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The Impact of Learned Helplessness on Academic Procrastination Mediated by Self-Motivation among Jordanian University Students

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Abstract

This study examines how Self-Motivation and learned Helplessness influence academic Procrastination. This study utilized a quantitative survey to analyze the relationships between learned Helplessness, academic Procrastination, and Self-Motivation among 421 Jordanian university students. Data analysis involved descriptive assessments, reliability, and validity checks using SPSS. SmartPLS 4, specifically Partial Least Squares Structural Equation Modeling (PLS-SEM), was employed for hypothesis testing, suited for complex models and smaller samples. The questionnaire was built based on scales by Moneva et al. (2020), Tuckman (1991), and Quinless et al. (1988), comprising of 45 items across three sections, measuring Self-Motivation, Procrastination, and Learned Helplessness. The study's findings provide substantial support for a significant inverse relationship between Learned Helplessness and Self-Motivation and between Self-Motivation and Academic Procrastination. Learned Helplessness is found to have a positive impact on Academic Procrastination, and Self-Motivation significantly mediates the relationship between Learned Helplessness and Academic Procrastination. In addition, the total effect of Learned Helplessness on Academic Procrastination is direct and indirect, signifying its extensive influence.

Keywords: *Learned Helplessness; Academic Procrastination; Self-Motivation.*

Introduction

In the intricate tapestry of educational psychology, the concepts of learned Helplessness, academic Procrastination, and Self-Motivation form a complex interplay that significantly affects student behavior and academic outcomes. Learned Helplessness is a phenomenon where individuals feel powerless to change their situation due to repeated failures or adverse experiences, and it can profoundly affect a student's approach to learning and academic tasks. This sense of inefficacy often leads to academic Procrastination, a pervasive issue in educational settings characterized by the intentional

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delay in initiating or completing academic activities. The fundamental premise is that the individual believes that his actions have no impact on the environment and that this state of affairs will persist until he feels helpless (Seligman & Csikszentmihalyi, 2014). According to Haji Arbabi et al. (2011, the most hostile state of the concept of self-concept is learned Helplessness. Seligman's theory states that when someone experiences a lot of social, cultural, and educational setbacks, they will feel like they have no control over their surroundings, leaving them feeling unstable and like they are always set up for failure. The student experiences Helplessness, which teaches him that even in circumstances over which he has control, he still grows accustomed to them and gives in.

Students frequently engage in academic procrastination (AP), which has been extensively researched in literature (Abu & Saral, 2016). Despite this, the phenomenon is difficult to understand due to its complexity (KV & Indradevi, 2017). The conceptual definition of AP is the deliberate act of postponing the start or completion of a task or activity related to learning or studying, even though the person knows the task would suffer from the delay. Procrastination has long been associated with adverse outcomes, including the potential for malevolent harm to one's life (Steel & Klingsieck, 2016). Students report adverse effects, including decreased productivity, missed deadlines for assignments, low academic satisfaction and performance overall, and emotional discomfort. It might even lead to severe psychological issues and prevent students from succeeding (Goroshit, 2018).

This study examines how Self-Motivation and learned Helplessness influence academic Procrastination. It highlights the role of repeated failures in fostering a sense of powerlessness, affecting students' academic responsibilities. The research underscores that Procrastination is more than a time management issue involving complex emotional and cognitive factors, vital for improving student engagement and success.

Literature Review

Self Motivation

Motivation, as described by Robbins et al. (2011), is a multifaceted process characterized by the intensity, direction, and persistence of an individual's effort towards achieving a goal. Intensity refers to the vigor of the effort, but it's the strategic direction of this effort that ensures it leads to desirable outcomes. Persistence, on the other hand, denotes the sustained effort over time, highlighting the endurance of motivated individuals in reaching their objectives. McClelland and Koestner (1992) introduce a foundational perspective on motivation, emphasizing three core human desires: achievement, affiliation, and power. These desires extend beyond mere motivation, encapsulating a broad spectrum of human aspirations and concerns.

