

## **THE RELATIONSHIP BETWEEN ACADEMIC RESILIENCE AND ACADEMIC STRESS OF SECONDARY SCHOOL STUDENTS**

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### **Abstract**

The main purpose of this study was to explore the relationship between academic resilience and academic stress of secondary school students. Descriptive survey method and quantitative research design were used in this study. This study was conducted with a sample of 821 (366 boys and 455 girls) secondary school students studying in eight schools of four districts in Yangon Region. The required sample was selected by using random sampling technique. As the research instruments, Resilience and Youth Development Questionnaire developed by Thomas. L. Hanson & Jin-Ok Kim (2007) and Formal Academic Stress Inventory developed by Tabachnick, B.G. and Fidell, L.S. (2007) were applied in this study. As a result of descriptive statistics, most of the students in this study were resilient students and they also have average academic stress. The results of *t*-test revealed that there was a significant difference between students' academic resilience by gender but the students' academic stress was not. ANOVA results showed that there were significant differences in students' academic resilience and academic stress according to age, districts and schools. Then, the academic stress of secondary school students had significant differences with regard to their parents' education and no. of siblings. The results also showed that there was a significant relationship between academic resilience and academic stress of secondary school students.

**Keywords:** Academic Resilience, Academic Stress, Secondary School Students

### **Introduction**

Education is a mindful purpose to train the children for fulfilling the responsibilities of adult life. For education, children access to school to learn new knowledge and develop cognition. Students spend most of their times at the school. They are encountered by a number of demands. A great source of demands comes from school and they also have pressure from their parents to excel their grades in their class. When a student is unable to cope with these demands conveniently, he will experience stress. Everyone is bombarded with everyday stresses. It affects the part of life. In school, adolescents often see themselves as being evaluated according to their academic performance and the force to achieve is an important measure of their success (Ang & Huan, 2006).

In Myanmar, high school students are mostly middle and late adolescents. In the present world, adolescents are facing enhanced difficulties due to fierce competition, peer pressure, parental expectations, and so on in their lives which give rise to many psychosomatic problems such as stress, anxiety, tension, failure, frustration and emotional turbulences in daily life. Parents' expectation towards their children is to pass the matriculation examination with high marks and many distinctions. This is the main source of stress among students. As Grade 9 is the foundation of matriculation level, they also are under pressure of achieving high grades in examinations. Although there is a high level of stress, resilient students can reduce its adverse effects. Therefore, students need to be resilience ones for reducing stress.

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### **Purpose of the Study**

The main purpose of this study was to explore the relationship between academic resilience and academic stress of secondary school students. The specific objectives of this study are:

1. To study academic resilience and academic stress of Grade 9 students
2. To compare academic resilience and academic stress of Grade 9 students by gender, age, districts and schools
3. To compare the academic stress of Grade 9 students according to parents' education and no. of siblings
4. To find out the relationship between academic resilience and academic stress of Grade 9 students

### **Scope and Procedure**

A total of 821 Grade 9 students were selected from eight schools in four districts of Yangon Region by using simple random sampling method. Questionnaire survey method and quantitative research design were used in this study.

### **Definition of Key Terms**

The following definitions of the key terms were used in this study.

**Academic Stress:** Academic stress is defined as a state of distress resulted from a student's evaluation of excessive academic demands (e.g., excessive assignments, excessive amount of exams), generally ending up with negative impacts on students' mental and physical health as well as their performance in school (Shruthers et al., 2000).

**Academic Resilience:** Academic resilience is defined as the ability to effectively deal with setback, stress or pressure in the academic setting (Fallon, 2010).

**Secondary School Students:** In this study, secondary school students refer to Grade 9 students.

## **Review of Related Literature**

### **Fostering Resilience in the School Context**

Without any hesitation the most influential source for fostering and developing resilience in children and youth is the family. But right after families, the next major influence goes to the schools. Primary schools and their staff play a key role in children's development. Since the compulsory schooling is just an entering stage of Life-long learning and knowledgeable adulthood, the amount of time that our children spend in school (that covers at least one third of their active day) is critically important. Through student-centered and holistic education all included children and youth should get enough stimulations and opportunities to develop various competences, life skills and optimistic life orientation. For all children, but especially for those whose families cannot appreciate their role, school and teachers have the opportunity, chance and responsibility to create and competently cover wider educational goals and life skills. Benard, (1998) found that teachers were the most frequently faced positive role models for children, outside their circle of family members. Furthermore, there are so many personal life stories that

communicate the powerful role that schools and teachers have to tip the scales from risk to resilience.

