

ACADEMIC STRESS AND ITS ASOCIATIONS TO SOME FACTORS AMONG SECONDARY SCHOOL STUDENTS IN THE CENTRAL OF VIET NAM

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Abstract

Background: This study aims to 1) Identify the prevalence among students of some secondary schools in Thua Thien Hue province, Vietnam and 2) Explore some factors influencing academic stress among secondary school students. **Methods:** This research comprised of a school-based cross-sectional study conducted in Thua Thien Hue province in 2012. A sample of 400 students at 7th grade and 9th grade classes in four secondary schools was randomly recruited and asked to complete a self-administered questionnaire. The Educational Stress Scale for Adolescents (ESSA), parental bonding instrument and school connectedness scale were employed to investigate academic stress of the students, measure the status of parental bonding and school connectedness of these students. In-depth interviews and group discussions among students, parents and principal teachers were also conducted. **Results:** 51.3% students had high and medium academic stress while these percentage for low academic stress was 48.8%. Regarding five dimensions of educational stress including pressure from study, worry about grade, despondency, self expectation and workload, prevalence of students who got high stress on those dimensions were 41.7%, 45.7%, 49.0%, 41.2% and 37.8% respectively. Several factors found to be significantly associated with academic stress among secondary school students included area of living, conflict with family, care of mothers, care of fathers, school connectedness, conflict with teachers at school and conflict with friends. **Conclusion:** The study showed high frequencies of academic stress among students of some secondary schools in central of Vietnam. However, the ESSA scale with 5 concerned dimensions might not enclose all facets of the academic stress. Therefore, further related studies should be conducted, helping to reduce the problem in the community.

Keywords: *Academic stress, secondary school students, parental bonding, school connectedness.*

1. BACKGROUND AND OBJECTIVES

In Vietnam, it is generally believed that the better people perform academically the better life they will have. Therefore, pressure to succeed in learning is increasing especially when academic environment recently becomes more competitive. Academic stress is considered as mental distress related to frustration associated with academic

failure, anticipation of future academic failure or an awareness of the possibility of failure (Verma and Gupta -1990). This is a subjective psychological state associated with an individual's perception of possible future outcomes or consequences related to academic performance.

Many recent surveys have shown that there is a very strong relationship between

academic stress and mental health issues for teenagers all over the world. In addition, recent studies implemented around the world as well as in Vietnam showed high rates of mental problems among students. According to Dang Hoang Minh and Hoang Nhat Tu, in a study conducted in the North of Vietnam, the prevalence of teenager students having mental problems was roughly 25%. In another study on mental health of high school students, Le Thi Kim Dung et al. (2007) have found the prevalence of students getting anxiety and depression were 12.3% and 8.4% respectively.

It is considered that there is a lack of systemic research on academic stress among students and its consequences in the central of Vietnam. Therefore, the study *“Academic stress and its associations among secondary school students in the central of Vietnam”* was conducted in order to:

- 1. Identify the prevalence among students of some secondary schools in Thua Thien Hue province, Vietnam;
- 2. Explore some factors influencing academic stress among secondary school students.

This is also the first study that uses the ESSA scale - Educational Stress Scale for Adolescents (developed by Sun, Dunne, Hou

and Xu) is used to evaluate academic stress of students carried out in the central of Vietnam.

2. MATERIALS AND METHODOLOGY

2.1. Study design, Time and Location

This study includes a descriptive cross-sectional survey with a random sample of students in grade 9 (who were generally anticipated having high academic pressure) and grade 7 (comparison group) from four secondary schools in Thua Thien Hue province (two schools in the city and two in rural areas). The survey was conducted in 2012. In-depth interviews and group discussions among students, parents and principal teachers were also implemented.

2.2. Sample size and sampling method

The calculated sample size was 384. However, in order to preventing incomplete date, the sample size was increased up to 400.

A multi-stage cluster sampling was recruitment to select participants. Among the list of all secondary schools in Thua Thien Hue province, we randomly selected 2 secondary schools in urban areas and 2 in the rural areas. Each school, we collected all student ‘s names in grade 7 and 9, then randomly selected 50 students per grade. Hence, the total number of students of participating in the survey was 400.

Table 1. Individual characteristics of participants in the survey

Characteristics	Frequency (n)	Percentage (%)	Characteristics	Frequency (n)	Percentage (%)
Gender			Grade		
Male	175	43.8	7	222	55.5
Female	225	56.2	9	178	44.5
GPA			Study time		
Not good	8	2.0	<1 hour	21	5.3
Average	324	81.0	1 -3 hours	140	35.0
Good	68	17.0	>3 hours	239	59.7
Attending to added class/ having home tutorial			Living areas		
Yes	373	93.3	Urban	302	75.5
No	27	6.7	Rural	98	24.5

2.3. Instrument development

The self-administered questionnaire was developed, based on:

- The Educational Stress Scale for Adolescent (the ESSA) was developed by the author Sun, Dunne, Hou and Xu (2010) and has been used to investigate the academic pressure of students.