The complexity of motivation is further dissected by Montero and Alonso (as cited in Tapia, 1992), who delineate three distinct types of motivation, spanning from intrinsic to extrinsic motivations: fear of failure, motivation for results, and motivation for learning. In academic contexts, students often gravitate towards the first two, driven by the avoidance of failure and the quest for tangible achievements. While such motivations can cultivate resilience and initiative, they may also lead to mental fatigue in the relentless pursuit of these objectives. Intrinsic motivation, as Ryan and Deci (2000) articulate, is driven by internal satisfaction and the inherent joy or challenge of an activity, rather than

external rewards or pressures. This form of motivation is characterized by a natural inclination towards exploration, learning, and self-improvement. Conversely, extrinsic motivation hinges on external incentives, whether tangible, like money or grades, or intangible, such as acclaim or acknowledgment. This type of motivation is goal-oriented, with the desired outcome being distinct from the activity itself.

Self-motivation is the ability to do what needs to be done, without influence from other people or situations (Suhadi et al., 2015). Deci and Ryan expand this concept, illustrating that self-motivation intricately weaves together intrinsic and extrinsic factors. It refers to the capacity to initiate and persist in actions towards a goal, integrating both internal drives, like curiosity, and external influences, such as rewards. This integration, central to the organismic integration theory, underscores the role of competence and self-determination in fostering a cohesive self-structure that harmoniously assimilates internal and external motivations, facilitating purposeful engagement and self-regulation (Deci and Ryan, 1985).

Learned Helplessness

Seligman's theory of learned Helplessness states that generally speaking, learned Helplessness refers to realizing that events are beyond one's control (Tamadoni et al., 2019). According to Slavin's (2008) definition, learned Helplessness is a severe type of failure avoidance in which an individual feels that no matter what they try, they will always fail. There is a connection between internal justification and failure and learned Helplessness. According to the learned helplessness hypothesis, learning obstructs the development of the association between response and escape and the cessation of shock. Later, this knowledge lessens the desire to flee or alter the circumstances (Smalheiser et al., 2011).

Academic Procrastination

Academic Procrastination is the term used to describe a delay in learning and instruction (Vargas, 2017). The learning and success of students are significantly impacted by it, regardless of whether it is intentional, inadvertent, or habitual (Hussain & Sultan, 2010). The deliberate and needless delaying of a necessary task to the point where someone is inconvenienced is known as Procrastination. Postponing academic work is a specific form of academic Procrastination (Schraw et al., 2007; Solomon & Rothblum, 1984). Academic procrastination occurs when a student delays completing a task until the last minute and then fails to complete it in the allocated time (Wolters, 2003). Academic procrastination can lead to an inability to meet deadlines for assignments and projects, which can exacerbate people's mental suffering.

Furthermore, it leads to incompetent behavioral outcomes, and individuals may struggle to properly manage their surroundings (Xiaolong et al., 2021). Finally, new educational psychology research has enhanced our knowledge of the interaction between learned helplessness, academic procrastination, and motivation. Niknam, ZandKarimi, and Amiri (2023) pioneered this research by demonstrating that therapies targeting learned helplessness can reduce academic procrastination while increasing self-efficacy in high school students, highlighting a critical relationship between these ideas. Similarly, Carmack (2023) found that motivation is important in countering learned helplessness, as seen by its impact on students' proactive engagement in academic advising.

Abidin et al. (2023) and Kemal et al. (2023) support this by demonstrating a negative

association between academic Procrastination and Motivation, implying that increasing Motivation could mitigate the consequences of learned Helplessness. Wu and He (2022) expanded on this theme by investigating how moral disengagement interacts with learned helplessness and academic procrastination. Ghasemi (2022) offered empirical evidence of the efficacy of motivating programs in enhancing academic achievement and lowering learnt Helplessness, signifying a potential reduction in academic Procrastination. Atiri and Onofuye (2021) discovered a strong positive relationship between learnt Helplessness and academic Procrastination, implying that interventions addressing learned Helplessness could be advantageous. BOZGÜN and Baytemir (2021) investigated the role of intrinsic Motivation as a moderator of academic self-efficacy, dispositional hope, and academic procrastination, while, Demirbilek & Atila (2021) proposed that improving life satisfaction and academic self-efficacy could lessen learned helplessness and, in turn, academic procrastination. To complete the picture, Quispe-Bendezú et al. (2020) demonstrated an inverse relationship between academic procrastination and motivated attributions of achievement, highlighting the potential of motivating factors in reducing procrastinating behaviors associated with Learned Helplessness. When taken as a whole, these studies provide a thorough understanding of the relationships that exist between Self-Motivation, academic procrastination, and learned helplessness. These relationships also yield important insights for educational tactics and interventions.

