

A CROSS-SECTIONAL STUDY OF ACADEMIC PERSEVERANCE AND RESILIENCE IN LEARNING AMONG GRADES 7 TO 10 STUDENTS AT AN INTERNATIONAL SCHOOL IN YANGON, MYANMAR

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Abstract

The purpose of the current study was twofold: (a) to determine the levels of academic perseverance and resilience in learning held by Grades 7 to 10 students at an international school in Yangon, Myanmar, and (b) to perform statistical comparisons of these variables, using the students' school grade as grouping factor. The study participants were sampled from a population of 60 students from Grade 7, 29 students from Grade 8, 19 students from Grade 9, and 14 students from Grade 10, enrolled in the target international school during the academic year 2025-2026. For the data collection, the Academic Perseverance Questionnaire and the Resilience in Learning Questionnaire were used.

From performing descriptive statistics on the collected data, it was found that the overall level of academic perseverance and resilience in learning held by the participants was high, regardless of their grade. From a quantitative comparative analysis using a one-way ANOVA, no significant difference in either academic perseverance or resilience in learning was found among Grade 7 to 10 students at the target school. Based on the research findings, recommendations for practice and future researchers are provided.

Keywords: Academic Perseverance, Resilience in Learning, Secondary School Students, International School

Introduction

Adolescence is a crucial period of development in which students form their identity while navigate increasing academic demands (Steinberg, 2014). During this time, traits like academic perseverance—the sustained effort toward achieving academic goals—and resilience in learning—the ability to sustain a positive and adaptive functioning to recover from challenges and setbacks—become critical for academic success and personal well-being (Masten, 2018). These traits are vital for students in Myanmar, where the educational landscape presents unique social and economic challenges (Lall, 2020; UNESCO, 2021).

Academic perseverance has been reported to significantly predict school retention, grit, academic performance, and even intelligence quotient (Credé et al., 2017). Also, resilience in learning enables students to cope with failure, manage performance-related stress, and maintain motivation when faced with academic challenges (Ungar, 2011; Yeager & Dweck, 2012). Resilience in learning was found to significantly reduce the negative impact of academic stress on students at Yangon government secondary schools (Thant and Thi, 2020). However, the experience of students in international schools—who balance local with global standards and face pressures from navigating Western curricula, high expectations from family and teachers, and competitive global university admissions—remains under-researched in Myanmar.

The first author has taught for five years at an international school in Yangon, Myanmar, working with Grades 7 to 10 students. Based on her teaching experience and corroborating insights from the school principal and colleagues, the first author has observed some perseverance- and resilience-related issues among students. Some students seem to consistently procrastinate, avoid challenging tasks, and struggle with time management, which are indicators of low academic perseverance (Credé et al., 2017). Others appear to be disengaged and emotionally withdrawn when facing with academic pressure or setbacks, which are indicators of low resilience in learning (Zimmerman and Schunk, 2011). These issues highlight the need to explore in depth the levels of academic perseverance and resilience in learning among Grades 7 to 10 students at this international school in Myanmar, in order to inform interventions to support their perseverance and resilience, and enhance student well-being and success in the target international school.

Previous studies (e.g., Kapikiran, 2020; Roney, 2019; Thant and Thi, 2020) have reported conflicting results on students' academic perseverance and resilience in learning. For example, Roney (2019) found that, while academic perseverance among adolescents in England was stable, mathematics-specific perseverance showed significant variation, suggesting domain-based differences. Similarly, Kapikiran (2020) reported that resilience among Turkish high school students was consistent, showing no significant demographic differences. However,

Thant and Thi (2020) found significant differences in resilience in learning among Myanmar Grade 9 students, depending on their gender, school, district location, and parental education. These conflicting results highlight the complexity of studying academic perseverance and resilience in Myanmar—particularly in the under-researched context of international schools—, as they may remain stable in some contexts yet vary significantly in others.

For these aforementioned reasons, the researchers decided to conduct a study to measure Grades 7, 8, 9 and 10 students' academic perseverance and resilience in learning at an International School in Yangon, Myanmar, and compare them according to their grade.

Objectives of this Research

1. To determine the levels of academic perseverance held by Grades 7 to 10 students at an international school in Yangon, Myanmar.
2. To determine the levels of resilience in learning held by Grades 7 to 10 students at an international school in Yangon, Myanmar.
3. To determine whether there is a significant difference in academic perseverance among Grades 7 to 10 students at an international school in Yangon, Myanmar.
4. To determine whether there is a significant difference in resilience in learning among Grades 7 to 10 students at an international school in Yangon, Myanmar.

