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RESEARCH ARTICLE

A COMPARATIVE STUDY TO ASSESS STRESS AND COPING PATTERN AMONG ADOLESCENT STUDENTS IN SELECTED CBSE AND STATE BOARD SYLLABUS SCHOOLS

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Key words:-
Comparative Study. Stress. Coping Pattern. Adolescent Students. Cbse. State Board. Syllabus. Schools.

Abstract

Aim: To assess stress and coping pattern among adolescent students in selected CBSE and state board syllabus schools.
Settings and design: selected CBSE and state board syllabus schools at Vijayapur.
Methods and material: A comparative descriptive research design was adopted for this study. The sample was drawn through simple random sampling technique and consisted of 50 adolescent students each from selected CBSE and state board syllabus schools at Bijapur
Statistical analysis used: A structured stress rating scale and coping rating scale was used to assess and compare the stress and coping pattern respectively for data collection. The data was analyzed using descriptive and inferential statistics.
Result: The study results shows that 74% of CBSE school adolescent students were under moderate level of stress and only 2% of students were having very severe stress similarly 70% of state board school students were under moderate level of stress and about 8% of students were having severe stress. 82% of CBSE school adolescent students had good coping pattern and only 8% of students were having excellent coping and none of the student has poor coping. Similarly 80% of state board school students were having good coping pattern and none of them having poor coping. On comparison between CBSE and state board schools adolescent students stress was similar in both groups and their coping pattern was good, It is evident from the data presented the calculated Z value for stress ($Z_{98} = 0.109$) is lesser than the table value ($Z_{98} = 1.98$). It indicates that there is no significant difference between stress of C B S E and State board syllabus school adolescent students.in both groups. The calculated Z value for coping is($Z_{98} = 0.283$) lesser than the table value ($Z_{98} = 1.98$) .It indicate that there is no significant difference between coping pattern of C B S E and State board syllabus school adolescent students.

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Conclusions: To find a comparative study to assess stress and coping pattern among adolescent students in selected CBSE and state board syllabus schools.

Introduction:-

Todays children are tomorrow's citizens of country. Adolescents are an embodiment of our dreams and hopes of the future. In the developing country education will take more important role. Adolescence is a stage development that occurs between childhoods to adulthood. Although there are varying definitions of adolescence, adolescence is generally viewed as a stage where young people experience rapid growth of their body and mentality to full maturity during adolescence. Most problems of adolescence are due to failure in understanding the anatomical, morphological, and psychological changes. These problems may further cause psychological troubles and even induce deviant behavior. Along with that school is the other main source of stress during adolescence. Stress may come from academic tests, fear of failure, interpersonal relations, relationship problems, life changes, family factor, and career exploration.[2] Stress can be defined as adverse reaction of the people to excessive pressure or other types of demand placed on them or external demands that go beyond our capacity.[3] it can affect both health and academic performance of the students.[4]

India's education system is divided into different levels such as pre-primary level, primary level, elementary education, secondary education, undergraduate level and postgraduate level.[6] Present day education aims at gaining knowledge and to be successful in life in terms of academic achievement and not based on capacity and abilities and background of the students.[7]In the academic and policy discourses, low achievement is attributed to unsatisfactory work of the students; the troubles in the world including India are due to the fact that education has become more an intellectual exercise and not a question of moral and spiritual values. Lack of motivation and incompetence in taking corrective steps result in a system that has become burdensome and stressful to students. Parents fail to accept and understand their children and therefore they impose their own desires on them.[5, 7]

Materials and Methods:-

Problem Statement:

A Comparative Study To Assess Stress And Coping Pattern Among Adolescent Students In Selected Cbse And State Board Syllabus Schools At Vijayapur

Objectives:-

1. To assess the level of stress among CBSE and state board adolescent students on syllabus as measured with stress scale.
2. To assess the coping pattern among CBSE and state board adolescent students on syllabus as measured with coping scale.
3. To compare the CBSE and state board adolescent students stress and coping pattern.
4. To find out the association between stress and coping pattern with selected demographic variables among adolescent students of CBSE and state board syllabus.

Hypotheses:-

The following hypotheses will be tested at 0.05 level of significance.

H_1: There is significant difference in the stress scores between CBSE and state board school adolescent students.

H_2: There is significant difference in the coping scores between CBSE and state board school adolescent students.

H_3: There is significant association of stress scores with selected demographic variables among CBSE and state board school adolescent students.

H_4: There is significant association of coping scores with selected demographic variables among CBSE and state board school adolescent students.