Hypotheses Development and the Conceptual Framework

A thorough conceptual framework exploring the complex connections between Learned Helplessness, Self-Motivation, and Academic Procrastination is presented in Figure 1. The formulated theories that follow are predicated on this framework. These theories are well supported by recent empirical research, which provide a thorough and complex understanding of the interactions and dynamics between academic procrastination, Self-Motivation, and learned helplessness in educational psychology.

(H1) - *learned helplessness inversely Influences Self-Motivation: This hypothesis is consistent with research findings by Ghasemi (2022) and Niknam, ZandKarimi, and Amiri (2023). Empirical research indicates that therapies aimed at addressing learned helplessness have the potential to improve self-efficacy and Self-Motivation, suggesting a negative correlation between learned helplessness and Self-Motivation.*

(H2) - *Self-Motivation Inversely Influences Academic Procrastination: Carmack (2023) and Kemal et al. (2023) provide support for this hypothesis. They found that higher levels of Self-Motivation were associated with more proactive academic behaviors and less Procrastination, suggesting an inverse relationship between Self-Motivation and Academic Procrastination.*

(H3) - *Learned Helplessness positively impacts Academic Procrastination: This is supported by the findings of Wu & He (2022) and Atiri & Onofuye (2021). Their research indicates that higher degrees of learned Helplessness correlate with increased academic Procrastination among students.*

(H4) - *Self-Motivation Mediates the Relationship between Learned Helplessness and Academic Procrastination: The studies by BOZGÜN & Baytemir (2021) and Demirbilek & Atila (2021) provide evidence for this hypothesis. They suggest that Self-Motivation can mediate the relationship between learned Helplessness and academic Procrastination, indicating that the impact of learned Helplessness on Procrastination can be partially mediated through its effects on Self-Motivation.*

(H5) – *The total effect of Learned Helplessness on Academic Procrastination (direct and indirect) is significant. The studies by BOZGÜN & Baytemir (2021) and Demirbilek & Atila (2021) provide evidence for this hypothesis. They suggest that Learned Helplessness substantially influences Academic Procrastination,*

considering both its direct and indirect effects mediated through Self-Motivation.

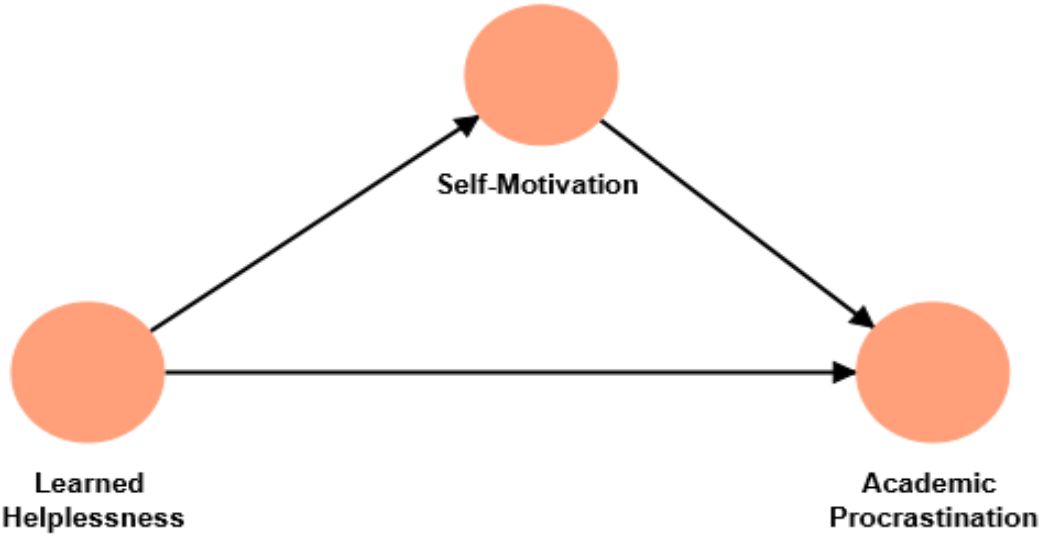

Figure 1: Conceptual Framework of the Study.