Research Methodology

This section includes details on the research design, population and sample, research tools, data collection, data analysis, ethical considerations, and the research validity.

1. Research Design

The researchers used a quantitative comparative survey research design, in order to compare the academic perseverance and resilience in learning (serving as dependent variables) among the study participants, using their school grade (i.e., Grades 7 to 10) as the independent variable.

2. Population and Sample

A population sample, comprised of all the 84 Grade 7, 54 Grade 8, 38 Grade 9, and 31 Grade 10 students enrolled in an international school in Yangon, Myanmar, during the academic year 2025-2026, was targeted in this study. Participation was voluntary.

3. Research Tools

This study was conducted using two research instruments: the Academic Perseverance Questionnaire (APQ), and the Resilience in Learning Questionnaire (RLQ).

3.1 Academic Perseverance Questionnaire (APQ). This instrument, adapted from the Academic Self Control Scale by Büyük et al. (2020), consisted of eight items measuring

three subscales of academic perseverance (see Table 2): sticking to academic goals (Items 1, 2, and 8), evaluating alternatives (Items 3-4), and perseverance (Items 5-7). The items were rated on a 5-point Likert-type scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always). The scale's mean scores, obtained from averaging the ratings of all items, were interpreted on a continuum from 1.00 (very low) to 5.00 (very high academic perseverance).

3.2 Resilience in Learning Questionnaire (RLQ). This instrument, adapted from the Adolescent Resilience Questionnaire by Gartland et al. (2011), consisted of 16 items measuring 2 subscales of resilience in learning in the school domain (see Table 3): supportive environment (Items 1-8), and connectedness (Items 9-16). Items were rated on a 5-point Likert-type scale (1 = never, 2 = not often, 3 = sometimes, 4 = most of the time, 5 = all the time). The scale's mean scores, obtained from averaging the ratings of all items, were interpreted on a continuum from 1.00 (very low) to 5.00 (very high resilience in learning).

4. Data Collection

The data were collected in July 2025, during the first semester of the academic year 2025-2026. Using a Google Form, the first author distributed the two research instruments to the students from the target international school who received consent from their parents to participate. The proportion of students from the target population who participated in the study was distributed as follows: 60 out of 84 Grade 7 students (71.43% response rate); 29 out of 54 Grade 8 students (53.70% response rate); 19 out of 38 Grade 9 students (50% response rate); and 14 out of 31 Grade 10 students (45.16% response rate).

5. Data Analysis

Before performing hypothesis testing, a reliability analysis was conducted on the data collected with the two research instruments (i.e., the APQ and RLQ), by computing the Cronbach's alpha coefficient for each construct and their subscales. Values ranging from .61 to .84 were obtained (see Table 1), indicating that the APQ and RLQ were reliably measuring participants' levels of academic perseverance and resilience in learning, respectively.

Table 1 Reliability Coefficients of the APQ and RLQ in This Study

Research instrument / Dimension	Grade			
	7	8	9	10
Academic Perseverance Questionnaire (APQ)	.75	.72	.77	.71
Sticking to academic goals	.63	.62	.70	.73
Evaluating alternatives	.63	.70	.72	.69
Perseverance	.75	.74	.61	.65
Resilience in Learning Questionnaire (RLQ)	.79	.74	.74	.66
Supportive environment	.72	.70	.72	.61
Connectedness	.71	.76	.70	.73

After the reliability of the APQ and RLQ was established, the collected data were analyzed using descriptive statistics (means and standard deviations) and comparative analysis (one-way analysis of variance [ANOVA]), with the support of a statistical software package.

6. Ethical Considerations

Before conducting the study, an IRB certificate was obtained to ensure that appropriate steps were taken to protect the rights and welfare of the study participants, who were minors under legal age. Then, the researchers contacted the authorities of the target international school to request permission to collect information from Grade 7-10 students, which was granted. Before collecting data, the parents of all potential participants were contacted to provide them with information on the study, establish whether they wished their children to participate in it, and, if so, ask for their written informed consent. All the students who joined the study were explained the purpose and objectives of the research prior to the administration of the questionnaires. Moreover, they were informed that their participation was voluntary, and they were free to withdraw from participating in the data collection at any time, for whatever reason and without prejudice, questioning, or any adverse consequences. Participants were also informed that the research results were going to be used only for the study purpose, and all their identities were going to be kept anonymous and confidential.

