

# Curriculum and Sex-specific Differences in Academic Stress Arising from Perceived Expectations

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**Abstract**—With the aim of knowing whether curriculum and sex differences exist in academic stress arising from perceived expectations, high school students were asked to respond to the Academic Expectations Stress Inventory (AESI). AESI is a nine-item inventory with two domains, namely: expectations of teachers/parents and expectations of self. Out of the 504 officially enrolled high school students in a state college, 469 responded to the inventory. Responses were analyzed using independent samples t-test. Significant differences were found between the mean scores of the respondents coming from the Science and the Vocational curriculum. The respondents from the Science curriculum consistently registered higher mean scores. Likewise, significant differences were found between the male and the female respondents. The female respondents consistently registered higher mean scores.

**Keywords**—academic stress, curriculum and sex differences, high school students, perceived expectations

## I. INTRODUCTION

STRESS is associated with the absence of inner peace in Eastern philosophies [1]. Moreover, “stress is a peculiar problem in that no one can consistently predict the amount or kind of stress that can turn an otherwise normal, positive human situation into one involving an unpredictable, irrational response” [2, p.2]. One form of stress constantly being experienced by students is academic stress. According to [3], “academic stress is the product of a combination of academic-related demands that exceed the adaptive resources available to an individual” [p.107] and academic stress adversely affects the overall adjustment of students [4].

Emotional disabilities, aggressive behavior, shyness, social phobia, and often lack of interest in otherwise enjoyable activities are the most common signs of stress [4] and several studies have already documented the effect of stress on students like that of [4-8]. Therefore, it is a concern that must not be taken for granted. As [9] advocates, “screening for high risk students and launching programs and activity for counseling the adolescents or parents is essential” [p.240].

The life of high school students is generally perceived to be stressful. “Schoolwork, family adaptation and peer relationships are the main sources of stress” [9, p.240] and “in an Asian context, academic stress arising from adolescents’

self-expectations and expectations of others (e.g., parents and teachers) are particularly salient” [10, p.134]. Specifically, among Filipinos, there is no concept of the other in the other person and the other is also one’s self [11]. Therefore, the perceived expectations of others are regarded as one’s own and really matter. Generally, once in school, “adolescents often see themselves as being evaluated in terms of their academic performance and the pressure to excel is an important measure of their success” [10, p.134].

In the end, since academic stress arising from perceived expectations is considered a reality among Asians, necessary investigation of this matter is important. Understanding academic stress arising from perceived expectations with reference to curriculum and sex differences can be a good start since it can provide valuable insights that can serve as bases for introducing interventions where they are needed the most.

## II. METHOD

With the aim of knowing if curriculum and sex differences exist in academic stress arising from perceived expectations among high school students, the Academic Expectations Stress Inventory (AESI) was administered. The AESI is a self-report scale to be completed by students. AESI attempts to measure perceived stress of students as it relates to academic work/concerns. Sources of stress could come from two main domains: expectations of teachers/parents and self-expectations. The AESI consists of nine items, and two scales [12].

Out of the 504 officially enrolled high school students in a state college, 469 responded to the inventory. These high school students belonged to two curricula (Science and Vocational). Following the purpose of the study, these two hypotheses were tested:

Hypothesis 1: There are differences in academic stress arising from perceived expectations between the mean scores of the respondents from the two curricula.

Hypothesis 2: There are differences in academic stress arising from perceived expectations between the mean scores of the male and the female respondents.

Responses were analyzed using independent samples t-test. The independent samples t-test is used when one wants to examine the mean difference between two exclusive or independent groups [13].

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### III. RESULTS

The differences in academic stress arising from perceived expectations between the mean scores of the respondents from the two curricula are presented in Tables I to III while the differences in academic stress arising from perceived expectations between the mean scores of the male and the female respondents are presented in Tables IV to VI.

TABLE I  
CURRICULUM-SPECIFIC DIFFERENCE IN TOTAL ACADEMIC STRESS ARISING FROM PERCEIVED EXPECTATIONS

Curriculum	N	M	SD	t	p
Science	123	32.41	6.07	4.02	0.00
Vocational	346	29.99	5.64		

Table I presents the difference in academic stress arising from perceived expectations between the mean scores of the respondents from the two curricula. The mean scores presented in this table are the combined mean scores of the respondents in the two domains of ASEI (expectations of teachers/ parents and self-expectations). As seen in Table I, there is a significant difference ( $p= 0.00$ ) between the mean scores of the respondents. With reference to the mean scores, respondents from the Science curriculum scored higher.

TABLE II  
CURRICULUM-SPECIFIC DIFFERENCE IN ACADEMIC STRESS ARISING FROM PERCEIVED EXPECTATIONS OF TEACHERS/PARENTS

Curriculum	N	M	SD	t	p
Science	123	17.95	3.10	2.10	0.04
Vocational	346	17.11	3.76		

Table II presents the difference in academic stress arising from perceived expectations of teachers/parents between the mean scores of the respondents from the two curricula. The mean scores presented in this table are the mean scores of the respondents in the said domain of ASEI (expectations of teachers/parents). As seen in Table II, there is a significant difference ( $p= 0.04$ ) between the mean scores of the respondents. With reference to the mean scores, respondents from the Science curriculum scored higher.

TABLE III  
CURRICULUM-SPECIFIC DIFFERENCE IN ACADEMIC STRESS ARISING FROM PERCEIVED SELF-EXPECTATIONS

Curriculum	N	M	SD	t	p
Science	123	14.46	2.93	5.53	0.00
Vocational	346	12.88	2.65		

Table III presents the difference in academic stress arising from perceived self-expectations between the mean scores of the respondents from the two curricula. The mean scores presented in this table are the mean scores of the respondents in the said domain of ASEI (self-expectations). As seen in Table III, there is a significant difference ( $p= 0.00$ ) between the mean scores of the respondents. With reference to the mean scores, respondents from the Science curriculum scored higher.