Methods

To analyze the interrelationships among the study variables, the researchers used a quantitative methodology and a survey approach in this work. The method adopted involved collecting numerical data using a precisely constructed questionnaire. The study's target demographic was Jordanian university students, and employed a random sampling technique to choose a representative sample of 421 students in the academic year 2022/2023. According to Field (2013), the data analysis method was comprehensive, involving descriptive assessments, normality tests using SPSS, and a detailed review of reliability and validity. SmartPLS 4, a well-known structural equation modeling software tool was used to analyze the model's fit, as recommended by Ringle et al. (2015). For hypothesis testing, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used. According to Hair, Black, et al. (2019), this method is recognized for its applicability in research involving complex models, smaller sample numbers, and exploratory purposes. This decision was especially appropriate given the complex links between Learned Helplessness, Academic Procrastination, and Self-Motivation among Jordanian university students. PLS-SEM's unique capacity to estimate both formative and reflective dimensions makes it an appropriate instrument for thoroughly exploring the multiple interactions within the theoretical framework, effortlessly harmonizing with the study aims. This approach is also consistent with previous studies that successfully used PLS-SEM in comparable study (Hair et al., 2019).

A self-administered questionnaire with three sections was used. The first section served as an introduction, the second was for the collection of demographic data, and the third section contains three instruments or scales which are the Self-Motivation scale (developed by Moneva et al., 2020) with 10 items; Procrastination Scale (developed by Tuckman's, 1991) with 15 items, as cited in (Tisocco & Liporace, 2021) and the third scale is the Brazilian Version of the Learned Helplessness Scale (developed by Quinless et al. (1988), with 20 items. These scales were used on a four-point scale, with 1 being strongly disagree and 4 being strongly agree.

Thus, the questionnaire included 45 items to represent the three scales, to provide a thorough estimate of these essential variables.

Results

The section contains participant demographics as well as the measurement model, as well as methodologies and statistical analysis for construct reliability, validity, and model fit. Furthermore, it includes a variety of statistical techniques to highlight the correlations between variables, such as discriminant validity utilizing the Heterotrait-Monotrait ratio, R-square values, bootstrapping, and path coefficients. Furthermore, it investigates both direct and indirect effects within the model, providing a more comprehensive understanding of the psychological aspects influencing students' academic habits.

Demographic Characteristics

Table 1 of the study delineates the demographic characteristics of the participants, showcasing a balanced gender distribution with 48.22% females (203 participants) and 51.78% males (218 participants). The participants are also varied in their academic progression, with a substantial representation from each university year: 30.88% in their first year (130 students), 25.65% in their second year (108 students), 24.70% in their third year (104 students), and a smaller proportion in their fourth year or higher (11.64%, 49 students) and in graduate studies (7.13%, 30 students). Furthermore, the study includes a diverse mix of educational streams, with 44.42% (187 students) from a Scientific background and 55.58% (234 students) from an Art background. This demographic spread provides a comprehensive cross-section of the student population, allowing for a more nuanced understanding of how learned Helplessness and Self-Motivation influence academic Procrastination across different genders, academic years, and educational streams.

Table 1: Demographic Characteristics.

variables	Categories	Frequency	Percentage
Gender	Female	203	48.22%
	Male	218	51.78%
year	1st year	130	30.88%
	2nd year	108	25.65%
	3rd year	104	24.70%
	4th year and up	49	11.64%
	graduate studies	30	7.13%
stream	Scientific	187	44.42%
	Art	234	55.58%

The Measurement Model in Table 2 of the study provides outer loadings of items on three key constructs: Learned Helplessness, Academic Procrastination, and Self-Motivation. These outer loadings reflect how well each item represents its respective construct. For Learned Helplessness, items show loadings ranging from 0.49 to 0.82, indicating varying degrees of association with the construct. Academic Procrastination items load between 0.48 and 0.75, suggesting a moderate to strong relationship with the construct. Self-Motivation items display loadings from 0.53 to 0.78, denoting a substantial correlation with the construct. The distribution of these loadings suggests that while most items are good indicators of their respective constructs, there is some variability in how well each item represents the underlying concept.

Measurement Model

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Table 2: Outer Loadings of Items on Constructs.

