

Association between stress and behavioural problems among sophomores

■ GAYATRI BIRADAR AND V.S. YADAV

Received: 05.11.2012; Revised: 12.03.2013; Accepted: 18.05.2013

See end of the paper for authors' affiliations

Correspondence to :

GAYATRI BIRADAR

Department of Human Development, College of Rural Home-science, University of Agricultural Sciences, DHARWAD (KARNATAKA) INDIA
Email: gayatri.abrediffmail.com, biradargayatri@gmail.com

■ **ABSTRACT** : This study was conducted to compare between the students of I and II PUC on stressful life events and behavioural problems and to know the association between stressful life events and behavioural problems among students of I and II PUC. The sample consisted of 416 pre-university students of both PUC I (N=223) and PUC II (N=193) age ranged from 16 years to 19 years drawn using random sampling method from five colleges of Bidar city. This was an ex-post facto research design. Stressful life events schedule (Biradar, 2007) and Revised Behavioural Problems Scale (Quay and Peterson, 1986) was administered on the students of pre-university courses. The data was subjected to 't' test and Karl Pearson's co-efficient correlation analysis. The results revealed that both PUC I and II year students had developed more or less similar level of stress in family relations, peer relations, academic, physical health, psychological aspects and overall stress. Correspondingly they had developed similar level of conduct disorder, socialized aggression, attention problem, anxiety withdrawal and psychotic behaviour problems. The results also revealed that there was significant positive relationship between stressful life events and behaviour problems among sophomores (I and II PUC students).

■ **KEY WORDS** : Stress, Behavioural problems, Sophomores

■ **HOW TO CITE THIS PAPER** : Biradar, Gayatri and Yadav, V.S. (2013). Association between stress and behavioural problems among sophomores. *Asian J. Home Sci.*, 8 (1): 118-123.

Human developmental processes are not controlled by completely different and independent factors such as nature versus nurture, continuity versus discontinuity in development, maturation versus learning as seen in traditional approach to biology and psychology. Principles of development are same for all the individuals but behaviour becomes more critical, versatile and differentiated in sophomore or phase of late adolescent entering in to PUC with age range between 16 to 19 years.

Scientific advancement, high educational aspirations and severe competition in academic and professional areas have an impact on the overall development of college students, specially who belong to the age group of 16 to 19 year *i.e.* sophomores, because during this age the adolescents enter into college life from school life. There are several factors which act as stressors and that lead to the development of problems among sophomores.

Stress forms an inseparable part of life and upto a degree may be essential for adequate personality development. Both pleasant and unpleasant experiences can have stressful

components. Being stressed is an attitude that can become a habit. However, if these stressors become too severe or too numerous they may affect the psychological equilibrium, producing maladaptive patterns of behaviour and possibly psychological disorders. The conditions of the social and physical environment operates as stressors to the extent that they exceed on organisms adaptive resources (Lazarus and Folkman, 1984). These annoying conditions and unpleasant events are often said to be stressful life events.

Researches suggest that cumulative life stress increase risk for emotional and behavioural problems. These cumulative stresses may occur in the life of students of PUC at different contexts (Anesnehsel, 1992; Cohen and Gordon, 1995; Kessler *et al.*, 1997; Jackson and Warren, 2000).

Sameroff *et al.* (1998) found that the risk for several negative outcomes was significantly higher for adolescents who experienced more environmental risk factors compared with those who experienced three or fewer environmental risk factors and high risk youth were nearly five times more likely than low risk youth to demonstrate severe problem behaviour.

Berry *et al.* (1996) studied that stressful life events and lack of perceived support from friends of adolescents were predictive of problem behaviour and strong support from friends attenuated the effects of stress.