### **Teacher's Role in Fostering Resilience**

Schools foster positive development and avoid problems in the general population (Masten et al., 2008). When a protective environment is established and protective factors are increased, school climate and attendance will improve as well as students' academic achievement.

A teacher should never be only an instructor of academic skills, but also a confident and positive model for personal identification. As a person and as a professional, he or she should convey caring support to students by listening to them, demonstrating kindness, respect, compassion throughout the educational process. By expressing high expectations, teachers can structure and guide students' behavior and challenge their learning motivation and efficiency. Finally, a teacher is the one who should provide numerous opportunities for students to participate and contribute within a class, school and local environment to express their opinions, ideas, creativity and knowledge, to make choices, solve problems, work together, help others, interact with each other and with the community.

Benard (1998) recognized teachers as promoters of three crucial environmental protective factors:

- **Connection** that is transmitted through authentic relationships that communicate respect, availability, interest, and compassion. Such rapport also builds the critical motivational foundation for successful learning.
- **Competence** that follows high expectations, guided learning strategies and understanding metacognition. Such an approach influences the learning structure, guides behavior and challenges students with higher learning goals.
- **Contribution** that builds class and school community, personal value, involvement, responsibility, belonging by enhancing students' active and reflective learning, critical thinking, dialogue, collaborative work, curriculum planning, using participatory evaluating strategies, creating class rules, peer support, community service and connection.

### **Factors Influencing Academic Stress**

Environmental factors also contribute to the challenges encountered by adolescents. A variety of studies have identified factors contributing to academic stress and mental health problems. These include demographic factors (e.g., gender, age, ethnicity, socio-economic status), individual factors (e.g., personal characteristics), family factors (e.g., parents bonding, family connectedness, conflict with parents), school factors (e.g., school connectedness, conflict with teachers), and peer factors (e.g., bullying) (Ang & Huan, 2006b; Grant, et al., 2003; Mates & Allison, 1992; McMahon, et al., 2003).

*Age* as a developmental factor is mentioned by many authors. Children aged 9-14 most frequently experience problems with school, siblings, parents, and friends. Adolescents aged 14-17 years most commonly show four types of problems: school, parents, friends, and boyfriend/girlfriend problems. Young adolescents have their own specific developmental needs. Early adolescence is a period of physical, intellectual, emotional, and social development, which

involves many challenges which can enhance stress (Gerler, 1991). In this study, children at the age of 14-15 years have least stress among three age groups of 14-15 years, 16-17 years and 18 and above years. 18 years and above old students' academic stress has been found to be highest for all age groups in this study.

**Gender** is considered to be a predictor of academic stress and mental health. Boys mention more school problems and athletic performances as stressors, while girls nominate more interpersonal problems and oral presentations as stressors (Pincus & Friedman, 2004; Romano, 1997). However, in the study of Karr & Johnson (1991), stress perceived by girls and boys was the same. Romano (1997) found boys more likely to use acting out or anger as a coping device, while girls talked more with others to reduce stress, but De Anda et al. (1997) did not find any difference in gender with respect to coping strategies. In this study, the mean score for academic stress of male students is higher than females but there is no significant difference in academic stress between gender.

**Siblings** played a major role in an individual's development and had a significant effect on their academic and behavioral outcomes. A study of Latino adolescents in the United States indicated that the presence of at least one older sibling was related to higher quality sibling relationships and more academic motivation between sibling (Alfaro & Umaña-Taylor, 2010). The finding of this study indicates that only children have less stress than students have more siblings. A study of American adolescents in grades 7 to 12 indicated that lower household income and lower parental education in adolescence each were associated with higher prevalence of depression (Goodman, Slap, & Huang, 2003).

#### **Parental factors**

Cultural values influence parental expectations and their willingness to invest in their children's education. Parental expectations are often very high in Asian cultures that are influenced by the Confucian tradition. Students' whose parents were more educated have balanced educational expectations for their children. These students have less academic stress than students' whose parents were less educated. This study found that students' whose parents were primary school level educated parents have much stress than that of graduated level educated parents.

