

A comparative study on academic stress and coping strategies between adolescents studying in selected urban and rural colleges at Mangalore

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Abstract

Adolescence is the second decade of life. Adolescents represent about one fifth of India's population. Stress has become an important factor in academic circle as well as in our society. Modern school going adolescents are experiencing enormous amount of stress. Healthy coping is essential to overcome such situations. The aims of this study were to assess and compare the academic stress and coping strategies between adolescents studying in selected urban and rural colleges at Mangalore. A comparative descriptive research design was adopted for this study. The sample was drawn through simple random sampling technique and consisted of 60 each urban and rural college. A structured stress rating scale and coping rating scale was used to assess and compare the academic stress and coping strategies. The result showed that, Most of the urban subjects (83.3%) had severe academic stress and 16.7% of them had very severe academic stress, whereas in the rural area all the subjects had moderate academic stress. Most of the urban subjects (98.3%) coping was moderate and 1.7% subjects had good coping. All the adolescents in rural area showed good coping. The academic stress of urban adolescents (M-41) was consistently high when compared to that of the rural adolescents (M-22) and the coping strategy adopted by rural adolescents (M-29.5) were consistently higher than that of the urban adolescents (M-21). There was no significant association of academic stress scores and coping strategies scores of urban and rural adolescents and selected demographic variables. The findings of the study suggest that college students should play an active role in stress management. On one hand they can learn various stress coping measures from various channels and transform anxiety frustration caused by inadequate adaptation to stress. Training students on positive coping strategies, reducing stressor-related school training, and improving parent and teacher supports to the students will help to improve this condition.

Keywords: Academic Stress, Rural Areas, Urban Area.

Introduction

Stress is a very familiar condition faced by the students when they are unable to bear the risks involved in higher education. They are often found in frightening, abusive, depressing, threatening competitive, unpredictable, and confusing situations. The percentage of suicides is more among the college students compared to the others and these suicides are mostly associated with academic failure or under achievement¹.

Coping strategies can be defined as types of conscious adaptive responses consistently applied to a broad range of stressful events. Good coping behaviours can decrease the damage brought by stress. However, inappropriate coping behaviours can increase individual problems thereby increasing an individual's stress. Bad coping behaviour also has unfavourable influence on the mind and body. Some study findings strongly highlight the need of regular assessment of mental health of students in order to identify the psychological, behavioural, physiological, and relationship related issues among students and to train the students on positive coping strategies, reducing stressor-related school training, and improving parent and teacher supports to the students to help improve this condition. So parents and present educational system should provide justice to these young minds,

otherwise the society will have to pay a price to deal with it.⁽²⁻⁶⁾

University students often attempt to control and reduce their stress through avoidance, religious and social support, or positive reappraisal, leisure satisfaction, and fitness activities act as stress buffers, providing a sense of purpose and competence for college students. Students' academic stress is also reduced and controlled through effective time management and study techniques. A short-term longitudinal study was conducted to examine the structure of coping behaviour and the relationship between coping style and depression during adolescence. The result showed that 84% of adolescents adopted approach-oriented coping style and 16% adopted avoid-oriented coping style in order to cope up with their stressors.⁽⁷⁾

Material and Methods

A comparative descriptive research design was adopted for this study. The sample was drawn through simple random sampling technique and consisted of 60 each urban and rural adolescents studying in the selected colleges at Mangalore. Formal written permission was obtained from the authorities to conduct the study and informed consent was obtained from the subjects prior to the data collection process. A structured stress rating scale and coping rating scale

was used to assess and compare the academic stress and coping strategies respectively for data collection. The investigator explained the purpose of the study and requested the participants' full cooperation and assured the confidentiality of the data. Written consent was taken from the participants. Participants cooperated

well during the time of data collection process. The data was analysed using descriptive and inferential statistics.