7. Research Validity

7.1 Academic Perseverance Questionnaire (APQ). Büyük et al. (2020) established the construct validity of the instrument items by performing both exploratory factor analysis, which revealed the factor structure of academic perseverance, and confirmatory factor analysis, which tested the underlying factor structure and returned good fit statistics (RMSEA = .065, CFI = .93, TLI = .91, SRMR = .05). Content validity was also ensured through expert evaluation, and convergent validity was confirmed by AVE scores of .83. For the current study, the first author translated all items into Burmese, and translation validity was verified through a back-translation procedure reviewed by three experienced secondary school teachers.

7.2 Resilience in Learning Questionnaire (RLQ). Gartland et al. (2011) established the construct validity of the instrument items by developing them based on a literature review, focus groups, and two large-scale studies, with factor analyses testing and confirming the underlying factor structure of the items. Moreover, content validity was ensured through expert review, and face validity by participant feedback. For the current study, all items were translated into Burmese by the first author, and translation validity was confirmed by a back-translation procedure reviewed by three experienced teachers.

Research Results

In this section, the research findings obtained from the data collection and analysis follows, presented by research objective.

1. Findings from Research Objective 1

Table 2 displays details on the mean scores, standard deviations and interpretations of the participants' answers to all eight items comprising the APQ.

Table 2 Mean Scores, Standard Deviations, and Interpretations of the Participants' Responses to the APQ, According to Their Grade

Item N ^o	Item statement	Grade 7			Grade 8			Grade 9			Grade 10		
		M	SD	Interpret.	M	SD	Interpret.	M	SD	Interpret.	M	SD	Interpret.
I. Sticking to academic goals													
1	If my friends invite me out or play while I am doing homework at home, I go out after I complete it.	3.88	0.90	High	3.41	1.02	Moderate	3.26	1.37	Moderate	3.29	1.07	Moderate
2	Even if my desk mate tries to make me chat, I pay attention to the lesson.	3.77	0.81	High	3.45	0.91	Moderate	3.37	0.76	Moderate	3.71	0.83	High
8	Before the exams, I begin studying without anybody reminding me to do that.	3.85	1.10	High	3.93	1.07	High	4.32	0.89	High	4.14	1.10	High
1-2,8	Sticking to academic goals	3.83	0.95	High	3.60	1.03	High	3.65	1.03	High	3.71	1.00	High
II. Evaluating alternatives													
3	When I am not interested in a subject during class, I find myself taking an interest in something else.	2.93	1.09	Moderate	2.90	1.15	Moderate	2.79	1.08	Moderate	2.64	1.28	Moderate
4	I prepare for the exams by reviewing the subjects.	4.53	.72	Very high	4.34	.94	High	4.26	1.16	High	4.43	1.16	High
3-4	Evaluating alternatives	3.73	.92	High	3.62	1.04	High	3.55	1.12	High	3.54	1.21	High
III. Perseverance													
5	I work hard enough to obtain high marks from exams.	4.18	0.81	High	4.03	0.87	High	4.26	0.99	High	3.93	1.07	High
6	When I fail a subject, I strive to improve it.	4.52	0.79	Very high	4.48	0.63	High	4.89	0.31	Very high	4.21	0.89	High
7	Even if it is hard to comprehend the subject in class, I compel myself to grasp it.	4.25	0.82	High	3.90	1.01	High	4.42	0.84	High	4.36	0.75	High
5-7	Perseverance	4.32	0.80	High	4.14	0.85	High	4.53	0.77	Very high	4.17	0.91	High
1-8	Academic perseverance	3.99	0.89	High	3.81	0.96	High	3.95	0.79	High	3.84	1.03	High

2. Findings from Research Objective 2

Table 3 displays details on the mean scores, standard deviations and interpretations of the participants' answers to all the 16 items comprising the RLQ.

