

# A Study to Find the Effectiveness of Structured Teaching Program on Knowledge Regarding Academic Stress and its Coping Strategies among Tenth Standard Students in Selected High School at Hassan

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**Abstract:** Background & Objectives: Teenage years can be stressful and challenging. Adolescents feel all kinds of pressures to do well in school, to be popular with peers, to gain the approval of parents, to make the team, to be cool. In addition, many teenagers have other special problems. It may be due to parent's marital problems, parent being out of work or the family's financial problems, parent's alcoholism and poverty. It was found out that, academic work load, inadequate resources, low motivation, poor performance in academic, continuous poor performance in academic overcrowded lecture halls and uncertainty of getting job after graduating from the university leads to stress among students. Coping style may play an important role in the way students manage stressful academic events and perform at college. As expected, greater academic stress co-varied with lower course grades; however, students who engaged in problem-focused coping were more likely to be motivated and perform better than students who engaged in emotion-focused coping. College students confront many challenges in pursuit of their educational goals. When such experiences are perceived as negative, they can have an adverse effect on students' motivation and performance. Difficulties in handling stress can lead to mental health problems. So, there is a need to educate the high school students regarding academic stress and coping strategies. Hence the present study was undertaken to assess the "Effectiveness of Structured Teaching Program on Knowledge regarding Academic Stress and Coping Strategies Among Tenth Standard Students in Selected High School at Hassan" and to find the association between knowledge, attitude and selected demographic variables of the respondents. Methods: The study involved single group pre-test and post-test without a control group using pre-experimental design, with non-probability purposive sampling. Knowledge questionnaire was administered to 30 tenth standard students. Pre-test was conducted on first day then the structured teaching programme was given in a classroom. Post-test was conducted after seven days using the same questionnaire. The results were described by using descriptive and inferential statistics. Results: The collected data was analysed by descriptive and inferential statistics. The overall pre-test mean knowledge score was 43.9% followed by post-test 81.8% with mean enhancement of knowledge score of 37.9% which is statistically significant. The paired 't' test was computed and it was 24.42 which is higher than the table value and is significant at 5%. Structured teaching programme was effective in increasing the knowledge on academic stress and its coping strategies. There was a significant association between knowledge scores with demographic variables like Age, sex, type of family, family monthly income and primary care giver at early childhood at 5% level. Interpretation & Conclusion: The findings of the study showed that there was a deficit in knowledge regarding academic stress and its coping strategies. The Structured Teaching Programme (STP) was effective in improving the knowledge of tenth standard students regarding academic stress and its coping strategies.

**Keywords:** Effectiveness; Structured teaching programme, Knowledge, tenth standard students, Academic stress and Coping strategies

## 1. Introduction

Adolescence is a stage of human development that occurs between childhood and adulthood. About one-fifth of India's population is in the adolescent age group of 10–19 years. It is estimated that there are almost 200 million adolescents in India. It is expected that this age group will continue to grow reaching over 214 million by 2020. Due to fast physical changes and mental development at this stage, students may sometimes experience incompatibility of their mental development with their physical changes or with the social environment and thus suffer from problems arising from inadequate adaptations. These problems may further cause psychological troubles and even induce deviant behaviors.<sup>1</sup>

Life of adolescents is a painful tug-of-war filled with mixed messages and conflicting demands from parents, teachers, coaches, employers, friends and oneself. Growing up negotiating a path between independence and reliance is a

tough business. It creates stress and it can create serious depression in young people and it is a state in which the person has already broken with the happy age of childhood, but has not yet found himself in adult life. WHO defines an adolescent as a person between 10-19 years of age. One in five persons of the world today is an adolescent. 65% of them live in developing countries and 35% of live in Asia. In India this age group forms 21.4% of the population. According to Registrar General and Census Commissioner's Office, Government of India (2008), about one-fifth of India's population is in adolescent age group.<sup>2,3</sup>

School life is very important part of one's life, because it provides opportunity for study and discipline. Besides these, the school life is a preparatory stage for entering public life. School is a meeting place of students and teachers. From here, a student learns how to adjust himself with the society at later part of life. School is the right place for the fulfillment of the youthful desires. Students take part in games and sports,

drama, essay competition, song and debate competitions etc. School also gives the foundation for the budding poets, scientists, writers, doctors, engineers, painters and musicians. It is in school that the students enjoy the affection of their teachers. It was found out that, academic work load, inadequate resources, low motivation, poor performance in academic, continuous poor performance in academic overcrowded lecture halls and uncertainty of getting job after graduating from the university leads to stress among students.<sup>4,5</sup>

