

## **Development and Validation of Stressful Life Events Scale for Children in Pakistan**

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The aim of study was to develop an indigenous, valid, and reliable self-report measure to identify stressful life events in children with age range from 9 through 13 years. An initial item pool of 110 items was generated through interviews with children, whereas a preliminary questionnaire was administered to clinical psychologists, parents, and teachers. For the empirical evaluation, a sample of 1132 children (with a dropout rate of 12.9%) was drawn from five schools in Lahore including 632 boys and 500 girls. Principal Component Factor Analysis with Varimax rotation was used to determine the construct validity along with running item analysis. As a result, five factors emerged that explained 41% total variance containing total 61 items on selection criteria of item loading of .45 and above loading exclusively on one factor. These factors were labeled as trauma related stressors, social stressors, familial stressors, emotional stressors, and personal stressors. Total Stressful Life Event Scale for Children showed alpha reliability of .96; while, it ranged from .80 to .96 for its five subscales with significant inter-correlations with each other. Hence, Stressful Life Event Scale for Children may be used as a reliable and valid self-report measure for assessing stressful life events in children.

*Keywords.* Stressors, children, trauma, emotional stressors, personal stressors

Stress can be considered as any disturbing event (Bagdi & Pfister, 2006); while, Kaplan and Sadock (2007) defined stress as emotional changes brought about by stressors. Stress has been construed in various ways, for example, as the nonspecific response of the body to any demand that exceeds the person's ability to cope, as a person-environment relationship that threatens personal resources and as a mental state in response to daily hassles (Manning & Curtis, 1988).

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Precisely, stress is considered as an unfolding, forceful relationship between individual and the environment (Helms, 1996). Initially, Seyle (1976) introduced stress as something that is not good or as distress where distress is unpleasant and damaging. Life stress is typically defined in terms of negative life events encountered in life. The experience of more negative life events is posited to increase internal distress in children, increasing the risk for maladaptive responses including psychopathology (Hussong et al., 2008).

The phenomenon of experiencing stress, which is much researched among adults and adolescents, has been rarely considered important in the context of children. Children's experience of stress comes from outside pressures such as friends, family, and from within themselves as well (Hale, 1998). The perception of child's stressful experience of a certain event makes that event a stressor (Helms, 1996). A child's life is likely to become more stressful as children's interactions expand farther than the family. The situation is exacerbated due to the fast paced and complex nature of contemporary life. Many of the maternal stressors are transmitted to children unknowingly through a number of mechanisms like less time with children, failure to shop for, or cook nutritional meals, and poor parenting, leading to poor wellbeing or elevated stress levels among children. Evidence indicates that there is a relationship between stress experienced by child and the stressors faced by mother including those related to physical, mental, family, and financial issues (Robila & Kirshnakumar, 2006; Whitebeck et al., 1997).

There is a wide range of causes of children's stress including the temperaments and personalities of children as some of them never feel happy or at ease in any setting (Kostelnik et al., 1998). Economic factors are also important as low income is associated with a number of physical and social stressors including family conflict and family disbanding, maternal depression, exposure to violence, and paternal harshness (Bardley & Corwyn, 2002; Conger & Donnellan, 2007). Literature indicates that stressors in childhood can be divided into seven diverse categories on micro, meso, and macro levels. The macro level is about school or academic stressors and stressors related to economic issues. The meso level deals with interpersonal stressors in which media plays a vital role. Micro level is defined as developmental, physical, and psychological stressors (Grant et al., 2004).

There are various sources of stress among children such as those relating to performing well in school, maintaining friendships, or meeting perceived expectations from their teachers, peers, and parents (Alvord & Palmiter, 2009). Since school constitutes a major part of a

child's life, the experiences at school are a significant source of stress for the child (Chandler, 1997). School related stressors are argued to be the greatest stress (Anda et al., 2007). Another study supports the idea that sources that are non-school worsen stress related to school (Karr & Johnson, 1991). Sears and Milburn (1990) proposed three clusters of academic stress; fear of failure, fears related to settings in school, and test anxiety. One of the most frequent source of school related stress are tests (Bauwens & Hourcade, 1992) like apprehensiveness related to taking tests, preparation of test, receiving poor grades, and failing in exam (Pincus & Friedman, 2004; Romano, 1997). School work becomes a nightmare for children because of negative expectations concerning grades, result sent home, work sheets, and assignments for home (Bauwens & Hourcade, 1992; De Anda et al., 1997; Helms, 1996; Romano, 1997). Participation in classroom activities, interactions with teachers, and peer relationships are also potential stressors (Helms, 1996). The competitive features of school can be stressful (Karr & Johnson, 1991; Sears & Milburn, 1990); while, performance in front of the class such as recitation of a poem, giving speech, or working on the board (Bauwens & Hourcade, 1992; Romano, 1997) is usually considered as stressful usually by girls (Bauwens & Hourcade, 1992).