Table 3 Mean Scores, Standard Deviations, and Interpretations of the Participants' Responses to the RLQ, According to Their Grade

Item N ^o	Item statement	Grade 7			Grade 8			Grade 9			Grade 10		
		M	SD	Interpret.	M	SD	Interpret.	M	SD	Interpret.	M	SD	Interpret.
I. Supportive environment													
1	My teachers are caring and supportive of me.	4.03	0.82	High	3.79	1.01	High	4.26	.56	High	3.79	0.98	High
2	I have a teacher that I feel looks out for me.	3.85	1.26	High	3.90	1.05	High	4.11	1.05	High	3.50	0.94	High
3	My teachers provide me with extra help if I need it.	4.20	0.76	High	4.00	0.76	High	4.21	0.92	High	3.29	0.92	Moderate
4	There is an adult at school I could talk to if I had a personal problem.	2.50	1.43	Moderate	2.62	1.55	Moderate	2.74	1.28	Moderate	1.86	1.29	Low
5	I get involved with school activities.	4.12	0.78	High	3.86	0.83	High	3.79	1.03	High	2.64	1.15	Moderate
6	I feel that what I say counts at school.	3.35	1.01	Moderate	3.17	0.81	Moderate	3.26	0.99	Moderate	3.86	0.95	Moderate
7	At school students help to decide and plan things like school activities and events.	3.75	0.99	High	3.66	0.90	High	3.79	1.13	High	3.71	1.20	High
8	My teachers notice when I am doing a good job and let me know.	3.85	0.95	High	3.83	0.93	High	3.68	0.89	High	3.27	1.07	Moderate
1-8 Supportive environment		3.71	1.02	High	3.60	1.01	High	3.73	1.00	High	3.27	1.07	Moderate
II. Connectedness													
9	I enjoy going to school.	3.45	1.25	Moderate	3.34	1.14	Moderate	3.84	0.83	High	3.64	1.08	High
10	I hate going to school.	3.28	1.26	Moderate	3.38	1.15	Moderate	3.74	1.05	High	3.71	1.07	High
11	I try hard in school.	3.87	0.75	High	3.38	0.94	Moderate	3.89	0.81	High	3.36	1.22	Moderate
12	I join class discussions.	3.92	1.06	High	3.72	0.88	High	3.63	1.07	High	3.71	1.20	High
13	My teachers expect too much of me.	2.77	0.94	Moderate	2.48	1.12	Low	2.63	0.96	Moderate	2.86	1.23	Moderate
14	I participate in class.	4.00	0.88	High	3.83	0.93	High	4.21	0.71	High	3.86	1.10	High
15	I am bored at school	2.88	1.01	Moderate	3.14	1.30	Moderate	3.53	0.91	High	3.29	0.91	Moderate
16	Getting good marks is important to me.	4.48	0.87	High	4.45	0.63	High	4.53	0.70	Very high	4.07	1.00	High
9-16 Connectedness		3.58	1.02	High	3.45	1.03	Moderate	3.75	0.89	High	3.56	1.11	High
1-16 Resilience in learning		3.64	1.02	High	3.53	1.02	High	3.74	0.95	High	3.42	1.09	Moderate

3. Findings from Research Objective 3

Table 4 displays the results obtained from performing a one-way ANOVA on the collected data, testing whether there was a significant difference in academic perseverance among Grades 7 to 10 students at an international school in Yangon, Myanmar.

Table 4 One-Way ANOVA Test Results from Comparing Grades 7 to 10 Students' Academic Perseverance at an International School in Yangon, Myanmar

Grade	n	M	SD	ANOVA	
				F(3, 118)	p
Grade 7	60	3.99	0.89	0.89	.447
Grade 8	29	3.81	0.96		
Grade 9	19	3.95	0.79		
Grade 10	14	3.84	1.03		

Note. Significance level set at $p = .05$, two-tailed.

4. Findings from Research Objective 4

Table 5 below shows the results obtained from performing a one-way ANOVA on the collected data, testing whether there was a significant difference in resilience in learning among Grades 7 to 10 students at an international school in Yangon, Myanmar.

Table 5 One-Way ANOVA Test Results from Comparing Grades 7 to 10 Students' Resilience in Learning at an International School in Yangon, Myanmar

Grade	n	M	SD	ANOVA	
				F(3, 118)	p
Grade 7	60	3.64	1.02	1.78	.157
Grade 8	29	3.53	1.02		
Grade 9	19	3.74	0.95		
Grade 10	14	3.42	1.09		

Note. Significance level set at $p = .05$, two-tailed.

Research Discussion

Here, a discussion of the research findings from the current study is provided.