Constructs					
Learned Helplessness		Academic Procrastination		Self-Motivation	
Items	Outer loadings	Items	Outer loadings	Items	Outer loadings
LH1	0.61	AP1	0.48	SM1	0.55
LH10	0.58	AP11	0.59	SM2	0.71
LH11	0.62	AP12	0.56	SM3	0.69
LH12	0.52	AP13	0.75	SM4	0.58
LH13	0.61	AP14	0.59	SM5	0.53
LH14	0.66	AP15	0.67	SM6	0.67
LH16	0.61	AP3	0.6	SM7	0.7
LH18	0.8	AP4	0.6	SM8	0.65
LH19	0.69	AP5	0.75	SM9	0.78
LH2	0.65	AP6	0.63		
LH20	0.77	AP7	0.73		
LH3	0.65	AP8	0.67		
LH4	0.56				
LH5	0.49				
LH6	0.82				
LH7	0.74				
LH8	0.77				
LH9	0.64				

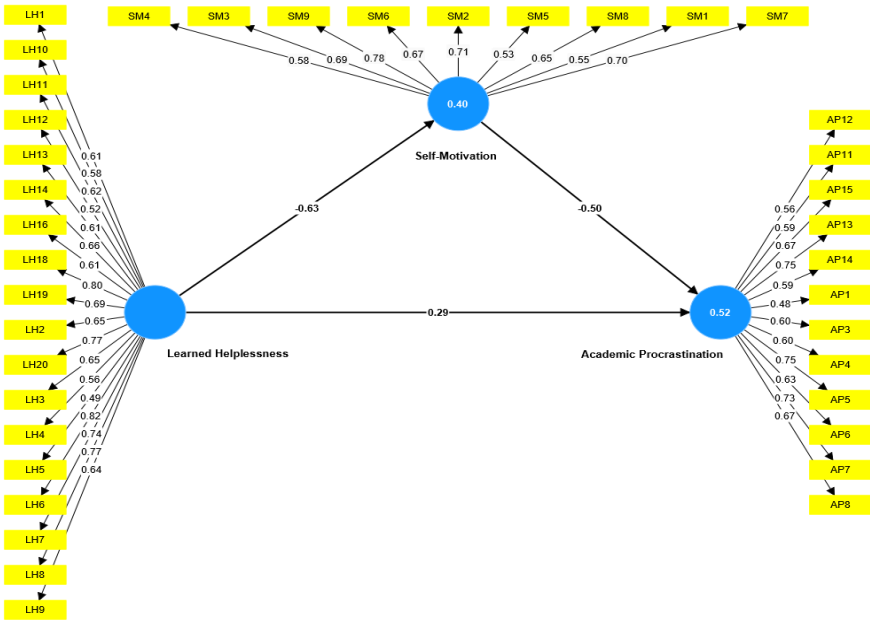

Figure 2: Graphical Output.

Constructs Reliability and Validity

Table 3 in the study addresses the constructs' reliability and validity, presenting values for Cronbach's alpha, composite reliability (rho_a and rho_c), and Average Variance Extracted (AVE) for Academic Procrastination, Learned Helplessness, and Self-Motivation. Academic Procrastination shows a high level of internal consistency with a Cronbach's alpha of 0.87, matched by its composite reliability (rho_a at 0.87 and rho_c at 0.89). However, its AVE of 0.41 is slightly lower, indicating moderate convergent validity. Learned Helplessness scores were even higher in reliability with a Cronbach's alpha of 0.92 and composite reliability values of 0.93 for both rho_a and rho_c, coupled with a reasonably high AVE of 0.44, reflecting strong reliability and convergent validity. Self-Motivation, while slightly lower, still demonstrates good reliability (Cronbach's alpha at 0.83, rho_a at 0.84, and rho_c at 0.87) and a fair level of convergent validity with an AVE of 0.43. These metrics indicate that the constructs used in the study are reliably measured and validly represent the theoretical concepts they are intended to capture.

