## Gender Differences in Academic Stress among Higher Secondary School Students in Gujarat

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### Abstract

The present study was undertaken to investigate gender differences in academic stress with respect to gender differences among higher secondary school students in Anand district of Gujarat state. The study is based on primary data collected from the randomly selected 1000 sample students from 13 higher secondary schools (XI and XII). The study results indicate that there is a significant difference between the mean scores of academic stress in relation to boys and girls students of higher secondary school. The boys have high academic stress than the girls of higher secondary school. The comparison of boys and girls students across streams indicate that boys of the commerce stream have high academic stress than the girls students of science and arts stream does not indicate any significant difference in stress levels between them. Therefore, methods of overcoming stress cannot be the same for boys and girls, and methods should be based on the factors causing stress among the boys and girls rather than any other basis.

#### INTRODUCTION

Education is an essential element for the growth of any society or nation. In today's highly competitive world, students face various kinds of academic stress due to various internal as well as external factors such as high academic expectations by the parents, teacher schools causing an examination stress which later becomes a major reason for lack of interest in attending the classes, or not achieving the desired and expected results. Besides, across

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the students, gender discrimination in education system is another kind of stress experienced by the girl students. Educating the girls continues to be a problem in India where gender inequality is a very serious issue as more importance is given to the education of boys or sons. Thus, girls always have the stress of being pulled out of school may be due to society stigma on girls education, or due to the requirement of labour at home or in the field.

During the schooling years, students have to face many academic burdens or loads, for example, appearing for the school examination on regular interval basis, answering questions in the classrooms as well as in examination, always showing progress in school subjects, trying to understand what the teacher is teaching, also competing with friends in the class, and most importantly trying to fulfill the teachers and parent's academic expectations (Lal. 2014). Sometimes. these demands may surpass the available resources of the students, which put some students under stress, since the demand is related to the achievement of academic goals. Student's perception and reaction to academic stressors are influenced by gender difference (Misra et al., 2000). Although both boys and girls have the same level of pressure regarding academics, girls are much more vulnerable to increased stress mainly due to the issues related to personal health, classmates and future events.

It has been reported that adolescent girls are found to perceive negative interpersonal events as more stressful than boys. Studies revealed that adolescent girls experience more stress than boys. For example, female students are more often reported letting out their emotions or feelings, whereas men are more often reported controlling their emotions, accepting or adjusting to the problem as well as situation and trying to find out solution to the problem (Hyde and Plant, 1995; Milkie and Thoits, 1993). When compared to the similar levels of stress, women exhibit stress more overtly than men (Hyde and Plant, 1995; Thomas and Williams, 1991). Also, the coping styles to stressors also differ by gender.

However, not many studies focus on academic stress across the gender in Gujarat state. The present study intends to investigate gender differences in academic stress among higher secondary school students in Gujarat.

#### **R**EVIEW OF LITERATURE

There are direct and indirect ways to study the difference in stress levels based an gender differences. Investigation of the experience and perception of stress along gender lines is a fascinating undertaking as findings of the studies conducted regarding stress with references to gender are somewhat conflicting. For example, in a study conducted by Misra and Castillo in 2004, it was revealed 'that men and women differ in their perceptions and reactions to stress' (pp. 146) while Jagaratnam and Buchanan (2004) found differences between male and female students to be significant when it came to the time pressure dimension of stress. In relation, Sulaiman et al. (2009) found in their study that 'female students have different stress compared to the male students. This may be because female students tend to be more emotional and sensitive toward what is happening in their surroundings' (p. 183). On the other hand, Walton (2002) found no significant difference in the perceived stress between male and female students when the researcher made a comparison of perceived stress levels and coping styles of junior and senior students in nursing and social work programmes.

Gadzella and Baloglu (2001) found female students experienced that during changes stress more in their life, while Muhammad Shah Burhan (1993) found that there is a significant difference between the stress experienced by male and female students. While research by Mohd Jafri (1991) shows that female students experienced more stress when faced with problems compared to the male students. Misra and Castillo (2004) conducted a study, in which they concluded that perception and reaction to stress is different in both genders i.e. male and female while Jagaratnam and Buchanan (2004) found a significant difference between male and female students on the time pressure factor of stress. Sulaiman, Hassan, Sapian and Abdullah (2009) found that male and

female students experience different levels of stress, and an explanation may be that females are more likely to be emotional than males in reaction to their environment. This research is also conducted to detect the difference of stress level with respect to urban and rural students as well as male and female students.