**Relationships with teachers** also played an important role in students' academic performance. Teachers have been shown to exert pressure upon students and influence parents to control their children's academic activities (West, et al., 1982). A study of students aged 10 to 16 years in Australia found that students were less likely to report experiencing somatic and depressive symptoms when they saw their relationship with teachers as supportive. Conversely, a higher level of depressive symptoms was reported when this relationship was perceived as stressful (Murray-Harvey & Slee, 2007).

**Peer relationships** also have been shown to contribute to academic stress. Research has suggested that a low level of popularity and poor peer relationships were associated with adolescent depression (Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007). Positive peer relationships could be protective for students because they improved academic performance through better motivation and involvement in school activities (Gonzales, Cauce, Friedman, & Mason, 1996; Shin, Daly, & Vera, 2007). Additionally, conflict with peers was also reported to be responsible for students' stress (Sun, Dunne, Hou, et al., 2012).

## Method

### Sample of the Study

**Table 1 Number of Participants Included in This Study**

Characteristics	Yangon Region								Total
	East		West		South		North		
School	H-1	H-3	H-5	H-2	H-1	H-1	H-2	BH-2	
Township	NO	SD	KMD	LMT	DL	TT	IS	MGD	
Male	39	53	49	61	35	38	49	42	366
Female	107	71	31	34	51	59	65	37	455
<b>Total</b>	146	124	80	95	86	97	114	79	821

**Note:** NO=North Okkalapa(School-1), SD=South Dagon(School-2), KMD=KyMyinTaing(School-3), LMT=Lanmataw(School-4), DL=Dala(School-5), TT=Twantay(School-6), IS=Insein(School-7), MGD=Mingalar don(School-8)

### Instrumentation

To measure the academic resilience of Grade 9 students, Resilience and Youth Development Questionnaire was used in this study. It was developed by Thomas. L. Hanson and Jin-Ok Kim in 2007. The questionnaire consists of 39 items using a Four-points Likert respond format (1-Not at all true, 2-A little true, 3-Pretty much true, and 4-Very much true). The questionnaire was composed of school resilience, home resilience, community resilience, peer resilience and internal assets.

To assess students' academic stress, Formal Academic Stress Inventory was used in this study. It was developed by Tabachnick, B.G. and Fidell, L.S. in 2007. This inventory consists of 29 items using a Five-points Likert respond format (1-Strongly disagree, 2-Disagree, 3-Neutral, 4-agree, 5-Strongly agree). It has six subscales – teachers stress, result stress, tests stress, peer stress, time management stress, and self-inflicted stress.

All the measures used in this study were adapted to Myanmar Version. After preparing the measuring scales, expert review was conducted for face validity and content validity by fourteen experts from Yangon University of Education and two experts from former lecturer who have special knowledge and close relationship in the field of educational psychology and educational test and measurement.

The pilot study was done with a sample of 70 Grade 9 students (35 boys and 35 girls) from Basic Education High School (Khattiya), Twantay in Yangon Region. The internal consistency (Cronbach's alpha) of Academic Resilience and Academic Stress were .875 and .799 respectively.

## Data Analysis and Findings

### Comparison for Academic Resilience and Academic Stress of Grade 9 Students

By using the descriptive procedure with the data obtained from the self-reported survey questionnaire, students' academic resilience and academic stress can be estimated.

**Table 2 Descriptive Statistic for Academic Resilience and Academic Stress of Grade 9 Students**

Variable	N	No. of Items	Mean	Mean (%)	SD
Academic Resilience	821	39	119.94	76.88	14.90
Academic Stress	821	27	80.93	59.94	13.46

Descriptive analyses revealed that the means and standard deviations of academic resilience and academic stress for the whole sample are 76.88% (SD=14.90) and 59.94% (SD=13.46), respectively (see Table 2). These findings showed that the academic resilience and academic stress of students in this study were somewhat satisfactory. Stress is necessary and unavoidable concomitant of daily living necessary because without some stress, everyone would be listless and apathetic creatures (Lazarus & Folkman, 1984).