Roy (1976) defined stress as an “adaptive response as behavior that maintains the integrity of the individual”. Adaptation is viewed as positive and is correlated with a healthy response. When behavior disrupts the integrity of the individual. It is perceived as maladaptive. Maladaptive response by the individual are considered to be negative or unhealthy. Various 20th-century researchers contributed to several different concepts of stress. Three of these concepts include stress as a biological response, stress as an environmental event, and stress as a transaction between the individual and environment. There are different types of stress — acute stress, episodic acute stress, and chronic stress.<sup>9</sup> Indeed, stress symptoms can affect one’s body, thoughts and feelings, and behavior. Being able to recognize common stress symptoms can give a jump on managing them. Stress that has left unchecked can contribute to health problems, such as high blood pressure, heart disease, obesity and diabetes.<sup>5,6,7,8</sup>

With over 10 million students writing school-leaving final exams every year, exam stress is a phenomenon that has assumed larger-than-life dimensions in India. According to a study conducted by the Delhi-based Hindustan Times, a north India leading daily, nearly 70 percent of Indian students after class VIII experience severe academic stress, especially during exam time with nearly 10 percent having contemplated suicide at some point during their academic years.<sup>9</sup>

The anxiety can be reduced by regular use of pranayama (yogic breathing). Pranayama is the technique of breath manipulation to achieve desired level of emotional and physical wellness. Pranayama is a tool that can change our mental state, reduce negative thought patterns, and create an environment of wellness in body and mind. Coping style may play an important role in the way students manage stressful academic events and perform at college. As expected, greater academic stress co-varied with lower course grades; however, students who engaged in problem-focused coping were more likely to be motivated and perform better than students who engaged in emotion-focused coping. College students confront many challenges in pursuit of their educational goals. When such experiences are perceived as negative, they can have an adverse effect on students’ motivation and performance.<sup>10,11</sup>

Daily interactions with internal and external demand contribute to stress in human beings who constantly are changing and adapting to their environmental stressful events normally generate feeling of impotency and a loss of control that activate both physiological and psychological responses. These responses are major components of coping. An

inability to cope with internal and external stressors increase feelings of helplessness and vulnerability to illnesses.<sup>12</sup>

A study conducted on adaptive perfectionists in middle school sought family support, sought acceptance by peers, and developed academic competence as primary coping responses, which differed from classmates with less adaptive perfectionist tendencies.<sup>28</sup> Hart’s study of high school students indicated that students who became angry in response to academic stressors tended to also seek more support (i.e., social– emotional assistance, resource guidance, or information from others) and were less likely to attempt positive appraisal coping efforts (e.g., optimistically reframing, perspective taking).<sup>13</sup>

A study was conducted among 300 High school children with an objective to assess knowledge of high school related to school stress and coping. Descriptive inferential statistics were used for analysis by using perceived stress scale among the study participants. The results showed that approximately 55% of the participants had the data showed that, majority of the respondents (76.7%) had inadequate knowledge, 23.3% of them had moderate knowledge and none of them had the adequate knowledge.<sup>14</sup>

A study was on relationship of demographic variables with stress felt by student community, a sample of 100 students were drawn from prominent institutes of Indore city. Results obtained from the data analysis shows that Demographic variables play important role in stress felt by student that indicates that difference between means of age and stress is significant which indicates that students’ level of stress vary according to their age. And their difference between means of sex & stress is not significant.<sup>15</sup>

A study was conducted among 1723 adolescence school boys on depression, nervousness, and academic stress, with an objective to determine the prevalence rate and severity of depression, anxiety and academic stress. Standardized anxiety depression stress scales were used to analyses the perceived factor. The results revealed that 59.4% had at least one of three disorders, 40.7% had at least two, 22.6% had all the three disorders more over more than one third of the participant 38.2% had suffered from depression while 48.9% had nervousness and 35.5% had academic stress.<sup>16</sup>

An experimental study was conducted in Bangalore to evaluate the effects of guided imagery relaxation programme for reducing the anxiety level among exam going students. The randomized study consisted of 14 days relaxation technique with pre- and post-anxiety scores of 40 exam-going students, randomly assigned to a 25- minute audiovisual relaxation of guided imagery programme to the experimental group and not for control group. Anxiety level scores were recorded to both groups. The result showed that for the experimental group the reduction in anxiety (75% had no anxiety and 25% had healthy anxiety) after 14 days intervention training was statistically significant, whereas anxiety level was same to control group.<sup>17</sup>