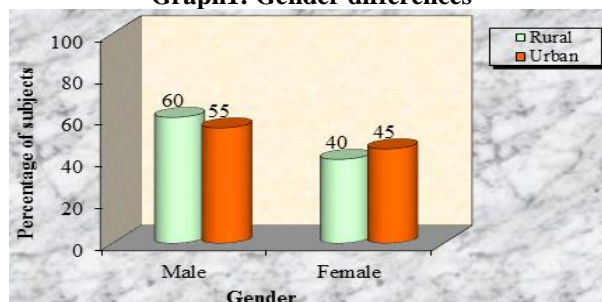
Statistics: Chi-square test, Unpaired 't' test and Fisher's Exact test.

Results

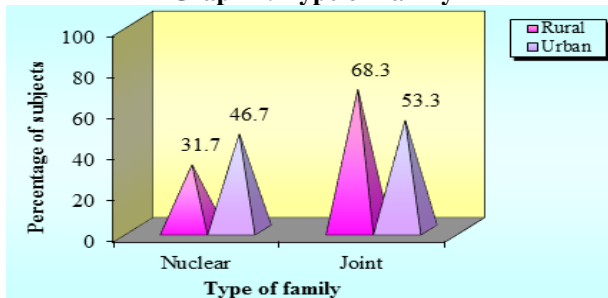
Table 1: Frequency and percentage distribution of sample characteristics

Variable		Rural		Urban	
		f	%	f	%
1.	Age				
1.1	15-16 years	23	38.3	20	33.3
1.2	17-18 years	37	61.7	40	66.7
2.	Gender				
2.1	Male	36	60.0	33	55.0
2.2	Female	24	40.0	27	45.0
3.	Type of family				
3.1	Nuclear	19	31.7	28	46.7
3.2	Joint	41	68.3	32	53.3
3.3	Extended	-	-	-	-
4.	Place of stay				
4.1	Hostel	26	43.3	21	35.0
4.2	Home	34	56.7	39	65.0
4.3	Relatives' house	-	-	-	-
4.4	Other	-	-	-	-
5.	Education of father				
5.1	Up to PUC	40	66.7	37	61.7
5.2	Above PUC	20	33.3	23	38.3
6.	Education of mother				
6.1	Up to PUC	4	6.7	1	1.7
6.2	Above PUC	56	93.3	59	98.3
7.	Income of the family (Rs.)				
7.1	< 5,000	18	30.0	23	38.2
7.2	5,001-10,000	42	70.0	37	61.7
7.3	> 10,000	-	-	-	-
8.	No. of siblings				
8.1	None	28	43.3	21	35.0
8.2	1 or more	34	56.7	39	65.0

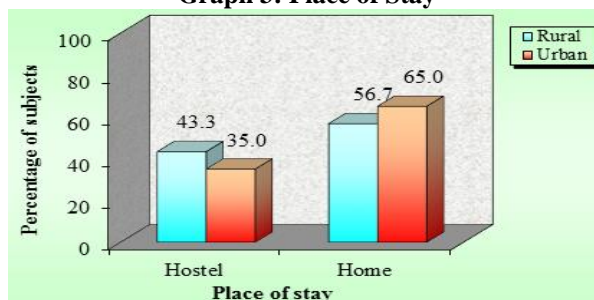
Graph1: Gender differences



Graph 2: Type of Family



Graph 3: Place of Stay



Graph 4: Number of Siblings

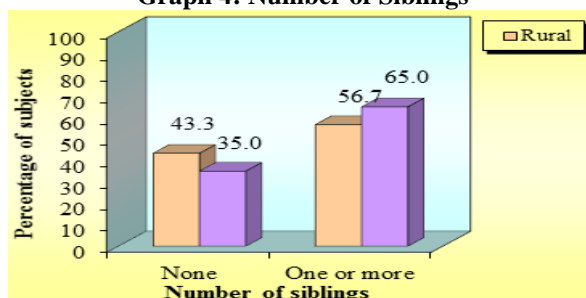


Table 2: Area-wise level academic stress of urban and rural adolescents

Area	Rural			Urban		
	Mean	SD	Mean %	Mean	SD	Mean %
Cognitive	3.45	0.811	43.13	5.52	0.596	68.96
Affective	6.30	1.280	52.50	10.18	0.390	84.86
Behavioural	2.83	0.376	35.42	5.92	0.279	73.96
Physiological	5.57	1.240	34.79	11.90	0.681	74.38
Social	4.22	0.585	35.14	8.02	0.504	66.81
Overall	22.37	2.240	39.94	51.53	1.033	74.17

