

## **“STRESS AND STORM” IN ADOLESCENCE: A COMPARATIVE STUDY<sup>#</sup>**

**Kausar Suhail & Ansa Nausheen**

*Department of Psychology*

*Govt. College University, Lahore*

*Studies conducted with Western adolescent populations have shown a high incidence of reckless and problematic behaviour. The present work aimed to investigate the prevalence of so called “stress and storm”, typically associated with this age group, in Pakistani adolescent boys. Apart from a group of adolescents (students of Matric), two other groups (B.A. & M.A. students) were also included in the study for comparison. The study was also conceived to compare the three groups on depressive affect. The target behaviour was assessed through two means: self-report measures and teachers’ assessment. The results did not reveal significant differences between the three groups on self-reports, measuring problematic behavior and depression. However, the students of Matric were rated as being more irresponsible, rude, and emotionally disturbed by their teachers. It is concluded that adolescence may be a period of stress but the extent described and found in Western societies is not observable in traditional oriental cultures.*

Starting from Hall (1904) to modern times adolescence has been considered a period for heightened stress and storm. This troublesome period has been found to be associated with reckless, rude, and irresponsible behaviour as well as with mood swings. A number of terms have been used to describe troublesome or problem behaviour typically associated with adolescence. Arnett (1999) emphasized on three elements of the storm and stress view, in order of their developmental peak during adolescence: Risk behaviour, conflict with parents, and mood disruptions.

Reckless or risk behaviour indicates drug use and minor criminal activity as well as sexual activity. Modern researchers have associated adolescence with heightened rates of antisocial, norm-breaking, and criminal behaviour, particularly for boys (Arnett, 1992; Palmer & Hollin, 2001). Sensation seeking behaviour is also a form of risk behaviour in adolescence, but it refers to socially acceptable but thrilling activities, which have slight potential for serious consequences arising from them. According to Arnett (1992),

---

<sup>#</sup> Correspondence concerning this article should be addressed to Kausar Suhail, Department of Psychology, Govt. College University, Lahore, Pakistan. <kausars@wol.net.pk>

sensation seeking behavior has been found to be directly and indirectly related to reckless behaviour in a variety of studies. It has been pointed out that adolescents are not only more likely, than those in other age groups, to drive after drinking (Jonah & Wilson, 1984) but they also drive faster and use seat belts less frequently (Jonah, 1986). Wilson and Herrnstein (1985) noting the small potential gains involved in property crimes committed by juveniles, suggest that these adolescents are motivated partly by sheer adventurousness.

Sensation seeking has been demonstrated to be related to both, levels of sex hormones (Daitzman, Zuckerman, Sammelwitz, & Ganjam, 1978) and cognitive factors, e.g., adolescence egocentrism. Studies supporting this model of the impact of cognitive factors on sensation seeking and reckless behaviour can be found in the area of driving behaviour (Arnett, 1990), sex without contraception (Kalmuss, 1986), and criminal behaviour (Piliavin, Thornton, Gartner, & Matsueda, 1986).

Adolescents also report greater mood disruptions when compared with preadolescents. Comparing preadolescents (fifth graders) with adolescents (ninth graders), Larson and Richards (1994) saw this increase in mood disruptions as due to cognitive and environmental factors rather than pubertal changes. Nearly 100 years before, Hall (1904) proposed that adolescence is inherently a time of storm and stress, referring to the conflict and confusion accompanying a growing awareness of self and society. To Hall, this legacy of storm and stress was particularly evident in adolescents' tendency to question and contradict their parents, in their mood disruptions and in their propensity for reckless and antisocial behaviour.

An enormous amount of research has been produced from the West on risk taking and rude behaviour in adolescents, but very little work has been reported from Asian countries on this important subject. Kishore, Singh, Grewal, Singh, and Roy (1999) surveyed urban male adolescent population and comparable rural population in India to determine the difference in their risk behaviour. They conducted a comparative cross-sectional study among 199 and 152 male adolescents from an urban village of South Delhi and a rural village in Uttar Pradesh. A pre-tested semi-structured interview schedule with 36 items was applied on all subjects by trained interviewers. The results of their study indicated high prevalence of risk behaviour in both urban and rural adolescents. However, except for smoking which was more common amongst rural adolescents, all the other risk behaviours were more in those residing in urban areas.