A study was undertaken to assess the effectiveness of teaching programme on social anxiety among adolescents in selected schools at Tamilnadu (2011). Sample size was 100

and stratified random sampling technique was used in the study. The mean value of overall social anxiety in 97 with a standard deviation of 9.46 in experimental group for overall anxiety in control group, the mean value is 96.12 with the standard deviation of 10.41. The calculated t value (7.062) is greater than the table value. The comparison of effectiveness of teaching programme on social anxiety among adolescents between experimental and control group shows that there was a significant level of reduction in social anxiety among adolescents in experimental group who had undergone the STP than those who did not undergo teaching programme. The result of the study found that teaching programme was effective.<sup>18</sup>

Based on the above information it is indispensable that the high school students needs education regarding academic stress and its coping strategies to keep themselves physically and mentally healthy by practicing coping measure. And as per investigator's personal experience during student period found a lot of problems associated with academic performance and achievements due to stress. Hence the researcher choose the present research study

Pre-experimental one group pre-test, post-test design was adopted. In this one group pre-test, post-test design ( $O_1 X O_2$ ) the investigator introduced a base measure before and after a planned exposure which is depicted as  $O_1$  and  $O_2$  respectively. In the present study, the measure was the knowledge of tenth standard students regarding academic stress and coping strategies and independent variable is the structured teaching programme depicted as  $X$ . Target population for the present study were tenth standard students studying at St. Joseph's high school, Hassan. The sample of this study comprised of 30 Tenth standard students of St. Joseph's high school, Hassan. Non-probability sampling technique was used for selection of samples. The aim of non-probability sampling is to enhance representativeness.

**Development of the Structured Teaching Programme (STP):** Structured teaching programme on knowledge regarding plan on academic stress and coping strategies was developed based on Review of Literature, consulting with subject experts. The steps adopted in the development of structured teaching were:

- Preparation of first draft of structured teaching content
- Development of criteria checklist to evaluate the structured teaching content.
- Content validity of structured teaching content
- Preparation of final draft of structured teaching content

#### Development of Tool

A Structured Knowledge Questionnaire was developed to assess the knowledge of students pursuing tenth standard

education regarding academic stress and its coping strategies. The following steps were carried out in preparing the tool.

- Literature review.
- Preparation of blue print.
- Consultation with the Guide, Subject Experts of Psychiatric Nursing.
- Establishment of validity and reliability.

**Description of the Tool:** The structured knowledge questionnaire consists of two sections.

**Section I:** It consists of 12 questions on demographic data

**Section II:** It consists of 40 questions.

**Plan of Data Analysis:** The obtained data was analyzed in terms of achieved objectives of the study by using descriptive and inferential statistics. Analyzed data will be presented in the form of tables and diagrams.

## 2. Presentation of the Data

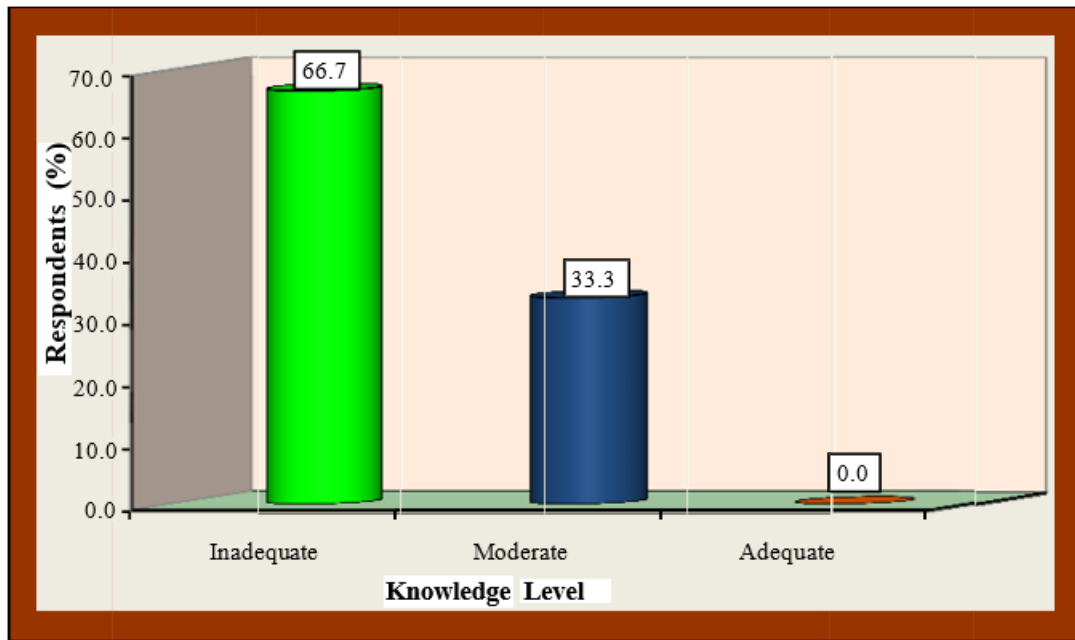
### Section I: Demographic Characteristics of Respondents