Graph 5: Area-wise level academic stress of urban and rural adolescents

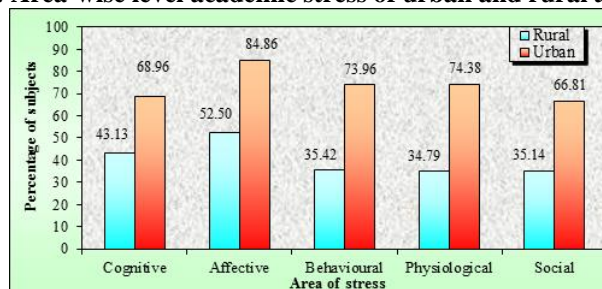


Table 3: Overall level of academic stress of rural and urban adolescents.

Level of stress	Rural		Urban	
	Frequency	Percentage	Frequency	Percentage
Very severe	-	-	10	16.7
Severe	-	-	50	83.3
Moderate	60	100.0	-	-
Mild	-	-	-	-

Graph 6: Ogive comparing the academic stress scores of rural and urban adolescents

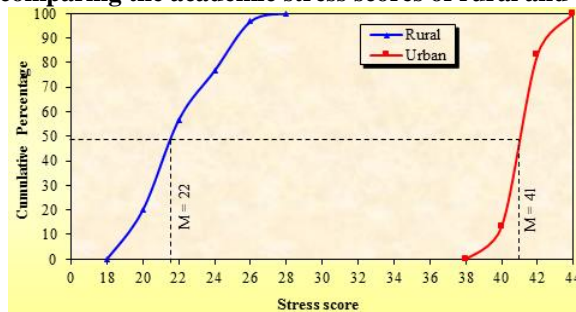


Table 4: Area-wise coping strategies adopted by urban and rural adolescents

Area	Rural			Urban		
	Mean	SD	Mean %	Mean	SD	Mean %
Acceptance of reality	4.83	0.557	80.56	2.67	0.475	44.44
Problem solving	6.43	1.731	64.33	3.60	0.616	36.00
Self-control	4.35	0.799	43.50	3.48	1.081	34.83
Seeking social support	5.80	0.953	58.00	6.03	0.736	60.33
Wishful thinking	4.27	1.118	53.33	2.88	0.640	36.04
Spirituality	3.27	0.446	81.67	2.00	0.000	50.00
Overall	28.95	1.395	60.31	20.67	2.088	43.06

Graph 7: Area-wise coping strategies adopted by urban and rural adolescents

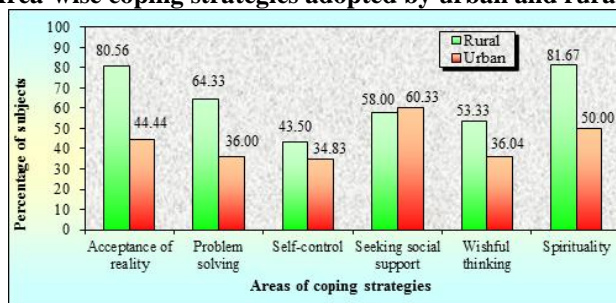


Table 5: Significant difference between the academic stress of urban and rural

Area of stress	Rural		Urban		Mean diff.	't' value
	Mean	SD	Mean	SD		
Cognitive	3.45	0.811	5.52	0.596	2.07	15.90*
Affective	6.30	1.280	10.18	0.390	3.88	22.49*
Behavioural	2.83	0.376	5.92	0.279	3.08	51.04*
Physiological	5.57	1.240	11.90	0.681	6.33	34.67*
Social	4.22	0.585	8.02	0.504	3.80	39.13*
Overall	22.37	2.240	41.50	1.033	19.17	60.20*

