic engagement, academic procrastination, and psychological well-being.

4. Discussion and Conclusion

This study aimed to investigate the mediating role of self-esteem in the relationship between psychological capital, academic engagement, and academic procrastination with the psychological well-being of Al-Diwaniyah students in Iraq. The findings indicated a significant negative relationship between academic procrastination and psychological well-being. Consistent with this finding, the studies by (Berber Çelik & Odaci, 2022; Junça Silva et al., 2024) also showed a negative relationship between procrastination and psychological well-being. To explain the relationship between academic procrastination and psychological well-being, it can be stated that procrastination, due to creating high levels of stress for completing tasks in a short time, confusion, self-blame, guilt, and feelings of inadequacy, anxiety, and depression, negatively affects psychological well-being. It seems that as a result of avoiding tasks, anxiety increases, and self-blame for delaying the start of work causes problems in psychological well-being. Thus, with increased procrastination, psychological well-being decreases. Conversely, the lower the psychological well-being and the more individuals engage in depression or mood problems, the less they are willing to engage in tasks, and their procrastination increases. Additionally, in this context, the study by Gündoğan (2023) also showed that academic procrastination positively affects academic burnout and negatively affects psychological well-being. When students consistently delay their academic responsibilities, they may experience higher levels of stress, anxiety, and feelings of inadequacy. These negative emotions can impact their overall mental health (Gündoğan, 2023). On the other hand, those who effectively manage their time and tasks without succumbing to procrastination often experience higher levels of psychological well-being. They may feel more in

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

control of their academic life, experience less stress, and derive more satisfaction from their achievements. Similarly, Bu et al. (2021) also showed that academic procrastination negatively affects mental well-being, and mindfulness mediates this relationship (Bu et al., 2021).

Another finding of this study indicated a significant negative relationship between academic procrastination and self-esteem. Consistent with these findings, studies (Acosta-Gonzaga, 2023; Ren et al., 2023; Turki et al., 2023; Yang et al., 2023) also found a negative relationship between procrastination and self-esteem. To explain the relationship between academic procrastination and self-esteem, it can be stated that students who doubt their abilities may delay tasks because they fear failure or believe they cannot meet expectations. Conversely, academic procrastination can also reduce self-esteem. When students consistently delay tasks and experience negative outcomes (such as poor grades), it can reinforce feelings of inadequacy and lower self-esteem. Students with low self-esteem may use procrastination as a coping mechanism. By avoiding tasks, they temporarily avoid the anxiety or stress associated with potential failure. However, this coping strategy often backfires, as procrastination leads to rushed work, lower quality results, and increased long-term stress, further impacting self-esteem.

Another finding of this study indicated a significant positive relationship between psychological capital and psychological well-being. Consistent with these findings, studies (Amini et al., 2020; Li et al., 2023; Prasath et al., 2022) found a significant and direct relationship between psychological capital and psychological well-being. To explain this finding, it can be stated that individuals' strengths, such as optimism, hope, resilience, or self-efficacy, can help maintain a desirable level of mental health and well-being. Hope has a negative relationship with negative emotions such as helplessness, anxiety, depression, and loneliness. Resilience acts as a key protective factor for individual mental health. Optimism about the future can lead to higher levels of motivation and perseverance. A sense of purpose and direction contributes to overall psychological well-being. Students with high self-efficacy are less likely to be discouraged by failures and are more likely to view problems as opportunities for growth. This positive mindset reduces stress and increases feelings of competence and mastery, enhancing their psychological well-being. The study by Alsultan et al. (2023) showed that psychological capital is a complete mediator between academic stress and well-being (Alsultan et al., 2023).

Additionally, another finding of this study indicated a significant positive relationship between academic engagement and psychological well-being. This finding is consistent with the prior findings (Babosalam et al., 2022; Najafi, 2023). To explain this finding, it can be stated that engagement can act as a protector against stress. When students enjoy their learning, they are better equipped to handle the challenges and pressures of academic life. Engaged students are often more resilient in the face of problems. Academic engagement is associated with lower levels of depression and anxiety among students, possibly because they view challenges more as opportunities for growth rather than overwhelming obstacles. Engagement is associated with positive emotions such as happiness, curiosity, and excitement. Regularly experiencing these emotions in the academic context can contribute to a more positive outlook on life in general.

This study also showed a significant positive relationship between academic engagement and self-esteem. Consistent with this finding, the study by Acosta-Gonzaga et al. (2023) showed that engagement affects students' self-esteem (Acosta-Gonzaga, 2023). The relationship between academic engagement and self-esteem can be explained as follows: Academic engagement is closely related to self-esteem through the sense of competence. When students believe in their abilities, they become engaged, and the belief in competence helps build higher self-esteem because they see themselves as capable and competent learners. The engagement that leads to perseverance and effort results in a sense of achievement and self-esteem. This positive reinforcement of success increases self-esteem and confidence in their abilities. Academic engagement is associated with an internal locus of control, and students with an internal locus of control take responsibility for their learning and actively participate in their studies. The joy, curiosity, and interest in the learning process resulting from academic engagement, along with a sense of control and autonomy, contribute to higher self-esteem.