Variables of study:-

Two types of variables have been identified in this study. They are research variables and attribute varia

Research variables:-

The research variables in this study are

1. Stress
2. Coping

Attribute variable:-
The demographical variables in this study consisted**,** age, gender, type of family, place of stay, and educational status of parents, occupation of parents' family income, and number of siblings

Setting of the study:-
For the present study setting was selected CBSE and state board syllabus schools at Bijapur Formal permission was obtained from the concerned authorities for conducting the study.
Population:-
In the present study the population consisted of adolescents studying in selected CBSE and state board syllabus schools at Bijapur.

Sample:-
In this study the sample size was 100 adolescent students 50 each, from selected CBSE and state board high schools at Bijapur

Sampling technique:-
In this study, simple random sampling technique is adopted. Simple random sampling is the most pure and every member of population has an equal chance being selected as a subject.

Sampling criteria:-
Inclusion criteria:-
- Adolescents who are studying in CBSE and state board schools.
- Age group between 15-16 years.
- Students who are studying in 10^{th} class
- Students who are studying in English medium

Exclusion criteria
- Students those who are not willing to participate.
- Those not present at the time of data collection

Data collection instrument
The instrument used to collect the data consisted of:-
- Proforma for Demographic variables
- Stress rating scale to measure stress.
- Rating scale to measure coping pattern

Instruments & preparation of the tool: - Baseline proforma Stress rating scale coping rating scale
- Preparation of the blue print.
- Development of the first draft of the tool
- Development of criteria checklist.
- Content validity of the tool
- Reliability of the tool.
- Pre-testing the tool.
- Development of the final draft of the tool
- Pilot study

Plan for data analysis:-
Part I: Baseline proforma containing sample characteristic would be analyzed using frequency and percentage.
Part II : Stress score and coping score would be analyzed in terms of using frequency and percentage deviation.
Part III: Comparison between CBSE adolescent students, stress scores and state board adolescent students stress scores and CBSE adolescent students coping scores and state board adolescent students coping score analyzed by using unpaired 'z' test
part IV a: Chi square test would be computed to find the association of stress scores and coping score between CBSE and state board adolescence students with selected demographic variables.

Description of the Final Tool:-
The final tool consists of two parts:

Section I: Baseline proforma:-
It contains 10 items for obtaining information regarding age, gender, type of family, family income, place of stay, educational status of parents, occupation of the parents and number of siblings.

Section II: Stress rating scale:-
This part of the tool consisted of 48 items under the following areas:-
The respondents were requested to place a tick mark against the most appropriate answer. The maximum score of the stress rating scale was **2**. The stress scale was prepared in English. The scores were arbitrarily graded as

- **0-24:** Mild stress (25%)
- **25-48:** Moderate stress (52%)
- **49-72:** Severe stress (79%)
- **73-96:** Very severe stress (100%)

Section III: Coping rating scale:-
This part of the tool consisted of 32 items in the following areas:

- Acceptance of reality area
- Problem solving area
- Self-control area
- Seeking social support area
- Wishful thinking
- Spirituality

The respondents were requested to place a tick mark against the most appropriate answer. The maximum score of the coping rating scale was 64. The coping scale is prepared in English .The scores were arbitrarily graded as:

- **0-16:** Poor coping (25%)
- **17-32:** Moderate coping (50%)
- **33-48:** Good coping (75%)
- **49-64:** Excellent coping (100%)

Organization of findings:-
The data have been analyzed and presented under the following headings:-

- **Part I:** Demographic characteristics.
- **Part II:** Assessment of level of stress of state board and CBSE syllabus school adolescent students.
- **Part III:** Assessment of coping pattern adopted by state board and CBSE syllabus school adolescent students.
- **Part: IV:** Comparison of the CBSE and state board adolescent Students stress and coping pattern.
- **Part V**: Association between stress and coping pattern with selected demographic variables among adolescent students of CBSE and state board syllabus school.

Part I: Demographic characteristics:-

Table 1: **Frequency and percentage distribution of socio-demographic variables related to adolescent students. n=100**

DEMOGRAPHIC VARIABLE	CBSE SCHOOL STUDENTS(50)		STATE BOARD SCHOOL STUDENTS (50)	
	Frequency	%	Frequency	%
1. Age in years				
a. 15	34	68	22	44

b. 16	16	32	28	56
2. Gender				
a. Male	29	58	24	48
b. Female	21	42	26	52
3. Place of stay				
a. Hostel	0	0	0	0
b. Home	49	98	49	98
c. Relatives' house	1	2	1	2
d. Others	0	0	0	0

Table (1) shows that majority of CBSE school students i,e 68% were belong to the age group of 15 years. 44% of state board school students were 15years of age rest of them belongs to 16 years. It also reveals that majority (58%) students from CBSE were males and in state board school the sample distribution related to gender is not significantly different (48&52% respectively)Regarding place of stay, 98% of students belong to both CBSE and state board school students were staying in home and none of them staying in hostel or any other place.