Table 3: Constructs Reliability and Validity.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Academic Procrastination	0.87	0.87	0.89	0.41
Learned Helplessness	0.92	0.93	0.93	0.44
Self-Motivation	0.83	0.84	0.87	0.43

Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT)

Table 4 in the study presents the Heterotrait-Monotrait ratio (HTMT) as a measure of discriminant validity for the constructs of Academic Procrastination, Learned Helplessness,

and Self-Motivation. The HTMT ratio between Learned Helplessness and Academic Procrastination is 0.65, indicating a moderate correlation, which suggests they are distinct but related constructs. The HTMT ratio between Self-Motivation and Academic Procrastination is higher at 0.79, implying a stronger relationship yet maintaining discriminant validity. Similarly, the HTMT ratio between Self-Motivation and Learned Helplessness is 0.68, denoting a moderate to high correlation. These values suggest that while the constructs are related to each other, they are distinct enough to be considered separate entities.

Table 4: Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT)

	Academic Procrastination	**Learned Helplessness**	**Motivation**
Academic Procrastination			
Learned Helplessness	0.65		
Self-Motivation	0.79	0.68	

Model Fit

Table 5 presents various statistical measures after the removal of items (LH15 and LH17; AP2, AP9, AP10; SM10) to evaluate the model fit, comparing the saturated model (a model with as many estimated parameters as observed data points) and the estimated model (the model used in the study). The Standardized Root Mean Square Residual (SRMR) for both models is 0.11, indicating a moderate fit, as values closer to 0 imply a better fit. The d_ULS (Unweighted Least Squares discrepancy) and d_G (Geodesic discrepancy) both show identical values for the saturated and estimated models (9.97 and 10.91, respectively), suggesting consistency in the model's performance. The Chi-square value, a measure of discrepancy between expected and observed covariance matrices, is substantial at 23624.96 for both models, which might indicate a less-than-ideal fit. However, Chi-square is sensitive to sample size. Lastly, the Normed Fit Index (NFI) stands at 0.32 for both models, below the commonly recommended threshold of 0.9, pointing towards a weaker model fit. Collectively, these indicators suggest that the model has some consistency.

Table 5: Model Fit.

	Saturated model	**Estimated model**
SUMMER	0.11	0.11
d_ULS	9.97	9.97
d_G	10.91	10.91
Chi-square	23624.96	23624.96
NFI	0.32	0.32

R-Square

Table 6 in the study reports on the R-square and R-square adjusted values for Academic Procrastination and Self-Motivation. The R-square value, which represents the proportion of variance in the dependent variable that the independent variables can explain, is 0.52 for Academic Procrastination and 0.4 for Self-Motivation. These values indicate that the model's independent variables can explain 52% of the variance in Academic Procrastination and 40% of the variance in Self-Motivation. The R-square adjusted, which adjusts the R-square value for the number of predictors in the model, is the same as the R-square for both constructs, suggesting that the number of predictors used in the model is appropriate and does not inflate

the proportion of explained variance.

Table 6: R-Square and R-Square Adjusted.

	R-square	R-square adjusted
Academic Procrastination	0.52	0.52
Self-Motivation	0.4	0.4

Bootstrapping

Bath Coefficients

In Table 7, which explores the impact of "Learned Helplessness" on "Academic Procrastination" mediated by "Motivation" among Jordanian university students, the results reveal significant direct effects. Firstly, "Learned Helplessness" has a statistically significant positive direct effect on "Academic Procrastination," with a coefficient of 0.29. Secondly, it exhibits a significant negative direct effect on "Motivation," as indicated by a coefficient of -0.63. Finally, "Motivation" has a significant negative direct effect on "Academic Procrastination" with a coefficient of -0.5. These findings imply that higher levels of "Learned Helplessness" are associated with increased academic Procrastination, primarily influenced by decreased Self-Motivation, which is linked to reduced academic Procrastination.