The relationship between stress and adjustment adolescent females was studied by Tung and Chahal (2005) and found that there was no significant causal relationship between stress and adjustment. However, results implied that the level of adjustment influences the number of stressful events and the amount of stress experienced by them. Yumba (2010) found that female undergraduates have higher degree of stress due to studies related sources of stress, such as increased class workload, pressure to earning good grades, excessive homework, and unclear assignments, compared to their counterparts. There is no difference in the perception of stress for both male and female undergraduate students. The first vear under-graduate students, especially female students reported higher degree of stress than male students. Another study by Khan, et al., (2013) found that there was a significant effect of academic stress on student's performance and nonsignificant difference between males and females on perceived stress scale. Govaerts and Gregoire (2004) noted that girls granted greater importance to the stressful situation, while boys

perceived themselves as having more resources for coping with it.

Pourrajabetal., (2014) reviewed the literature to describe the components of academic stress and observed the difference between the stress level of male and female students. Study by Pastey and Aminbhavi (2006) revealed that female students perceive more academic stress in comparison of their male counterpart. While Kumar et al., (2011) concluded that stress level differs among the genders, and therefore the methods of overcoming stress cannot be the same for boys and girls. On the other side, Kumari and Gartia (2012) noted that stress achievement academic are and not mediated by gender. Bartwal et al. (2013) showed that there is a significant gender difference with regards to the academic stress among rural as well urban as adolescents, thus academic stress experienced by both male and female adolescents seem to be of similar levels. Further, both genders have similar levels of average emotional intelligence. The author concluded that a person with high score on emotional intelligence can deal in a better way with the academic stress. Kumar and Bhukar (2013) showed that stress was significantly higher among girls in comparison to boys of their profession. A study by Bartwal et al. (2014) revealed that there were significant gender differences no with regard to the academic stress among rural and urban adolescents. Authors suggested that in order to make adolescents stress free, there

is a need to adopt better methods of teaching-learning.

Menaga and Chandrasekaran (2014) found that there is a significant difference in the academic stress of higher secondary students in relation to their gender, type of family, type of school management, and no significant difference has been found in relation to their family income and stream of study. Dhull and Kumari (2015) indicated that there was a significant difference between academic stress of male and female adolescents. Female subjects were found to be under more academic stress as compared to their male counterparts. Authors suggested that academic frustration, academic conflict, academic pressure and academic anxiety should be minimised, which can reduce the academic stress. Kaur (2015) found that frustration level of boys was significantly higher than the girls. Further, study found that there is no significant difference in the level of parental encouragement of the boys and girls. While frustration among boys is significantly related to their parental encouragement, but the results doesn't show any such significant relation in case of girls. Kaur and Simmi (2015) indicated no significant difference in boys and girls on all the measured variables, i.e. anxiety and socio-economic status. and there was no relationship between these two variables.

The review of literature indicates that past studies have experienced separately all three situations about the level of stress across genders. Numerous studies have shown

that men and women differ in their awareness and response to stress, and female students have different stress compared to the male students. Also, female students are more poignant and receptive which make them more stressful than male. Besides, male students have more resources to handle stress than the female students. Therefore, it was suggested that the methods of overcoming stress cannot be the same. Some researchers found that there is no significant difference in level of stress between male and female students.Further, they opined that academic achievements are not judged by gender. While few researchers have reported that the frustration level of boys was significantly higher than the girls, which is mostly related to the expectations of parents from boys more than girls. Overall, reviews indicate contradictory findings as few researchers observed that female students were found to be under more academic stress as compared to their male counterparts, while opposite picture was reported by other studies where boys are facing more stress than their counterparts. Thus, literature review indicates that stress is not as such gender specific and can be location specific and therefore, it is important to have a study on the status of same in Gujarat.