Table 2: Frequency and % distribution of socio-demographic variables related to parents.N-**100**

Demographic variable	**CBSE school students(50)**		**State board school students(50)**	
	Frequency	%	frequency	%
1.Education status of the father				
a.Illitarate	1	2	0	0
b. Primary school	1	2	1	2
c. secondary school	5	10	3	6
d.PUC	6	12	10	20
e. Graduate	21	42	24	48
f .post Graduate	16	32	12	24
2.Education status of the mother				
a.Illitrate	1	2	1	2
b. Primary school	3	6	6	12
c. secondary school	11	22	12	24
d.PUC	7	14	14	28
e. Graduate	21	42	16	32
f. post Graduate	7	14	1	2
3.Occupation of father				
a.Govt.employee	15	30	24	48

c. Private employee	31	62	19	38
c. Agriculture	4	8	6	12
d. Cooli	0	0	1	2
4.Occupation of mother				
a.Govt.employee	4	8	3	6
c.Private employee	6	12	1	2
c. Agriculture	0	0	0	0
e.House wife	40	80	46	92

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Table:2 reveals that majority of father of both CBSE and state board students (42 & 48% respectively) were graduates 32%, 24% respectively were post graduates none of father of state board school students were illiterate and only 1 father of CBSE student was illiterate. Regarding educational status of mother, majority of mothers from both category were graduates (42% & 32% respectively) 14% of mothers of CBSE students were post graduates and only 2% each from both group were illiterate. About occupation of father, majority i,e 68% of father of CBSE school students were private employees, majority i,e 48% of father of state board school students were Govt. employee, only 2% of state board school students were coli.Regarding mothers occupation, majority of mothers of both groups i.e. 80% & 92% respectively were house wives and none of them were doing agriculture work.

Table 3: Frequency and percentage distribution of socio-demographic variables related to family.N-100

DEMOGRAPHIC VARIABLE	**CBSE SCHOOL STUDENTS (50)**		**STATE BOARD SCHOOL STUDENTS(50)**	
	Frequency	**%**	**Frequency**	**%**
1. Type of family				
a. Nuclear	33	66	34	68
b. Joint	17	34	14	28
c. Extended	0	0	2	4
2. Income of the family (In Rupees)				
a. Below 5000/-	0	0	4	8
b. 5001/- – 10000/-	7	14	11	22
c. 10,001/- and above	43	86	35	70
3. Number of siblings				
a. Nobody	7	14	4	8
b. 1	18	36	22	44

c. 2	14	28	18	36
d. 3 and above	11	22	6	12

Table (3) shows that majority of both CBSE and state board students belongs to nuclear family(66% & 68% respectively), 34% & 28% respectively were in joint family and none of the CBSE student belongs to extended family and only 4%were state board school students belongs to extended family. Regarding income of family, majority of both CBSE and state board school students have family income above 10001(86% & 70% respectively).14% & 22% of both group students family were having income between 5001 to 10000 none of CBSE students have family income < 5000 and only 8%family and only 8% of state board school students belongs to the family of monthly income below 5000. About number of sibling's majority of both CBSE and state board school students (36 & 44% respectively) having single siblings. 28 & 36% respectively were having 2 siblings. 22 & 12% respectively were having 3 sibling and 14&8% of both group were having no siblings.

Part II: Assessment of level of stress of state board and CBSE syllabus school adolescent students Level of stress among CBSE school adolescent students n-50