Apart from reported differences within one cultural society, cross-cultural differences have also been shown in behaviours associated with adolescent population. Contemporary theory and research on adolescence have emphasized that the storm and stress popularly thought to be characteristic of adolescence have been exaggerated and that adolescence is not necessarily a tumultuous period of development in every culture. It has been pointed out that the typical behaviour associated with adolescence is more likely to occur in Western societies than in older lands with more conservative traditions (Arnett, 1992; Mott, & Haurin, 1987). It has also been suggested that independence promoted in Western culture may be leading toward such behaviours prevalent in relevant countries. However, Barber (1995) fails to see the impact of cultural differences on the expression of such behaviour in adolescence. He pointed out that all over the world traditional cultures are becoming integrated into the global economy and are being influenced by Western (especially American) cultures through growing economic ties and through exposure to Western movies, music, and television. He emphasized that within traditional cultures adolescents are often the most enthusiastic consumers of Western media.

It remains to be seen, however, whether adolescents' adherence to traditional ways and their low levels of storm and stress will be sustained as globalization increasingly changes the nature of their daily experience. If it is true that cultural values of individualism lead to adolescent storm and stress, then it seems likely that adolescence in traditional cultures will become more stressful in the ways described above as the influence of the West increases. Unfortunately this rich area of investigation has not been much explored in Oriental societies with their own specialized value systems and traditions. Particularly in Pakistan, no systematic attempt has been made to establish any links between adolescence and troublesome behaviour.

The Islamic Republic of Pakistan has a distinct culture and a rich traditional life handed down through generations. Pakistani culture and Muslim religion both put great emphasis on respect of parents, tolerance toward others, and balance in emotions and sharing with others. However, new generation in current modern and liberal Pakistan is increasingly becoming more westernised and independent through globalisation. The present work was conceived to find out whether the findings of the Western society hold in an Eastern Muslim country, and to determine whether so called "stress and storm" of adolescence are universally experienced or culturally determined. The study also aimed to compare early adolescents and

those entering adulthood in manifestation of such behaviour. As early adolescence has been described as the stage of heightened disruptive, disturbed and reckless behaviour, this age group was considered the main population of the current study. On chronological level, this period starts at about age 13 years, and on educational level, this is usually considered the period before leaving high school (Arnett, 1995). Considering this, the boys of Matric were taken as the typical adolescent group for the current research. The students of B.A. and M.A. were included as comparison groups. It was assumed, following Arnett (1999), that the disruptive and rude behaviour will decline in late adolescence and will eventually calm down in the M.A. students (approximate period of emerging adulthood) (Arnett, 2000). Symptoms of depressive affect were also measured to establish links between different age groups and mood disruption. Teachers' evaluation was also obtained to further validate self-reports of the subjects.

The following hypotheses were tested:

1. Typical group of adolescents (students of Matric) will obtain higher score on the Adolescence Behaviour Scale (ABS) compared to the other two groups.
2. Students of Matric will show more depressive symptoms than the other groups.
3. Students of B.A. will show more symptoms typical of adolescent group than the M.A. students.
4. Teacher's evaluation will show most disruptive behaviour in students of Matric as compared to others.

## **METHOD**

### **Sample**

The main sample of this study, boy adolescents, was recruited from three schools of Lahore: Crescent Model School, Army Public School, and Central Model School. The students of B.A. and M.A. were taken from the Government College University, Lahore. A total of 100 students were contacted from the main population, whereas 60 students from each of the other groups were requested to participate. Ten from Matric, 6 from B.A. and 4 from M.A., did not return the questionnaires. Twenty one of all who returned the questionnaires did not provide proper and complete information about them, hence were

not included in the analysis. A total of 179 served as the sample for the current study.

The mean ages of the students of Matric, B.A. and M.A. were 14.06 (SD = 0.72), 19.48 (SD = 1.21), and 23.62 (SD = 3.97), respectively. Majority of both parents in all groups were educated up to tertiary level. On average, all samples belonged to either high middle or upper social class.