**Table 1:** Classification of respondents by personal Characteristics, N=30

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	14 years	15	50.0
	15 years	15	50.0
Sex	Male	17	56.7
	Female	13	43.3
Religion	Hindu	19	63.4
	Christian	7	23.3
	Muslim	4	13.3
Type of family	Nuclear	24	80.0
	Joint	6	20.0
Place of Residence	Urban	25	73.3
	Rural	5	26.7
Total		30	100.0

The data from the Table.1 shows the following findings. Half (50%) of the respondents age was 14 years and remaining half (50%) of the respondents were 15 years. Majority (56.7%) of respondents were males, 43.3% were females, most of the respondents (63.4%) were Hindus, 23.3% were Christians and 13.3% were Muslims. Most of the respondents (80%) were from Nuclear Family and remaining 20% respondents were from Joint Family. Most of the respondents (73.3%) were from urban area and remaining 26.7% respondents were from rural area.

### Classification of Respondent Pre test Knowledge level on Academic stress and its Coping strategies.



The figure shows the classification of respondent's knowledge according to their knowledge level in the pre-test. The data showed that, majority of the respondents (66.7%)

had inadequate knowledge, 33.3% of them had moderate knowledge and none of them had the adequate knowledge.

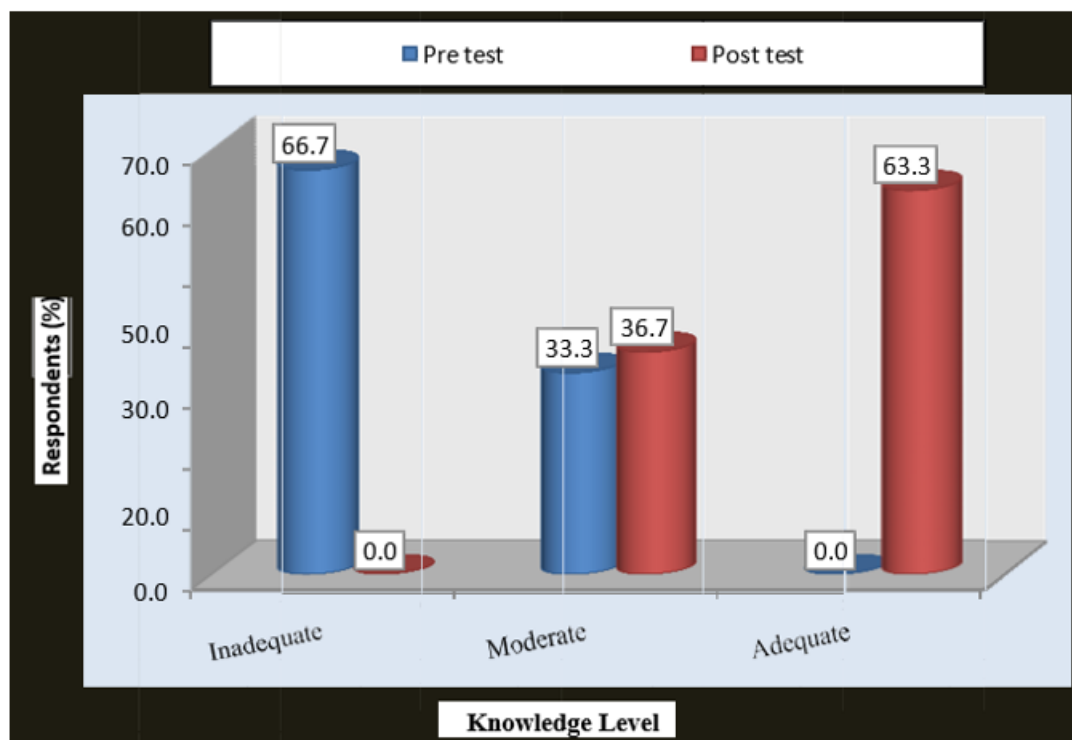
**Table shows Classification of Respondents of Post test Knowledge level on Academic stress and its Coping strategies.**

N=30

Knowledge Level	Category	Classification of Respondents				$\chi^2$ Value
		Pre test		Post test		
		Number	Percent	Number	Percent	
Inadequate	$\leq 50$ % Score	20	66.7	0	0.0	39.05*
Moderate	51-75 % Score	10	33.3	11	36.7	
Adequate	$> 75$ % Score	0	0.0	19	63.3	
Total		30	100.0	30	100.0	

The above table shows the classification of respondent's knowledge according to their knowledge level in the post-test. The data showed that, majority of the respondents (63.3%)

had adequate knowledge, 36.7% of them had moderate knowledge and none of them had the inadequate knowledge.