#### **DATA AND METHODOLOGY**

The present study was undertaken in the Anand district of Gujarat, which is one of the educationally progressed districts having Vallabh Vidyanagar as an educational hub located close to it. Stratified random sampling technique was used for the selection of sample students. To fulfill the objectives of the study, survey method was used. The primary data were collected from the 1000 selected sample students (boys and girls) of three streams (Science, Arts and Commerce) of higher secondary schools (XI and XII). Total schools were selected for data collection, of which seven schools were located in urban area and the remaining were in rural area. The hypotheses of the study were as follows:

- (a) There will be no significant difference between the mean scores of academic stress of girls and boys students of higher secondary schools.
- (b) There will be no significant difference between the mean scores of academic stress in relation to girls and boys students of science stream in higher secondary schools.
- (c) There will be no significant difference between the mean scores of academic stress in relation to girls and boys students of commerce stream in higher secondary schools.
- (d) There will be no significant difference between the mean scores of academic stress in relation to girls and boys students of arts stream in higher secondary schools.

Simple tabular analysis was used for data analysis. SPSS 20 data analysis package was used for data analysis. The statistical tools like mean, standard deviation, standard error and 't' test were used for data analysis.

#### **Results and Discussion**

The researcher has tried to find out the level of stress across gender among students of various streams of education. The data were collected from 1000 students (boys and girls) from rural and urban areas studying across three streams, viz. arts, science and commerce. Using Likert Scale technique (close ended questions), data were collected from sampled students on 75 questions pertaining the academic stress. The Likert Scale 5-point rating scale ranges from "1" to "5"; 1 = Never; 2 = Rarely; 3= Sometimes; 4= Mostly; 5= Always. The comparison of the students across the stream and areas in relation of their academic stress scores are presented and discussed here.

#### Comparison of Students across gender and Academic stress scores

The results of analysis of comparison of the students of different gender and academic stress scores are presented in Table 1. It can be seen from this table that the t-value obtained from the mean score of boys and girls student is 3.126. The significance value obtained in this case is 0.002 which is less than 0.05, so there is no significant difference between the mean scores of academic stress in relation to boys and girls students of higher secondary school and their the hypothess. The mean score of academic stress of boys is 170.71, which is higher than the mean score of academic stress of girls (162.40). The standard deviation score of boys is estimated to be 45.278, which is greater than the standard deviation score of girls (38.574). Thus, it can be said that the boys have slightly higher academic stress than the girls of higher secondary schools which may be due to high expectations of parents from boys more than girls. Besides, field survey indicated that attitudes and behaviour of boys in terms of educational level is much more unfavourable than that of girls. Girl students are found to be very serious about their studies and complete the given work in time and remember attentive in classroom, while boys are reported to be less attentive and working for activities.

Table 1
Comparison of Students in relation to their Academic
Stress Scores Descriptive Statistics

Gender	N	Mean	Std. Deviation	Std. Error		nfidence for Mean	Minimum	Max.
					LB	UB		
Boys	500	170.71	45.278	2.025	166.73	174.69	75	326
Girls	500	162.40	38.574	1.725	159.01	165.79	83	311
Total	1000	166.55	42.244	1.336	163.93	169.18	75	326

	Sig.	0.002			-		% lence	l of the ence	Upper	3.096 13.536		3.096 13.536		
	Έų	9.773						Interval of the Difference	Lower	2.660		2.660		
	Mean Square	.964	308			t-test for Equality of Means	Std. Error	Difference	, ,	8.316		8.316		
	df Mea	17288.964	1769.008	60	mple Test	t-tesi	Mean Difference	8		0.002	0	0.002		2
ANOVA		1	866	666	Independent Sample Test		Sig. (2-tailed)		0	998.000		3.126 973.428		
	Sum of Squares	964	0.120	9.084	Indep		đf	0		3.126		3.126		
	Sum	17288.964	1765470.120	1782759.084		's Test uality lances	μ			0.000				
						Levene's Test for Equality of Variances	Sig.			12.354				
	Boys and Girls	troups	sdno	C		Boys and Girls F				Equal	variances assumed	Equal	variances	assumed
	Bo	Between Groups	Within Groups	Total		Boy Gi				Academic	Stress			

*Notes*: N-Number of sample; LB- Lower Bound; UP-Upper Bound; df- degrees of freedom. *Source:* Estimated using field survey data.

#### Comparison of the students of particular stream across gender and academic stress scores

Table 2 presents the comparison of boys and girls students of science stream and the score of academic stress. The table indicates that the t-value obtained from the mean score of boys and girls of science stream school students is 1.199. The significance value obtained in this case is 0.231 which is greater than 0.05, so the hypothess stating that there is no significant difference between the mean scores of academic stress in relation to boys and girls of science stream students of higher secondary school is not rejected. The standard deviation score of boys is 47.138, which is relatively greater than the standard deviation score of girls (38.201). Thus, the level of stress among the boys and girls students of science stream is found to be non-significant and boys have reported large variation in the level of academic stress.