## **Instruments**

The following instruments were used to collect the data.

### *Adolescence Behaviour Scale (ABS)*

This scale was especially constructed to measure the typical behaviour associated with early adolescents. The items for this scale were generated from two sources: Literature review and in-depth interviews with parents of adolescents. A total of 35 items were generated and were shown to two experts in this field who finally selected 24 items with consensus. It was assumed that the nature of the problematic behaviour would vary according to particular cultural society. For example, driving at a high speed while drunk, and sex without contraception are fairly common in the West, while such behaviours may not be frequently reported in a Muslim country. Moreover, the subjects might be very hesitant to report such behaviours, even if it applies to them, because of cultural pressure. Hence items depicting the themes mentioned above were not picked from the literature. Instead those items were included in the scale which majority of the parents (interviewed for the construction of this scale) believed are present in their adolescent children, i.e., being rude to parents, arguing with elders, not complying with the orders, being rebellious, etc. It is important to point out that the scale also includes 5 questions pertaining to thrill seeking behaviour, e.g., driving a car at high speed, hunting animals, climbing/hiking, etc. These questions do not indicate problems in behaviour as such, however, their effect could be devastating if that exceeded a certain threshold. Another category of behaviour is problematic and reckless behaviour, e.g., hurting people, getting impatient, to get things by fair or unfair means, etc. The last category of items is related with affective problems, e.g., unable to concentrate, crying, sleepless, restless, etc.

These items were answered on simple yes/no format with yes indicating the behaviour typically associated with adolescents. A higher score on this scale indicated more disruptive, rude, sensation seeking and reckless behaviour. In a pilot study, the questionnaire was administered to the students of Matric, B.A. and M.A., 10 from each group. Every group reported easy understanding with the items. To ascertain the internal cohesiveness of this scale for the current sample ( $N = 179$ ), reliability coefficients were calculated. The computed alphas were sufficiently high indicating the reliability of the scale for the sample on the whole ( $r = .79$ ) and for the separate groups of Matric (.81), B.A. (.75), and M.A. (.73) students.

### *Siddiqui Shah Depression Scale (SSDS)*

Siddiqui Shah Depression Scale (Siddiqui, 1992), designed to measure symptoms of depressive affect in Pakistani adolescents, consists of 36 items in Urdu. The items are scored on a four point Likert scale with a score range of 0-108. The depression level of a subject is rated as mild for scores 26-38, moderate for 39-49, and severe for above 50. The author has reported high values of split-half reliability of the scale for clinical ( $r = .79$ ) and non-clinical ( $r = .80$ ) populations. The computed alpha coefficients for clinical ( $r = .91$ ) and non-clinical ( $r = .89$ ) populations were even larger and showed the internal cohesiveness of the scale. The reported values of concurrent ( $r = .55$ ) and construct ( $r = .64$ ) validities were also significant.

As the present sample consisted of groups of heterogeneous populations, the reliability of this scale for the current samples was calculated which appeared to be satisfactory for the total sample ( $r = .68$ ) as well as for the three groups of Matric ( $r = .66$ ), B.A. ( $r = .70$ ), and M.A. ( $r = .65$ ).

### *The Newcastle Adolescent Behaviour Screening Questionnaire (NABSQ)*

The Newcastle Adolescent Behaviour Screening Questionnaire (Place, Kolvin, & Morton, 1987) has been designed to measure teachers' assessment of mid-adolescent phase development regarding distressed and disturbed behaviour. The questionnaire measures behaviour of particular concern in educational setting, i.e., a sense of confusion, excessive day-dreaming, lability of mood and emotion,

lack of confidence, reserved and uncommunicative, and being easily upset by educational failure.

This scale measures the assessment of the teachers about students' behaviour in the previous 6 months. It has two sections: section A consists of 7 items describing behaviour often seen in adolescents (mentioned above) and section B consists of 3 items about the overall assessment of the person (nervous; shows problem behaviour; has educational difficulties). The items are scored on a 0-2 scale indicating 'No', 'Somewhat', and 'Yes', respectively.