The final finding of this study showed that self-esteem partially mediates the relationship between psychological capital, academic engagement, academic procrastination, and psychological well-being. This finding showed that psychological capital, procrastination, and academic engagement improve psychological well-being through their impact on self-esteem. This finding is consistent with the result of the study by Li et al. (2023), where self-esteem mediated the relationship between psychological capital and anxiety (Li et al., 2023). As explained in the previous

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

findings regarding the relationship between psychological capital, procrastination, academic engagement, self-esteem, and psychological well-being, self-esteem, due to its impact on how individuals interpret and react to experiences, influences confidence, resilience, and their overall outlook on life. Additionally, individuals with high self-esteem are more active, optimistic, socially engaged, and psychologically resilient compared to those with low self-esteem, resulting in higher psychological well-being. Therefore, it seems that by improving students' psychological capital and academic engagement, increasing their self-esteem, and reducing procrastination, psychological well-being can be enhanced.

5. Limitations & Suggestions

This study, like other studies, had limitations, which are mentioned here. The first limitation was examining the relationship between the research variables without considering demographic characteristics such as gender. The next limitation was related to conducting the research using the correlational method, and the final limitation was conducting the research among high school students in Al-Diwaniyah, Iraq. In this regard, it is suggested that in similar studies, gender should be considered as a moderating variable in relation to these variables. Additionally, it is recommended to conduct similar studies in other cities of Iraq to ensure the generalizability of the findings. Furthermore, it is suggested to design experimental or quasi-experimental studies through interventions on students' psychological capital, procrastination, and academic engagement to examine the effectiveness of interventions on self-esteem and psychological well-being.

Based on the findings of the present study, it is recommended to officials and stakeholders of the education system in Iraq, as well as to parents, to foster students' self-esteem by developing psychological capital, increasing academic engagement, and reducing procrastination, to improve self-esteem and psychological well-being of students.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

This article is derived from the first author's doctoral dissertation. All authors equally contributed to this article.

References

Acosta-Gonzaga, E. (2023). The Effects of Self-Esteem and Academic Engagement on University Students' Performance. *Behavioral Sciences*, *13*(4).

Alsultan, A., Alharbi, A., Mahmoud, S., & Elsharkasy, A. (2023). The mediating role of psychological capital between academic stress and well-being among University students. *Pegem Journal of Education and Instruction*, *13*(2), 335-344. https://www.pegegog.net/index.php/pegegog/article/view/2070

Amini, M., Shehni Yailagh, M., & Hajiyakhchali, A. (2020). The Causal Relationship of Psychological Capital with Psychological Well-Being and Academic Performance with the Mediating Role of Social Capital. *Positive Psychology Research*, *6*(2), 1-16. https://doi.org/10.22108/ppls.2020.116114.1688

Babosalam, S., Ghazanfari, A., & Ahmadi, R. (2022). Modeling Academic Engagement Based on Academic Identity with the Mediating Role of Academic Wellbeing of Students [Research]. *Quarterly Journal of Child Mental Health*, *9*(3), 62-77. https://doi.org/10.52547/jcmh.9.3.6

Bageri, M., Bafroei, K. B., & Estabragi, M. (2022). Structural equation model for predicting academic enthusiasm based on attribution styles and psychological capital with the mediation of infatuation experience in university students. *Journal of Educational Psychology Studies*, *19*(47), 32-16. https://jeps.usb.ac.ir/article_3606.htmlhttps://jeps.usb.ac.ir/article_7229_0b621cdaaec5cc09b3c0cdd162f06ded.pdf

Berber Çelik, Ç., & Odaci, H. (2022). Subjective well-being in university students: what are the impacts of procrastination and attachment styles? *British Journal of Guidance & Counselling*, *50*(5), 768-781. https://doi.org/10.1080/03069885.2020.1803211

Bu, X., Wu, L., & Wang, H. (2021). Impact of college students' academic procrastination on subjective well-being. *Social Behavior and Personality: an international journal*, *49*(7), 1-

JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

13. https://www.ingentaconnect.com/content/sbp/sbp/2021/00000049/00000007/art00007

Darbani, S. A., & Parsakia, K. (2023). Investigating the effectiveness of strength-based counseling on adolescent resilience. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, *4*(5), 169-175. https://doi.org/10.61838/kman.jayps.4.5.16

Darya, A. R. (2022). Mental Health Problems in Iraq: a Systematic Review. *GLOBAL PSYCHIATRY ARCHIVES*, *5*(1), 26-35. https://doi.org/10.52095/gp.2022.3774.1026

Gündoğan, S. (2023). The Relationship of Academic Procrastination Behavior to School Burnout, Psychological Well-Being, and Academic Achievement. *Journal of Hasan Ali Yücel Faculty of Education/Hasan Ali Yücel Egitim Fakültesi Dergisi (HAYEF)*, *20*(2). https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=13048139&AN=164791147&h=XN64cFOezX4%2FlaQW%2F%2FYkuVY03s6dDlYtREL3NeBQmY7okvj13F6Xx4bnG0OOlwCc2Txu3O7Rwc4i6czYTKRcVA%3D%3D&crl=c