Above figure shows the Classification of Respondents on Knowledge level on Academic Stress and its Coping Strategies

The table here represents the Overall Pretest and Posttest Mean Knowledge on Academic stress and its Coping strategies

Aspects	Max. Score	Respondents Knowledge				Paired 't' Test
		Mean	SD	Mean (%)	SD (%)	
Pre test	40	17.57	3.20	43.9	8.0	24.42*
Post test	40	32.73	2.85	81.8	7.1	
Enhancement	40	15.17	3.40	37.9	8.5	

\*Significant at 5% level,  $t(0.05, 29df) = 2.045$

The table depicts the overall pre-test mean percentage of knowledge score of respondents on academic stress and its coping strategies was 43.9% and post-test mean was 81.8% with an enhancement 37.9%. To test the effectiveness of structured teaching programme paired 't' test was computed. The calculated paired 't' test value of 24.42 is greater than the table value at 0.05 level of significance which indicate that there is a significant difference between pre-test and post-test knowledge scores of whole test of respondents. It was concluded that the structured teaching programme was effective in increasing knowledge of tenth standard students regarding academic stress and its coping strategies.

**Table:** shows Association between Demographic variables and Post test Knowledge level on Academic stress and its Coping strategies

Demographic Variables	Category	Sample	Knowledge Level				$\chi^2$ Value	P Value
			Moderate		Adequate			
			N	%	N	%		
Age group (years)	14 years	15	2	12.5	13	87.5	7.3*	P<0.05
	15 years	15	9	60.0	6	40.0		
Sex	Male	17	9	52.9	8	47.1	4.47*	P<0.05
	Female	13	2	15.4	11	84.6		
Religion	Hindu	19	7	36.8	12	63.2	0.35 NS	P>0.05
	Christian	7	3	42.9	4	57.1		
	Muslim	4	1	25.0	3	75.0		
Type of family	Nuclear	24	11	45.8	13	54.2	4.34*	P<0.05
	Joint	6	0	0.0	6	100.0		
Place of Residence	Urban	25	11	44.0	14	56.0	3.47 NS	P>0.05
	Rural	5	0	0.0	5	100.0		
Family income/month	Rs.5,000-10,000	15	4	26.7	11	73.3	6.41*	P<0.05
	Rs.10,000- 15,000	11	7	63.6	4	36.4		
	Above Rs.15,000	4	0	0.0	4	100.0		
Attachment pattern	Parents	27	9	33.3	18	66.7	4.16 NS	P>0.05
	Friends	1	1	100.0	0	0.0		
	Self	1	0	0.0	1	100.0		
	Siblings	1	1	100.0	0	0.0		
Primary caregiver in early childhood	Mother	27	8	29.6	19	70.4	5.76*	P<0.05
	Others	3	3	100.0	0	0.0		
Previous knowledge on academic stress and coping strategies	Yes	1	0	0.0	1	100.0	0.60 NS	P>0.05
	No	29	11	37.9	18	62.1		
Source of information	Relatives	1	0	0.0	1	100.0	0.60 NS	P>0.05
	No	29	11	37.9	18	62.1		
Leisure time activities	Yoga/Meditation	3	1	33.3	2	66.7	0.36 NS	P>0.05
	Exercise	4	2	50.0	2	50.0		
	Others	23	8	34.8	15	65.2		
Combined		30	11	36.7	19	63.3		

\* Significant at 5% Level, NS: Non-significant

The above table. reveals the association between demographic variables and post-test knowledge scores on academic stress and its coping strategies, that the calculated  $\chi^2$  values with regard to age ( $\chi^2 = 7.3$ ,  $P<0.05$ ); (Figure. 20), Sex ( $\chi^2 = 4.47$ ,  $P<0.05$ ); (Figure. 21), type of family ( $\chi^2 = 4.34$ ,  $P<0.05$ ); (Figure. 22), monthly family income ( $\chi^2 = 6.41$ ,  $P<0.05$ ); (Figure. 23), primary caregiver in early childhood ( $\chi^2 = 5.76$ ,  $P<0.05$ ); (Figure. 24) were more than the table values at 0.05 level of significance, which indicates there is significant association with these variables like age, sex, type of family, monthly family income and primary care giver in early childhood. Hence the null hypothesis  $H_{02}$  is rejected and research hypothesis  $H_2$  is accepted with regard to above mentioned demographic variables, but the calculated  $\chi^2$  values with regard to religion ( $\chi^2 = 0.35$ ,  $P>0.05$ ) place of

