

Development and Field Trial of a Hassles Measure for Indian Adolescents

Seema Mehrotra and Aruna Kumari
NIMHANS, Bangalore Derby, United Kingdom

The paper describes the development of a measure of hassles suitable for use with Indian adolescents. The measure consists of 28 items that capture cumulative exposure to hassles in various domains of daily life in the past six months through the use of frequency rating format. The items were generated using the perspectives of adolescents themselves. The measure was constructed in such a way as to minimize the possibility of contamination of exposure ratings with perceptions of severity of stress or psychological symptoms. A field trial with 272 pre-university students indicated satisfactory internal consistency. The hassles scores were significantly correlated with worry and well being measures providing support for the convergent validity of the measure. Hassles in the academic domain were rated as having high frequency of occurrence. The implications of the study findings as well as the directions for further research on the Hassles measure are highlighted.

Keywords: Hassles, Stress in adolescence, Measurement of hassles

Daily hassles are conceptualized to be different from major events in as much as that these refer to minor irritating and frustrating demands or events that are typical of daily interactions between individuals and their environments (Kanner, Coyne, Schaefer, & Lazarus, 1981). Daily hassles, similar to major stressful events, have been found to be predictors of depressive, anxious as well as externalizing symptoms in children and adolescents (e.g. Carter, Garber, Ciesla, & Cole, 2006, Barrera et al., 2002; Rudolph et al., 2000). There are a few studies that in fact suggest that hassles/daily stressors are not just more frequent but are also better predictors of psychological adjustment (e.g. Aldwin, 1994; Wagner, Compas, & Howell, 1988). Advancement in stress research including measurements of stress in children and adolescents has however lagged behind that in adults (Grant et al., 2003; Compas 1987; Johnson, 1986).

Measurement of hassles in adolescence:
A scan of the research literature indicates

that there are a few validated measures of stress (including hassles) available for use with adolescents. However, most of these have been developed for use with white middle class adolescents and include items deemed by the researchers to be stressful for adolescents (Grant et al., 2004). Compas, Davis, Forsythe, & Wagner, 1987) reviewed six checklists of life events developed for use with children & adolescents. They observed that only one of these utilized items generated by the adolescents themselves. Most of the available stress measures, like their counterparts for adults, focused on major events rather than daily hassles.

A few examples of hassles scales available for use with children and adolescents are as follows. The children's hassles scale (McDermott, & Spencer, 1995) consists of forty items and involves two response formats to be used for each item, namely, frequency and magnitude. The frequency -format asks respondents to rate how often they have experienced each item

in the last six months and the magnitude-format asks the extent to which that event was a hassle for them. Multiplying each pair of responses produces weighted scores. The scale includes home/family and personal-independence categories of hassles. A questionnaire about school related events (Robinson, Garber, & Hilsman, 1995) contains subscales on academic and peer related hassles (e.g. receiving poor grades, trouble keeping up with homework and being teased by friends). The items are rated in terms of the extent to which the stressor had occurred on a five point scale. The inventory of high school students' recent life experiences (Kohn & Milrose, 1993) consists of 41 hassle items specific to high school adolescents. This scale uses a frequency of occurrence response format and avoids confounding items with appraisal/distress dimensions by attempting to focus only on exposure to sources of daily stressful events.

Adolescent perceived events scale (Compas, Davis, Forsythe, & Wagner, 1987) consists of 164 major as well as daily events (positive & negative) appropriate for adolescents. It allows respondents to rate the positive and negative impact of the events. Daily Hassles for Adolescents Scale (Dubois, Felner, Meares, & Krier, 1994) consists of 26 items reflecting day to day concerns of children and adolescents. It uses a four point response format wherein "1" indicates "not at all a hassle" and "4" denotes "a very big hassle". An overall index of hassles for the past one week as well as hassle scores in academic, social, family and personal safety domains can be arrived at.