Using data from 1,446 urban adolescents, the authors of the scale compared performance of the NABSQ with other screening instruments (e.g., General Health Questionnaire; the Junior Eysenck Personality Inventory). They did not find any questionnaire more efficient than the NABSC at detecting potential disturbance. The NABSQ proved to be a reliable and valid screening measure. The reliability coefficients, computed to check the internal consistency of the NABSQ for the present sample, were satisfactory when calculated for the total sample ( $r = .71$ ) and when computed for the subgroups (Matric = .72; B.A. = .65); M.A. = .69).

Because the teachers were required to fill the NABSQ for their students, there was no need to translate it into Urdu. However, the scale was shown to school and university teachers (10 each group) and were requested to point out any problem in understanding of the items. As not a single teacher identified any problem, the scale was used as such.

## **Procedure**

For this study, Matric and B.A. students were contacted through their class teachers, and Masters students were contacted in different departments of the Government College University, Lahore. The two questionnaires (ABS & SSDS) were distributed to those subjects who volunteered to participate in the study. They were requested to read the questions carefully and then answer all the questions. The questionnaires were given to the students, and were collected after some days.

The teachers' evaluation on students' general behaviour was obtained through the NABQ. The class teachers of Matric students were requested to assess the relevant subjects. However, teachers of B.A. and M.A. students stated that they were unable to comment on the behaviour of their students, as they did not have enough contact

with them (just teaching one area of studies). Moreover, in every class, there were 40-50 students and it was difficult to remember all of them. To solve this problem, their tutorial teachers were requested to report on the behaviour of their students on the NABQ. Because of small-group teaching (maximum 10), the tutorial teachers did not find the task difficult.

All teachers provided the requested information of their students. However, teachers' assessments of those students, who did not return the questionnaires or provided incomplete information, were excluded to match the data sets.

## RESULTS

In the final analysis, a total of 179 sets of data were included. The results were analyzed using the SPSS for windows, version 10.00. Separate one-way ANOVAs were conducted to find out the difference between three groups on the three scales.

Table 1

*Comparison among Three Groups on Adolescence Behaviour Scale*

Groups	$\bar{X}$ (SD)	Source of variation	Ss	df	MS	F	p
Matric	32.77 (5.14)	Between groups	67.18	2	33.59		
B.A.	34.02 (4.05)	Within groups	3941.35	176	22.39	1.50	.230
M.A.	32.52 (4.68)	Total	4008.54	178			

Table 2

*Comparison among Three Groups on Siddiqui Shah Depression Scale*

Groups	$\bar{X}$ (SD)	Source of variation	Ss	df	MS	F	p
Matric	24.82 (9.61)	Between groups	120.89	2	60.44		
B.A.	26.40 (12.1)	Within groups	23374.39	176	132.80	.45	.63
M.A.	24.32 (13.45)	Total	23495.29	178	193.24		



Table 3

*Comparison among Three Groups on Newcastle Adolescence Behaviour Screening Questionnaire*

Groups	$\bar{X}$ (SD)	Source of variation	Ss	df	MS	F	p
Matric	2.88 (3.72)	Between groups	476.14	2	238.07		
B.A.	0.67 (1.21)	Within groups	3440.00	176	19.54	12.22	.001
M.A.	0.70 (.82)	Total	2975.72	178	257.59		

## DISCUSSION

The data of the current report need to be interpreted considering the following limitations: (1) There was no direct comparison of Pakistan adolescents with an equivalent Western sample; (2) the groups consisted of only high middle and upper social class boys, hence the findings are restricted to these populations and allow no generalization to either lower class adolescents or girls; and (3) the study does not cast light on the behaviour of those adolescents who do not attend schools.

The purpose of this research was to determine the prevalence of any problematic behaviour in adolescents, based on Hall's view of storm and stress in that group. However, the current results indicate that in Pakistani society typical group of adolescent boys are not different from their older counterparts in reckless behaviour, mood disruptions, conflict with parents and thrill seeking and risk behaviour. Even though previous researches have shown greater problematic behaviour in adolescents, the current work failed to find such associations.