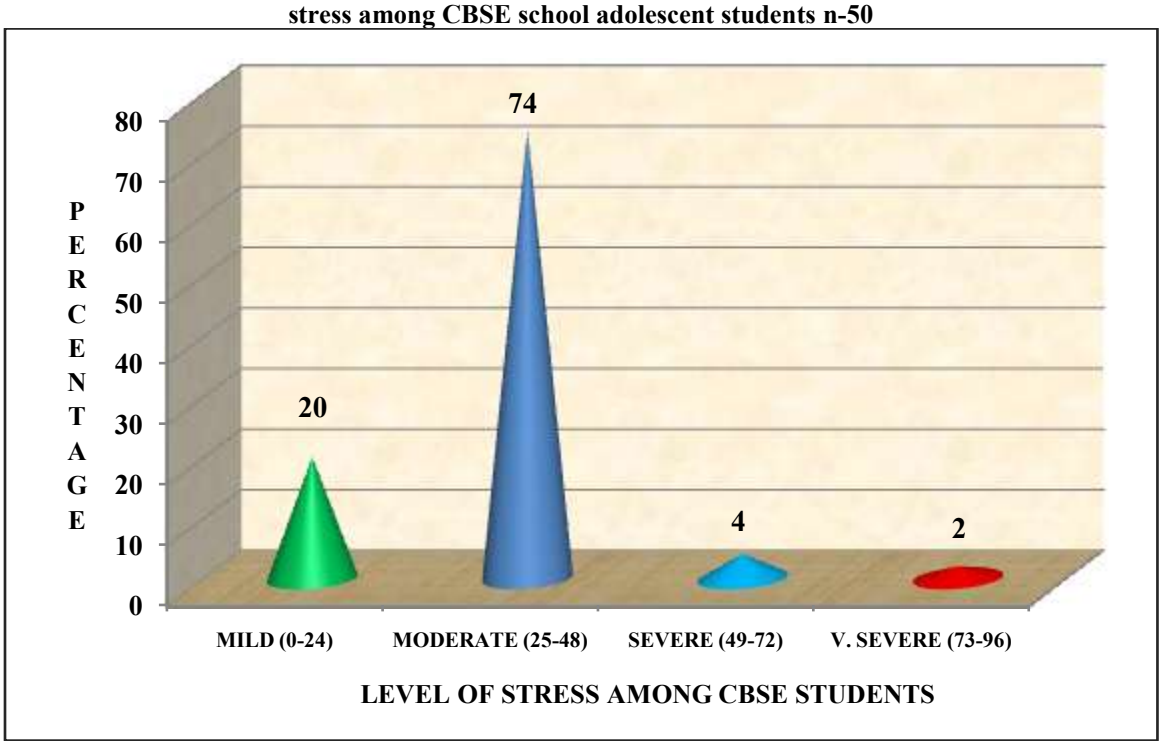

Figure 3:- Pyramid diagram shows the percentage distribution of Stress score among C B S E school adolescent students.

Fig; 1 reveals that 74% of CBSE school adolescent students were under moderate level of stress and only 2% of students were having very severe stress

Level of stress among state board school adolescent students

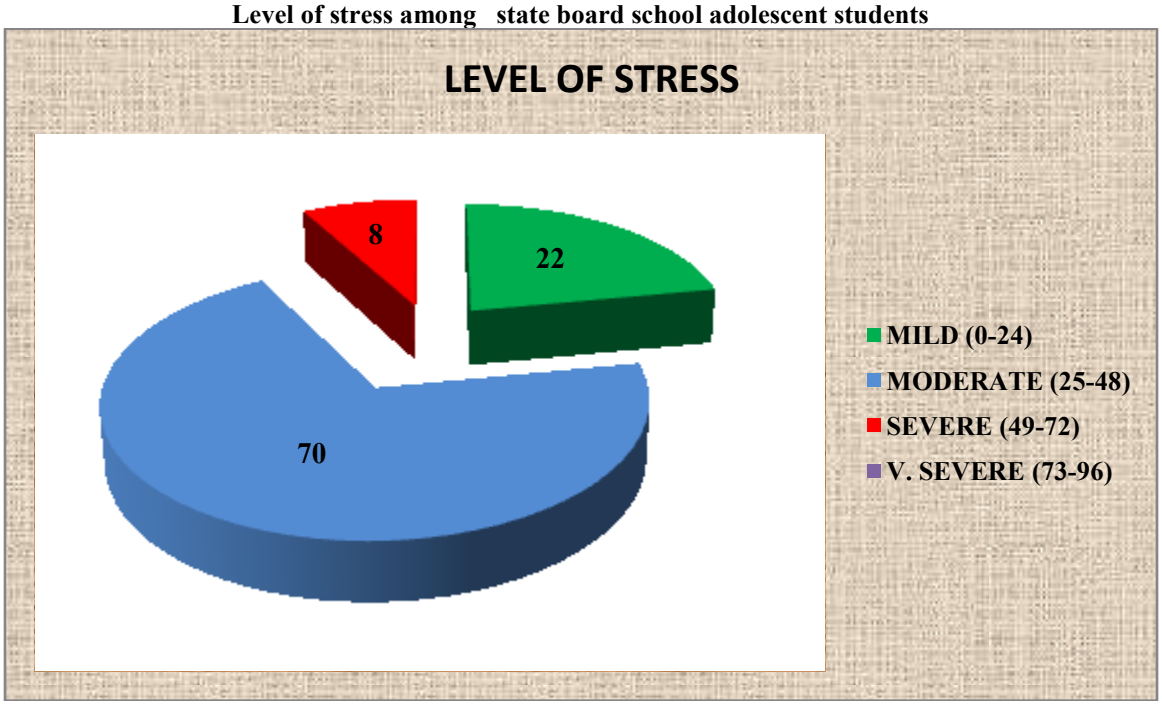

Figure 4:- Pie diagram shows the percentage distribution of Stress score among state board school adolescent students.

