The Moderating Role of Locus of Control in the Effect of Self-Efficacy on Academic Resilience

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Article Info

Abstract

Academic resilience is important to enhance students in achieving good academic performance in the learning process. The lack of it may affect students' adaptability, while its underlying factors are such as self-efficacy and locus of control. Regarding this issue, the present study attempted to analy zed the role of locus of control in moderating the effect of self-efficacy on the academic resilience of eight graders all over Kendal Regency. It was quantitative research that surveyed 202 students as the respondents using an instrument developed based on Cassidy's academic resilience scale (2016), Bandura's self-efficacy (1997), and Levenson's locus of control scale (1981). The collected data were examined using the Hayes model 1 moderation test. Findings indicated that self-efficacy had no effect on academic resilience, but locus of control on internality scores provided a moderating effect that strengthened the effect of self-efficacy on academic resilience. In addition, locus of control on powerful other and chance scores had no moderating effect. Thus, further studies are suggested to deepen the examination of the effect of internal locus of control on academic resilience.

INTRODUCTION

Academic resilience is one's capacity to deal with problems during the learning process. Cassidy (2016) defines academic resilience as one's ability to enhance the rate of success in education during the hard times. At school, students will surely encounter various demands and challenges both personally and socially, so adaptation and adjustment need to be made (Utami, 2017).

Resilience becomes an important resource to improve students' academic performance (Ononye, t al., 2022). Sembiring, et al (2021) explains that academic resilience is student's dynamic ability to succeed in studies although there are disruptions, pressures, and problems. It can be seen from the way a person acts against academic difficulties and challenges (Mutaqin, et al., 2021). Hence, academic resilience is a must for students since it can be useful for facing difficulties in academic processes.

To be resilient, some factors must be fulfilled. Rutter in Shafi (2020) mentions that one way to develop positive traits is to maintain self-efficacy. Cassidy (2016) affirms self-efficacy as a prominent feature related to academic resilience. His study also implies the psychological attribution of self-efficacy in academic resilience.

Self-efficacy is defined as one's desire to determine positive reinforcement actions in accomplishing particular tasks (Yang, 2020). It helps students solves academic problems and push their limit (Maspupatun, et al., 2021). One with high self-efficacy will be persistent and consistently struggle with no delay (Handayani, et al., 2021). Similarly, Lestari, et al. (2022) argue self-efficacy can assist individual in solving problems. However, according to Rosmayati (2017), low self-efficacy will trigger doubt in one's abilities and finally make him reduce their efforts.

Basith, et al (2020) argue self-efficacy contribute to academic resilience improvement. Moreover, Oktaningrum & Santhoso (2019) found self-efficacy contributes 48,7% improvement on academic resilience.

Oppositely, Keye & Pidgeon (2013) revealed self-efficacy has no significant role in influencing academic resilience. Both studies indicate inconsistency of the effect of self-efficacy on academic resilience.

Other than self-efficacy, locus of control was predicted to affect academic resilience. Martin & Marsh (2003) have confirmed locus of control can predict academic resilience. It can happen because locus of control affects one's beliefs that the source of events in their lives come from internality and externality (powerful other, chance) (Levenson, 1981).

Individuals who believe in themselves have control over their fate and are able to manage the undergoing situations. With internal locus of control individuals' beliefs in efforts will increase. In contrast, external locus of control will weaken self-efficacy because it considers things such as luck, fate, and people in power as the cause of events (Djunaedi, et al., 2022).

Satyaningrum (2019) found internal locus of control has no effect on academic resilience. However, Kronborg, et al., (2017) conclude internal locus of control affects academic resilience better than students with dominant external locus of control. Both studies indicate opposite results regarding the effects of locus of control on academic resilience.

Based on the aforementioned backgrounds, the present study strived for examining the contributions of self-efficacy on academic resilience with locus of control as the moderator in the junior high school or SMP students in Kendal Regency. Thus, school counselors can make use of it as a basis for improving students' academic resilience through the source of self-efficacy and locus of control.