Table 7: Bath Coefficients of Direct Effects.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Learned Helplessness -> Academic Procrastination	0.29	0.29	0.05	6.06	0
Learned Helplessness -> Self-Motivation	-0.63	-0.63	0.03	22.69	0
Self-Motivation -> Academic Procrastination	-0.5	-0.5	0.04	11.46	0

Indirect Effect

Table 8 provides insights into the indirect effects of "Learned Helplessness" on "Academic Procrastination" mediated by "Motivation" among Jordanian university students. The indirect effect is calculated as 0.32, with a p-value of 0, indicating its statistical significance. This suggests that "Learned Helplessness" significantly influences "Academic Procrastination" indirectly through its impact on "Motivation." The findings imply that higher levels of "Learned Helplessness" among Jordanian university students are associated with increased academic Procrastination, and this effect is, in part, explained by the mediating role of reduced Self-Motivation

Table 8: Indirect Effect.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values

Learned Helplessness -> Academic Procrastination	0.32	0.32	0.03	9.67	0

Total Effect

Table 9 presents the total effect of "Learned Helplessness" on "Academic Procrastination" mediated by "Motivation" among Jordanian university students. The total effect for the path "Learned Helplessness -> Academic Procrastination" is 0.61, with a p-value of 0, signifying its statistical significance. This total effect encompasses both the direct and indirect influences of "Learned Helplessness" on "Academic Procrastination," meaning that it includes the impact mediated by "Motivation." The results indicate that "Learned Helplessness" has a substantial and statistically significant total effect on "Academic Procrastination," emphasizing its importance as a predictor of academic Procrastination. This suggests that while "Motivation" mediates part of the relationship, there is still a solid direct association between "Learned Helplessness" and "Academic Procrastination" among Jordanian university students.

Table 9: Total Effect.

	Original sample (O)	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
Learned Helplessness -> Academic Procrastination	0.61	0.61	0.03	17.62	0
Learned Helplessness -> Self-Motivation	-0.63	-0.63	0.03	22.69	0
Self-Motivation -> Academic Procrastination	-0.5	-0.5	0.04	11.46	0

Indirect Effect Histogram

Figure 3 illustrates the indirect effects of Learned Helplessness on Academic Procrastination among Jordanian university students, with Self-Motivation as a mediator. The blue bars show the distribution of these indirect effects, revealing variability in how learned Helplessness affects Procrastination through Self-Motivation. A standard distribution curve overlays the histogram, comparing observed data and expected normal frequencies. Some histogram bars exceed the curve in certain intervals, indicating potential data skewness or kurtosis. This suggests a complex or non-linear relationship between the variables, outliers, or a non-normal distribution of indirect effects in the sample.

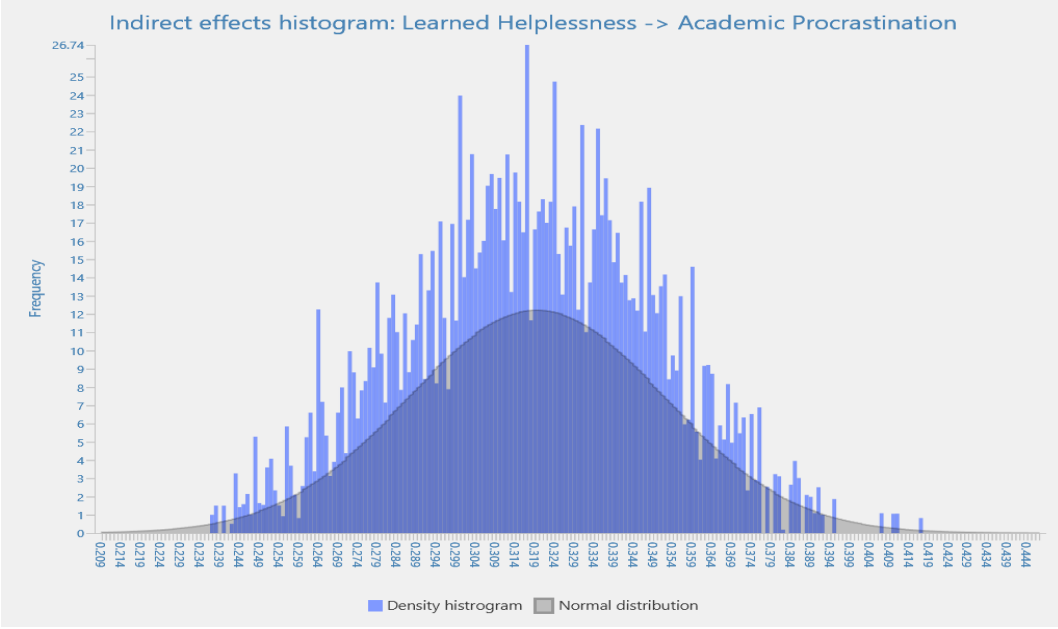

Figure 3: Indirect Effect Histogram.