**Table 3 Mean Percentage and Standard Deviation for Factors of Academic Resilience and Academic Stress of Grade 9 Students**

Variable	Factors	No. of Items	Mean(%)	SD
Academic Resilience	Community	3	74.25	15.10
	School	13	<b>72.97</b>	12.97
	Peer	3	<b>81.50</b>	20.83
	Home	7	80.56	13.22
	Internal assets	13	78.35	10.34
Academic Stress	Teacher	9	61.67	12.10
	Result	4	<b>65.19</b>	16.35
	Test	3	56.85	18.82
	Peer	4	62.47	16.10
	Time management	3	<b>51.72</b>	17.06
	Self-inflicted	4	56.83	15.74

It can be clearly seen that the mean score for peer resilience was highest and school resilience was lowest. The mean score for result stress was highest and time management stress was lowest. This can be said that the students had much stress concerning their exam results but good time management skill.

**Table 4 Comparison for Academic Resilience and Academic Stress of Grade 9 Students by Gender**

Variable	Gender	Mean	SD	t	Sig.
Academic Resilience	Boy	75.91	10.24	<b>-2.627**</b>	.009
	Girl	<b>77.66</b>	8.90		
Academic Stress	Boy	<b>60.47</b>	10.67	1.352	.177
	Girl	59.53	9.35		

\*p<.05, \*\*p<.01

The mean score for girls were higher in academic resilience than that of boys. The academic stress for boys were higher than that of girls. the result of independent sample t-test confirmed that there was a statistically significant difference in academic resilience by gender at 0.01 level. There was no significant difference between boys and girls in academic stress.

**Table 5 Comparison for Each Factor of Academic Resilience of Grade 9 Students by Gender**

Factor	Gender	Mean	SD	<i>t</i>	Sig.
Community	Boy	<b>76.50</b>	15.97	<b>3.868***</b>	<b>.000</b>
	Girl	72.44	14.13		
School	Boy	<b>73.05</b>	13.09	.146	.884
	Girl	72.91	12.90		
Peer	Boy	79.21	21.28	<b>-2.830**</b>	<b>.005</b>
	Girl	<b>83.33</b>	20.30		
Home	Boy	77.94	13.84	<b>-5.188***</b>	<b>.000</b>
	Girl	<b>82.68</b>	12.30		
Internal assets	Boy	76.78	11.14	<b>-3.939***</b>	<b>.000</b>
	Girl	<b>79.62</b>	9.47		

\*\*p<.01, \*\*\*p<.001

Based on the results shown in Table 5, there were statistically significant differences in community resilience, home resilience and internal assets by gender at 0.001 level and peer resilience of students at 0.01 level. It was found that boys have greater community and school resilience because they are more likely to participate in community and school activities. Girls have profound resilience in peer, home and internal assets because they support and care towards their peers facing stressful life circumstances and they have strong relationship with adults. There was no statistically significant difference in school resilience. It can be said that most boys and girls have the same opportunities to learn and respond during instruction.

**Table 6 Comparison for Each Factor of Academic Stress of Grade 9 Students by Gender**

Factor	Gender	Mean	SD	<i>t</i>	Sig.
Teacher	Boy	<b>62.24</b>	13.16	1.218	.224
	Girl	61.21	11.16		
Result	Boy	<b>65.75</b>	16.83	.884	.377
	Girl	64.74	15.95		
Test	Boy	<b>58.23</b>	19.62	1.892	.059
	Girl	55.74	18.10		
Peer	Boy	61.24	16.84	-1.957	.051
	Girl	<b>63.45</b>	15.41		
Time management	Boy	51.02	16.86	-1.051	.294
	Girl	<b>52.28</b>	17.21		
Self-inflicted	Boy	<b>59.22</b>	15.94	<b>3.944***</b>	<b>.000</b>
	Girl	<b>54.90</b>	15.32		

\*\*\*p<.001

Although there were no significant differences in teacher stress, result stress, test stress, peer stress and time management stress by gender, *there was statistically significant difference in self-inflicted stress at 0.001 level*. Therefore, adolescents can experience high levels of stress as they are in a developmental period with significant psychological, social and physical changes (Williams, Holmbeck, & Greenley, 2002). The most significant stressors during adolescence were related to school where adolescents spent much of their time (Ang & Huan, 2006a).