Rationale for the development of the hassles measure: On the whole it appears that research on hassles among adolescents in Asian cultures is scarce (e.g. Lai, Hamid, & Chow, 1996). Some of the criticisms leveled against hassles scales for adolescents are same as those raised with reference to such measures for adults. These include

confounding of measurement of stressors with symptoms of distress or with perceptions of severity (Dohrenwend, & ShROUT, 1985). Moreover, the need for hassles scale-items to adequately represent perspectives of adolescents and to be appropriate & relevant for a given socio-cultural context can not be overemphasized. These considerations led to the development of hassles measure suitable for Indian adolescents. This venture particularly focused on adolescents in pre-university courses, i.e. those who were in the terminal phase of schooling. This was in order to capture the day-to day difficulties experiences by Indian adolescents during this transitional phase. Lay observations suggest that adolescents in this phase are likely to experience heightened social pressures as well as practical demands regarding vocational choices. Also, keen competition for entry to professional courses at this juncture in life has the potential to add to high pressures to perform. In broader terms, it is also a phase that is marked by intensified struggles for a sense of identity (Erickson, 1979).

It is well documented in the Western as well as Indian research literature that the prevalence of diagnosable psychological disturbances in adolescence is substantial (Blackman, 1995; Srinath et al., 2005). In the above background, the availability of a culturally appropriate measure of hassles that does not confound with other related variables (major life events, perceived stress, symptoms etc.) assumes importance in order to understand contributors to mental health outcomes among adolescents.

Method

Generation of items for the hassles scale for adolescents (HAS-ADS)

It was decided to use the perspectives of the adolescents themselves rather than the researcher, to generate items for the scale. This was in keeping with the criticisms

directed against a few existing hassles scales. A sample of 58 students (boys and girls in equal proportions) from two local schools enrolled in pre-university courses was recruited, using a purposive sampling method. The students were asked to provide a list of "day-to day, small/minor events that keep happening and that upset/bother/irritate them or make them feel pressured/tensed". They were told not to restrict themselves to the events that they personally experience but also to include those events that they knew their friends experienced/discussed about. They were prompted to think of such day to day events with respect to various domains: related to home, friends, teachers & their studies etc. A few examples of possible events in various categories were provided.

Analysis of pilot-phase data:

The engagement of the adolescents was evident in terms of lengthy protocols that not just listed but also described the day-to day stressors. These protocols were content analyzed independently by two judges. Each statement was examined to look for a mention of a hassle as operationally defined above. Each new hassle was coded separately. Items in the form of brief, simple phrases were written to capture each of the hassles. Statements with overlapping content were culled together to frame a single item representing the same. Each hassle that emerged in more than one protocol was incorporated in the pool of the items. This was to ensure that items were not reflections of highly idiosyncratic issues and would be of somewhat common relevance for the target group. The statements that reflected negative self appraisals, possible consequences of stress or features of psychopathology (e.g. "My mind is unsound", "I don't get sleep as I keep worrying", etc.) were not considered for item formation. Differences between judges were resolved through discussion and this exercise resulted in 27 items spread across various life domains. An additional item "Any

other...." was added at the end to provide an opportunity for the respondents to add a day –to-day- stressor, if they felt that it was not covered through the remaining items.

five point response-formats was decided upon to tap the frequency of occurrence of hassles. The response options were: Never/rarely (scored as 0)/ Only Sometimes (1), Often/frequently (2), Very often/very frequently (4) and Almost Always (5). A time frame of six months was used to arrive at an understanding of chronic/relatively stable pattern of occurrence of hassles in the adolescents' lives. The use of a shorter time frame (e.g. past few weeks/ past month) was considered to be less likely to capture hassles that may have relatively low frequency of occurrence (e.g. preparing for tests). Also, this time frame was expected to provide an index of the cumulative repetitive/continuous nature of hassles that often are sources of chronic stress.

Field Trial:

The Hassles measure thus developed was field tested to obtain preliminary data on its reliability (internal consistency) and convergent validity.

Field trial sample: The sample subjects were recruited from seven pre-university institutions in a southern town in India. The sample was confined to students in the first and second year of pre-university course who had English as their medium of instruction. Informed consent was obtained from the participants before enrolling them for the survey. An attempt was made to enroll students from different streams of study (Arts, science, Commerce). The final sample consisted of 272 participants between 15 & 20 years of age (mean 16.4 years, SD= 0.73). Males(n=134) & females(n=138) were roughly equally represented (49% & 51% respectively). Similarly, the first & second year students were also equally well represented in the sample (52 % and 48 %

respectively). The newly developed hassles measure was administered along with other tools for convergent validation. The Hassles scores were expected to correlate significantly and yet modestly with scores on worry and wellbeing. As mentioned earlier, hassles have been established to be predictive of a variety of mental health outcomes including perceived stress and well being. Hassles scores were hence expected to significantly correlate with a measure of wellbeing in a negative direction. Worry has been defined as reflecting attempts at mental problem solving activity and the available literature suggests that worries are common during childhood and adolescence (Gottlieb, & Bronstein, 1996, Muris et al., 1998, Kaufman et al., 1993) and may be associated with mental health indices such as depression (Chorpita, Tracey, & Brown, 1997). It was expected that scores on a worry measure would significantly correlate positively with the scores on the Hassles measure. The tools were administered in a predetermined constant order in group sizes of fifteen to thirty-five each.