Worries related to school are not limited to academics only. They cover a wide range of troubles at school (Romano, 1997) including social problems related to class mates and teachers. Change of school itself is a stressor, generating worry about feeling lost in the new school (Helms, 1996; Sears & Milburn, 1990), not knowing other fellows in new school, as well as strain from peers regarding appearance and dressing (Bauwens & Hourcade, 1992). Moreover, behaviour of teachers leads to stress when they scream at children, exhibit favouritism, mock, or make fun of children (Bauwens & Hourcade, 1992). Things get worse when conflicts arise with peers (Pincus & Friedman, 2004) and these conflicts can be related to being teased, bullied, called names, or not being invited to parties (Romano, 1997).

Interpersonal stressors are not only originated by negative experiences with peers and teachers, but also from conditions within the family (Romano, 1997). Parental problems like their illness, depression, alcohol abuse, or jail sentence (Moos, 2004) give substantial embarrassment to children and become major stressors for them (Sears & Milburn, 1990). In addition, parental lack of interest in child's achievements can induce feelings of rejection, whereas too much parental interest in the form of demands to achieve also contribute to stressful feelings (Hale, 1998). Separation or divorce in

parents are extremely stressful for children (Karr & Johnson, 1991; Plante & Goldfarb, 1993) and is a hallmark to upcoming interpersonal stressors for children, forcing them to grow up in extended families with stressors concerned to relatives other than siblings, adding to the stress experience of the child (Moos, 2004). Situations become critical when the child is compelled to take sides in the conflicts of parents (Hale, 1998). Evidently, loss of a parent due to demise is considerably stressful (Hale, 1998; Romano, 1997). Familial issues do not only include parental issues and problems as siblings also play important role in introducing negative experiences a in child's life especially younger siblings and this situation exaggerates if rivalry with siblings exists, or older siblings set expectations too high (Moos, 2004; Romano, 1997).

Children's developmental changes such as hormonal changes, sexual identity, formal operational thinking skills, augmented self organization demands and responsibilities, psychosocial issues like conformity, dependency, and independence contribute to the severity of stress (Elias, 1989). The transitional phase directs children's worry towards self, social life, friends, personal appearance, expectations from themselves, and world events. As they grow up, concerns about world events can be stated as a major source of stress in specific stages of development (De Anda et al., 1997). Media's influence on stress experience cannot be denied as excessive exposure to violent programs is a noteworthy stress for children (Sears & Milburn, 1990). Television allows children's access to drama, entertainment, news, and content or images which might be suitable for adults but not for children.

Being ill for a long period of time (Moos, 2004) or the experience of having an accident or getting hurt due to unsafe conditions is stressful for children (Romano, 1997). Similarly, incidents of physical or sexual abuse cause stress in children, reflected by their emotions in terms of anger, frustration, despair, and powerlessness (Hale, 1998; Plante & Goldfarb, 1993) leading to maladjustment to environment, psychological disturbance, and adjustment problems (De Anda et al., 1997). Childhood abuse often provokes feeling of shame and helplessness (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996).

If children have to deal with loads of stressful circumstances or if these stressors are severe in nature the damage can become too massive for them to manage (Greenman, 2002; Pearson, 1998; Rickard, 1996; Thomas, 2003). Enormously stressful situations are experienced by many of the children. These situations range from family disturbance of normal developmental processes to catastrophic events such as terrorism or chronic illness, or high risk circumstances

such as abuse, neglect, trauma and poverty (Driedger, 1996; Shonkoff & Phillips, 2000). This wide range of psychosocial stressors contributes to risk factors like emotional, behavioural and academic problems (Brooks-Gunn, Duncan, & Aber, 1997). When stress is researched regarding children very harmful impacts are identified as emotional, physical, psychological, and spiritual wellbeing are deformed, furthermore their learning ability, concentration levels and social skills are also adversely affected (Romano, 1992; Thomas, 2003).