Stressful life events have significant influence on behavioural outcomes of sophomores. During I and II year of pre-university classes, the students contend with a series of new challenges while at the same time losing the structure of high school learning environment, family life and daily instrumental support of family. On their own, students must organize their schedules, do their work, attend to their own requirements, work on time and allocate sufficient time for studying. The new found responsibilities for their own life style, work ethic, resource use and choice of professional courses in addition to demands of the society is well managed by some and staggering to others (Arnett, 2004). The review of literature reveals that there is need to study critically stressful life events and behavioural problems among sophomores or the students of PUC to guide them to manage the stressors. Therefore, the present study was conducted with the following hypotheses :

- There is no significant difference between students of I and II PUC on stressful life events.
- There is no significant difference between students of I and II PUC on behavioural problems.
- There is significant positive association between stressful life events and behavioural problems.

■ RESEARCH METHODS

Sample :

The sample of the present investigation was drawn from pre-university classes from Bhomreddy College, Karnataka College, Government Junior College and Pannalal Heeralal College of Bidar city. Twenty per cent of the total students present at the time of testing from each of the class, course and college were selected randomly. Thus, 416 pre-university students of both PUC I (223) and PUC II (193) year were the sample of the study.

Tools :

Stressful life events schedule :

The schedule (Biradar, 2007) consisted of 100 life events. The events were related to family, peer, academic, physical health and psychological aspects. For each event, four alternative answers such as always stressful, sometimes stressful, rarely stressful and never stressful with the scoring 4, 3, 2 and 1, respectively were given to assess the level of stress created by each event. The schedule was tested on 45 PUC II year students for pre-testing purpose. Test-retest reliability co-efficient of the schedule was 0.867 and it was significant at 0.01 level.

Revised behavioural problems scale :

This scale was adopted (Quay and Peterson, 1986) to measure the behavioural problems among the PUC students. The scale consists of 61 statements related to conduct disorder, socialized aggression, attention problem, anxiety withdrawal and psychotic behaviour. Each statement consisted of four alternative answers such as, always, sometimes, rarely and never with the scoring of 4, 3, 2 and 1, respectively. The test-retest reliability co-efficient of the scale was 0.554 and it was significant at 0.01 level.

Procedure of data collection :

The data collection was carried out with the prior permission from the principal and the class teacher to get the responses from female students of PUC I and II year of arts, science and commerce of each college. The selected students of each class and course were made to sit in one hall and rapport was established with them. They were also informed that the information given by them would be kept under strict confidence. The students were instructed very clearly about the pattern of answering to each item of the questionnaire. The necessary clarifications were provided to the students as and when they raised doubts while answering the statements. The data were subjected to ‘t’ test and Karl Pearson’s correlation of co-efficient.

■ RESEARCH FINDINGS AND DISCUSSION

Feeling “stressed” is pervasive for college age students (Rawson *et al.*, 2001), it means that as the adolescents enter from High School life to college life, there is every possibility of increasing stress. The results of present study supported that there was positive and significant relationship between stressful life events and behavioural problems among sophomores. The positive and significant relationship between stressful life events and behavioural problems may be due to the fact that during PUC, students have to adjust with the college environment, with the various aspects of development such as physical, psychological, emotional, adjusting with the peer group and also there is a need to develop commitment and high exploration to meet the expectation and demands of the society. In this process of developmental adjustment, sometimes students experience failure in meeting these demands, as a result there is possibility of perceiving these experiences as stressful and inturn it may affect the behaviour of the students. Therefore, in the present study an attempt was made to study the stressful life events and behavioural problems among students of pre-university courses.

Comparison between students of I and II PUC on stress :

Adolescence and young adulthood include a lengthy interval of education, career training and adult role acquisition,

which may extend into the third decade of life. Increasing independence from parents during this interval provides adolescents and young adults with increasing opportunities to explore behaviours, roles, attitudes and values (Erikson, 1968). Due to this, young adults may experience stress by getting confused in making use of the increasing opportunities.

In the present study, it was hypothesized that there is no significant difference between students of PUC I and II years on stressful life events. The results of Table 1 clearly denoted the 't' value of students of PUC I and II year on family relations ('t' = 0.914), peer relations ('t' = 0.847), academic stressors ('t' = 0.430), physical health was ('t' = 1.085), on psychological aspects ('t' = 1.472), on overall stress ('t' = 1.118). Hence, the hypothesis that there is no significant difference between students of PUC I and II year on stressful life events was accepted.