METHODS

The population in this study was junior high school students throughout Kendal Regency, represented by students at SMP Negeri 3 Kendal and SMP Negeri 3 Patebon. They were sampled using cluster random sampling and shrunken to 202 students (46.5% of SMPN 3 Kendal students and 53.5% of SMPN 3 Patebon

students) to be respondents in collecting data regarding the level of academic resilience, self-efficacy and locus of control.

Data collection was done by developing instruments from the dimensions of academic resilience by Cassidy (2016), Bandura's self-efficacy (1997) and Levenson's locus of control (1981). Expert judgment and field trials were carried out to test the construct validity prior to the distribution of psychological scale instruments to the respondents.

Academic resilience was measured using an academic resilience scale consisting of 20 statement items from 28 instrument trial items with an alpha reliability coefficient of 0.84. For more, self-efficacy was measured using 25 statement items from 28 instrument trial items with an alpha reliability coefficient of 0.86. Finally, locus of control was measured using 18 statement items from 22 test items with an alpha reliability coefficient of 0.70. All instruments used favorable and unfavorable items with a Likert scale consisting of five answer choices (1 = very unsuitable, 5 = very suitable).

The respondents' data were analyzed using descriptive analysis to determine the level of academic resilience, self-efficacy and locus of control. Further, the Hayes model 1 moderation test was carried out to decide the moderating role of locus of control on the influence of self-efficacy on academic resilience. Previously, Hayes model 1 test can be done if the data are normally distributed data, linear variable relationships and have no heteroscedasticity.

RESULTS AND DISCUSSION

The descriptive analysis resulted the scores of mins, max, mean and standard deviation of academic resilience, self-efficacy, and locus of control of the eight graders at junior high school throughout Kendal Regency.

Table 1. Min, Max, Mean, Standar Deviation

Variabel	Min	Max	Mean	SD
Academic resilience	47	89	69.36	7.85
Self-efficacy	50	112	86.13	10.1
Locus of control	38	65	50.55	4.33

Academic resilience was in the medium category with the mean of 69,361 at a max score of 89 and a min score of 47. Self-efficacy was categorized as medium with the mean of 86,133 at a max score of 112 and a min score of 50. Lastly, locus of control was in the medium category with the mean of 50,559 at a max score of 65 and a min score of 38.

Table 2. Moderation of Internality Locus of Control Score

Predictor	β	Se	T	p
Constant	62.97	19.9	3.15	< 0.01
ED	0.017	0.02	0.07	> 0.05
LOC	-1.81	1.02	-1.7	> 0.05
EDxLOC	0.023	0.01	0.01	< 0.05

Note: R^2 = 0.4038, MSE = 37.385, F = 44.708

Hayes model 1 test implied that self-efficacy had no influence on academic resilience (β = 0.0172, p > 0.05). Then, the results of the internality locus of control moderation test found a moderating effect of the internality locus of control between self-efficacy and academic resilience (β = 0.0239, p <0.05).
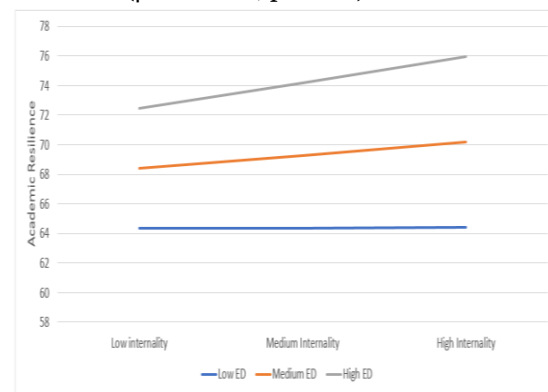

Figure 1. Graph of the Moderating Role of Internality Locus of Control

Internal locus of control distinguished the strength of the role of self-efficacy in academic resilience. The moderating role of internal locus of control could increase the effect of self-efficacy on academic resilience. Even though it

was equally capable of strengthening the role of self-efficacy on academic resilience, individuals with high and medium levels of internal locus of control appeared to have boost the role of self-efficacy in influencing academic resilience in individuals with low internal locus of control.