Fig;4 reveals that 70% of state board school students were under moderate level of stress and only 8% of students were having severe stress

Part III: **Assessment of coping pattern adopted by state board and CBSE syllabus school adolescent students**

Coping scores of CBSE school adolescent students

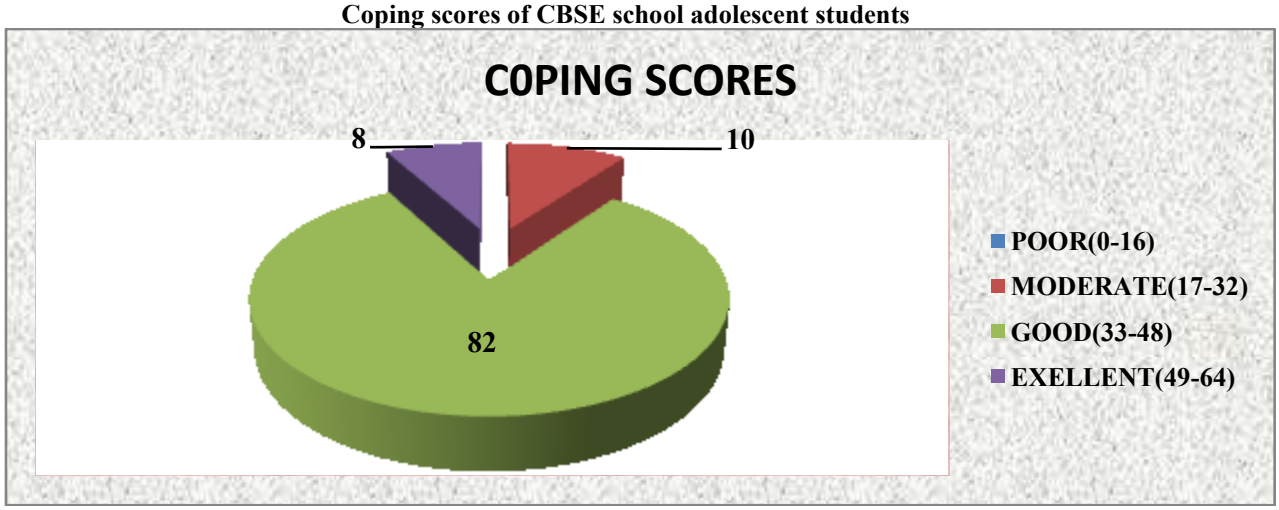

Figure 5:- Pie diagram shows the percentage distribution of coping score among CBSE school adolescent students

Fig;5 reveals that 82% of CBSE school adolescent students were under good coping pattern and only 8% of students having excellent coping and none of the student has poor coping.