Tools:

1. Hassles scale for adolescents (HAS – ADS) As described above

2. State Worry questionnaire (Revised): A 15 item worry questionnaire with a five point response format was used. This was based on modifications of the most frequently used and researched Penn State Worry Questionnaire (Meyer, Miller, Metzger, & Borkovec, 1990). Chorpita, Tracey, and Brown (1997) had developed a revision of

this measure of trait- like pathological worry for use with children & adolescents. Stober and Bittencourt (1998) independently revised the original Penn worry questionnaire to arrive at a state rather than trait version. The present study utilized these two independent revisions to arrive at a modified measure for assessing “worry as a state” in the Indian adolescent sample. This questionnaire assessed levels of worry in the past one month. It demonstrated an alpha coefficient of 0.80 in the present study. Higher scores on this scale indicate higher intensity of worrying.

3. Well being: PGI subjective well being measure was developed by Verma and Verma (1989) for use in the Indian context. This is a 20 item scale that follows a simple yes/No format. The authors have demonstrated satisfactory reliability (internal consistency and test-retest) and concurrent validity of this measure. The scale is scored in the direction of well being and thus higher scores indicate higher levels of well being.

Results

Basic psychometric properties of the hassles measure

The Hassles scores were normally distributed. The obtained scores fairly spanned the possible range of scores, although there were no scores at the upper extreme end of the range. The sample mean was below the mid point of the possible range of scores. The alpha coefficient for the scale was 0.78, indicating satisfactory internal consistency reliability of the scale.

Table 1. Hassles Measure: Descriptive statistics

Mini-Max scores (Possible)	Mini-Max scores (Obtained)	Alpha coefficient	Normality of distribution (K-S Z* value)	Mean & SD N=272
0-108	6-81	0.78	0.89 NS**	33.15 (11.81)
Gender comparisons on hassles	MalesN=134 Mean (SD) 34.00 (11.47)	FemalesN=138 Mean (SD) 32.31 (12.10)	t-Value	1.18

* K-S Z test: One-Sample Kolmogorov-Smirnov Test for checking departure from normality

Mean hassles scores were not significantly different for the two genders ($t=1.18$, NS) Table 1. The Hassles scores had significant positive correlation with the state worry scale ($r=0.36$, $p<0.01$) and a negative correlation ($r=-0.38$, $p<0.01$) with the subjective well being scale.

Item endorsements on the Hassles measure:

The table 2 shows those five items on the Hassles measure that were marked as “never/rarely” occurring in the last six months by the highest proportion of participants. It may be noted that even these hassles were marked as present/applicable to varying degrees by at-least 50% of the participants.

Table 2. Five Hassles reported to have lowest frequency of occurrence in past six months

Hassle	Percentage of respondents reporting : “Occurred Never/Rarely” in last 6 months
Failing in a test	58%
Not having enough money for day to day needs	56%
Being Punished at school	55%
Illness in a family member	53%
No proper place to study with concentration, at home	52%

The table 3 shows the top five items that were highly endorsed in the current sample. These are items which were given either a high frequency rating (very often/ almost always) or a moderate frequency rating (often, frequently) by the highest proportion of respondents. It is interesting to note that all these items pertained to academics. On the whole the patterns of item endorsements suggest that all items were applicable in the present study sample.