Discussion

The study employed a measurement model to evaluate the relationships between three core constructs: Learned Helplessness, Academic Procrastination, and Self-Motivation. It assessed the reliability and validity of these constructs, finding that Academic Procrastination exhibited strong internal consistency and reliability, albeit with moderate convergent validity. Learned Helplessness demonstrated even higher levels of reliability and strong convergent validity, while Self-Motivation maintained good reliability and fair convergent validity. Discriminant validity was confirmed through Heterotrait-Monotrait Ratio (HTMT) analysis, indicating that the constructs were distinct yet related. Model fit analyses suggested a moderate to weaker fit, indicating potential limitations in capturing the complex interplay between the studied variables. R-square values indicated that the independent variables could explain a significant proportion of variance in Academic Procrastination and Self-Motivation, with adjusted R-square values supporting the appropriateness of the chosen predictors.

In Testing Hypotheses, the analysis yields conclusive support for all five hypotheses. The first hypothesis (H1) regarding the inverse relationship between Learned Helplessness and Self-Motivation is supported by a significant negative coefficient (-0.63) and a p-value of 0. Similarly, the second hypothesis (H2), proposing an inverse relationship between Self-Motivation and Academic Procrastination, is also upheld, evidenced by a negative coefficient (-0.5) and a p-value of 0. The third hypothesis (H3), suggesting a positive impact of Learned Helplessness on Academic Procrastination, is confirmed by a positive coefficient (0.29) and a p-value of 0. The fourth hypothesis (H4) about Self-Motivation mediating the relationship between Learned Helplessness and Academic Procrastination is validated by a significant indirect effect coefficient (0.32) with a p-value of 0. Lastly, the fifth hypothesis (H5), which posits a significant total effect of Learned Helplessness on Academic Procrastination, is supported by a substantial coefficient (0.61) and a p-value of 0, indicating the considerable direct and indirect influence

of Learned Helplessness on Academic Procrastination.

Thus. the key findings indicate a significant inverse relationship between learned helplessness and self-motivation, and between self-motivation and academic procrastination. Moreover, the study shows that self-motivation mediates the relationship between learned helplessness and academic procrastination. This comprehensive research provides valuable insights into the dynamics of student behavior and academic outcomes in educational psychology.

Conclusion and Implications

These results are logical within the mediation analysis, as they indicate that "Motivation" partially mediates the relationship between "Learned Helplessness" and "Academic Procrastination" among Jordanian university students. The negative relationship between "Learned Helplessness" and "Motivation" and the negative relationship between "Motivation" and "Academic Procrastination" suggest that lower Self-Motivation may be one of the mechanisms through which learned Helplessness leads to academic Procrastination.

Nevertheless, the robust support for all five hypotheses has profound implications. The inverse relationship between Learned Helplessness and Self-Motivation (H1) and the inverse relationship between Self-Motivation and Academic Procrastination (H2) illustrates a critical pathway through which psychological states impact academic behaviors. Notably, the positive impact of Learned Helplessness on Academic Procrastination (H3) and the mediation effect of Self-Motivation (H4) underscore a significant psychological mechanism in education. The substantial total effect of Learned Helplessness on Academic Procrastination (H5) further emphasizes the importance of addressing psychological factors in educational interventions.

These findings suggest that interventions to reduce learned Helplessness could enhance student Self-Motivation, thereby reducing academic Procrastination. The mediation role of Self-Motivation implies that strategies to increase Self-Motivation could serve as a buffer against the negative effects of learned Helplessness on academic Procrastination. Educational programs focusing on psychological resilience, Self-Motivation enhancement, and procrastination management might be particularly beneficial.

Limitations and Future Studies

While the research on learned helplessness, self-motivation, and academic procrastination offers valuable insights, future studies could address its limitations. Expanding the sample to encompass a wider range of cultural and educational contexts would improve the applicability of the results. Employing longitudinal studies could shed light on the evolving nature of these psychological factors. Utilizing qualitative methods would deepen the understanding of personal experiences, while intervention-focused research could assess solutions for these psychological issues. Furthermore, exploring additional psychological aspects such as anxiety, self-efficacy, and resilience would provide a more holistic view of the influences on academic behavior.

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