Junça Silva, A., Neves, P., & Caetano, A. (2024). Procrastination is not only a "thief of time", but also a thief of happiness: it buffers the beneficial effects of telework on well-being via daily micro-events of IT workers. *International Journal of Manpower*, *45*(1), 89-108. https://doi.org/10.1108/IJM-05-2022-0223

Kuftyak, E. (2022). Procrastination, stress and academic performance in students. *ARPHA Proceedings*, *5*, 965-974. https://ap.pensoft.net/article/24340/download/pdf/

Li, Z.-H., Wang, J., Cheng, X., Mao, Y.-C., Zhang, K.-D., Yu, W.-J., Li, Y.-Q., Huang, K., Ding, K., & Yang, X.-J. (2023). The Role of Self-Esteem in the Relationship Between Psychological Capital and Anxiety of Left-Behind Experience College Students During COVID-19 Pandemic: An Online Study. *Psychology research and behavior management*, 727-737. https://www.tandfonline.com/doi/abs/10.2147/PRBM.S403399

Mehdad, A., & Sajadi, M. (2019). Mediating role of psychological capital in Relationship of authentic leadership and work engagement. *International Journal of Psychology (IPA)*, *13*(1), 133-156. http://ijpb.ir/article-1-265-en.html

Mohammadi, N., Darbani, S. A., & Parsakia, K. (2021). The role of psychological capital and career success in marital adjustment. *International Journal of Innovation Management and Organizational Behavior (IJIMOB)*, *1*(3), 66-78. https://journals.kmanpub.com/index.php/ijimob/article/view/318

Najafi, H. (2023). The Relationship Between Modern Education (Electronic and Blended), Academic Engagement and Academic Well-Being with Academic Performance. *Positive Psychology Research*, *9*(1), 87-106. https://ppls.ui.ac.ir/article_21335.htmlhttp:/ppls.ui.ac.ir/article_27598.html?lang=en

Orth, U., & Robins, R. W. (2022). Is high self-esteem beneficial? Revisiting a classic question. *American psychologist*, *77*(1), 5-17. https://doi.org/10.1037/amp0000922

Prasath, P. R., Xiong, Y., Zhang, Q., & Jeon, L. (2022). Psychological Capital, Well-being, and Distress of International Students. *International Journal for the Advancement of Counselling*, *44*(3), 529-549. https://doi.org/10.1007/s10447-022-09473-1

Rajabi, G., & Behlool, N. (2001). Assessing the reliability and validity of the Rosenberg Self-Esteem Scale in first year students of Shahid Chamran University. *Edu Psychol Res*, *3*(2), 33-48. https://www.researchgate.net/publication/331552943_Reliability_and_validity_of_the_Rosenberg_self-esteem_scale_among_university_students_of_Bangladesh

Ren, K., Chen, X., Zhang, Y., Sun, F., & Peng, F. (2023). Physical activity and academic procrastination in Chinese college students: The serial mediating roles of physical self-perceptions and self-esteem [Original Research]. *Frontiers in psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1083520

Salguero-Pazos, M. R., & Reyes-de-Cózar, S. (2023). Interventions to reduce academic procrastination: A systematic review. *International Journal of Educational Research*, *121*, 102228. https://doi.org/10.1016/j.ijer.2023.102228

Saman, A., & Wirawan, H. (2021). Examining the impact of psychological capital on academic achievement and work performance: The roles of procrastination and conscientiousness. *Cogent Psychology*, *8*(1), 1938853. https://doi.org/10.1080/23311908.2021.1938853

Syeda, B. S. (2020). Academic achievement: Interplay of positive parenting, self-esteem, and academic procrastination. *Australian Journal of Psychology*, *72*(2), 174-187. https://doi.org/10.1111/ajpy.12280

Turki, M., Sahnoun, F., Guermazi, A., Elleuch, O., Bennaceur, F., Halouani, N., Ellouze, S., & Aloulou, J. (2023). Relationship between self-esteem, self-efficacy and academic procrastination among medical students. *European Psychiatry*, *66*(S1), S554-S554. https://doi.org/10.1192/j.eurpsy.2023.1169

Wang, H., Ng, T. K., & Siu, O.-l. (2023). How does psychological capital lead to better well-being for students? The roles of family support and problem-focused coping. *Current Psychology*, *42*(26), 22392-22403. https://doi.org/10.1007/s12144-022-03339-w

Yang, X., Liu, R.-D., Ding, Y., Hong, W., & Jiang, S. (2023). The relations between academic procrastination and self-esteem in adolescents: A longitudinal study. *Current Psychology*, *42*(9), 7534-7548. https://doi.org/10.1007/s12144-021-02075-x

Zarkouipour, A., Sanagoy Mohrar, G., & Shirazi, M. (2022). Effectiveness of Commitment and Acceptance Therapy on Academic Procrastination and Behavioral Maladaptation of Male Students with Test Anxiety: A Quasi-Experimental Study [Research]. *Journal of Rafsanjan University of Medical Sciences*, *21*(1), 3-16. https://doi.org/10.52547/jrums.21.1.3

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526