1. Academic Perseverance

The study results revealed an overall high level of academic perseverance held by Grade 7, Grade 8, Grade 9, and Grade 10 students at the target international school in Yangon, Myanmar. Therefore, it can be concluded that the participants, regardless of the grade they were enrolled in, exhibited a high level of sustained effort toward achieving academic goals. This is in line with the findings of Büyük et al. (2020), who reported a similar trend of high academic perseverance in secondary school students in Ankara, Turkey. This could be attributed to students replicating, in a stable way through secondary school, self-regulated

learning strategies to set meaningful goals, monitor their progress, apply effective learning methods, sustain motivation, and engage in self-reflection (Zimmerman and Schunk, 2011).

2. Resilience in Learning

The study results revealed an overall high level of resilience in learning among Grade 7, 8, and 9 students at the target international school in Yangon, Myanmar, with Grade 10 students showing an overall moderate level of resilience. Therefore, it can be concluded that the participants' ability to sustain a positive and adaptive functioning to recover from challenges and setbacks in the school context was high for Grade 7-9 students, and moderate for Grade 10 students. This is aligned with the findings reported by Thant and Thi (2020), who found a high level of resilience in learning among Grade 9 students at eight public government secondary schools across four districts in Yangon, Myanmar. This could be due to school-related factors shaping students' resilience in learning, such as peer and adult support, caring teacher-student relationships, and opportunities for meaningful participation, which are usually stronger in the beginning of secondary school (Gartland et al., 2011; Thant and Thi, 2020).

3. The Grade-Based Difference in Academic Perseverance

The data analysis found no significant difference in overall academic perseverance among Grade 7, 8, 9 and 10 students at the target school. Thus, it can be concluded that the school grade in which participants were enrolled in appears to have no significant effect on their academic perseverance. This could be due to enduring traits shaping students' academic perseverance, such as conscientiousness (Credé et al., 2017), effort regulation habits (Roney, 2019), consistent school supports (DiNapoli, 2018), and self-control processes, remain somewhat steady and consistent through adolescence (Büyük et al., 2020).

4. The Grade-Based Difference in Resilience in Learning

The data analysis revealed no significant difference in overall resilience in learning among Grades 7, 8, 9 and 10 students at the target international school in Yangon, Myanmar. Thus, it can be concluded that the grade in which these students were enrolled in appears to have no significant effect on their overall resilience in learning. A possible reason why resilience in learning did not change across a span of four grades could be that enduring traits shaping students' resilience in learning, such as personal traits, family, peers, community, and school support (Gartland et al., 2011), caring relationships and high expectations (Sulong et al., 2019), are somewhat consistent through adolescence (Kapikiran, 2020).

Research Body of Knowledge

The study results revealed that the school grade in which participants were enrolled in did not have a significant effect on either their academic perseverance or resilience in

learning. However, other factors that may significantly influence students' academic perseverance and resilience in learning were identified from the literature review and discussion conducted for this study (see Figure 1).