Comparison between male students of I and II PUC on behavioural problems :

Adolescence is a developmental stage characterised by rapid physical, cognitive, psychological and moral growth. During adolescence, young people gradually establish independence, explore their body image, and learn to control and express their sexual drives. Peer relationships assume high value. Young people with anxiety, social isolation, poor school performance, distress about their body image, and behavioural problems may be at risk. Shaffer and Shoben's (1956) study on graduates and undergraduates revealed that both boys and girls had study problems. Study of Verma and Joyeeta (1990) indicated that both early and late adolescents

had problems like irritability, sleeplessness, day dreaming, temper tantrums, difficulty to concentrate and difficult to take notes *etc.*

In the present study, it was hypothesized that there is no significant difference between students of PUC I and II year on the behavioural problems. The results of Table 2 revealed that the 't' value of students of PUC I and II year had not differed significantly on conduct disorder (t=0.33NS), socialized aggression (t=0.28NS), attention problem (t=0.57NS), anxiety withdrawal (t=0.54NS), psychotic behaviour (t=1.52NS) and total behavioural problems (t=0.39NS). The results revealed that students of PUC I and II year had expressed more or less similar level of behavioural problems of conduct disorder, socialized aggression, attention problem, anxiety withdrawal and psychotic behaviour. It might be due to the reasons that the students have been experiencing more or less similar stressors in family, peers, administrative and social environments along with higher expectations about their academic achievement, correspondingly, both the groups had problems related to teaching, medium instructions, study and with peer group. These results support to the study of Verma and Joyeeta (1990). Therefore, the hypothesis that there is no significant difference between students of PUC I and II year on components of behavioural problems was accepted.

Association between stressful life events and behavioural problems :

PUC students have to experience change in their educational environments as they go to college from High School. This environmental change may expose them to many

Table 1 : Comparison between PUC I and II year students on components of stressful life events and stress

Sr. No.	Component of stressful life events	PUC I (N=223)		PUC II (N=193)		't' value
		Mean	S.D.	Mean	S.D.	
1.	Family relations	66.92	12.86	68.08	12.94	0.91 ^{NS}
2.	Peer relations	20.66	4.22	21.02	4.48	0.84 ^{NS}
3.	Academic	19.29	4.36	19.48	4.66	0.43 ^{NS}
4.	Physical health	31.57	4.63	32.08	5.02	1.08 ^{NS}
5.	Psychological	5.24	1.60	5.48	1.78	1.47 ^{NS}
	Total stress	153.40	21.32	155.80	22.38	1.11 ^{NS}

Note: NS = Not-significant

Table 2 : Comparison between PUC I and II year students on components of behavioural problems

Sr. No.	Component of behavioural problems	PUC I (N=223)		PUC II (N=193)		't' value
		Mean	S.D.	Mean	S.D.	
1.	Conduct disorder	36.28	9.10	36.25	8.40	0.33 ^{NS}
2.	Socialized aggression	26.07	5.47	25.93	4.86	0.28 ^{NS}
3.	Attention problem	29.04	7.27	29.43	6.73	0.57 ^{NS}
4.	Anxiety withdrawal	20.32	5.92	20.74	5.10	0.54 ^{NS}
5.	Psychotic behaviour	10.28	2.83	10.70	2.85	1.52 ^{NS}
	Total behavioural problems	150.70	31.74	151.84	27.73	0.39 ^{NS}

Note: NS = Not-significant

environmental risk factors. Some of the most common risks faced by a student during his/her PUC days are family related, peer related, academic, physical health, and psychological aspects. Increments in environmental risk factors have a steady additive effect on youth problem behaviour (Deaterr Decard, 1998). The accumulation of environmental factors is associated with linear increase in maladaptive behaviour (Buheler and Gerard, 1999). Therefore, it was assumed that there is positive and significant relationship between stressful life events and behavioural problems among PUC students. The results (Table 3) revealed the following information.

