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Influence of Academic Stress on Reasoning Ability Among Adolescent Girls

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In the new millennium, stress is a subject which is hard to avoid. Stress is defined as burdens, pressures, anxieties and worries. The present study examined the influence of academic stress on reasoning ability among adolescent girls. For the study, a sample of 250 adolescent girls was selected by using stratified random sampling technique. For the collection of data Scale of Academic Stress and Reasoning Ability Test were used. The techniques of t-test and correlation were used for the analysis of data. Results of the study showed that there is no significant relationship between academic stress and reasoning ability among adolescent girls.

Introduction

In this age of industrialization, globalization, modernization and scientific innovations, the life of individuals is generally becoming more and more complex and mal-adjusted. The result is that people, by and large, are under great stress and strain. It is more so with adolescents. While in many societies, adolescence means an opening up of opportunities for girls, while in India, it often means goodbye to opportunities and personal freedom even today. The problem is even more acute with adolescent girls.

Stress is an inevitable phenomenon of adolescents' life. Usually, the life of adolescent girls is filled with numerous stress factors. Achievement factors are directly correlated with their academics. Academic stress refers to the pressure experienced by students to perform well in final examinations and competitive entrance examinations.

Reasoning is recognized as the core element of human nature (Chen, 2000). Reasoning skills are recognized as the key abilities for human being to create, learn and exploit knowledge. These skills are also an important factor in the life of adolescents. Therefore, the importance of reasoning skills has been of great concern in stress prone behavior of adolescents. Thus the present study attempts to find out the effect of academic stress on reasoning ability among adolescent girls.

To review the literature, for conducting research, is must for every research worker, so as to build the background for the paper in hand. The study of Sawhney (2012) go in similar findings where he conducted a study on scholastic achievement in academic stress among adolescents. The results concluded the significant correlation was not found between academic achievement

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and academic stress of adolescents.

Singh (2013) aimed at finding the reasoning ability of pupil-teachers, the gender differences, in reasoning ability of pupil teachers belonging to Science and Arts faculties. The pupil teachers found to have low level of reasoning ability, no significant differences was found in reasoning abilities in female and male pupil teachers but the reasoning ability of pupil teachers belonging to science faculty was found to be higher than that of pupil teachers belonging to art faculty.

Objective

1. To explore the relationship between academic stress and reasoning ability among adolescent girls.

Method

The descriptive research method was employed to find out the relationship of academic stress with reasoning ability in a sample of adolescent girls (age range 11-18 years).

Sample

A sample of 250 adolescent girls was selected by using stratified random sampling technique from government senior secondary schools of Hoshiarpur district of Punjab.

Tools

For the present study following tools were used:

1. Academic Stress Scale by Dr. Abha Rani Bisht (2005).
2. Reasoning Ability Test by Dr. L.N. Dubey (2006) was used.

Hypothesis

1. There is no significant difference between low, average and high reasoning ability groups of adolescent girls on academic stress.
2. There is no significant relationship between academic stress with reasoning ability.

Procedure

For the data collection a prior permission was taken from the school principals and investigator explained the purpose of present study of adolescent girls. The subjects were assured that their responses and information given about them will be kept confidential and used for research paper only. After assurance, the questionnaire of Scale of Academic Stress by Dr. Abha Rani Bisht and Reasoning Ability Test of Dr. L.N. Dubey were administered to adolescent girls of Hoshiarpur district.

Statistical Techniques

For the analysis of data statistical techniques of t-test and correlation were used:

Results

The results of t-test and correlation are given as below:

Comparison of reasoning ability with academic stress of adolescent girls

Table-1

Mean and SD scores of reasoning ability test of adolescent girls having academic stress is given below

Levels of Reasoning Ability	N	M	SD
High	65	274.89	87.01
Average	120	266.01	94.93
Low	63	239.03	86.79

The adolescent girls were divided into three groups into low, average and high levels of reasoning ability on the basis of M and SD. The t-test results are presented below:

Table-2

t-values for academic stress on the levels of reasoning ability

Levels of Reasoning	Low	Average	High
High	-0.14		
Average	0.03		
Low	-0.15		

Table 2 shows that none of the t-value is significant at 0.05 level of significance. The results are suggestive to the fact that academic stress does not significantly affecting the reasoning ability of the adolescent girls. Irrespective of their level of stress, adolescent girls do not significantly different in their reasoning ability. There exists no significant difference in academic stress and reasoning ability of adolescent girls. In this way Hypothesis 1st that is "there is no significant difference between academic stress and reasoning ability test of adolescent girls" is accepted.

Relationship of Academic Stress and Reasoning Ability

The co-efficient of correlation between academic stress and reasoning ability is computed for the sample (N=250) in the table 3 and the results have been given hereunder:

Table-3

Relationship of Academic Stress with Reasoning Ability

	Co-efficient of Correlation	Significance
Academic Stress & Reasoning Ability	.10	Not Significant

The co-efficient of correlation between the scores of reasoning ability and academic stress of adolescent girls is .10 which is less than the table value of co efficient of correlation (0.138) at 0.05 level of significance. It reveals that there does not exist significant correlation between academic stress and reasoning ability of adolescent girls. Hence the 2nd Hyptothesis that is "there is no significant relationship between academic stress and reasoning ability of adolescent girls" is accepted.

Conclusions and Educational Implications

The reasoning ability of adolescent girls do not differ significantly in relation to academic

stress. The correlation between academic stress and reasoning ability of the adolescent girls is found to be not significant.

To reduce the higher level of academic stress among adolescent girls, there should be provision of activities according to their capabilities and interests to achieve more.

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