ESSA scale comprised of 16 questions (n=16) using 5-point scale from 1 (strongly disagree) to 5 (strongly agree) with higher scores indicating greater stress.

The scale covered five dimensions of educational stress including pressure from study (4 items), worry about grade (3 items), despondency (3 items), self-expectation (3 items) and workload (3 items).

The total score was recorded into three groups using textiles to have better estimation of the differences. The cut-off points suggested by the author includes <50 (low stress), 51-58 (medium stress) and >58 (high stress).

- Parental bonding instrument (PBI – developed by Parker, Tupling and Brown - 1979).

- School connectedness scale (adapted from the National Longitudinal Study on Adolescent Health by Resnick and et al. - 1997).

2.4. Data analysis

- The data collected will be processed and analyzed, using SPSS 11.5 software.

- Beside descriptive information was calculated, the χ^2 , ANOVA tests were used to analysis data.

- $p < 0.05$ was chosen as statistically significant cut-off point.

2.5. Research ethics

The study was received approval from the Scientific Committee of Hue University of Medicine and Pharmacy. Participation in this research was confidential and students joining in the study were completely voluntary and had signed in a consent form. Participants could also quit of the study at any time.

3. RESULTS AND DISCUSSIONS

3.1. Prevalence of academic stress among students

The study found that 20.0% students had high academic stress while these percentages for medium and low academic stress were 31.2% and 48.8% respectively.

The ESSA score = 49.99 ± 9.636

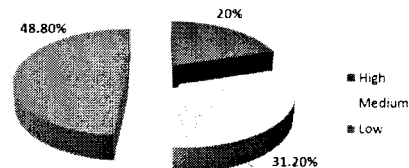


Chart 1. Prevalence of academic stress among students

Table 2: Dimensions of educational stress

Dimension	Frequency (n)	Percentage (%)	Mean (SD)	Dimension	Frequency (n)	Percentage (%)	Mean (SD)
Pressure from study				Worry about grades			
Low	233	58.3	11.72 (3.38)	Low	217	54.3	10.75 (2.57)
High	167	41.7		High	183	45.7	
Despondency				Self-expectation			
Low	204	51.0	8.38 (2.41)	Low	235	58.8	9.72 (2.74)
High	196	49.0		High	165	41.2	
Workload							
Low	249	62.2	9.43 (2.80)				
High	151	37.8					

Regarding 5 dimensions of educational stress, despondency was the most important element that is cause the stress for student.

3.2. Factors related to academic stress

3.2.1. Relationships between academic stress and individual characteristics of students

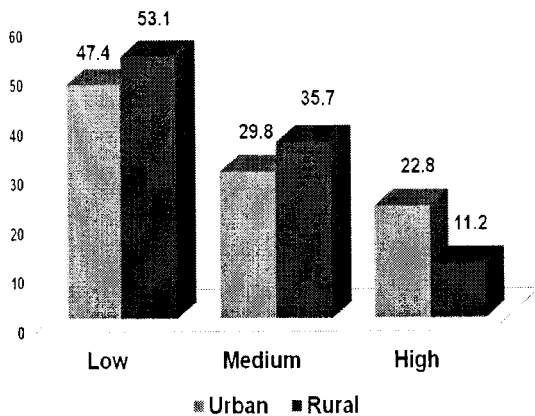


Chart 2: Relationships between academic stress and living areas

In term of individual characteristic of students, we only found a significant relationship between academic stress and living area ($p = 0.042$). Students who live in urban area get higher academic stress than students who live in rural area. However, in this study, there is no difference in academic stress between male and female, and other characteristics such as GPA, study time, grade, attending to added classes/ having home tutorials.