residence ( $\chi^2 = 3.47$ ,  $P>0.05$ ); attachment pattern ( $\chi^2 = 4.16$ ,  $P>0.05$ ); previous knowledge on academic stress and its coping strategies ( $\chi^2 = 0.60$ ,  $P>0.05$ ); source of information ( $\chi^2 = 0.60$ ,  $P>0.05$ ) and leisure time activities ( $\chi^2 = 0.36$ ,  $P>0.05$ ) were less than the table values at 0.05 level of significance, which indicates there is no significant association with these variables like religion, place of residence, attachment pattern, previous knowledge on academic stress and its coping strategies, source of information and leisure time activities. Hence the null hypothesis  $H_{02}$  is accepted and the research hypothesis  $H_2$  is rejected with regard to these demographic variables

It is concluded that, post-test knowledge level of respondents are significantly associated with variables like age, sex, type

of family, family monthly income, primary caregiver in early childhood and the variables like religion, place of residence, attachment pattern, previous knowledge regarding academic stress and its coping strategies, source of information, leisure time activities had no significant association between knowledge scores.

#### Findings of the Study in Relation to the Objectives:

- 1) **To assess the existing knowledge regarding Academic Stress and Coping Strategies:** The present study showed that tenth standard student had inadequate knowledge regarding academic stress and its coping strategies with the mean knowledge score percentage of 43.9%..
- 2) **To assess the effectiveness of Structured Teaching Program on knowledge regarding Academic Stress and Coping Strategies:** The present study revealed that, the mean percentage pre-test knowledge scores is 43.9%; and post-test knowledge score is 81.8%. The comparison between the pre-test and post-test knowledge scores showed that the pre-test knowledge level of 66.7% of respondents regarding academic stress and its coping strategies was inadequate that of remaining 33.3% was moderate; whereas the post-test level of knowledge of 63.3% of respondent was adequate and 36.7% of them were moderate. Finding reveals that structure teaching programme was effective in improving the knowledge of 10<sup>th</sup> standard students regarding academic stress and its coping strategies.
- 3) **To find association between post test level of knowledge scores of tenth standard students and their demographic variables:** The present study, the calculated  $\chi^2$  values for age, Gender, type of family, family monthly income and primary care giver in early childhood regarding academic stress and its coping strategies were more than the table value and calculated  $\chi^2$  values were less than the table values for all the other demographic variables. Therefore, it was concluded that there was a significant association between post-test knowledge level and the variables like age, gender, type of family, family monthly income and primary care giver in early childhood regarding academic stress and its coping strategies, and there is no significant association with variables like religion, place of residence, attachment pattern, previous knowledge on academic stress and its coping strategies, source of information and leisure time activities.

### 3. Major Findings of the Study

#### Findings related to the respondents personal characteristics:

- Half (50%) of the respondents were 14 years of age and remaining half (50%) of the respondents were 15 years.
- Majorities of respondents (56.7%) were males and 43.3% were females.
- Most of the respondents (63.4%) were Hindus, 23.3% were Christians and 13.3% were Muslims.
- Most of the respondents (80%) were from Nuclear Family and remaining 20% students were from Joint Family.
- . Most of the students (73.3%) were from urban area and remaining 26.7% respondents were from rural areas.
- Half of the respondents family income was between Rs.

5,000- 10,000/-; 36.7% of them family income between Rs.10,000/- 15,000/-; 13.3% of the respondents were having the family income had >Rs.15, 000.

- Majority (90%) of respondents had attachment with parents and 3.3% of respondents had attachment with friends, self and siblings respectively.
- All 100% of the respondent's childhood was secured.
- Majority 90% of respondents have cared by mother in childhood and 10% of students are cared by others.
- Majority (96.7%) of respondents do not have previous knowledge and 3.3% had previous knowledge regarding academic stress and its coping strategies.
- Majority (96.7%) of respondents has no information regarding academic stress and its coping strategies and 3.3% of respondents got information from the relatives.
- Majority (76.7%) of students uses other leisure activities than the yoga and exercise, 13.3% of students do exercise and 10% of students do yoga or meditation as leisure time activities.