Poverty is an antecedent that perpetuates stress risks in children's life as poverty in childhood not only increases the level of stress but it also obstructs the regulatory systems that facilitate the children in controlling the environmental demands which in general accompany poverty (Blair, 2010; Blair & Raver, 2012). Poverty affects the quality of parent child interactions negatively due to parental distress (Conger & Donnellan, 2007; Grant et al., 2004). Chronic stress and childhood poverty when they occur together are capable of disturbing the top down control of emotional reactions and at the same time they intensify the sensitivity of amygdala to negative sentiments for instance anger (Hackman et al., 2010; Mcewen & Gianaros, 2010). Accumulated exposure to risk in childhood arbitrates the link between social class at the time of birth and social accomplishments at middle age (Schoon et al., 2002). In the same way exposure to risk affects the link between physiological stress like stress hormones, blood pressure and poverty and other aspects of psychological wellbeing such as learned helplessness, aggression and depression (Evans & English, 2002; Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005). De Anda et al. (1997) identified economic difficulty at home, parental job stress, and insecure environment as significant stressors for children.

Research has shown that stress manifestation in children is expressed by psycho physiological disorders such as stomach ulcers, headache, mood swings, depression, hysterical behaviour, sleep disturbance, belligerence, poor attention span and self-punishment for instance head banging (Marion, 1995). Several studies have shown a relationship of stress with emotional, mental, and physical morbidity (Aktekin et al., 2001; Liselotte, Matthew, & Tait, 2005). Persistent and disproportionate stress leads to health problems related to emotional, mental, and physical domains (Niemi & Vainiomaki, 1999) reduces self-esteem (Kaplan & Saddock, 2000), and affects child's academic accomplishments and professional and personal development in later life (Liselotte et al., 2005). D'Aurora and Fimian (1988) claimed that controllable levels of stress imbibe life with passion for living. Stress impacts adversely on children's capability to

learn, concentrate and use social skills (Romano, 1992; Thomas, 2003).

There is sufficient evidence to indicate that children recognize, apprise and react to the events in their lives in a unique manner, therefore children should be considered as a good source of information on childhood stress, in research as well as practice (Bagdi & Pfister, 2006). Children are a vulnerable population with unique needs and it is vital to understand their emotions and problems in order to safeguard their wellbeing. Bagdi and Pfister (2006) found that when children were asked to pinpoint stressors, a variety of situations were discovered such as pressures from peers, being laughed at, lack of control, and most importantly, death of beloved ones. In another study, elementary school children identified school as the most stressful of all domains (Karr & Johnson, 1991). Parents can recognize some of the stressors experienced by children as an overlap were identified between parents' and children's perception of stress (Bagdi & Pfister, 2006). However, it is important to understand the experience of stress in childhood from an emic perspective, from the eyes of the children themselves. Researchers provide evidences that when stressors accumulate, this can have an additional negative effect on children. Acute and chronic stresses both have far-reaching impact upon development, health and wellbeing of children (Greenman, 2002; Pearson, 1998; Thomas, 2003). Chronic stressors have a tendency to leave long-lasting harmful influence on children (Jewett, 1997).

The unrecognized stress or ineffective management of children's stress symptoms can result in serious long-term effects including social and behavioural problems, health, and wellbeing issues, reduced happiness and resilience in life, and mental illness. Therefore, the cognition of stressors experienced by children is far more important and expedient than the management of multiple issues generated by the effect of these stressors. Stress adversely affects health and functioning in many ways and stressful life events have been linked to physical and psychosocial disturbances among adults (Smetana et al., 1991). This relationship between stress and disease holds good for children as well; whereas, it is important to study stress generally, it can be argued that is even more vital to study the different stressors that children encounter as children constitute a vulnerable population with unique needs. It is essential to understand their emotions and problems in order to safeguard their health and wellbeing.

Children may not be able to clearly or adequately express their concerns and feelings directly. In this context, it is crucial to have

effective, reliable and valid measures to study and identify stressors in children. In Pakistan, no such measure to assess stressors and stressful life events from children's own point of view is available so far; as far as western literature there are hardly few measures available but these are quite old (Dise-Lewis, 1988; Monaghan, Robinson, & Dodge, 1979) and had never been revised; therefore, the current study was designed to bridge this gap in the indigenous literature related to psychological measures. The identification of stressors among children has important implications for prevention of physical and psychological problems later in life and would assist in early detection and management of stressors.