The comparison of boys and girls students of commerce stream and academic scores is illustrated in Table 3. It can be seen from this table that that the t-value obtained from the mean

Table 2
Comparison of science stream students of
higher secondary school in relation to their Academic
Stress Scores Descriptive Statistics

Science Stream	N	Mean	Std. Deviation	Std. Error		nfidence for Mean	Min.	Maxi.
Stream				.0	LB	UB		
Boys	200	169.51	47.138	3.333	162.93	176.08	88	326
Girls	200	164.36	38.201	2.701	159.03	169.69	83	262
Total	400	166.93	42.926	2.146	162.71	171.15	83	326

ANOVA

Boys and Girls (Science Stream)	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2647.102	1	2647.102	1.438	0.231
Within Groups	732578.075	398	1840.648		
Total	735225.178	399			

				Ind	ependent S	Independent Sample Test				
Boy Gi (Sci	Boys and Girls/ (Science	Levene for Eq of Var	Levene's Test for Equality of Variances			t-test for	t-test for Equality of Means	Means		
	oucami	٤	Sig.	ţ	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff	95% Confidence Interval of the Difference	Indence of the
				2					Lower	Upper
Academic Equ	Equal	8.014	0.005 1.199	1.199	398	0.231	5.145	4.290	-3.289	13.579
Stress	variances									
	assumed									
	Equal			1.199	381.620	0.231	5.145	4.290	-3.291	13.581
	variances									
	not									
	assumed		2							
Notes and Source:	ource: Same a	Same as in Table 1.	1.							

score of boys and girls of commerce stream school students is 4.553. The significance value obtained in this case is 0.000 which is less than 0.05, so the hypotheses stating that there is no significant difference between the mean scores of academic stress in relation to boys and girls of commerce stream students of higher secondary school is rejected. The significant difference in the mean values of academic stress of boys (175.85) and girls (157.56) can be seen from the table, so the case of values of standard deviation. The figures indicate that the boys of the commerce stream have relatively higher stress than their counterpart. It may be due to the fact that girls are generally more disciplined in their studies, while boys are found to be more worried about their examination and future. Besides, poor administration also creates academic stress among boys students more than the girls students of commerce stream.

While the results pertaining to boys and girls students of arts stream and academic scores comparison presented in Table 4 indicates that the t-value obtained from the mean score of boys and girls students of arts stream school is -0.863. The significance value obtained in this case is 0.389 which is greater than 0.05, so the hypotheses stating that there is no significant difference between the mean scores of academic stress in relation to boys and girls students of arts stream of higher secondary school is not rejected. Thus, it can be said that the boys and girls student of arts stream does not indicate any significant difference between them.

#### Table 3

#### Comparison of the commerce stream students of higher secondary school in relation to their Academic Stress Scores Descriptive Statistics

Commerce Stream	N	Mean	Std. Deviation	Std. Error		nfidence for Mean	Min.	Max.
Stream			Deviation	Error	LB	UB	-	
Boys	200	175.85	43.376	3.067	169.80	181.89	79	308
Girls	200	157.56	36.671	2.593	152.45	162.67	97	270
Total	400	166.70	41.145	2.057	162.66	170.75	79	308

#### ANOVA

Boys and Girls (Commerce Stream)	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33434.123	1	33434.123	20.726	0.000
Within Groups	642021.475	398	1613.119		
Total	675455.598	399			~

#### Independent Sample Test

•	nd Girls ce Stream)	Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95 Confie Interva Differ	lence l of the	
									Lower	Upper	
Academic Stress	Equal variances assumed	4.881	0.028	4.553	398	.000	18.285	4.016	10.389	26.181	
	Equal variances not assumed	9		4.553	387.279	.000	18.285	4.016	10.388	26.182	

Notes and Source: Same as in Table 1.