**Table 7 Comparison for Academic Resilience and Academic Stress of Grade 9 Students by Age**

Variable	Age	Mean	SD	F	Sig.
Academic Resilience	14-15	<b>77.10</b>	9.52	.761	.468
	16-17	76.65	9.61		
	18 and above	<b>74.32</b>	9.63		
Academic Stress	14-15	<b>58.97</b>	9.85	<b>6.446**</b>	<b>.002</b>
	16-17	61.40	9.87		
	18 and above	<b>63.01</b>	12.09		

\*\*p&lt;.01

Although there were no significant differences in academic resilience for all age groups of Grade 9 students, there were significant differences in academic stress according to age at 0.01 level. To obtain more detailed information of which age had significant differences, Post Hoc Test was executed by Scheffe multiple comparison procedure (see Table 8).

**Table 8 The Results of Multiple Comparison for Academic Stress of Grade 9 Students by Age**

Variable	(I)Age	(J)Age	Mean difference(I-J)	Sig.
Academic Stress	16-17 years	14-15 years	2.43**	.003

\*p&lt;0.05, \*\*p&lt;0.01

It can be said that students at the age of 14-15 years were more willingness to learn and positive relationship with teachers and peers. These students can have less amount of academic stress. According to the result of multiple comparison analysis, academic stress of students was dependent upon their age. It can be concluded that Grade 9 students' academic resilience in this study did not depend on their age.

**Table 9 Comparison for Academic Resilience and Academic Stress of Grade 9 Students According to Districts**

Variable	District	Mean	SD	F	Sig.
Academic Resilience	East	76.92	9.31	<b>7.925***</b>	<b>.000</b>
	West	<b>74.05</b>	10.26		
	South	77.67	8.99		
	North	<b>78.64</b>	9.23		
Academic Stress	East	<b>58.46</b>	9.73	<b>3.948**</b>	<b>.008</b>
	West	60.95	10.37		
	South	59.72	9.20		
	North	<b>61.35</b>	10.40		

\*\*p&lt;0.01, \*\*\*p&lt;0.001

ANOVA result revealed that there were significant differences for academic resilience of Grade 9 students across four districts at 0.001 level. For academic stress, the differences were significant at 0.01 level from students in four districts of Yangon Region. Being Grade 9 students, they have different levels of resilience and stress on the basis of their districts.

**Table 10 The Results of Multiple Comparison for Academic Resilience and Academic Stress of Grade 9 Students According to Districts**

Variable	(I) District	(J) District	Mean difference(I-J)	Sig.
<b>Academic Resilience</b>	East	West	2.872*	.020
	South		3.618**	.004
	North		4.592***	.000
<b>Academic Stress</b>	North	East	2.89*	.023

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The results showed that there were significant mean differences between East District and West District at 0.05 level, South District and West District at 0.01 level and North District and West District at 0.001 level for academic resilience. This can be said that students from West District had poor socio-emotional adjustment, poor communication skills, limited parental education and family discord than other three districts.

For academic stress, there was a significant mean difference between North District and East District at 0.05 level. It can be said that students from North District may have heavy academic workload and pressure from the teacher may be excessive. Their parents and teachers expected them to get good grades in exams, competition for grades and finishing the assignments at school.

**Table 11 Comparison for Academic Resilience and Academic Stress of Grade 9 Students According to Schools**

Variable	Schools	Mean	SD	F	Sig.
<b>Academic Resilience</b>	School-1	77.23	9.30	<b>3.951***</b>	<b>.000</b>
	School-2	76.56	9.35		
	School-3	75.02	8.37		
	School-4	<b>73.23</b>	11.59		
	School-5	76.68	8.88		
	School-6	78.55	9.04		
	School-7	78.30	9.21		
	School-8	<b>78.88</b>	9.28		
<b>Academic Stress</b>	School-1	<b>55.96</b>	9.59	<b>7.237***</b>	<b>.000</b>
	School-2	61.40	9.08		
	School-3	62.14	11.33		
	School-4	59.95	9.43		
	School-5	59.01	9.51		
	School-6	60.34	8.91		
	School-7	<b>64.51</b>	9.40		
	School-8	59.16	10.534		

\*\*\*p<.001

ANOVA result showed that there were significant differences in Grade 9 students' academic resilience and academic stress by schools at 0.001 level. In order to find out which particular school had significant difference in academic resilience and academic stress, Post Hoc Test was conducted (see Table 12).