Discussion

The present report describes the development and a preliminary field trial of a

Table 3. Hassles reported to have high and moderate frequency of occurrence in past six months

Hassle	Percentage of respondents reporting High frequency of occurrence (Occurred Very often/Almost always)
Preparing for exams/tests	51%
Not enough time to study	32%
Lot of home work to do	29%
Needing to study uninteresting topics	23%
Being compared with others by parents/teachers about marks scored	22%
	Percentage of respondents reporting Moderate frequency of occurrence (Occurred Often/Frequently)
Lots of things/activities that distract me from studies, at school	27%
Needing to study uninteresting topics	22%
Lot of home work to do	22%
Preparing for exams	21%
Finding subjects difficult to understand	20%

hassles scale suitable for use for adolescents in their terminal phase of schooling. The scale items were generated based on the descriptions of day-to day stressors reported by the adolescents themselves. This helped in ensuring that items reflect the perspectives of the respondents rather than an adult researcher (Compas et al., 1987)

An attempt was made to come up with a “decontaminated/ relatively pure hassles measure by avoiding items that reflect potential consequences of stressors/ symptoms of distress/psychopathology. Also, the hassles measure developed in the present study utilized a frequency format for

responding. This was again to avoid confounding the measurement of stressors with ratings of perceived severity (Doherenwend, & Shrout, 1985) as the latter are more likely to be influenced by personality variables than the reports regarding frequency of occurrence. These strategies make this hassles measure useful in research paradigms that need to segregate the measurement of stressors per se from the measurements of appraisals of stressors or perceived stress and its mental health outcomes. The stressors included in this hassles scale are not limited to discrete, minor, day-to-day events/episodes that occur at specific points of time but also include continuous conditions of daily life that can serve as daily irritants. This is in keeping with the observations that hassles are recurrent and chronic and that most existing measures of hassles include not only minor events but also intermittent or ongoing difficulties (Monroe, & Simons, 1991).

The field trial of the measure suggested that all the items have fair applicability and that the scale has satisfactory internal consistency. Convergent validation refers to the process of establishing that the scale correlates meaningfully with measures of those variables with which it should theoretically correlate. In line with this, the hassles measure was found to have a significant and yet modest correlation with measures of worry and wellbeing. The magnitudes of correlations indicate that the hassles scores predicted 12% and 19% of variations in worry and well being respectively. External events/stressors are expected to exert influence on mental health outcomes. However, as the hassles scale was constructed to be a decontaminated measure that avoids confounds with perceived severity and distress; it was not expected to have very high correlations with estimates of worry and well being. The latter are likely to be influenced by personality variables as well

as coping, apart from the stressors themselves.

Socio-cultural factors are likely to impact on the hassles that are reported as most frequent in a given culture. Unlike the findings in a western study, the most common hassles in a Hong Kong sample (Lai, Hamid, & Chow, 1996) were more to do with the school related events. This was explained in the light of heavy academic demands, competitive environments and the resultant examination anxiety faced by adolescents in certain Asian cultures. In the present study too, the most frequently reported stressors pertained to the academic demands. Previous research suggests that as adolescents strive for independence, parental monitoring activities (that parents initiate due to their needs to be protective of their off springs) may be perceived as hassles by the adolescents (Spencer, Dupree, Swanson, & Cunningham, 1996). This may partly explain the high frequency endorsement of an item on "being compared with others by parents/teachers" in the current study.

Transition to a higher grade level can be associated with higher grading standards; much more competitive environments and can have a demoralizing impact when the students find that earlier levels of efforts result in lower grades in the new set up/higher class (Eccles et al., 1993). Also, the phase at which students (and parents) become highly concerned with preparation for college entrance exams is associated with high distress attributed to the pressure of these exams (Schooland, 1990). Time budget studies in India that examine patterns of time use in children and adolescents (Verma, & Gupta, 1990; Shah, 1988) as well as observations during the present study suggest that Indian adolescents during their pre-university phase have high academic load and minimal free time. A substantial proportion of adolescents in the present study reported moderate to high frequency of

occurrence of hassles in the academic domain namely, "Lots of things at school that distract one from studies" and "needing to study uninteresting topics", "lots of home work to do". It is speculated that a large number of attractive extra-curricular activities further lower the attractiveness of academic tasks for those students who may not be achievement oriented in the academic sphere and also increase the amount of efforts needed to keep oneself engaged in studies / bring the focus back to studies. Studies in Korea and India (Lee, 1994, Verma, 1998) have found class-work and home-work to be associated with the experience of low intrinsic motivation and high rates of boredom. These observations indicate a need for minimizing the divide between fun- activities and learning activities at school, whenever possible. The importance of hassles alone (without mixing up its measurement with that of major events) on psychological adjustment among adolescents was demonstrated by (Carter, Garber, Ciesla, & Cole, 2006). This study reiterated the notion that hassles occurring within the school require attention of researchers and interventionists as school environments are highly salient in the context of development of children and adolescents.