## Method

### Step I: Generating Items Pool

In-depth interviews from five children with age ranged from 9 to 13 years were conducted to identify and to obtain firsthand information regarding their stressors in life as per their perception. The interviews with children were audio recorded after obtaining the informed consent from their parents as well as assent from children. Moreover a preliminary questionnaire for identification of stressors in daily life of children were administered to 5 parents, 5 teachers, and 3 child clinical psychologists requesting them to write at least five stressors or stressful life events, based on their expertise and experience with children in Pakistani cultural context. The obtained verbatim in Urdu then were transcribed and scrutinized by the researchers. Initially generated 112 items were transformed into statements. A try out was carried out with 30 children (15 girls and 15 boys) of age range 9-13 years to check difficulty in terms of lingual comprehension, hence, two statements were excluded and a few were modified; hence the final pool of 110 items with a 10-point rating scale ranging from 1 = *least stress* to 10 = *extreme stress* was finalized for further empirical evaluation.

### Step II: Empirical Evaluation of Items

**Sample.** A convenient sample of 1300 children, boys and girls with age ranging from 9 to 13 years ( $M = 12.3$ ,  $SD = 0.88$ ), was drawn from 3 public and 2 private schools in Lahore and Kasur after seeking formal permission of the school authorities. The sample on which analysis was carried out was 1132 children (632 boys and 500 girls)

with a drop out ratio of 12.9%. The participants left for the statistical analysis were 9 times greater than the number of items in the pool for empirical testing (Hair et al., 1998).

**Procedure.** Prior permission for data collection in written form was solicited from school administration. Scale was administered to school children all the way through researcher in group administration; while, the teacher was present in the classroom. Instructions were read aloud by the researcher, allowing children to ask questions about the scale and about procedures in completing it. The scale took 20 minutes to complete.

## Results

In order to determine the construct validity and factor structure, Principal Component Analysis (PCA) with varimax rotation was carried out on the items pool of 112 statements. PCA with varimax rotation presented lucid and exclusive five factors solution comprising of total 61 items on the factor loading criteria of  $\geq .45$  exclusively on one factor. The extracted five factors collectively explained 29% variance.

Table 1

*Factor Structure of the Stressful Life Events Scale for Children (N=1132)*

F1		F2		F3		F4		F5	
Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>
34	.58	79	.60	58	.60	3	.27	27	.44
35	.66	81	.68	63	.57	4	.38	28	.36
38	.64	87	.50	64	.58	5	.54	29	.37
39	.69	93	.61	65	.42	6	.50	30	.28
40	.68	94	.62	66	.22	7	.55	31	.40
41	.70	95	.53	68	.44	11	.43		
43	.71	96	.55	70	.54	12	.58		
44	.63	98	.62	102	.20	14	.45		
45	.56	99	.68			15	.43		
47	.66	100	.64			16	.58		
48	.61	101	.60			17	.45		
49	.64	104	.50						
50	.72	105	.63						
59	.65	106	.57						
60	.71	110	.57						
61	.57								

*Continued ...*



	F1		F2		F3		F4		F5	
	Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>	Item No.	<i>r</i>
	72	.59								
	74	.62								
	75	.63								
	78	.65								
	85	.69								
	88	.62								
Eigen Values		31.95		5.72		3.60		2.16		2.00
% of Variance		29.04		5.20		3.28		1.96		1.82
Cumulative Variance		29.04		34.25		37.52		39.48		41.30

*Note.* Factor 1 = Trauma Related Stressors (22 items); Factor 2 = Social Stressors (15 items); Factor 3= Familial Stressors (8 items); Factor 4 = Emotional Stressors (11 items); Factor 5 = Personal Stressors (5 items). Factor loadings  $\geq .45$  was used for retaining items exclusively on one factor.

Table 1 showed that Factor 1 clustered items related to trauma comprising of 22 items related to parent's separation, quarrels, expulsion from school, being insulted, threats to be sent to hostel, and not being liked; therefore, it was labeled as Trauma Related Stressors. Factor 2 clustered items of stressors related to social settings comprising of 15 items, related to attending unfamiliar functions, porn jokes, feeling bored, threatened by fellows, not having new dress for function, facing insult by close friends and expression of dislike towards oneself and finally labeled as Social Stressors. Factor 3 comprised of 8 items related to family related issues like lack of parental understanding, sibling's misbehavior, longing for pocket money, imposed actions, and doing work at home, hence, labeled as Familial Stressors. Factor 4 consisted of 11 items indicating emotional stressors to one's self, like fight with close friend, relative's illness, doing some mistake, witnessing accident, annoyed with close friend, and getting insulted in front of friends, therefore this factor was labeled as Emotional Stressors. Factor 5 comprised of 5 items indicating fears of dread like, fear of *jins* (giants), living alone, sleeping alone, nightmares and to be alone in dark, hence this factor was labeled as Personal stressors. Overall the developed scale was labeled as Stressful Life Events Scale for Children. Factor 1 explained 29.04% variance; while Factor 2 explained 5.20% variance. In addition, 3.28%, 1.96%, and 1.82% variance has been explained by Factor, 3, 4, and 5; respectively.

