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Original Research Article

Academic stress and levels of life skills among high school children

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ABSTRACT

Background: The adolescence is a transition period from childhood to adulthood, filled with adjustments in the areas of physical, psychological, academic, social and family relationships. The mid adolescents need to be equipped with life skills to handle the problems, solve day today issues, cope with academic stress and achieve good mental health. Through the present study an effort was made to evaluate the academic stress and the levels of ten life skills recommended by WHO among 240 school going adolescents to undertake intervention programme to improve their stress coping abilities.

Materials and Methods: The study is a formative research with a purpose to assess the levels of academic stress and life skills among 120 boys and 120 girls aged between 14 to 15 years and studying 10th class in high schools in Tirupati, Andhra Pradesh, India. A questionnaire consisting of a five point Likert type of rating scale for Life skills assessment and Academic stress scale were used.

Results: Using independent sample t-test the difference between the girls and boys was studied with regard to life skills and also the academic stress. The association between the levels of academic stress and levels of life skills was examined using chi square test, further, the correlation between academic stress and life skills of boys and girls was also studied.

Conclusion: The study allows to conclude that the academic stress of the school going adolescents can be reduced by improving their LS as there is a strong relationship between these two variables in spite of the gender differences.

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1. Introduction

The adolescents go through a period of physical, physiological psychological and social change due to puberty, moreover, school going adolescents are expected to adapt to these changes and improve their academic performance to meet the targets set by the parents and teachers. The long hours of schooling, with less scope for; play, sports, recreation, socialization, hobbies and travel, is causing more stress among school children. Stress is a state of mental or emotional strain and anxiety caused by

the actions of others, situations and tasks which demand a performance beyond a person's capability.¹ A 12 per cent of Indian students between the ages of 4 and 16 years, suffer from mental health problems and shockingly, every one hour a student commits suicide in India.² The relationship between stress and adjustment indicated that level of adjustment influences the number of stressful events and amount of stress experienced by students.³

On the other hand the adolescents need life skills to deal with stressful situations efficiently, which they have to acquire and practise to overcome the difficult situations, they come across in their day to day life. The World Health Organization has defined Life Skills (LS)

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as, “the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life.” Whereas the UNICEF defined Life Skills as, “a behavior change or behavior development approach designed to address a balance of three areas; knowledge, attitude and skills.” There is a growing demand to train adolescents in life skills to help them handle their everyday life challenges and smooth transition into adulthood. Demonstrating its effectiveness, significance and value, life skills has become a major part of many intervention programs around the world, especially those aimed at the prevention of alcohol abuse, drugs and smoking.⁴⁻⁶ Understanding how knowledge, skills and values learnt from life skills education facilitates healthy passage to adulthood will merit special attention to life skills education programs in diverse contexts. Examining adolescent experiences rooted within the culture of the individual is important to understand how individuals from different backgrounds construct life skill knowledge into reality.⁷ Several studies indicated that life skills pedagogy improved the levels of life skills and abilities to address the stressful situations among the adolescents in general. Which reiterates the need for life skills to older children and teenagers to reduce their stress levels and as a way to promote positive behaviour and to act as a buffer against risk-taking behaviors for adolescents in both developed and developing countries.^{8,9}

2. Materials and Methods

Assessment is an essential component of an educational programme, especially to design a need based training programme to equip the students with necessary life skills. The study is a formative research with a purpose to assess the levels of academic stress and life skills among 240 adolescents in Tirupati, Chittoor District, Andhra Pradesh, India. The participants in the study were adolescent boys and girls aged between 14 to 15 years and studying 10th class selected from two Private high schools of CBSE syllabus, two Private high schools of AP State Board syllabus and two Government Schools of AP State Board syllabus in 2015. From each Private English medium school 20 boys and 20 girls aged between 14 to 15 years were selected and from Government High schools 40 boys and 40 girls were selected as they are Single sex schools, thus the sample comprised of 240 children of whom 120 were boys and 120 were girls. The students who were willing to participate with the consent of the parents were included in the study.

2.1. Tools for data collection

A questionnaire consisting of three parts was used, the first part consisted of questions to collect information on personal and family profile of the sample, the second part

was a five point Likert type of rating scale for Life skills assessment and the third part was the Academic stress scale. The Life Skills assessment scale developed for the purpose, consisted of fifty items stated under ten life skills. The respondents were asked to rate on this five point scale as; 5-Always true, 4- Mostly true, 3- Somewhat true, 2- Not true and 1- not at all true, the Internal consistency reliability coefficient was 0.90 as measured by Chronbach's alpha. The Academic stress scale consisted of forty items representing five stressor domains namely; Cognitive, Affective, Behavioral, Physical and Social was developed (based on Sinha et al.,’s thirty item Scale for Assessing Academic Stress¹⁰), standardized and administered to 240 adolescent boys and girls. Each academic stressor domain consisted of eight items, the respondents were asked to rate each item on a five point scale as; Strongly Agree(SA)-5, Agree(A)-4, Do not Know(DK)3, Disagree (DA)-2, Strongly Disagree(SDA)-1. The Chronbach's Alpha test (C A value=0.74) was used on a sub sample (n=40) for assessing the internal consistency of the Academic stress scale. Both the scales were given to a group of ten experts in the areas of; Psychiatry, Human Development and Family Studies, Social Work, Psychology and Education to establish content validity. They were asked to judge the explicitness of wording and the suitability of each item and its relevance to the construct being measured, their feedback was used for further refinement of the questionnaire.

