

Psychological Relationship between Multidimensional Perfectionism and Academic Performance by the Mediating Role of Academic Resilience in the Schools

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Abstract

This study aimed to determine the relationship between academic resilience, multidimensional perfectionism and academic performance. The descriptive-correlational method was utilized as a research design, while the stratified sampling method was employed in the selection of respondents and participants. Mediation analysis was used to achieve the objective of the study. The findings of the study showed that the learners during School Year 2021 – 2022 were found to exhibit academic resilience in terms of perseverance, reflecting & adaptive help-seeking, and emotional response. Moreover, their multidimensional perfectionism as to striving influence their academic performance. Finally, the variables reflecting and adaptive help-seeking, emotional response, and striving are good predictors to determine the academic performance of the learners.

Keywords: Multi-Dimensional Perfectionism, Academic Performance, Mediation Analysis, Mediating Role, Academic Resilience, Academic Perfectionism

1. Introduction

All facets of life underwent a dramatic change as a result of the COVID-19 epidemic. Education environments were unavoidably impacted as well (Kumalasari et al., 2021). Previous research discovered that when online learning was implemented as a result of the epidemic, there was a substantial decline in student satisfaction and a concurrent increase in academic stress. Academic toughness, on the other hand, is regarded as a psychological asset since it helps pupils deal with stress and promotes fulfilment. Since the last ten years, research on resilience has exploded, and recently, some scholars have begun to view resilience as a field-specific notion. More focus was given to academic resilience than to other factors. Academic resilience is the ability of a person to remain strong in the face of academic strain (Rachmawati et al., 2021). It speaks to a learner's ability to excel in the classroom while coming from a challenging background. Numerous investigations have been conducted on it.

Many research has looked at the connection between academic success and perfectionism during the last 20 years (Madigan, 2019). This research has not yet been thoroughly collected and meta-analyzed, though. The results revealed that there is a complex relationship between perfectionism and academic achievement, with perfectionism's aspirations possibly assisting and perfectionism's worries possibly impeding students' academic success.

In a study conducted by Raeis et al. (2019), the intricate interplay between perfectionism and resilience was investigated, with students' academic adjustment serving as a pivotal mediator. Their research aimed to decipher the connection between these variables, suggesting that perfectionism tends to diminish students' resilience. However, the presence of educational adjustment acted as a bridging mechanism between perfectionism and resilience, shedding light on the nuanced relationship.

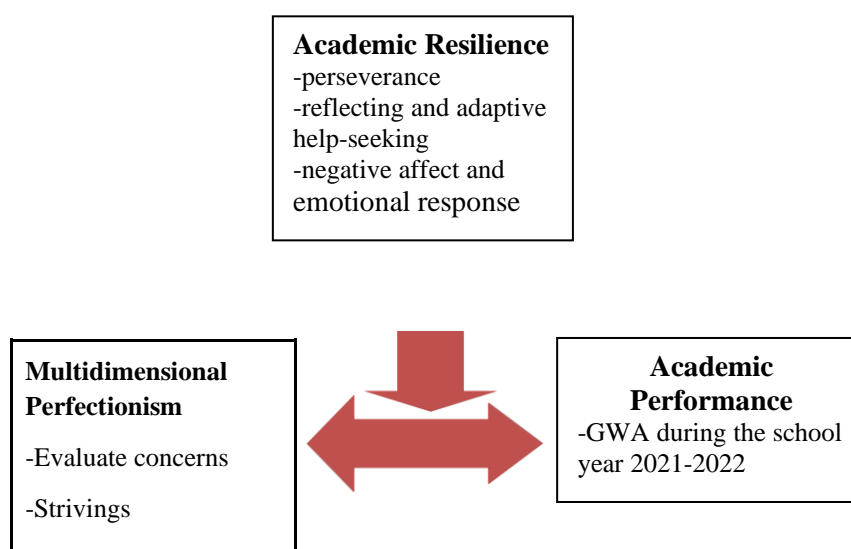
Another insightful exploration by Turan (2021) delved into the correlation between teenagers' social-emotional learning (SEL) skills and life satisfaction. Central to this investigation was the role of academic resilience as a mediator. The findings indicated that academic resilience operates as a pivotal mediator in the intricate interlinking of social-emotional learning abilities and life satisfaction among adolescents.