Although Hall (1904) acknowledged individual differences in stress and storm associated with adolescence period, he attributes this behaviour largely to biological factors. Arnett (1999) maintains, however, that the claim that adolescent stress and storm is characteristic of all adolescents and that the source of it is purely biological is clearly false. In attitude formation both biological and environmental factors play a significant role. Biological factors may predispose some teenager to behave in stormy or 'different' way than

the usual cultural norms, but the society or environment where a person grows up plays an equally important role in shaping one's behaviour. Hence, upbringing of child has great importance in shaping his/her behaviour. It may be hypothesised that the adolescents brought up in a traditional Muslim environment have learnt to suppress and hide their feelings (culturally unacceptable), either consciously or unconsciously.

Though Hall placed emphasis on biological basis of so called stress and storm of adolescents, he also believed that culture influenced its expression and experience. He believed stress and storm as more likely to occur in the United States of his day than in lands with more conservative traditions. He attributed the stress and storm in the US adolescents to growing urbanisation. He also conceived such problematic behaviour as adolescents' inherent need for activity and exploration. However, he felt that the problems of youth of his time were aggravated by the failure of school, home, and religious originations to recognise the true nature of adolescence, a view consistent with that of many modern researchers (Eccles et al., 1993).

Arnett (1995) after a comprehensive review of the issue, points out that the limited evidence available so far suggests that adolescents in traditional cultures often are able to maintain their traditional values and practices including low conflict with parents and low rates of risk behaviour – even as they become avid consumers of western popular culture. Mead (as cited in Sprinthall & Collins, 1995) also encountered the claim that a tendency toward storm and stress in adolescence is universal and biological by describing non-western cultures in which adolescence was neither stormy nor stressful. Mott and Haurin (1987) pointed out that communities affect reckless behaviour through their sheer size, in a smaller community there may be more of a fear of social censure for reckless transgressions than in a larger community and perhaps more of a sense of responsibility to one's neighbours, since one knows many of them personally. However, it remains true that in West adolescents are over-represented statistically in virtually every category of reckless behaviour (Arnett, 1992).

A key difference between traditional cultures and West is the degree of independence allowed by the adults and expected by the adolescents in the majority of the cultures of the west. Because of cultural values of individualism it is taken for granted by adolescents and their parents that children should become independent from their parents during the course of adolescence. A substantial amount of

storm and stress arises from regulating the pace of adolescents' growing independence. But in Pakistani culture independence from parents is generally discouraged. Adolescents fully depend on their parents for a long time, and may show less individualistic or so called rude behaviour. According to Western standards, parents in Pakistan are dominating and over protective. Because of this over protection, mental growth, development of ideas and individual thinking of children all remain very much under the influence of their parents. May be adolescents in traditional cultures like Pakistan are often able to maintain their traditional values and practices including low conflict with parents and low rates of risk behaviour. Moreover, the teachings of Islam also are to obey and respect our elders. Rudeness to parents is greatly discouraged in Pakistani culture as well as in Muslim religion. Living in such a society may make it very hard for youth to express their feelings, not in harmony with society. Also such feelings may not actually develop in a society, which puts so many premiums on conformity to elders.

The findings of the current work suggested that the stress and storm in adolescence reported mostly from the Western countries is not necessarily universal. However, the possibility that the subjects might not have filled the questionnaires honestly cannot be overlooked. Also they might have been scared of the exposure of their feelings to others and especially to an outsider. Hence they may have given responses which are socially acceptable and admirable.

To conclude, our findings did not support first two hypotheses presumably because of cultural and religious differences. The third hypothesis regarding more problematic symptoms in B. A. compared to M. A. students was also not supported. Although the current data did not show significant differences between the three groups on self-reported problematic behaviour as well as depressive affect, the teachers' assessment showed greater frequency of both indicators in students of Matric (typical group of adolescents) as compared to the other two groups. The current group of adolescents was rated high on day-dreaming, confusion, variation in mood, frustration, being uncommunicative, nervous, disruptive and anxious. The findings indicated that the adolescents of the current study showed at least some of the problems, detected and identified by their teachers. However, it may be hypothesised that because of cultural and religious differences such behaviours are prevalent in Eastern adolescents in somewhat lesser degree. The possibility that the adolescents here are experiencing the similar level of disturbed

behaviour, which they are reluctant to admit, cannot be ignored though.