Family relations stressors and the behavioural problems :

The family environment is influenced by a number of factors like family type, number of siblings, ordinal position, parent’s occupation, parent’s education, conflict between the parents *etc.* The family furnishes the basic environment for building personality of the individual with its warm intimate contact contributing to their feeling of security and belongingness. Thus, family is the first and most important socializing agency, which integrates and regulates the individual’s behaviour as he/she strives to satisfy his/her basic needs. If the stressors increased in the family environment then this will in turn may affect the behaviour of the individuals.

The results of Table 3 revealed that the co-efficient of correlation of stressors of family with conduct disorder (0.342), socialized aggression (0.323), attention problem (0.305), anxiety withdrawal (0.373), psychotic behaviour (0.289) and with total behavioural problems (0.412) had shown positive and significant relationship. It means that as the stressors of family relations increased the behavioural problems such as conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and overall behavioural problems had also increased significantly.

This may be due to the affective pressures in parental style, higher expectations of parents from the students, conflict between the parents, sibling rivalry, problems with relatives, argument with the parents and income of the family. All these familial demands may make the adolescents to experience stress always and it leads to the development of problematic behaviour. These results support to the studies of Barnes

(2006).

Peer relations stressors and the behavioural problems :

The social interest depends partly on what opportunities adolescents have to develop such interests and partly on how popular they are with the members of the peer group. To achieve the goal of adult pattern of socialization the adolescents must make new adjustments to increased influence of peer group, new social grouping, new values in friendship selection and new values in peer acceptance and rejection.

The co-efficients of correlation of stressors of peer relations (Table 3) with conduct disorder (0.246), socialized aggression (0.258), attention problem (0.172), anxiety withdrawal (0.151), psychotic behaviour (0.266) and total behavioural problems (0.266) were significant and positive. The results mean that as the stressors of peer relations increased the behavioural problems such as conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and overall behavioural problems had also increased significantly.

This may be due to the situation that the students enter into college and they meet with new peer groups and on peer context they may experience peer rejection, low perceived peer support, mingling with delinquent peers and separation of close friends. All these events may make the students to experience stress always and due to this they may exhibit more behavioural problems. These results support the findings of Cause *et al.* (1996) and Penny *et al.* (2005).

Academic stressors and the behavioural problems :

Adjustment to college depends upon the vocational interests of adolescents. Thus, they have certain problems in adjusting to college, which may cause stress in them and overall develop behavioural problems.

The co-efficient of correlation (Table 3) indicated that academic stressors had shown significant and positive relationship with conduct disorder (0.344), socialized aggression (0.287), attention problem (0.363), anxiety withdrawal (0.354), psychotic behaviour (0.267) and total behavioural problems (0.408). It means that as the academic

Table 3 : Association between the components of stressful life events and behavioural problems among PUC students								
Sr. No.	CSLE	CBP	Conduct disorder	Socialized aggression	Attention problems	Anxiety withdrawal	Psychotic behavior	Total behavioral problems
1.	Family relation		0.342**	0.323**	0.305**	0.373**	0.289**	0.412**
2.	Peer relation		0.246**	0.258**	0.172**	0.151**	0.266**	0.266**
3.	Academic		0.344**	0.287**	0.363**	0.354**	0.267**	0.408**
4.	Physical health		0.437**	0.359**	0.361**	0.423**	0.271**	0.469**
5.	Psychological		0.297**	0.108*	0.299**	0.331**	0.187**	0.312**
	Total stressful life events		0.471**	0.408**	0.415**	0.471**	0.370**	0.539**

Note: * and ** Indicate significance of value at P=0.05 and 0.01, respectively
 CSLE– Components of stressful life events CBP – Components of behavioural problems

stressors increased the behavioural problems such as conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and behavioural problems had also increased.

This may be because of the sophomores experience more academic pressure due to problem of English language, conflicting vocational choices and their vocational interest generally influence the attitude of students towards education and difficulty in adjusting with the college environment. All these stressors make them to express problematic behaviour. These results support to the study of Mischel (1974).