3. Results

Using independent sample t -test the difference between the girls and boys was studied with regard to life skills and also the academic stress. The association between the levels of academic stress and levels of life skills was examined using chi square test, further, the correlation between academic stress and life skills of boys and girls was also studied. The results in the Table 1, indicate that the sample differed significantly at 5% level in their academic stress in cognitive and physical domains, moreover, both the girls and boys did not vary in their academic scores for three domains namely; affective, behavioral and social. The Table 2, displayed that the boys and girls differed significantly at 1% level in three of the life skills; empathy, creative thinking, decision making and coping with emotions. Similarly the girls and boys varied significantly at 5% level in their life skills score for coping with the stress. Furthermore, both the groups statistically did not differ significantly on the five life skills scores viz; self-awareness, effective communication, interpersonal relationship, critical thinking and problem solving. The relationship between the overall academic stress scores and levels of life skills of adolescent girls and boys was examined using chi-square test, significant association at 0.01 level was found between the two variables as shown in Table 3. The Pearson correlation test (2 tailed) was applied to know the relationship between the

academic stress and levels of life skills of girls (Table 4) and boys (Table 5) separately. It was found that there was significant difference between the academic stress and life skills scores of; girls at 0.01 level and the boys at 0.05 level.

4. Discussion

The adolescence is a transition period from childhood to adulthood, filled with adjustments in the areas of physical, psychological, academic, social and family relationships. The mid adolescents need to be equipped with life skills to handle the challenges, solve day today issues and problems, cope with academic stress and achieve good mental health. Through the present study an effort was made to evaluate the academic stress and the levels of ten life skills recommended by World Health Organization (WHO) among school going adolescents to undertake intervention programme to improve their stress coping abilities. In the present study the levels of academic stress for each domain (1 to 40) was classified as low, medium, high and very high scores and overall academic score ranged from 40 to 200. The Findings showed that majority of the adolescents had very high academic stress in cognitive (62.1%), and affective (59.2%) domains and high stress in behavioral (66.3%), physical (59.6%) and social (65.4%) areas indicating presence of academic stress in both boys and girls under study. Academic stress is a widespread phenomenon in the different stages of the educational system, and it adversely affects students' personal, emotional, and physical well-being,^{11–16} as well as their learning and performance levels.^{17,18} Different studies also highlighted its relationship with early school dropout¹⁹ and internalizing and externalizing problems in school contexts.^{20,21} Academic stress is particularly relevant in adolescence because the school environment is one of the most significant life situation in this developmental stage and one of the sources of stress most perceived by adolescents.^{22,23} In addition, transitions between educational stages are generally related to higher levels of stress and strain.²⁴ They can have a negative influence on students' academic, personal, emotional and social adjustment, and their levels of self-esteem and achievement.²⁵ Studies stipulated that chronic and continued exposure to stressful situations lead to emotional, physical and mental disturbance of the students.^{26,27} The difference between girls and boys with regard to academic stress was found at 5% level for two domains namely; cognitive ($P=0.022$) and physical ($P=0.028$), furthermore, the means (Table 1) showed that comparatively more number of girls (31.71) had very high stress than boys (30.45) in cognitive domain. In contrary, more number of boys (mean=28.23) showed stress in physical domain than girls (mean= 26.86) indicating gender difference in perception of stress. Similar results consistent with the existing evidence were found in studies, indicating

academics and its tight schedule substantially contributed to students stress levels,^{28,29} furthermore, perception and reaction to stress is different in both genders.³⁰

The Life Skills (LS) are a set of abilities needed for adaptive and positive behavior to effectively manage demands, expectations, and problems of daily life and balance their personal and academic life in a healthy way.⁹ In the present study the levels of each LS was assessed, the score each of them ranged from 5 to 25 and the overall LS score ranged from 50–250. The levels LS among majority of adolescents was found to be moderate; girls = 92 percent and boys = 80 percent. The LS scores of girls and boys were compared dimension wise the difference between the gender (Table 2) was examined, which revealed that statistically significant difference was found for; empathy ($P=0.01$), creative thinking ($P=0.00$), decision making ($P=0.001$), coping with emotions ($P=0.003$) at 1 percent level and for coping with stress ($P=0.018$) at 5 percent level. Among the ten LS assessed gender difference was found for five LS, the means scores indicate that comparatively more number of boys had LS; empathy, creative thinking and coping with emotions than their female counter parts. Moreover, more number of girls had LS such as; decision making and coping with stress than boys indicating gender difference in levels of life skills. In addition, significant association ($P=0.006$) was found between the overall stress scores and levels of life skills of mid adolescents at 1 percent level of significance indicating a strong relationship between gender, academic stress and LS of young boys and girls. Furthermore, the findings of correlation between the academic stress and LS of girls ($P=0.616$) and boys ($P=0.222$) showed that there was a strong correlation between the two variables at 1 percent and 0.5 percent level of significance respectively, emphasizing the need for LS education to reduce academic stress among school going adolescents. Stress does not affect all people equally, but stress can lead to illness and negative experiences.³¹ Students do have to interact with teachers, family members and peers daily and maintain relationships at all levels by acquiring life skills, to buffer the increasing stress that they face.