#### Findings related to Effectiveness of structured Teaching Programme.

- Using a structured knowledge questionnaire, knowledge level of 30 tenth standard students was assessed before and after administering structured teaching programme and the findings reveal that;
- Most of respondents (66.7%) had inadequate knowledge and 33.3% of them had moderate knowledge and none of them had adequate knowledge in pre-test. But in post-test majority of respondents (63.3%) had adequate knowledge and 36.7% of them had moderate knowledge and none of them had inadequate knowledge.
- The mean percentage of pre-test score of respondents for the whole test is 43.9%. The highest mean percentage (46.1%) of knowledge scores of respondents is obtained in the aspect coping and coping strategies. It is followed by 44.2% in stress and academic stress aspect; 43.9% in the aspect effects of academic stress, 42.2% in stressors, causes and symptoms of academic stress aspect.
- The mean knowledge according to their knowledge level in the post-test. The data showed that, majority of the respondents (63.3%) had adequate knowledge, 36.7% had moderate knowledge and none of them had the inadequate knowledge.
- Mean and mean percentage of pre-test knowledge scores of respondents in different aspects of knowledge questionnaire reveals mainly the mean percentage of post-test score of respondents for the whole test is 81.8%. The highest mean percentage (86.1%) of knowledge scores of respondents is obtained in the aspect of effects of academic stress. It is followed by 85.5% in coping and coping strategies aspect; 79.2% in stress and academic stress aspect. 78.9% in the aspect of stressors, causes and symptoms of academic stress.
- Pre-test mean percentage of knowledge score of respondents on academic stress and its coping strategies was 43.9% and post-test score was 81.8% with an enhancement of 37.9% in knowledge score. The calculated paired 't' test value of 24.42 is greater than the table value at 0.05 level of significance which indicate that there is a significant difference between pre-test and post-test knowledge scores of whole test of respondents. Hence the null hypothesis  $H_{01}$  is rejected and research hypothesis

$H_{01}$  is accepted. It was concluded that the structured teaching programme was effective in increasing knowledge of tenth standard students regarding academic stress and its coping strategies.

#### Findings related to association between post test levels of knowledge scores with selected demographic variables of tenth standard students.

Chi-square values were computed to find the association between post test level of knowledge and selected demographic variables viz; age, sex, religion, type of family, place of residence, family income, attachment pattern, primary caregiver in early childhood, previous knowledge, source of information and leisure time activities. This includes

- Age -  $\chi^2 = 4.11$ , (S),  $P < 0.05$ .
- Sex-  $\chi^2 = 4.47$ , (S),  $P < 0.05$ .
- Religion -  $\chi^2 = 0.35$ , (NS),  $P > 0.05$
- Type of family-  $\chi^2 = 4.34$ , (S),  $P < 0.05$ .
- Place of residence -  $\chi^2 = 3.47$ , (NS),  $P > 0.05$ .
- Monthly family income-  $\chi^2 = 6.41$ , (S),  $P < 0.05$ .
- Attachment pattern-  $\chi^2 = 4.16$ , (NS),  $P > 0.05$ .
- Primary caregiver in early childhood-  $\chi^2 = 5.76$ , (S),  $P < 0.05$ .
- Previous knowledge on academic stress and its coping strategies-  $\chi^2 = 0.60$ , (NS),  $P > 0.05$ .
- Source of information-  $\chi^2 = 0.60$ , (NS),  $P > 0.05$ .
- leisure time activities-  $\chi^2 = 0.36$ , (NS),  $P > 0.05$ .

These findings indicated that  $\chi^2$  calculated for Age, Gender, Type of family, family income and primary caregiver were more than the table value This indicates that, there is significant association between these variables and post-test knowledge level of respondents. These findings indicated that  $\chi^2$  calculated for religion, place of residence, attachment pattern, previous knowledge, source of information and leisure time activities were less than the table value This indicates that, there is no significant association between these variables and post-test knowledge level of respondents.

#### 4. Nursing Implication of the Study

**Nursing Education:** Nurse should have thorough knowledge regarding various aspects of health in order to provide comprehensive care to the society. One of the important aspects of the health is mental health. Nurses need to have in-depth knowledge regarding academic stress and its coping strategies and should have favorable attitude so that they can motivate the students to develop the coping skills. This can be done by integrating education including various academic problems in to all levels of curriculum in nursing education; the findings of the study would help the nurse to develop an in-sight into the importance of education regarding academic stress and its coping strategies.

**Nursing Practice:** Health education is an important tool for the health care agency. It is one of the most cost-effective interventions to promote healthy living. Nurses working in the psychiatric units, educational institutions, remand homes, orphanages as well as in the community should be equipped with knowledge on prevention of academic stress and should work towards empowering students with the psychosocial competence.

**Nursing administration:** Nurse administrators should take initiative in creating plan and policies for the continuing education programme to the staff nurses especially the school and college nurses. In each session they should assess their level of knowledge and skill before and after the continuing education programme, and evaluate the effectiveness as well as the problem they face.

**Nursing research:** The emphasis on research and clinical studies is needed to improve the quality of nursing care. The present study is only on the initial investigation in the area of teaching the students on academic stress. Various studies conducted showed that awareness on academic stress and its coping strategies should be created among citizens.