Physical health stressors and the behavioural problems :

The period of adolescence results in variations in physical changes and many adolescents experience Body-Cathexis or satisfaction with their bodies. However, sometimes they do experience more dissatisfaction with some parts of their bodies than with other parts. This failure to experience Body-Cathexis is one of the causes of unfavourable self-concept, which may be a potential source of stress.

The stressors of physical health had shown significant positive relationship (Table 3) with conduct disorders (0.437), socialized aggression (0.359), attention problem (0.361), anxiety withdrawal (0.423), psychotic behaviour (0.271) and total behavioural problem (0.469), indicating that as the stressors of physical health increased the behavioural problems of conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and overall behavioural problems had also increased.

This may be due to the fact that the students of PUC are more concentrating on academic performance and career development rather than increasing physical strength and development of physical health. These results support to the study conducted by Garhammer (2002).

Psychological stressors and the behavioural problems :

Adolescence is an age where these adolescent girls have to develop new social relationships and play different social roles in the society and thus the adolescents experience psychological stressors and express behavioural problems.

The psychological stressors had significant positive relationship (Table 3) with conduct disorder (0.297), socialized aggression (0.108), attention problem (0.299), anxiety withdrawal (0.331), psychotic behaviour (0.187) and total behavioural problem (0.312). The results mean that as the psychological stressors increased the behavioural problems such as conduct disorders, socialized aggression, attentions problem, anxiety withdrawal and overall behavioural problems also increased except socialized aggression.

This may be due to the fact that the students are not feeling well psychologically then they get irritated tensed and depressed, therefore they may express more behavioural problems. These results support to the study conducted by

Reddy *et al.* (2005).

Stressors and behavioural problems :

Various behavioural problems are caused in adolescents due to environment, family, peer, college, physical health and psychological stressors that they gradually become serve and become chronic stressors. Stress forms an inseparable part of PUC students. Stress to a degree may be essential for adequate personality development. However, if stress becomes too severe or too many stressors which may affect the psychic equilibrium, producing maladaptive patterns of behaviour. Thus, stressful life events may give rise to behavioural problems.

The co-efficient of correlation of overall stressors with conduct disorder (0.471), socialized aggression (0.408), attention problem (0.415), anxiety withdrawal (0.471), psychotic behaviour (0.370) and behavioural problems (0.539) had shown significant positive relationship. It means that as the stressors increased the behavioural problems such as conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and overall behavioural problems had also increased.

This may be due to the social and situational change in demands at familial context, peer context, academic aspects, physical health context and psychological and the students of PUC have to meet these environmental demands and they perceive all these changes in environment as stressful life events and inturn it affects their behaviour. These results support to the studies of Du Bois (1992), Wanger and Compus (1990) and Wanger *et al.* (1996). Hence, the hypothesis that there was positive significant association between stressful life events and behavioural problems was accepted.

Conclusion :

- The students of PUC I and II year had experienced more or less similar level of family relation stressors, peer relation stressors, academic stressors, physical health stressors, psychological stressors and overall stressors.
- Correspondingly, the students of PUC I and II had expressed more or less similar level of behavioural problems of conduct disorder, socialized aggression, attention problem, anxiety withdrawal, psychotic behaviour and overall behavioural problems.
- The stressful life events develop behavioural problems among sophomores.

Authors' affiliations:

V. S. YADAV, Department of Psychology, University of Agricultural Sciences, DHARWAD (KARNATAKA) INDIA

■ REFERENCES

Aneshensel, C.S. (1992). Social stress: Theory and Research. *Ann. Rev.Soccol.*,**18**: 15-38.