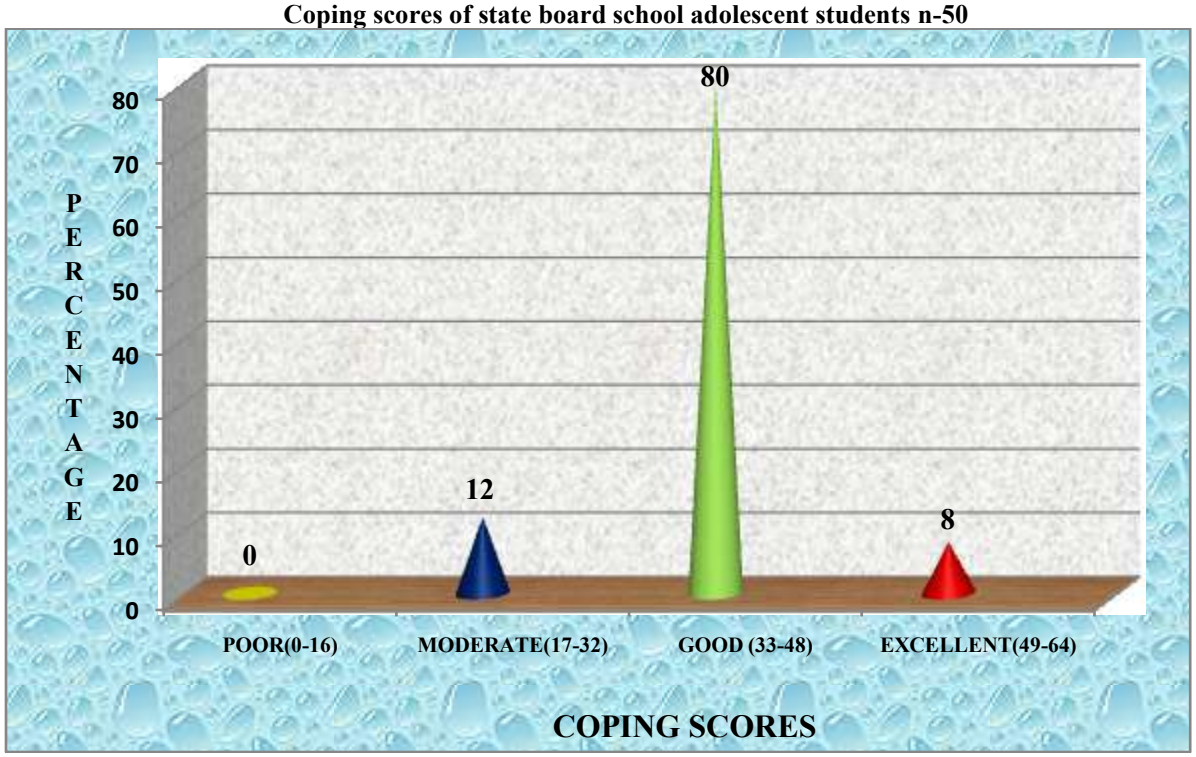

Figure 6:- Bar diagram shows the percentage distribution of coping score among State board school adolescent students

Fig:6 reveals that 80% of state board school students were under good coping pattern and none of them having poor coping

Part: IV: Comparison of the CBSE and state board syllabus school adolescent Student's stress and coping pattern.

Table- 4 n-100

PATTERN	C B S E		STATE BOARD		REMARK		
	n_1	mean	n_2	Mean	SD	Z_{CAL}	Z_{TAB}
STRESS	50	32.02	50	32.78	34.62	0.109	1.98

INFERENCE: It is evident from the data presented in Table 4 that the calculated Z value for stress (Z_{98} = 0.109) is lesser than the table value (Z_{98} =1.98). It indicates that there is no significant difference between stress of C B S E and State board syllabus school adolescent students.

Comparison of stress level between state board and CBSE syllabus school adolescent students n-100