**Table 12 The Results of Multiple Comparison for Academic Resilience and Academic Stress of Grade 9 Students According to Schools**

Variable	(I)School	(J)School	Mean difference(I-J)	Sig.
Academic Resilience	School-6	School-4	5.317*	.034
	School-8		5.648*	.010
Academic Stress	School-2	School-1	5.45**	.004
	School-3		6.18**	.004
	School-7	School-1	8.55***	.000
		School-8	5.35*	.050

\*p&lt;0.05, \*\*p&lt;0.01, \*\*\*p&lt;0.001

For academic resilience, the differences were significant at 0.05 level for School-6 and School-8 with School-4. For academic stress, the significant difference was existed at 0.01 level for School-2 and School-3 with School-1 and at 0.001 level for School-7 with School-1 and at 0.05 level for School-7 with School-8. The instructional plan of School-4 may have inadequate resources and lack promotion of self-concept and self-esteem. Students from School-1 were low in academic stress. It can be said that their school provided opportunity to learn advanced content and higher order thinking skills. Students have frequent and high-quality teacher-student interactions. They themselves may have engagement and participated in goal-setting.

**Table 13 Comparison for Academic Stress of Grade 9 Students by Parents' Education**

Variable	Education Level	Mean	SD	F	Sig.
Academic Stress by Father's Education	Primary	61.64	9.45	<b>6.910***</b>	<b>.000</b>
	Middle	61.35	9.46		
	High	60.42	9.29		
	Graduate	<b>57.54</b>	11.01		
Academic Stress by Mother's Education	Primary	61.35	9.49	<b>7.255***</b>	<b>.000</b>
	Middle	61.38	10.08		
	High	60.38	9.68		
	Graduate	<b>57.44</b>	<b>9.97</b>		

\*\*\*p&lt;.001

ANOVA result showed that there were significant differences among parents' education in academic stress of Grade 9 students at 0.001 level. To obtain more detailed information, multiple comparison (Post Hoc- Scheffe) was calculated (see Table 14).

**Table 14 The Results of Multiple Comparison for Academic Stress of Grade 9 Students by Parents' Education**

	(I)FEdu	(J)FEdu	Mean difference(I-J)	Sig.
Academic Stress by Father's Education	Primary	Graduate	4.096*	.038
	Middle		3.812**	.001
	High		2.877**	.011
Academic Stress by Mother's Education	Primary	Graduate	3.909*	.024
	Middle		3.945***	.000
	High		2.947*	.011

\*p&lt;0.05, \*\*p&lt;0.01, \*\*\*p&lt;0.001

According to Table 14, the results explained that Primary education level parents were significantly different with Middle education level, High education level and Graduate education

level parents. Therefore, students whose parents' were Primary education level had highest academic stress. It can be said that the more the parent was educated, the less the academic stress of the student.

**Table 15 Comparison for Academic Stress of Grade 9 Students According to the no. of Siblings**

Variable	No.	N	Mean	SD	F	Sig.
No. of Siblings	Only one child	148	<b>58.76</b>	10.760	<b>5.236**</b>	<b>.001</b>
	1-3	594	59.85	9.785		
	4-7	68	61.85	9.084		
	8-10	11	69.83	7.784		

\*\*p<0.01

ANOVA result indicated that the significant difference existed among no. of siblings in academic stress at 0.01 level. To be specific, multiple comparison (Post Hoc- Scheffe) was calculated to exemplified the significant differences (see Table 16).

**Table 16 The Results of Multiple Comparison for Academic Stress of Grade 9 Students According to the no. of Siblings**

	(I)NSib	(J)NSib	Mean difference(I-J)	Sig.
No. of Siblings	8-10	Only one child	11.073**	.005
	8-10	1-3	9.986*	.012

\*p<0.05, \*\*p<0.01

The result of the multiple comparison analysis revealed that students who had 8-10 no. of siblings were statistically significant with students who were only one child at 0.01 level and with those students who had 1-3 no. of siblings at 0.05 level. According to the result, the more the number of siblings, the more the stress of students.