- Arnett, J.J.** (1994). Are collect students adults ? their conception of the transition to adulthood. *J. Adult Develop.*, **7**: 213-224.
- Barnes, G.M.** (2006). Effects of parental monitoring and peer deviance on substance use and Delin quency. *J. Marriage & Family*, **68**: 1084-1104.
- Biradar, Gayatri** (2007). Stressful life events and behavioural problems among pre-university students. M.H.Sc. Thesis, University of Agricultural Sciences, Dharwad, KARNATAKA (INDIA).
- Cause, A.M.** (1996). Social support during adolescence methodological and theoretical considerations. In: K. Hurrelmann and Hamilton S.F. (Eds.) *Social problems and social contexts in adolescence : Prospectus across boundaries*, pp.131-152.
- Cohen, S. and Gordon, L.U.** (1995). Strategies for measuring stress in studies of psychiatric and physical disorders. In: S. Cohen, R.D. Kessler and Gordon, L.U. (Eds.) *Measuring stress: A guide for health and social scientists*, Oxford University Press, NEW YORK pp.3-28.
- Deater-Deckard, K.** (1998). Multiple risk factors in the development of externalizing behaviour problems : group and individual differences. *Develop. & Psychopathol.*, **10**: 469-493.
- DuBois, D.L.** (1992). A prospective study of life stress, social support and adapation in early adolescence. *Child Develop.*, **63**: 542-557.
- Erikson, E.H.** (1968). *Identify, youth and crisis*, NEW YORK, NORTON.
- Garhammer, M.** (2002). Pace of life and enjoyment of life. *J. Happiness Studies*, **3**: 217-256.
- Gerard, J.M. and Buehler, C.** (1999). Multiple risk factors in family environment and youth problem behaviour. *J. Marriage & Family*, **61**: 343-361.
- Gerard, J.M. and Buehler, C.** (2004). Cumulative environmental risk and youth problem behaviour. *J. Marriage & Family*. **66**: 702-720.
- Jackson, Y. and Warren, J.S.** (2000). Appraisal, social supports and life events; predicting outcome behaviour in school-age children. *Child Develop.*, **71**: 1441-1457.
- Kessler, R.C.** (1997). Childhood adversity and adult psychopathology. In: I. H. Gotlib and B. Wheaton (Eds.) *Stress and adversity over the life course: Trajectories and turning points*, Cambridge Univ. Press., NEW YORK, U.S.A.
- Lazarus, R.S. and Folkman, S.** (1984). *Stress, appraisal and coping*, Springer, NEW YORK pp.579-605.
- Mischel, H.N.** (1974). Sex bias in the evolution of professional achievement. *J.Edu. Psychol.*, **66**: 157-166.
- Penny, J.S., Jo-Tina Kim, Osorio, S. and Vilhjalmstottir, P.** (2005). Autonomy and relatedness in adolescent parent disagreements : ethnic and developmental factors. *J. Adolescent Res.*, **20**(1): 8-39.
- Quay, H.C. and Peterson, D.R.** (1986). Revised behaviour problem chicklist. *Psychological Assess. Res.*
- Rawson, H.E., Bloomer, K. and Kendall, A.** (2001). Stress, anxiety, Depression and physical illness in college students. *J. Genetic Psychol.*, **155**: 321-330.
- Reddy, S.V., Kotoshwari Balu, V. and Ruo Tirumala, T.**(2005). Sources of stress among adolescents. *J. Comm. Guidance & Res.*, **22**(2): 127-138.
- Sameroff, A.J.** (1998). Family and social influences on the development of child competence. In: M. Lewis and C. Feiring (Eds.) *Fmailies, Risk & Camp.*
- Shaffer, L.F. and Shoben, E.L.** (1956). *The psychology of adjustment*, Boston : Houghton.
- Verma, S. and Joyeeta, G.** (1990). Some aspects of high academic stress and symptoms. *J. Personality & Clinical Studies*, **6**(1): 7-12.
- Wanger, B.M., Choen Patricia and Brook, J.S.** (1996). Parent/ adolescent relationships moderators of the effects of stressful life events. *J. Adolescent Res.*, **11**(3): 347-374.
- Wanger, B.M. and Compas, B.E.** (1990). Gender, instrumentality and expressivity : moderators of the relation between stress and psychological symptoms during adolescence. *American J. Comm. Psychol.*, **18**: 383-406.