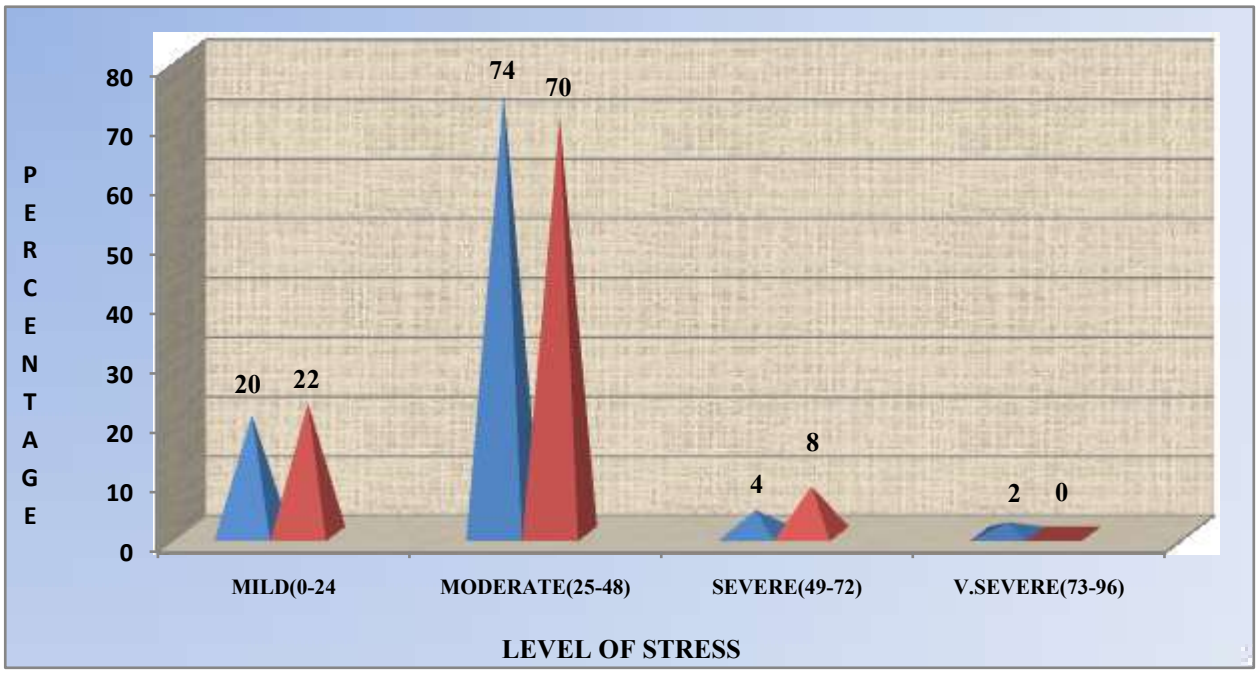

Figure 7:- Bar diagram shows the percentage distribution of stress scores among CBSE and state board syllabus school adolescent students

Comparison of the CBSE and state board syllabus school adolescent Student's coping pattern.n- 100

Table-5

Pattern	C B S E school students		State board school students		Remarks		
	n_1	mean	n_2	Mean	SD	Z_{Cal}	Z_{Tab}
Coping	50	41.5	50	39.16	41.20	0.283	1.98

Inference: The calculated Z value for coping is(Z_{98} = 0.283) lesser than the table value (Z_{98} =1.98) .It indicate that there is no significant difference between coping pattern of C B S E and State board syllabus school adolescent students.

Comparison of coping level between CBSE and state board syllabus school adolescent students.n-100

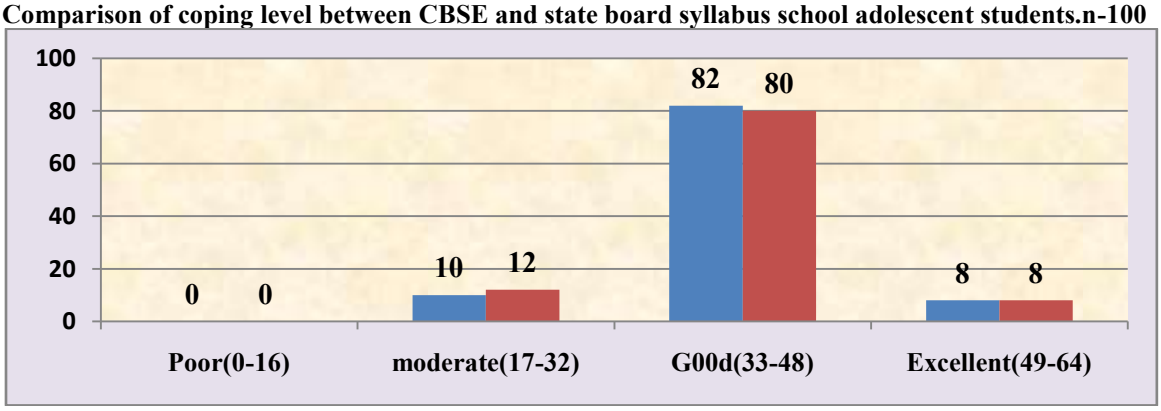

Figure 8:- Bar diagram shows the percentage distribution of coping score among CBSE and state board syllabus school adolescent students

Part V: **Association between stress and coping pattern with selected demographic variables among adolescent students of CBSE and state board syllabus.**

Table (6) Association of stress scores of selected Demographic variables among state board school adolescent students n=50

Demographic Variables	Category	≤ median	> median	χ^2	P value	Df	Remarks
Age in years	15 years	14	8	2.11	3.84	1	NS
	16 years	12	16				
Gender	Male	10	14	1.96	3.84	1	NS
	Female	16	10				
Type of family	Nuclear	17	18	0.53	3.84	1	NS
	Joint	8	5				
	Extended	1	1				
Educational status of the father	Illiterate	0	0	9.26	9.49	4	NS
	Primary school	1	0				
	High school	1	2				
	PUC	4	6				
	Degree	10	4				
	Post graduate	10	2				
Educational status of the mother	Illiterate	0	1	7.36	7.82	3	NS
	Primary school	4	2				
	High school	9	2				
	PUC	4	10				
	Degree	9	8				
	Post graduate	0	1				

The chi-square test to find the association of Stress score of state board syllabus school adolescent students with selected demographic variables. Shows no significant association at 0.05 level of significance. Therefore null hypothesis is accepted and research hypothesis is rejected.