## CONCLUSIONS

The findings of the present research suggest that stress and storm is by no means universal and inevitable among adolescents. However, higher rating of such behaviour in students of Matric as assessed by their teachers shows that this age group is somehow facing some problems, which they themselves are hesitant to admit. Perhaps adolescence is a period of stress but the extent described and found in Western societies is not observable in traditional Oriental cultures.

## REFERENCES

- Arnett, J. J. (1990). Drunk driving sensation seeking, and egocentrism among adolescents. *Personality and Individual Differences* 11, 541-546.
- Arnett, J. J. (1992) Reckless behavior in adolescence: A developmental perspective. *Journal of Developmental Review*. 12, 339-367.
- Arnett, J. J. (1995). Broad and narrow socialization. The family in the context of a cultural theory. *Journal of Marriage and the Family*, 57, 617-628.
- Arnett, J. J. (1999). Emerging adulthood: A conception of development from the late teens through the twenties. *Manuscript submitted for publication*.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *Journal of American Psychologist*. 5, 469-480.
- Barber, B. R. (1995). *Jihad vs. McWorld: How globalism and tribalism are reshaping the world*. New York: Ballantine.
- Daitzman, R. J., Zuckerman, M., Sammelwitz, P. H., & Ganjam, V. (1978). Sensation seeking and gonadal hormones. *Journal of Bioscience*, 10, 401-408.
- Eccles, J. S., Midgely, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & MacIver, D. (1993). Development during adolescence: The impact of stage-environment fit on young

- adolescents' experiences in schools and in families. *American Psychologist*, 48, 90-101.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion, and education* (Vols. I & II). Englewood Cliffs, NJ: Prentice-Hall.
- Jonah, B. A. (1986). Accident risk and risk-taking behaviour among youth drivers. *Accident Analysis and Prevention*, 18, 255-271.
- Jonah, B. A., & Wilson, R. J. (1984). *Drinking and driving among youth*. Paper presented at the Workshop on Epidemiological and Social Psychological Studies in Alcohol and Drug Use Among Youth, Toronto.
- Kalmuss, D. (1986). Contraceptive use: A comparison of ever-and never-pregnant adolescent. *Journal of Adolescent Health Care*, 7, 332-337.
- Kishore, J., Singh, A., Grewal, I., Singh, SR., & Roy, K. (1999). Risk behaviour in an urban and a rural male adolescent population. *National Medical Journal of India*, 12 (3), 107-10.
- Larson, R., & Richards, M. H. (1994). *Divergent realities: The emotional lives of mothers, fathers, and adolescents*. New York: Basic Books.
- Mott, F. L., & Haurin, R. J. (1987). *The interrelatedness of age at first intercourse, early pregnancy, alcohol, and drug use among American adolescents: Preliminary results from the National Longitudinal Survey of Youth Labour Market Experience*. Centre for Human Resource Research, Ohio State University, Columbus, Ohio.
- Palmer, E. J., & Hollin, C. R. (2001). Self-reported delinquency in persistent young offenders. *Pakistan Journal of Psychological Research*, 16 (3-4), 67-83.
- Piliavin, I., Thornton, C., Gartner, R., & Matsueda, R.L. (1986). Crime, deterrence, and rational choice. *American Sociology Review*, 51,101-119.
- Place, M., Kolvin, I., & Morton, S. M. (1987). The Newcastle Adolescent Behaviour Screening Questionnaire. *British Journal of Psychiatry*, 151, 45-51.
- Siddiqui, S. (1992). *The assessment of attributional style of depressive and non depressive through an indigenously developed scale*. Unpublished Ph.D thesis, National Institute of Psychology, Quaid-i-Azam University, Islamabad.

Sprinthall, N. A. & Collins, W. A. (1995). *Adolescent psychology. A developmental view* (3rd ed.). New York: McGraw-Hill, Inc.

Wilson, J. Q., & Herrnstein, R. J. (1985). *Crime and human nature*. New York: Simon & Schuster.

**Received: August 18, 2002.**