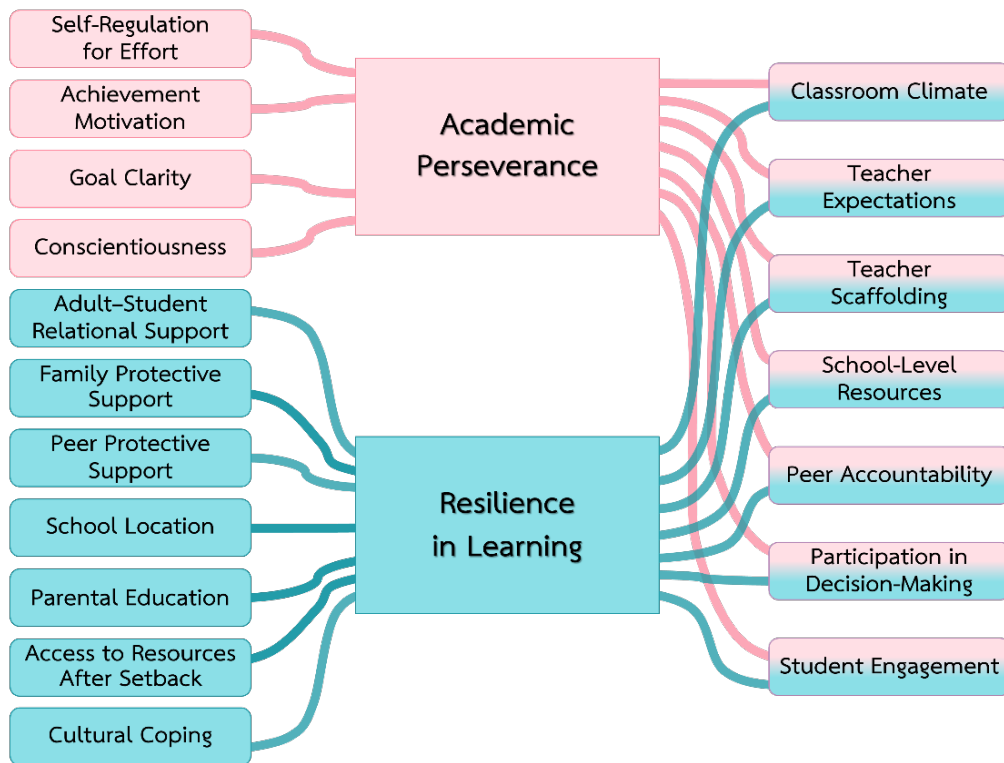


Figure 1 Research Body of Knowledge on Academic Perseverance and Resilience in Learning

Regarding academic perseverance, it can be influenced by factors such as self-regulation for effort (DiNapoli, 2018; Roney, 2019); achievement motivation, goal clarity and conscientiousness (Locke & Latham, 2002; Roney, 2019). Regarding resilience in learning, it can be affected by adult-student relational support (Pianta et al., 2012); family and peer protective supports, school location, and parental education (Thant and Thi, 2020); access to resources after setback and cultural coping (Ungar, 2011). Moreover, the following factors have been reported to influence both academic perseverance and resilience in learning: classroom climate (Gartland et al., 2011; Ungar, 2011); teacher expectations (Locke and Latham, 2002; Pianta et al., 2012); teacher scaffolding (DiNapoli, 2018; Locke and Latham, 2002), school-level resources and peer accountability (Sulong et al., 2019; Thant and Thi, 2020); participation in decision-making and student engagement (DiNapoli, 2018; Gartland et al., 2011; Ungar, 2011).

Research Suggestions

1. Suggestions for Practice

1.1 The study findings showed that APQ Items 1, 2, and 3 (see Table 2) were consistently rated with the lowest mean scores among participants from all grades. Therefore, the researchers suggest that teachers should foster students' perseverance by embedding into their lessons reflective pauses to encourage students' engagement in evaluating alternatives and rehearsing coping phrases (Mischel, 2014), setting clear learning targets per lesson and tie rewards to progress to reinforce commitment (Locke and Latham, 2002), scaffolding complex tasks into smaller and guided steps (DiNapoli, 2018), and fostering peer accountability through collaborative work and assignment of monitoring roles within groups (Büyük et al., 2020).

1.2 The study findings showed that RLQ Items 4, 10, 13, and 15 (see Table 3) were consistently rated with the lowest mean score among participants from all grades. Therefore, the researchers suggest that teachers can foster students' resilience in learning by building adult-student connections by scheduling regular brief advisory sessions and check-ins and assign each student a named adult mentor (Pianta et al., 2012); enhancing student connectedness with school through participation routines, giving students leadership opportunities, and considering student voice in classroom decisions (Gartland et al., 2011); communicate and co-create clear, attainable learning targets and success criteria, so high expectations are perceived as attainable (Locke and Latham, 2002; Ungar, 2011); and cultivating a positive classroom climate with varied and challenging lessons, connected to student interests to boost engagement (Gartland et al., 2011; Ungar, 2011).

2. Suggestions for Research

2.1 The study data were collected from 60 Grade 7 students, 29 Grade 8 students, 19 Grade 9 students, and 14 Grade 10 students from an international school in Yangon, Myanmar. Future researchers may conduct studies on larger student samples, more diverse schools, and even on particular subjects, to obtain more generalizable results.

2.2 The independent variable in this study (i.e., students' school grade) was found to have no significant effect on students' academic perseverance and resilience in learning. Therefore, it is suggested that future researchers include other variables that have been reported to have a significant impact on academic perseverance and resilience in learning, but were not included in this study, such as self-regulation for effort (DiNapoli, 2018; Roney, 2019); achievement motivation (Locke and Latham, 2002; Roney, 2019); school location and parental education (Thant and Thi, 2020); classroom climate (Gartland et al., 2011; Ungar, 2011); and student engagement (DiNapoli, 2018; Gartland et al., 2011; Ungar, 2011).

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