These studies collectively underscore the significance of academic resilience as a mediator in complex relationships involving psychological constructs. The outcomes have far-reaching implications. They suggest that interventions geared towards enhancing academic resilience can potentially counteract the adverse effects of perfectionism and bolster overall well-being. In the realm of social-emotional learning, the integration of academic resilience activities within SEL programs holds the potential to not only elevate life satisfaction but also contribute to improvements in overall quality of life and happiness.

In order to optimise the well-being and satisfaction of students, the design and incorporation of academic resilience-focused initiatives within educational curricula and social-emotional learning programs emerge as promising avenues. These initiatives have the potential to foster a supportive environment that enhances students' capacity to navigate challenges, cultivate resilience, and consequently lead to a more fulfilled and gratifying life experience.

There is a need for this study since: (1) academic resilience, corroborating it with multidimensional perfectionism and academic performance is still a gap in the literature and no one has yet published or even conducted a study about such interconnected variables; (2) students are instructed to accomplish various tasks but no one dared to provide seminars and training that would help them manage their time, workloads, and work-life balance, and (3) teachers and school administrators are challenged to help students in becoming more resilient even in the post-pandemic where schools are little by little opening its doors for the transitioning of progressive face to face classes. With these gaps found in related studies embarking academic resilience and its relatedness to educational system, the researchers purport to evaluate academic resilience of students and its influence, specifically on multidimensional perfectionism and academic performance in the secondary schools in the Schools Division of City of Malolos during the school year 2021-2022.

The conceptual model depicted in the provided figure served as the foundation for examining the mediating role of academic resilience in the connection between multidimensional perfectionism and academic performance. The central objective was to employ mediation analyses to elucidate a recognized correlation by investigating the intrinsic mechanism through which a specific variable influences another variable, with the involvement of a mediator variable. By employing this approach, the study aimed to enhance comprehension of the intricate relationship between an independent variable and a dependent variable, particularly in cases where these variables lack a clear and direct linkage.



The main aim of the study is to determine the mediating influence of academic resilience on multidimensional perfectionism and academic performance in secondary schools in the Schools Division of City of Malolos. Specifically, this study sought answers to the following questions:

1. How is the academic resilience described in terms of perseverance, reflecting and adaptive help-seeking, and emotional response?
2. What is the level of multidimensional perfectionism in terms of evaluative concerns and strivings?
3. Is there a significant relationship between Multidimensional Perfectionism (MP) and Academic Performance (AP)?
4. Does academic resilience mediate the relationship between multidimensional perfectionism and academic performance?

2. Methodology

The research employed the descriptive-correlational research method, focusing on providing a comprehensive depiction of both the independent and dependent variables. In tandem with this, a mediation model was adopted to elucidate and elucidate the underlying mechanism that drives the established connection between an independent variable and a dependent variable. This was achieved through the introduction of an intermediary hypothetical variable, referred to as a mediator variable, which aids in comprehending the intricate process governing the relationship. The respondents of the study involve 375 high school students in the Schools Division of City of Malolos during the school year 2020-2021. Guided by an online calculator in sample size with 0.05 margin of error and 95% confidence level, the researchers got 375 students as the sample size of the study from the total population of 15, 367.

3. Results And Discussion

Summary of Assessment of Learners Academic Resilience as to Perseverance, Reflecting & Adaptive Help-seeking and Emotional Response

Indicators	General Weighted Mean	Verbal Interpretation
Perseverance	2.72	To a Moderate Extent
Reflecting & Adaptive Help-seeking	2.50	To a Moderate Extent
Emotional Response	3.13	To a Moderate Extent

The summary assessment of learner's academic resilience shows that the indicator perseverance has a weighted mean of 2.72, verbally interpreted as "To a Moderate Extent". This means that the students can continue engaging in academic activities despite difficulties or obstacles.

This finding supported a study by Wang et al. (2021) who said that the environment, the use of techniques, and facilitators posed the biggest obstacles. Students expressed thoughts of "walking on thin ice" and uncertainty about their choice to become nurses. The capacity to remain upbeat in the face of difficulties is known as academic resilience.

The last indicator is emotional response which has a general weighted mean of 3.13, verbally interpreted as "To a Moderate Extent". Students appear to have negative emotional reactions to academic adversity, including disappointment and depression.