In the present study, no gender differences were observed in terms of the overall hassles score. It is possible that gender differences would emerge when one examines specific kinds/domains of stressors as well as on measures that tap perceived severity of stressors/distress related to the same. Earlier research (Wagner, & Compas, 1990, Kanner, Feldman, Weinberger, & Ford, 1987, Wu, & Lam, 1993) suggests that girls experience more hassles, perceive hassles as more stressful and report more symptoms. However there is some evidence that although girls may experience more hassles, they may also make more/better use of supportive networks (e.g. Cohen & Wills, 1985). The confounding of hassles-

measurement with appraisals of stressors has also been suggested to be a limitation of several measures that makes it difficult to understand potential gender differences in experiencing/reporting of hassles. For example, Burke, and Weir (1978) suggested that gender differences may exist in terms of appraisals rather than occurrence of stressors. In a study by Lai, Hamid, and Chow, (1996) an analysis of subscales suggested that boys and girls from a non-western culture (Hong Kong) may not be markedly different in terms of hassles experienced in most domains, unlike their western counterpart.

Limitations and directions for further research:

Test development is a process. This is a preliminary report on the development & field testing of the hassles measure for Indian adolescents. Its limitations need be examined and rectified through further studies.

The score on the hassles scale represents a cumulative index of the frequency of occurrence of day-to day stressors of different kinds. A high score can thus indicate a large number of relatively infrequently occurring stressors or a small number of frequently occurring stressors. The scoring is designed to tap the cumulative impact of hassles as it is the repetitive and accumulative nature of minor stressors that was expected to be important in determining mental health outcomes. Frequency of stressful events and their average (perceived) intensity are distinct measures both of which are equally important in stress research (Mullis, Youngs, Mullis & Rathge, 1993). The present scale in its current version incorporates only the frequency dimension.

Although, it was possible to arrive a relatively "pure measure" of hassles, it was noted that an impact of subjectivity could not be completely avoided. As suggested by Kohn, Lafreniere and Gurevich (1991), the

ratings regarding exposure to hassles may be influenced by appraisal processes although to a lesser extent than the ratings of severity. Certain items continued to reflect subjective judgments that may be influenced by person variables (e.g. being punished at school/ arguments at home). Lazarus, DeLongis, Folkman, and Gruen (1985) noted that the conceptual distinctions between hassles and symptoms may be difficult to make especially for certain kinds of hassle items (such as having frequent arguments). Also, the reciprocal models of stress- psychopathology (e.g. Kim, Conger, Elder, & Lorenz, 2003) suggest a bidirectional, mutual influence between stress and symptoms, i.e., stress contributing to symptoms which in turn result in generation of more stressful events. The existing hassles measures use variable time frames ranging from one week to six months. Studies in future need to examine the implications of using shorter (one month) vs. longer time frame (six months or so) for the newly developed measure. The scale was specifically developed to examine hassles reported by students in the terminal phases of their schooling in India; however the item content as well as phrasings suggests that its applicability might be extendable to younger students in lower grades in high school too. However this needs to be empirically examined. Hassle- reports are likely to vary from high school through pre-university to college years. It needs to be noted that the scale is not suitable for use with adolescents who have left school/ are working. It needs to be reiterated here that the present measure included both discrete events and other daily environmental demands although some researcher argue in favor of measuring hassles in terms of solely discrete events. Measurement of various dimensions of hassles such as frequency of occurrence, level of unpleasantness and extent of dwelling/preoccupation has been debated in previous research (e.g. Rowison, & Felner,

1988). The utility of incorporating such dimensions through a system of separate ratings in the current version of the hassles measure may be examined through further research.