$t_{118}=1.98, p<0.05$ * Significant

Table 6: Significant difference between the coping strategies of urban and rural adolescents

Area of coping	Rural		Urban		Mean diff.	't' value
	Mean	SD	Mean	SD		
Acceptance of reality	4.83	0.557	2.67	0.475	2.17	22.91*
Problem solving	6.43	1.731	3.60	0.616	2.83	11.95*
Self-control	4.35	0.799	3.48	1.081	0.87	4.99*
Seeking social support	5.80	0.953	6.03	0.736	0.23	1.50*
Wishful thinking	4.27	1.118	2.88	0.640	1.38	8.32*
Spirituality	3.27	0.446	2.00	0.000	1.27	22.00*
Overall	29.00	1.395	20.70	2.088	8.28	25.55*

$t_{118}=1.98, p<0.05$ *Significant

Table 7: Association between the demographic characteristics of urban and rural adolescents and academic stress

Demographic variable		Rural			Urban		
		< median	≥ median	χ ² value	< median	≥ median	χ ² value
1.	Age (years)						
a.	15-16	8	15	0.035	2	18	0.018
b.	17-18	12	25		6	34	
2.	Gender						
a.	Male	9	27	2.813	5	28	0.006
b.	Female	11	13		3	24	
3.	Type of family						
a.	Nuclear	9	10	2.465	3	25	0.032
b.	Joint	11	30		5	27	
4.	Place of stay						
a.	Hostel	8	18	0.136	4	17	0.311
b.	Home	12	22		4	35	
5.	Education of father						
a.	Up to PUC	10	30	3.750	4	33	0.115
b.	Above PUC	10	10		4	19	
6.	Education of mother						
a.	Up to PUC	2	2	0.033	0	1	0.867*
b.	Above PUC	18	38		8	51	
7.	Income of the family (Rs.)						
a.	< 5,000	5	13	0.357	4	19	0.115
b.	≥ 5,000	15	27		4	33	
8.	No. of siblings						
a.	None	8	18	0.136	3	18	0.000
b.	1 or more	12	22		5	34	

* Fisher Exact test

Table 8: Association between the demographic characteristics of urban and rural adolescents and coping strategies

Demographic variable		Rural			Urban		
		< median	≥ median	χ ² value	< median	≥ median	χ ² value
1.	Age (years)						
a.	15-16	10	13	0.635	10	10	0.543
b.	17-18	20	17		16	24	

2.	Gender						
a.	Male	20	16	1.111	17	16	1.999
b.	Female	10	14		9	18	
3.	Type of family						
a.	Nuclear	8	11	0.693	11	17	0.350
b.	Joint	22	19		15	17	
4.	Place of stay						
a.	Hostel	11	15	1.083	10	11	0.242
b.	Home	19	15		16	23	
5.	Education of father						
a.	Up to PUC	21	19	0.300	15	22	0.307
b.	Above PUC	9	11		11	12	
6.	Education of mother						
a.	Up to PUC	1	3	0.268	1	0	0.433*
b.	Above PUC	29	27		25	34	
7.	Income of the family (Rs.)						
a.	< 5,000	8	10	0.317	12	11	1.187
b.	≥ 5,000	22	20		14	23	
8.	No. of siblings						
a.	None	11	15	1.086	7	14	1.316
b.	1 or more	19	15		19	20	