Summary of Assessment of Multidimensional Perfectionism as to Perseverance, Reflecting & Adaptive Help-Seeking and Emotional Response

Indicators	General Weighted Mean	Verbal Interpretation
Evaluative Concerns	2.78	To a moderate extent

Striving	2.70	To a moderate extent
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This study investigated how evaluative concerns and strivings of multidimensional perfectionism perform among the learner-respondents. In general, the learner's multidimensional perfectionism in terms of Evaluative Concerns has an average of 2.78, verbally interpreted as "To a Moderate Extent," while the indicator Striving has an average of 2.70, verbally interpreted as "To Moderate Extent". This means that the students fairly demonstrate hope for success and fear of failure.

Test of Relationship between Multidimensional Perfectionism and Academic Performance

Variables	r-value	p-value	Decision	Interpretation
Evaluative Concerns and Academic Performance	0.094	0.101	Fail to Reject	Not Significant
Striving and Academic Performance	0.803	0.000	Reject	Significant

Level of Significance = 0.05

The post analysis on the test of the relationship between the multidimensional perfectionism domain and the academic performance of the learners show that the first pair of variables is evaluative concerns and academic performance. Therefore, there is no significant relationship between evaluative concerns and academic performance at a 0.05 level of significance. Furthermore, pairing striving and academic performance has an r-value of 0.803 (high positive correlation) with a corresponding p-value of almost zero ($p = 0.000$). This states that there is no enough evidence to reject the null hypothesis. Therefore, there is a significant relationship between striving and academic performance at a 0.05 level of significance.

Test of Significance of the Predictors with the Academic Performance

Predictors	R	R-Squared	p-value	Interpretation
Perseverance	0.873	0.704	0.000	Significant
Reflecting and Adaptive Help-Seeking	0.767	0.644	0.000	Significant
Emotional Response	-0.583	0.561	0.000	Significant
Evaluative Concerns	0.170	0.587	0.101	Not Significant
Striving	0.803	0.007	0.000	Significant

Level of Significance = 0.05

To come up with the conclusion if the academic resilience mediates multidimensional perfectionism and academic performance, several tests of relationships between the dependent variable (academic performance) and the predictors (perseverance, reflecting and adaptive help-seeking, emotional response, evaluative concerns, and striving) were obtained. It reveals that the p-values of the predictors such as perseverance ($p = 0.000$), reflecting and adaptive help-seeking ($p = 0.000$), emotional response ($p = 0.000$), and striving ($p = 0.000$) are all less than 0.05 level of significance. Thus, those mentioned variables are candidates as predictors of the academic performance of the learners. On the other hand, the computed p-value of evaluative concerns is 0.101, which is greater than 0.05, thus, there is no enough evidence to show that the relationship between academic performance and evaluative concerns is significant. Consequently, the evaluative concern is not a good predictor of academic performance.

Test of Significance of the Mediation of Academic Resilience between Academic Performance and Multidimensional Perfectionism

Model	R	R-Squared	F-value	p-value	Decision	Interpretation
Model 1	0.873	0.704	293.66	0.000 ^b	Reject	Significant

The next step is to test all academic resilience with academic performance and striving (multidimensional perfectionism) if a model exists in the combinations of the three.

a. Dependent Variable: Academic Performance

b. Predictors: (Constant), Striving, Emotional Response, Reflecting and Adaptive Help-Seeking

After several combinations of academic resilience variables with academic performance and multidimensional perfectionism variables, only one model gives a “significant” result with $p = 0.000$ at a 0.05 level of significance. The model has a multiple correlation coefficient of R-value of 0.873, which indicates a strong relationship since it is much closed to 1.00. Consequently, a coefficient of multiple determinations of R-squared of 0.704 describes 70.4% or almost three-fourths of the amount of variation explained by the model. Since the computed F-value is 293.66 with a corresponding p-value of 0.000, the decision is to reject the null hypothesis.