5. Conclusion

Various strategies and methods to address stress among adolescents have been used like Mindfulness-Based Stress Reduction (MBSR), Dialectal Behavior Therapy (DBT), Acceptance and Commitment Therapy (ACT), Mindfulness Based Cognitive Therapy (MBCT).³² Other techniques used in past decades for reducing stress among adolescents were guidance and counselling, yoga, meditation, psychotherapy and cognitive therapy techniques. But very few studies reported the use of life skills to reduce stress among Indian adolescents.⁷ The study allows to conclude that the academic stress of the school going adolescents can

Table 1: Difference between Girls and boys with regard to Academic stress

S.No	Academic stress areas	Gender	N	Mean	Standard Deviation	t-value	p-value
1	Cognitive	Girls	120	31.71	3.67	2.311*	0.022
		Boys	120	30.45	4.70		
2	Affective	Girls	120	30.46	3.04	0.937	0.350
		Boys	120	30.90	4.17		
3	Behavioral	Girls	120	27.55	3.61	1.362	0.175
		Boys	120	28.30	4.84		
4	Physical	Girls	120	26.86	4.76	2.213*	0.028
		Boys	120	28.23	4.86		
5	Social	Girls	120	26.04	4.44	0.583	0.561
		Boys	120	26.40	5.07		
Academic stress scores		Girls	120	142.62	16.32	0.670	0.503
		Boys	120	144.28	21.81		

* Significant at 5% level, ** significant at 1% level

Table 2: Collation of Life skills scores of girls and boys

S. No	Life Skills	Gender	N	Mean	Standard Deviation	t-value	p-value
1	Self-awareness	Girls	120	13.79	1.46	1.459	.146
		Boys	120	13.33	3.18		
2	Empathy	Girls	120	16.11	0.90	3.459**	.001
		Boys	120	17.19	3.31		
3	Effective communication	Girls	120	12.40	2.20	0.155	.877
		Boys	120	12.46	3.49		
4	Interpersonal relationship	Girls	120	16.32	1.37	1.366	.173
		Boys	120	16.79	3.56		
5	Creative thinking	Girls	120	14.63	1.58	3.581**	.000
		Boys	120	15.96	3.73		
6	Critical thinking	Girls	120	14.20	1.49	1.607	.109
		Boys	120	13.64	3.50		
7	Decision making	Girls	120	15.03	1.36	3.518**	.001
		Boys	120	13.79	3.59		
8	Problem solving	Girls	120	14.01	2.99	0.405	.686
		Boys	120	13.83	3.67		
9	Coping with emotions	Girls	120	15.18	1.62	3.033**	.003
		Boys	120	16.26	3.53		
10	Coping with stress	Girls	120	15.78	1.27	2.385*	.018
		Boys	120	14.97	3.53		
Life Skills score		Girls	120	131.13	6.33	0.102	.919
		Boys	120	131.43	30.71		

* Significant at 5% level, ** significant at 1% level

Table 3: Association between overall Academic stress and levels of life skills

Chi-square value	p-value	Levels of Life skills			Total
14.58**	0.006	Low	Medium	High	
overall Academic stress	Medium	1	1	3	5
		20.0%	20.0%	60.0%	100%
	High	7	113	19	139
		5.0%	81.3%	13.7%	100%
	Very High	9	78	9	96
		9.4%	81.3%	9.4%	100%
Total		17	192	31	240
		7.1%	80.0%	12.9%	100.0%

** Significant at 1% level

Table 4: Correlation between academic stress and life skills of girls

Variables		Academic Stress score	Life Skills score
Academic Stress score	Pearson Correlation	1	0.616**
	p-value		.000
	N	120	120
Life Skills score	Pearson Correlation	.616**	1
	p-value	.000	
	N	120	120

** Significant at the 0.01 level (2tailed).

Table 5: Correlation between academic stress and life skills of boys

Variables		Academic Stress score	Life Skills score
Academic Stress score	Pearson Correlation	1	0.222*
	p-value		.015
	N	120	120
Life Skills score	Pearson Correlation	.222*	1
	p-value	.015	
	N	120	120

*Significant at the 0.05 level (2 tailed).

be reduced by improving their LS as there is a strong relationship between these two variables in spite of the gender differences in their levels. Intervention programmes linking academic stress and life skills should be organized widely to promote mental health and well-being of adolescents.

6. Source of Funding

None.

7. Conflict of Interest

None.

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