# Table 4Comparison of the Arts Stream students of higher secondary school in<br/>relation to their Academic Stress Scores Descriptive Statistics

Arts Stream	N	Mean	Standard Deviation	Standard Error	95% Con Interval f		Min.	Max.
					LB	UB		
Boys	100	162.86	44.343	4.434	154.06	171.66	75	276
Girls	100	168.14	42.132	4.213	159.78	176.50	84	311
Total	200	165.50	43.224	3.056	159.47	171.53	75	311

		0.111			
Boys and Girls/ (Arts Stream)	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1393.920	1	1393.920	0.745	0.389
Within Groups	370396.080	198	1870.687		
Total	371790.000	199			

#### ANOVA

#### Independent Sample Test

Boys and Girls (Arts Stream)		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Diff.	
									Lower	Upper
Academic	Equal	0.805	0.371	-0.863	198.000	0.389	-5.280	6.117	17.342	6.782
Stress	variances									
	assumed									
	Equal			-0.863	197.485	0.389	-5.280	6.117	-17.342	6.782
	variances								Ť.	
	not									
	assumed									

*Notes* and Source: Same as in Table 1.

#### CONCLUSIONS

Students face various kinds of academic stress during the schooling years, while their awareness and response to academic stressors are influenced by gender difference. The study has attempted to investigate academic stress in different genders among higher secondary school students in Gujarat. Most of the past studies have noted that men and women differ in their awareness and response to stress and female students have different stress levels compared to the male students. Also, female students are more poignant and receptive which make them more stressful than male students. Besides, male students have more

resources to handle stress than female. students. Therefore, it was suggested that the methods of overcoming stress cannot be the same. Some researchers have found that there is no significant difference in the level of stress between male and female students and opined that academic achievements are not judged by gender. While few researchers have reported that frustration level of boys was significantly higher than the girls which is mostly related to the expectations of parents from boys. Overall, the reviews of past studies indicate a conflicting picture where a few opined that female students were found to be under more academic stress as compared to their male counterparts, while the opposite picture was reported by other studies where boys are seen facing more stress than their counterparts. Thus, literature review indicates that stress is not gender specific but can be location specific.

The results of analysis of comparison of the students of different genders and academic stress scores in Gujarat indicate that there is a significant difference between the mean scores of academic stress in relation to boys and girls students of higher secondary school. Thus, it can be said that the boys have slightly higher academic stress than that of the girls of higher secondary school which may be due to higher expectations of parents from boys in comparison to more girls. Besides, survey indicated that field the attitude and behaviour of boys in terms of education is much more

unfavourable than that of girls. Girls students are found to be very serious about their studies and complete the given work in time and remain attentive in classroom, while boys are reported to be less attentive showing more interest in with leisure activities. The comparison of boys and girls students of higher secondary school across streams indicates that the boys of commerce stream have high academic stress than the girls, while the boys and girls students of science and arts stream do not indicate any significant difference between them. As suggested by Kumar et al., (2011) methods of overcoming stress cannot be the same for boys and girls and methods should be based on the causing stress. factors Besides. parents should put less pressure and teachers should identify the stressful students and counsel them.

#### REFERENCES

- BARTWAL, RAMESH SINGH AND ANOJ RAJ. 2013. Academic Stress Among School Going Adolescents in Relation to Their Emotional Intelligence. *International Journal of Innovative Research And Development*. Vol. 2, No.11. pp. 417–424.
- BARTWAL, RAMESH SINGH AND RAMINDER SINGH. 2014. Academic Stress of School Going Adolescents. Indian Streams Research Journal. Vol. 3, No.12. pp. 1–4.
- DHULL, INDIRA AND SUNITA KUMARI. 2015. Academic Stress among Adolescents in Relation to Gender. *International Journal of Applied Research*. Vol. 1, No. 11. pp. 394–396.
- GADZELLA, M. BERNADETTE AND MUSTAFA BALOGLU. 2001. Confirmatory Factor Analysis and Internal Consistency of the Student-life Stress Inventory. *Journal of Instructional Psychology*, vol. 28, no. 2, June 2001, p. 84.
- GOVAERTS, SOPHIE AND JACQUES GRÉGOIRE. 2004. Stressful Academic Situations: Study on Appraisal Variables in Adolescence. *European Review of Applied Psychology*. Vol. 54. pp. 261–271. 10.1016/j.erap.2004.05.001.
- HYDE, J. S., AND E.A. PLANT. 1995. Magnitude of Psychological Gender Differences: Another Side of the Story. American Psychologist. No. 50. pp.159–161.
- JAGARATNAM, G. AND P. BUCHANAN. 2004. Balancing the demands of schools and were: stress and employed hospitality students. *International Journal of Contemporary Hospitality Management*. Vol. 16, No. 4. pp. 237–245.