Derived Coefficients for the Model

Model	Unstandardized Coefficients Beta	Standardized Coefficients Beta	t-value	p-value
(Constant)	70.58	1.22	57.73	0.000
Reflecting and Adaptive Help-Seeking	1.61	0.317	5.07	0.000
Emotional Response	-1.47	0.293	-5.03	0.000
Striving	3.52	0.267	13.15	0.000

Level of Significance = 0.05

The subsequent phase involves the determination of coefficients within the model, crucial for establishing a multiple regression equation that predicts learners' academic performance through specified predictors. This approach enables insights into the relationship between the examined factors and academic outcomes. Remarkably, the p-values for reflecting and adaptive help-seeking, emotional response, and striving converge near zero ($p = 0.000$), signifying their profound significance in deciphering learners' academic performance.

Delving into the specific coefficients, the reflecting and adaptive help-seeking variable manifests a coefficient of 1.61. This signifies that for every incremental unit of change in this variable, there's a concurrent rise of 1.61 in the learners' academic performance. Similarly, for the striving variable, a one-unit elevation corresponds to a substantial 3.52 increase in academic performance. Contrarily, the emotional response variable exhibits a coefficient of -1.47. This implies that for each step of escalation in emotional response, there's an associated reduction of 1.47 in the learners' academic performance.

These findings unveil a multifaceted landscape where students' academic performance is intricately linked to their strategies for help-seeking, emotional reactions, and their determination to strive. The highly significant p-values validate the pertinence of these factors in predicting academic outcomes. The revealed coefficients provide a quantitative lens to the relationship: seeking adaptive help and exhibiting greater striving contribute positively, while heightened emotional response seems to hinder academic performance.

Overall, this regression analysis empowers educators and researchers with a quantifiable tool to comprehend and potentially enhance students' academic performance. By focusing on fostering effective help-seeking strategies, managing emotional responses, and nurturing determination, educational institutions can foster an environment that propels learners toward success, with a comprehensive understanding of how these factors interplay in shaping educational outcomes.

The equation of the model can now be derived, and it is shown in the following equation.

Model:

$$\text{Academic Performance} = 70.58 + 1.61 \times (\text{Reflecting and Adaptive Help-Seeking}) - 1.47 \times (\text{Emotional Response}) + 3.52 \times (\text{Striving})$$

The equation model shows the mediation of academic resilience such as reflecting and adaptive help-seeking and emotional response to the relationship between academic performance and multidimensional perfectionism (which in this case is the striving). The model is significant at a 0.05 level of significance. Using the data gathered by the researcher, one of the learners who has the least emotional response (WM = 1.55) having reflecting and adaptive help-seeking (WM = 4.50) and striving (WM = 4.50) predicts to have an academic performance of 91.39, utilizing the model to predict the performance. Observe that the learners who have a little extent in their emotional response (WM = 1.55), but they have a very great extent in their reflecting and adaptive help-seeking (WM = 4.50) and striving (WM = 4.50), predicted to be proficient in their academics (91.39). Furthermore, one of the learners who have the highest weighted mean in emotional response (WM = 4.34) have their reflecting and adaptive help-seeking (WM = 1.53), and striving (WM = 2.12) gives an academic performance of 75.08, using the model. It can be gleaned that learners having a great extent in emotional response (WM = 4.34) with a little extent in reflecting and adaptive help-seeking (WM = 1.53) and striving (WM = 2.12) tend to have a developing level in their academic performance (75.08).

Additionally, if the learners could maximize their potential in reflecting and adaptive help-seeking (WM = 5.00), and striving (WM = 5.00), and having the least extent in emotional response (WM = 1.00), the learners could perform to a maximum academic performance of 94.76 or proficient. On the other hand, if the learner was not able to minimize his/her emotional response (WM = 5.00) instead reaching the maximum response, and suppose with the least reflecting and adaptive help-seeking (WM = 1.00) and striving (WM = 1.00), could most likely have the least academic performance which is 68.36 that is a failing grade.

4. Conclusion

Based on the findings of the study, it can be concluded that the learners who were achieving good educational outcomes despite adversity were found to fairly exhibit academic resilience in terms of perseverance, reflecting and adaptive help-seeking, and emotional response. As to their multidimensional perfectionism, they somewhat demonstrate evaluative concerns and striving. Moreover, the academic performance of the learners during School Year 2021 – 2022 is at the developing level and their multidimensional perfectionism as to striving influence their academic performance. Finally, the variables reflecting and adaptive help-seeking, emotional response, and striving are good predictors to determine the academic performance of the learners.

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