Table (7) Association of stress scores with selected Demographic Variables among CBSE school adolescent students n=50

Demographic Variables	Category	≤ median	> median	χ^2	P value	Df	Remarks
Age in years	15 years	20	13	1.68	3.84	1	NS
	16 years	7	10				
Gender	Male	13	16	2.32	3.84	1	NS
	Female	14	7				
Type of family	Nuclear	20	13	1.53	3.84	1	NS
	Joint	7	10				
	Extended	0	0				
Educational status of the father	Illiterate	0	1	0.65	9.49	4	NS
	Primary school	0	1				
	High school	4	4				
	PUC	3	3				

	Degree	11	9				
	Post graduate	9	7				
Educational status of the mother	Illiterate	0	1	4.5	7.82	3	NS
	Primary school	0	3				
	High school	5	9				
	PUC	3	5				
	Degree	14	7				
	Post graduate	5	2				

The chi-square test to find the association of Stress score among CBSE syllabus school adolescent students with selected demographic variables. Shows no significant association at 0.05 level of significance. Therefore null hypothesis is accepted and research hypothesis is rejected.

Table (8) Association of coping scores with selected Demographic Variables among state board school adolescent students n=50

Demographic Variables	Category	≤ median	> median	χ^2	P value	df	Remarks
Age in years	15 years	15	7	4.1	3.84	1	S
	16 years	11	17				
Gender	Male	14	10	0.76	3.84	1	NS
	Female	12	14				
Type of family	Nuclear	19	15	0.61	3.84	1	NS
	Joint	7	9				
	Extended	0	0				
Educational status of the father	Illiterate	0	0	3.3	5.99	2	NS
	Primary school	0	0				
	High school	3	1				
	PUC	7	4				
	Degree	9	15				
	Post graduate	7	5				
Educational status of the mother	Illiterate	0	0	0.25	7.82	3	NS
	Primary school	3	4				
	High school	6	5				
	PUC	8	6				
	Degree	9	8				
	Post graduate	0	1				

The chi-square test to find the association of coping scores among state board school adolescent students with selected demographic variables. Shows no significant association at 0.05 level of significance. Therefore null hypothesis is accepted and research hypothesis is rejected.

Table (9) Association of coping scores with selected Demographic Variables among CBSE school adolescent students n=50

Demographic Variables	Category	≤ median	> median	χ^2	P value	df	Remarks
Age in years	15 years	20	13	0.013	3.84	1	NS
	16 years	10	7				
Gender	Male	19	10	0.86	3.84	1	NS
	Female	11	10				
Type of family	Nuclear	18	14	0.51	3.84	1	NS
	Joint	12	6				
	Extended	0	0				
Educational status	Illiterate	0	0				

of the father	Primary school	0	0	5.91	7.82	3	NS
	High school	6	1				
	PUC	5	1				
	Degree	13	8				
	Post graduate	6	10				
Educational status of the mother	Illiterate	0	0	3.57	9.49	4	NS
	Primary school	3	2				
	High school	8	3				
	PUC	5	2				
	Degree	12	8				
	Post graduate	2	5				

The chi-square test to find the association of coping scores among CBSE school adolescent school adolescents with selected demographic variables. Shows no significant association at 0.05 level of significance. Therefore null hypothesis is accepted and research hypothesis is rejected.

Discussion:-

In this comparative study to assess stress and coping pattern among adolescent students in selected CBSE and state board syllabus schools. In the present study there was no significant association between stress and coping pattern among adolescent students in selected CBSE and state board syllabus schools.

Conclusion:-

The main aim of the study is to assess stress and coping pattern among adolescent students in selected CBSE and state board syllabus schools.100 students were selected as samples. Baseline proforma contains 10 items for obtaining information regarding demographical variables. Stress rating scale is part of the tool consisted of 48 items, the stress scale was prepared in English. The scores were arbitrarily graded as 0-24: Mild stress (25%) 25-48: Moderate stress (52%) 49-72: Severe stress (79%) 73-96: Very severe stress (100%) and Coping rating scale this part of the tool consisted of 32 items. The coping scale is prepared in English .The scores were arbitrarily graded as 0-16: Poor coping (25%) 17-32: Moderate coping (50%) 33-48: Good coping (75%) 49-64: Excellent coping (100%) when the data was collected to do the statistical analysis, the result has shown that the stress and coping mechanism will play important role in student life to reach the goals.

Recommendations:-

On the basis of the present study, the following recommendations have been made for further study:

1. The present study may be replicated on a larger sample size which may help to draw more definite conclusions and make generalizations.
2. An experimental study can be conducted among adolescents. Effect of selected coping pattern on reduction of stress
3. A similar study can be replicated in different settings.
4. A similar study can be conducted on the students on other branches of studies.
5. An evaluative study can be done to determine the effectiveness of relaxation therapy in reduction of stress.
6. A similar study can be carried out using other teaching strategies like video films, computer assisted instructions, etc.
7. An evaluative study on the effectiveness of stress management techniques among adolescents.

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