Table 3. Moderation of Powerful Other Locus of Control Score

Predictor	β	Se	T	P
Constant	47.20	22.7	2.08	< 0.05
ED	0.198	0.25	0.76	> 0.05
LOC	-1.454	1.68	-0.86	> 0.05
EDxLOC	0.021	0.02	1.11	> 0.05

Note: R^2 = 0.4016, MSE = 37.522, F = 44.302

It was understood that self-efficacy had no effect on academic resilience (β = 0.1979, p > 0.05). Then, the results of the moderation test of locus of control *powerful other* indicated no moderating effect of this aspect in the self-efficacy and academic resilience (β = 0.0213, p > 0.05).

Table 4. Moderation of the Chance Locus of Control Score

Predictor	β	Se	T	p
Constant	59.37	30.74	1.931	> 0.05
ED	0.118	0.354	0.331	> 0.05
LOC	-0.84	0.814	-1.04	> 0.05
EDxLOC	0.009	0.009	1.042	> 0.05

Note: R^2 = 0.3866, MSE = 38.468, F = 41.5924

Based on table 4, self-efficacy had no effect on academic resilience (β = 0.1175, p > 0.05). Also, the results of the locus of control chance moderation test inferred no moderating effect between self-efficacy and academic resilience (β = 0.0098, p > 0.05).

The findings implied that self-efficacy had no effect on academic resilience. Generally, self-efficacy in individuals will bring strong beliefs to accomplish academic tasks maximally. Unfortunately, Vancouver, et al., (2002) argue that challenging tasks completion do not always develop positive self-efficacy because the excessive feeling of success will result in negative effects. If an individual's confidence is too excessive, it will cause him to experience pressure and academic demands to achieve greater success than before, thereby disrupting his or her psychological stability.

A study by Keye & Pidgeon (2013) explains that there is another internal factor that affects academic resilience more than self-efficacy, namely mindfulness. The presence of mindfulness helps individuals improve adaptive coping with stressful events. Apart from internal factors, there are external factors explained by Satyaningrum (2019), namely teacher and parental support which support student participation to counter difficulties during the learning process.

Even though self-efficacy had no effect on academic resilience independently, it could do when locus of control was combined. Thus, individuals with locus of control survive better at academic pressure and demands (Phares in Pratiwi, 2017). They have the ability to think effectively, work hard and have problem-solving solutions that enable them to survive and recover after experiencing academic difficulties (Nugrahini et al, 2021). Similarly, Prihadi et al. (2018) argue that individuals who have an internal locus of control appreciate their own abilities so that they reduce negative emotions when they experience failure.

Individuals who have an internal locus of control and high self-efficacy will be confident in completing academic tasks. Hajmohammadi & Aghayani (2022) assume that individuals with an internal locus of control have the self-confidence to be responsible for carrying out internal and external academic tasks. This attitude of responsibility indicates that they have personal control to achieve academic goals. This characteristic helps increase the influence of self-

efficacy on academic resilience. Therefore, individuals who have a dominant internal locus of control balanced with high self-efficacy will help in increasing students' academic resilience. Oppositely, the ones with a dominant external locus of control are unable to strengthen the influence of self-efficacy on academic resilience.

CONCLUSION

Regarding the findings and discussion, it can be concluded (1) the level of academic resilience, self-efficacy and locus of control, (2) self-efficacy has no influence on academic resilience, and (3) internal locus of control is able to strengthen the influence of self-efficacy on academic resilience. Meanwhile, locus of control powerful other and chance have no moderating effect.

Of the conclusions, school counselors are recommended to help students improve academic resilience by improving their internal locus of control and exploring self-efficacy sources. For more, the future researchers can deepen the moderating effect of internal locus of control on academic resilience by considering gender.

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