References

- Aldwin, C. M. (1994). *Stress, coping, and development: An integrative approach*. New York: Guilford Press.
- Barrera, M., Jr., Prellow, H. M., Dumka, L. E., Gonzales, N. A., Knight, G. P., Michaels, M. L., Roosa, M. W. & Tein, J.Y. (2002). Pathways from family economic conditions to adolescents' distress: Supportive parenting, stressors outside the family, and deviant peers. *Journal of Community Psychology, 30*, 135–152.
- Blackman, M. (1995). You asked about adolescent depression. *The Canadian Journal of CME (Internet)*. Available at <http://www.mentalhealth.com/mag/1/p51-dpoi.html>.
- Burke, R., & Weir, T. (1978). Sex differences in adolescent life stress, social support and wellbeing. *Journal of Psychology, 98*, 277-288.
- Carter, J.S., Garber, J., Ciesla, J.A. & Cole, D.A., (2006). Modeling relations between hassles and internalizing and externalizing symptoms in adolescents: A Four-Year Prospective Study. *Journal of Abnormal Psychology, 115*, 428–442.
- Cohen, S., & Wills, T.A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357.
- Compas, B. E. (1987). Stress and life events during childhood and adolescence. *Clinical Psychology Review, 7*, 275-302.
- Compas, B.E., Davis, G.E., Forsythe, C.J. & Wagner, B.M. (1987). Assessment of major & daily stressful events during adolescence: The adolescent perceived events scale. *Journal of Consulting and Clinical Psychology, 55*, 534-541.
- Chorpita, B.F., Tracey, S.A., & Brown T.A. (1997). Assessment of worry in children and adolescents: On adaptation of the Penn State Worry Questionnaire. *Behavior Research and Therapy, 35*, 569-581.

- Dohrenwend, B. P., & ShROUT, P. E., (1985). "Hassles" in the conceptualization and measurement of life stress variables. *American Psychologist*, 40, 780-785.
- Dubois, D. L., Felner, R.D., Meares, H. & Krier, M. (1994). Prospective investigation of the effects of socioeconomic disadvantage, life stress and social support on early adolescent adjustment. *Journal of Abnormal Psychology*, 103, 511-522.
- Eccles, J.S., Midgley, C., Buchanan, C.M., Wigfield, A., Reuman, D., & MacIver, D. (1993) Development during adolescence. Impact of stage environment fit on young adolescent experiences in schools and families. *American Psychologist*, 48, 90-101.
- Erickson, E.H. (1979). *Identity & the life cycle: A reissue*. New York: Norton.
- Gottlieb, D., & Bronstein, P. (1996). Parents' perceptions of children's worries in a changing world. *Journal of Genetic Psychology*, 157, 104-118.
- Grant K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child and Adolescent Psychology*, 33, 412-425.
- Grant, K. E., Compas, B. E., Stuhlmacher, A.F., Thurm, A.E., McMahon, S.D., & Halpert, J.A. (2003). Stressors and Child and adolescent psychopathology : Moving from markers to mechanisms of risk. *Psychological Bulletin*, 129, 447-466.
- Johnson, J. H. (1986). *Life events as stressors in childhood and adolescence*. Beverly Hills: Sage Publications.
- Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, 4, 1-39.
- Kanner, A. D., Feldman, S. S., Weinberger, D. A., & Ford, M. E. (1987). Uplifts, hassles, and adaptational outcomes in early adolescents. *Journal of Early Adolescence Research*, 7, 371-394.
- Kaufman, K. L., Brown, R. I., Graves, K., Henderson, P., & Revolinski, M. (1993). What, me worry? A survey of adolescents concerns. *Clinical Pediatrics*. 32, 8-14.
- Kim, K. J., Conger, R. D., Elder, G. H., Jr., & Lorenz, F. O. (2003). Reciprocal influences between stressful life events and adolescent internalizing and externalizing problems. *Child Development*, 74, 127-143.
- Kohn, P.M., Lafreniere, K., & Gurevich, M. (1991). Hassles, health and personality. *Journal of Personality and Social Psychology*, 61, 478-482.
- Kohn, P.M., & Milrose, J.A. (1993). The inventory of high-school students' recent life experiences: A decontaminated measure of adolescents' hassles. *Journal of Youth and Adolescence*, 22, 43-55.
- Lai, J.C.L., Hamid, N.P., & Chow, P. (1996). Gender differences in hassles & symptom reporting among Hong Kong adolescents. *Journal of Social Behavior and Personality*, 11, 149-164.
- Lazarus, R.S., DeLongis, A., Folkman, S., & Gruen, R. (1985). Stress and adaptational outcome: The problem of confounded measures. *American Psychologist*, 40, 770-779.
- Lee, M. (1994). Cultural differences in the daily manifestations of adolescent depression: A comparative study of American and Korean high school seniors. Unpublished Doctoral Dissertation, University of Illinois, Urbana.
- Meyer, T.J., Miller, M.L., Metzger, R.L., & Borkovec, T. D. (1990). Development and validation of the Penn state worry questionnaire. *Behavior Research and Therapy*, 28, 487-495.
- Monroe, S.M., & Simons, D. (1991). Diathesis-stress theories in the context of life stress research: Implications for depressive disorders. *Psychological Bulletin*, 40, 406-425.
- Mullis, R.I., Youngs, G.A.Jr., Mullis, A.K., & Rathge, R.W. (1993). Adolescent stress: Issues of measurement. *Adolescence*, 28, 267-279.
- McDermott, P., & Spencer, M.B. (1995). Measurement Properties of Revised Children' Hassles Scale (Interim Research Report No. 6). Philadelphia: University of Pennsylvania,