*** Fisher Exact test**

Discussion

Most of the urban and rural adolescents (66.7% and 61.7%) belong to the age group of 17-18 and the rest to the age group of 15-16 years. The above findings are consistent with a study conducted to assess the pattern of stress, coping styles and social support among adolescents. The study finding revealed that 80% of the adolescents were aged between 16 to 19 years.²⁸ With respect to the gender, most of the urban and rural adolescents (60% and 55%) are males. It is observed that more than half of urban and rural adolescents (68.3% and 53.3%) are from joint family. With respect to the place of stay, most of the urban and rural adolescents (65% and 56.7%) are staying at home. With regards to education of fathers, maximum number of fathers (66.7% rural and 61.7% urban) studied up to PUC. With regards to education of mothers, maximum number of mothers (98.7% urban and 63.3% rural) studied above PUC. With regards to family income, more than half (70% rural and 61.7% urban) are having an income of above Rs. 5000 per month. With regards to number of siblings, majority of the adolescents (65% urban and 56.75% rural) have one or more siblings. Findings of the present study reveal that majority of urban adolescents (83.3%) have severe stress and (16.7%) have very severe stress. Whereas all the adolescents (100%) in rural have moderate academic stress. The above findings are consistent with a descriptive survey study conducted to assess the

parental pressure, present educational system and their impact on adolescents. The result showed that the majority, i.e., 76% of adolescents were coming from urban area, followed by 24% from rural and semi urban area. The students those who were residing at urban area had more stressful experience than those who came from rural. Findings of the present study reveals that all the rural adolescents (100%) have good coping, and most of the urban adolescents (98.3%) have only moderate coping, and the coping strategies score is maximum (81.67%) in the area of 'spirituality' in rural and in urban adolescents (60%) seeking social support. The findings are consistent with a survey conducted to assess the pattern of stress, coping styles and social support among adolescents. The study finding revealed that prayer is the main coping strategy used by both genders. Males have larger social network than females. There is significant difference between academic stress scores of urban and rural adolescents ($t_{118}=1.98$, $P<0.05$). The Chi-square and Fisher Exact test used to find the association of academic stress of urban rural adolescents and demographic variables show no significant association at .05 level.

The above findings are consistent with a study conducted to investigate the stress sources among college students at Taiwan, The result showed that there was no significant association between stress scores of students and selected demographical variables like

family economic status and education status of the parents.

The Chi-square and Fisher Exact test used to find the association of the coping strategies of urban rural adolescents and demographic variables show no significant association at .05 level. However this finding contradicts the study conducted to assess the sources of stress, stress level and coping pattern of college students at Ateneo de Naga University. The study findings revealed that there was significant association of the coping pattern among college students and selected demographical variables like age, sex and number of siblings.

The demographic data revealed that majority of the adolescents both in urban and rural were in the age group of 17-18 years. More than half of the subjects were males both in urban and rural colleges. More than half of the adolescent students (68.3% and 53.3%) belonged to joint family both in urban and rural colleges. Most of the adolescent students stayed at home both in urban and rural colleges. Most of the fathers of adolescents in the rural and urban colleges had studied up to PUC. Most of the adolescents' mothers had studied above PUC. Both rural and urban adolescents' family income was more than Rs. 5000 per month. Most of the subjects had one or more siblings both in urban and rural areas. Most of the urban subjects had severe stress (83.3%) and 16.7% had very severe stress, whereas all rural subjects had moderate academic stress. Majority (98.3%) of the urban subjects' coping was moderate and 1.7% subjects had only good coping. All the adolescents (100%) in the rural area had good coping. The academic stress of urban adolescents was consistently high when compared to the rural adolescents' stress, and the coping strategy adopted by rural adolescents was consistently higher than the urban adolescents coping.

There was no significant association of academic stress scores of urban and rural adolescents and selected demographic variables. There was no significant association of coping strategies scores of urban and rural adolescents and selected demographic variables.

Conclusion

When compared among urban and rural adolescents the academic stress was more among urban students and their coping pattern was moderate, whereas in rural adolescents the academic stress was moderate and coping pattern was good. School and parents should provide more support and care to help students cope with various stressors and identify students having stress reactions as soon as possible.

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