#### 5. Summary

The overall experience of conducting this study was satisfying one, as there was good co-operation from students and school authorities. The respondents were satisfied and happy with the information they received. The study was a new learning experience for investigator. The study reveals that STP could be used as an effective teaching strategy.

**Conflicts of Interest:** Nil

#### References

- [1] Wen C K. A study of stress sources among college students in Taiwan. *Journal of Academic Business Ethics*. 2000;10(1):78-79.
- [2] Walker J. Teens in distress series adolescent stress and depression. [serial online]. 2005. [cited 2014 Dec 1]; Available from URL: <http://www.extension.um.edu/distribution/youthdevelopment/d3038htm/>
- [3] Government of India. The District Health and Family Welfare Office, Dakshina Kannada District. Statistical survey of mental illness of the year 2007-2008.
- [4] Mili. 313 words article on school life [internet]. 2011 may 3 [cited 2013 Dec 4]. Available from URL: <http://www.preservearticles.com/201105036223/school-life-article.html>
- [5] Mohan Gupta, Renu Gupta, Subash Chandra Mishra. Examined the relationship between academic stress and academic achievement among secondary grade students. 2011; Vol: 2(7), 320-325.
- [6] Townsend MC. *Psychiatric Mental Health Nursing: Concepts of Care*. 4<sup>th</sup> Edition. Philadelphia. FA Devi's Publishers; 2009. P 4-10.
- [7] American Psychological Association: Stress: The different kinds of stress [internet]. 2013 feb 19 [Cited 2014 Nov 29]. Available from URL: <http://www.apa.org/helpcenter/stress-kinds.aspx>.
- [8] Mayo Clinic Staff. Stress management: Stress symptoms: Effects on your body and behavior [internet]. 2013 jul 19 [cited no 2013 Dec 14]. Available from URL: [http://www.mayoclinic.com/health/stress-symptoms/SR00008\\_D](http://www.mayoclinic.com/health/stress-symptoms/SR00008_D)
- [9] Ranjita M, MichelleMc. College students academic stress its relation to their anxiety,time management and leisure satisfaction. *American journal of Health*

- Studies[Internet]. Winter 2000 [cited 2013 Dec 24]. Available from URL: [http://findarticles.com/p/articles/mi\\_m0CTG/is\\_1\\_16/ai\\_65640245/](http://findarticles.com/p/articles/mi_m0CTG/is_1_16/ai_65640245/)
- [10] Burgin T. Yoga for anxiety. [online]. 2009 oct [cited on 2015 jan 1]. Available from: URL:<http://www.yogabasics.com/learn/yogaforanxiety.htm>.
- [11] Ward Struthers. c, Raymond P. and Verena H. An Examination of the Relationship Among Academic Stress, Coping, Motivation, and Performance in College. Research in higher education: Volume 1 / 1973 - Volume 51 / 2010
- [12] Admi H, "Nursing student`s stress during the initial clinical experience", Journal of nursing education, 1997 September; 36(7): 323 - 7.
- [13] Hart, K. E. Coping with anger-provoking situations: Adolescent coping in relation to anger reactivity. Journal of Adolescent Research-2006; 6, 357-370.
- [14] Dr. David Rainham 'Stressed Out' – Taking Control of Students Stress', an interactive Teacher's Guide, and other students stress and coping materials. For more information. Visit [www.optimumhealth.com](http://www.optimumhealth.com)
- [15] Sarita Vaidya, Shruti Jain. A study on relationship of demographic variables with stress felt by student community. Disseminate Knowledge-International Journal of Research in Management Science and Technology (Disseminate Knowledge-IJRMST). 2013 jan-apr; Vol 1 (1): 87
- [16] Levey- Thors. C., Schiaffino, K.M., Zaleski,E.H.,. Coping mechanisms, stress, social support, and health problems in college students. Fordam University, Department Of Psychology. 1998; Vol.2, No.3, 127-137.
- [17] Sayed F N, Hagani H, "Experienced stressors and coping strategies among Iranian nursing students", Journal for nurses, 2007 November; 13(1): 11 – 6
- [18] Dhital AD, Badhu BP, Paudel RK, Upreety DK. Department of community Health Nursing, College of nursing, BP Koriala Institute of Health Sciences, Haran, Sunsari, Nepal. Effectiveness of structured teaching programme in improving knowledge and attitude of school going students on reproductive Health. Kathmandu Univ Med J (KUMJ) [Serial online] 2005 Oct-Dec; [cited Dec 2014]. Available from URL: <http://www.ncbi.nlm.nih.gov/pubmed/?=16449840>