TABLE IV  
SEX-SPECIFIC DIFFERENCE IN TOTAL ACADEMIC STRESS ARISING FROM PERCEIVED EXPECTATIONS

Sex	N	M	SD	t	p
Male	189	28.90	6.02	5.41	0.00
Female	280	31.79	5.43		

Table IV presents the difference in academic stress arising from perceived expectations between the mean scores of the male and the female respondents. The mean scores presented in this table are the combined mean scores of the respondents in the two domains of ASEI (expectations of teachers/ parents and self-expectations). As seen in Table IV, there is a significant difference ( $p= 0.00$ ) between the mean scores of the respondents. With reference to the mean scores, female respondents scored higher.

TABLE V  
SEX-SPECIFIC DIFFERENCE IN ACADEMIC STRESS ARISING FROM PERCEIVED EXPECTATIONS OF TEACHERS/PARENTS

Sex	N	M	SD	t	p
Male	189	16.38	4.02	4.50	0.00
Female	280	17.97	3.57		

Table V presents the difference in academic stress arising from perceived expectations of teachers/ parents between the male and the female respondents. The mean scores presented in this table are the mean scores of the respondents in the said domain of ASEI (expectations of teachers/parents). As seen in Table V, there is a significant difference ( $p= 0.00$ ) between

the mean scores of the respondents. With reference to the mean scores, female respondents scored higher.

TABLE VI  
SEX-SPECIFIC DIFFERENCE IN ACADEMIC STRESS ARISING FROM PERCEIVED  
SELF-EXPECTATIONS

Sex	N	M	SD	t	p
Male	189	12.52	2.89	5.03	0.00
Female	280	13.82	2.64		

Table VI presents the difference in academic stress arising from perceived self-expectations between the male and the female respondents. The mean scores presented in this table are the mean scores of the respondents in the said domain of ASEI (self-expectations). As seen in Table VI, there is a significant difference ( $p= 0.00$ ) between the mean scores of the respondents. With reference to the mean scores, female respondents scored higher.

#### IV. DISCUSSION

Academic stress arising from perceived expectations either by others (teachers/parents) or by self is a reality among Asians and merits attention. The study at hand focused on the differences in the experience of academic stress arising from perceived expectations with reference to curriculum and sex with the hope of gaining valuable insights that can serve as bases for interventions. Significant differences were found between the mean scores of the respondents coming from two curricula. Respondents from the Science curriculum consistently registered higher mean scores. Likewise, significant differences were found between the male and the female respondents. Female respondents consistently registered higher mean scores.

In the State College where the respondents of this study came, on the average, there are more than 300 high school freshmen applicants in any given School Year. And not everyone is admitted. The number of students to be admitted as freshmen will depend on the number of graduates in the previous School Year. Since it is a laboratory high school, only 500 students are allowed to be enrolled (first year to fourth year). Technically speaking, admission to the high school program is already a rigorous process.

Specifically, the consistent higher mean scores of the respondents from the Science curriculum as presented in Tables I to III can be attributed to the fact that this curriculum is considered to be more rigorous compared to the other. Firstly, admission to the Science curriculum requires relatively high stanines (standard nine with nine being the highest) in the first examination (about 5 and above), relatively high transmuted scores in the achievement test given as a second examination (about 86% and above), and relatively high grade weighted averages in Sixth grade. Starting the School Year 2009-2010, an interview is conducted among the applicants as

an addition. Only those who are included in the top 50 based on the combined scores from the first examination, second examination, and general weighted average are subjected to the interview. Out of the top 50 applicants, only 30 will be admitted. Secondly, once admitted to the Science curriculum, to be retained, a student is required to have no grade below 80% in any subject in any grading period, and a general average of not less than 85% in any subject thus making the general average for the School Year no less than 85%. In contrast, the Vocational curriculum allows failure in one subject only but students are required to repeat the subject. With the best students admitted to the Science curriculum, perceived expectations from others and also the self are assumed to be higher. These factors can explain the significant differences between the mean scores of the respondents from the two curricula with the Science curriculum respondents scoring higher. Academic achievement having been significantly correlated with stress is also observed in the study conducted by [14].

On the other hand, the significant differences found between male and female respondents are consistent with the results of the study conducted by [15]. Results suggest in their study that significant sex differences exist in the experience of stresses. These differences can be attributed to differences in perception. This claim was proven in the study conducted by [16]. The researchers found that perception of males and females regarding stress differed.

With female respondents scoring consistently higher, as results from this study suggest, is parallel with the findings of the study conducted by [17]. The researcher found that females scored significantly higher than males in chronic stress and minor daily stresses. This is also consistent with the study of [8]. They found that male students experienced less stress compared to the female students. Additionally, [18] observed that females obtained significantly higher scores than males using AESI which was also used in this study.

#### V. LIMITATIONS OF THE STUDY

The study was limited to the use of a single measure (AESI) to investigate academic stress arising from perceived expectations among high school students. High school respondents of the study also came from one state college. Therefore, the results of this study cannot be generalized in other schools whether inside or outside of the country.

#### VI. RECOMMENDATIONS

Since significant differences were found between the two curricula and between the male and female respondents, it is recommended that intervention programs be carried out among high school students with reference to these differences. A review of curriculum is also encouraged to be able to understand thoroughly the concern. Similar studies are encouraged to be conducted in order to compare and contrast results to have a more thorough understanding of academic

stress arising from perceived expectations.

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