3.2.2. Relationships between academic stress and family environment factors

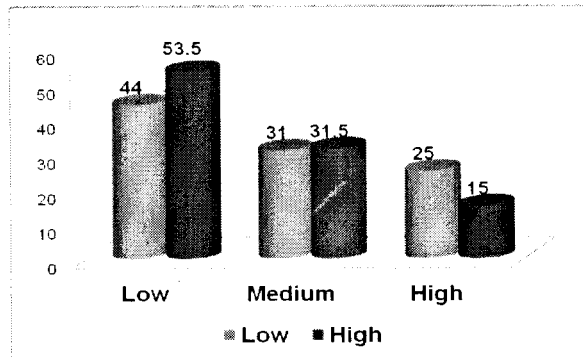


Chart 3. Relationships between academic stress and care of the father

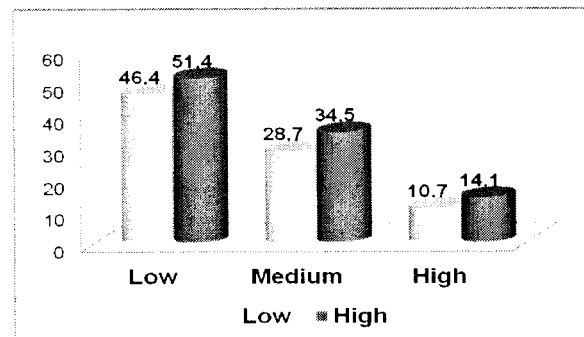


Chart 4. Relationships between academic stress and care of the mother

The results of the study showed the relationship between academic stress and care of the parents. On the other hand, we have not found the relationship between the academic stress and other factors: marital status of parents, control of parents, the number of siblings in the family, having many children in the family.

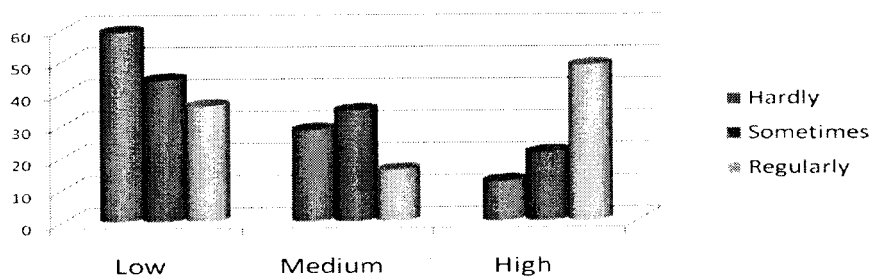


Chart 5. Relationships between academic stress and conflict with parents

This study showed a strong relationship between academic stress and conflict with parents ($p < 0.001$). It seems that students often conflict with their parents will get higher academic stress than other students.

3.3.3. Relationships between academic stress and school environment factors

Table 3. Relationships between academic stress and school environment factors

Factors	Academic stress			p -value
	Low	Medium	High	
School connectedness				
Low	96 (52.1%)	43 (23.4%)	45 (24.5%)	0.004
High	99 (45.8%)	82 (38.0%)	35 (16.2%)	
Conflict with teacher at school				
Hardly	145 (50.3%)	90 (31.3%)	53 (18.4%)	0.019
Sometimes	39 (39.4%)	35 (35.4%)	25 (25.2%)	
Regularly	11 (84.6%)	0 (0.0%)	2 (15.4%)	
Conflict with friends				
Hardly	51 (64.6%)	18 (22.8%)	10 (12.6 %)	0.008
Sometimes	126 (46.7%)	90 (33.3%)	54 (20.0%)	
Regularly	18 (35.3%)	17 (33.3%)	16 (31.4%)	

The research also found significant relationships between academic stress and school environment including the following factors: school connectedness, conflicts with teachers and friends.

Limitations of the study

This study was considered having some limitations. Firstly, information was collected solely relying upon self-administered questionnaire of students so that it might be not an objective assessment. On the other hand, the ESSA might be not enclose all the facets of the academic stress. There are other potential influencing factors that might be not covered in the study stress as: economic conditions of the family, regional security, relationships, and social activities...

4. CONCLUSIONS

The present study showed high frequencies of academic stress among students of some secondary schools in central of Vietnam - 20.0% students had high academic stress while these percentages for medium and low academic stress were 31.2% and 48.8% respectively (ESSA score: 49.99 ± 9.636).

Regarding five dimensions of educational stress: students got high stress of pressure from study was 41.7%, those of worry about grade was 45.7%, of despondency was 49.0%, of self-expectation was 41.2% and of workload was 37.8%. It seems despondency was the most important element that cause the stress for students. Additionally, the study found many similar related factors of academic stress to other studies (within family and school environments, including: areas of living, conflict with family, care of mothers, care of fathers, school connectedness, conflicts with teachers at school and conflict with friends). However, limitations of the study made it hard to evaluated other factors, basically for recall bias from the information collection relying upon the self-administered questionnaire. Moreover, the ESSA with 5 concerned dimensions might not enclose all facets of the academic stress. Therefore, more further studies overcoming these basic limitations should be conducted to examine more and in-deep relationships with academic stress, helping to reduce the problem in the community.

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