- Center for Health, Achievement, Neighborhood, Growth, and Ethnic Studies.
- Muris, P., Meesters, C., Merckelbach, H., Sermona, A., & Zwakhalen, S. (1998). Worry in normal children. *Journal of American Academy of Child and Adolescent Psychiatry, 37*, 703-710.
- Robinson, N.S., Garber, J., & Hilsman, R. (1995). Cognitions and stress: Direct and moderating effects on depressive versus externalizing symptoms during the junior high school transition. *Journal of Abnormal Psychology, 104*, 453-463.
- Rudolph, K. D., Hammen, C., Burge, D., Lindberg, N., Herzberg, D., & Daley, S. E. (2000). Toward an interpersonal life-stress model of depression: The developmental context of stress- generation. *Development and Psychopathology, 12*, 215-234.
- Rowlison, R.T., & Felner, R.D. (1988). Major life events, hassles & adaptation in adolescence : Confounding in the conceptualization & measurement of life stress & adjustment revisited. *Journal of Personality and Social Psychology, 55*, 432-444.
- Schooland, K. (1990). *Shogun's ghost: The dark side of Japanese education*. New York: Bergin and Garvey.
- Shah, M.L., (1988). Academic climate and its concept. *Progress of Education, 62*, 13-15.
- Srinath, S., Girimaji, S.G., Gururaj, G., Sheshadri, S., Subbakrishna, D.K., Bhola, P., & Kumar, N. (2005). Epidemiological study of child and adolescent psychiatric disorders in urban and rural areas of Bangalore India. *Indian Journal of Medical Research, 122*, 67-79.
- Stober, J., & Bittencourt, J. (1998). Weekly assessment of worry: An adaptation of the Penn state worry questionnaire for monitoring changes during treatment. *Behavior Research and Therapy, 36*, 645-656.
- Spencer, M. B., Dupree, D., Swanson, D. P., & Cunningham, M. (1996). Parental monitoring and adolescents' sense of responsibility for their own learning: An examination of sex differences. *Journal of Negro Education, 65*, 30-43.
- Verma, S., & Gupta, J. (1990). An exploratory study on some aspects of high academic stress and symptoms in 12-15 years old students. *Journal of Psychology and Clinical Studies, 6*, 7-12.
- Verma, S.K., & Verma, A. (1989). Manual for PGI general wellbeing measure. Ankur Psychological Agency, Lucknow.
- Verma, S. (1998). Daily effects of academic stress on psychological states and family interactions of Indian adolescents. Paper presented at the meeting of the International Society for Behavioral Development. Berne, Switzerland.
- Wagner, B.M., & Compas, B.E. (1990). Gender, instrumentality, and expressivity: Moderators of the relation between stress and psychological symptoms during adolescence. *American Journal of Community Psychology, 18*, 383-406.
- Wagner, B.M., Compas, B.E., & Howell, D.C. (1988). Daily and major life events: a test of an integrative model of psychological stress. *American journal of Community Psychology, 16*, 189-205.
- Wu, K.K., & Lam, D.J. (1993). The relationship between daily stress and health: Replicating and extending previous findings. *Psychology and Health, 8*, 329-344.

Received: July 07, 2008

Revision received: September 01, 2008

Accepted: November 13, 2008

Seema Mehrotra, PhD, Associate Professor, Department of Mental Health and Social Psychology, NIMHANS, Bangalore-560 029,
Email: seemamehrotra@yahoo.com

Aruna Kumari, 74, Uttoxeter New Road, Derby DE 223 JB, United Kingdom.