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- KAUR, CHARANJIT. 2015. Frustration among Adolescents in Relation to Parental Encouragement. Educational Quest: An International Journal of Education and Applied Social Sciences. Vol. 6, No. 1. pp. 141–145.
- KAUR, MANDEEP AND SIMMI. 2015. Anxiety Among Adolescents in Relation to their Socio-Economic Status. Educational Quest: An International Journal of Education and Applied Social Sciences. Vol. 6, No. 1. pp. 17–20.
- KHAN, MUSSARAT JABEEN, SEEMA ALTAF AND HAFSA KAUSAR. 2013. Effect of Perceived Academic Stress on Students Performance. Frontier Women University Journal Of Social Sciences. Vol. 7, No. 2. pp. 146–151.
- KUMAR, N. SANTHOSH, S. SUJATA, AND PARVEEN JAHIRA. 2011. Analysis Of Stress Among Higher Secondary School Students. *International Journal Of Exclusive Management Research*. Vol. 1, No. 6. pp. 1–10.
- KUMAR, SANJEEV AND J. P. BHUKAR. 2013. Stress Level And Coping Strategies of College Students. Journal of Physical Education and Sports Management. Vol. 4, No. 1. pp. 5–11.
- KUMARI RAJNI AND GARTIA RADHAKANTA. 2012. Relationship Between Stress and Academic Achievement of Senior Secondary School Students. Asian Journal of Multidimensional Research. Vol. 1, No. 3. pp. 153–160.
- LAL, KRISAHN. 2014. Academic Stress among Adolscent in Relation to Intelligence and Demographic factors. American International Journal or Research in Humanities acts and Social Science. Vol. 5, No. 1. Dec-Feb, pp. 123–129.
- MENAGA, S. AND V. CHANDRASEKARAN. 2014. A Study on Academic Stress of Higher Secondary School Students. Scholarly Research Journal For Interdisciplinary Studies. 2, 1973–1981.
- MILKIE, M. A. AND P.A. THOITS. 1993. Gender Differences in Coping with Positive and Negative Experiences. Unpublished Manuscript, Indiana University.
- MISRA, R., M. MCKEAN, S. WEST, AND T. RUSSO. 2000. Academic Stress of College Students: Comparison of Student and Faculty Perceptions. *College Student Journal.* 34, pp. 236–245.
- MISRA, R. AND L.G. CASTILLO. 2004. Academic stress among College students comperison of American and International students. *International Journal of Stress Management*, Vol. 11, No. 2, pp. 132–148.
- PASTEY, G. S. AND V.A. AMINBHAVI. 2006. Impact Of Emotional Maturity on Stress and Self Confidence of Adolescents. *Journal Of The Indian Academy of Applied Psychology*. Vol. 32, No. 1. pp. 66–70.
- POURRAJAB, M., RABBANI, MOHTARAM AND SARA, KASMAIENEZHADFARD. 2014. Different Effects of Stress on Male and Female Students. *The Online Journal of Counseling and Education*. Vol. 3, No. 3. pp. 31–39.
- SULAIMAN, T. HORSAN, A. SAPIAN, V.M. AND S.K. ABDULLAH. 2009. The level of stress among students in Urban and Rural secondary School in Malaysia. *European Journal of Social Sciences*. Vol. 10, No. 2. pp. 179–184.
- THOMAS, S. P., AND R. L. WILLIAMS. 1991. Perceived Stress, Trait Anger, Modes of Anger Expression, Health Status of College Men and Women. Nursing Research. 4, pp. 303–307.
- TUNG, S. AND N. CHAHAL. 2005. Relationship Between Stress and Adjustment Adolescents Females: A Causal Study. Journal of Personality Study and Group Behavior. 25, pp.19–31.
- WALTON, ROBIN. 2002. A Comparison of Perceived Stress Levels and Coping Styles of Junior and Senior Students in Nursing and Social Work Programs. Doctor of Education Dissertation, The College of Graduate Studies at Marshall University, Huntington, West Virginia.
- YUMBA, W. 2010. Academic Stress: A Case of the Undergraduate students (Dissertation). Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-81902.