**The Relationship Between Academic Resilience and Academic Stress of Grade 9 Students**

**Table 17 Correlation Between Academic Resilience and Academic Stress of Grade 9 Students**

Variable	Academic Resilience	Academic Stress
Academic Resilience	1	-.096**
Academic Stress		1

\*\*Correlation is significant at the 0.01 level (2-tailed).

The table indicated that there was a significant negative relationship between academic resilience and academic stress of Grade 9 students at 0.01 level. Although there is a high level of stress, resilient students can reduce its adverse effects. So, students need to be resilient ones for reducing stress.

**Conclusion, Discussion and Recommendations**

**Conclusion and Discussion**

This study was conducted to find out the relationship between academic resilience and academic stress of secondary school students. A total of 821 Grade 9 students: 44.6% (366) boys and 55.4% (455) girls from eight high schools of four districts in Yangon Region were selected as participants for this study. According to the result of independent sample t-test, there was a

significant gender difference for academic resilience of Grade 9 students. It showed that girls were more resilient than boys. Wright & Masten (2005) concluded that girls are more resilient than boys and also girls are less exposed to risky behaviors than boys. According to ANOVA result, there was no significant difference between age for academic resilience of Grade 9 students. Therefore, resilience does not depend on the age. It is mostly associated with the gender, school, family and community. According to districts, academic resilience for North District was highest among the four districts. ANOVA result pointed out that there was a significant difference in academic resilience of Grade 9 students among districts. Post Hoc Test result showed that students from East, South and North District were significant from students West District. This may be said that students from North District had good socio-emotional adjustment and good communication skills. Among the eight schools, students from School-6 and School-8 were high in academic resilience by comparing with School-4. This may be possible that these schools had strong leadership by principal, safe and orderly school atmosphere that rewards student achievement and effective classroom management.

For academic stress, although the mean score for boys were slightly higher than girls, there was no significant gender difference according to the result of independent sample t-test. They found that stress perceived by girls and boys was the same. According to the ANOVA result, academic stress has significant difference between age of the students. Students at the age of 16-17 years old students were different from 14-15 years old students. It may be said that adolescent is a period of physical, intellectual, emotional, and social development, which involves many challenges which can enhance stress. Students at the age of 18 years and above old were not consistent with the Grade 9 level because of the socioeconomic status of their parents and their development of physical, mental and cognitive skills. Therefore, they may have highest stress in concerning academic situation than others students. ANOVA result showed that there were significant differences in academic stress of Grade 9 students according to districts. Students from North District had highest academic stress and those from East district had lowest among four districts. It may be said that students from North District may have heavy academic workload and pressure from the teacher may be excessive. Their parents and teachers expected them to get good grades in exams, competition for grades and finishing the assignments at school. Moreover, there was a significant difference in academic stress according to schools. Students from School-1 had least academic stress by comparing with other schools in this study. This school may provide committed relationship between teachers and students and a motivational context for learning that recognizes differences in students' backgrounds, interests, and prior knowledge. The significant difference was existed for School-2, School-3 and School-7 with School-1 and for School-7 with School-8.

The mean score for academic stress of Grade 9 students according to parents' education showed that students whose parents had graduate level were lowest. There was a significant difference in academic stress of Grade 9 students according to parents' education. ANOVA result also showed that there was a significant difference in academic stress of Grade 9 students according to the no. of siblings. Students who had 8-10 no. of siblings had statistically significant difference with students who were only one child and with those students who had 1-3 no. of siblings. It may be possible that these students may not have positive sibling relationship. Adolescents with positive sibling relationships experienced better coping and less stress than students with negative sibling relationships. Moreover, according to the Pearson's Correlation, there was a significant negative relationship between academic resilience and academic stress

( $r=-0.096$ ) of Grade 9 students at 0.01 level. A high level of stress is associated with poor personal resilience in withstanding stress, as well as poor quality of life.

### Recommendations for Future Research

To explore the academic stress of students, researcher should consider variables not only academic resilience but also parental support, self-esteem and psychological well-being etc. More research should be done on the students' academic resilience and academic stress with a study of longitudinal design to clarify the grade appropriate differences in academic resilience and academic stress and how their grade level affects their level of academic resilience and academic stress. Further studies should be investigated for every Grade level to have comparison between different Grades. To be concluded, it is hoped that the findings presented in this study will provide some insights in the influence of academic resilience and academic stress in the future.

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