Table 2

*Parallel Component Analysis using Monte Carlo PCA for Stressful Life Events Scale for Children (N = 1132)*

Factors	Criterion Value from Parallel Analysis	Eigen Value from PCA	Decision
1	1.69	29.95	Accept
2	1.65	5.20	Accept
3	1.62	3.28	Accept
4	1.59	1.96	Accept
5	1.57	1.82	Accept
6	1.55	1.60	Reject
7	1.53	1.45	Reject

An additional analysis, The Monte Carlo PCA (version 2.5), was conducted to confirm the factors determined through PCA with varimax rotation. The Monte Carlo PCA for Parallel Analysis (version 2.5) program stipulated that 5 factors extracted factors for Stressful Life Events Scale, and PCA were within the acceptable range, while factors with eigen values lower than criterion were rejected.

Table 3

*Correlation Matrix of the Five Subscales of the Stressful Life Events Scale for Children (N = 1132)*

Subscales	1	2	3	4	5	6
1. Trauma Related Stressor:	-	.80***	.60***	.60***	.40***	.92***
2. Social Stressors		-	.70***	.60***	.41***	.90***
3. Familial Stressors			-	.54***	.40***	.73***
4. Emotional stressors				-	.44***	.80***
5. Personal stressors					-	.53***
6. Total SLESC						-

\*\*\*  $p < .001$

The construct validity of SLESC was further confirmed through computing correlation between total SLESC score and five empirically determined subscales comprising trauma related stressors, familial stressors, emotional stressors and personal stressors resulting in significant correlation with the total score. Item analysis and reliability analysis for the SLESC revealed that the correlation of 61 selected items for SLESC with total score was found to be highly significant. The internal consistency of items for Stressful Life Event Scale for Children was determined by using Cronbach's alpha, and the values for the scale were highly reliable. Moreover, inter-item correlation indicates that all items were related with total Stressful Life Events Scale for Children.

Table 4

*Descriptive Statistics of Stressful Life Events Scale for Children (N=1132)*

Scales	K	Scoring Range	M (SD)	$\alpha$
Trauma Related Stressors	22	22-220	117.93(62.38)	.96
Social Stressors	15	15-150	67.29(38.91)	.92
Familial Stressors	8	8-80	31.42(17.98)	.80
Emotional stressors	11	11-110	50.39(24.56)	.87
Personal stressors	5	5-150	19.41(13.34)	.80
Total SLESC	61	61-610	286.44(131.58)	.90

The Table 4 showed means, standard deviations, and reliability coefficient of SLESC and its five subscales. Scoring range for the scale and each subscale is also given in Table 4; while, the mean of scores fall in the given range.

Table 5

*Categories for the SLESC Scores (N=1132)*

Level of Stress	T-Scores	Raw Scores	f(%)
Mild Stress	$\leq 40$	$\leq 154$	237(20.9)
Moderate Stress	41 – 50	155-286	365(32.2)
Moderately High Stress	51 – 60	287-418	335(29.6)
High Stress	61 – 70 $\geq$	419-550 $\geq$	195(17.2)

Table 5 revealed categories of scores obtained on SLECS. Total scoring range of the scale was 61 to 610; while, by computing T scores out of the raw scores of the respondents, four levels of stress were determined. Wherein T score with 1 standard deviation below the mean ( $-1 SD$ ) with raw score less than 154 is considered mild stress; whereas, moderate stress is characterized with raw score ranging from 155 to 286; 1 standard deviation above the mean ( $+1 SD$ ) is moderately high stress with raw score ranging from 287 to 418, and score 2 standard deviation above the mean is high stress with raw score ranging from 419 to 550 and above (Bar-On, 2007; Noor, 2013).

McCall developed a method to transform scores into a standardized form and eventually called McCall's *T*. It is used in some clinical scales too for converting raw scores into standard scores, such as Childhood Depression Inventory (Kovacs, 1992), Detailed Assessment of Posttraumatic Stress (Briere, 2001), and Child Depression Scale (Noor, 2013). Though this method mean was set as 50 and standard deviation of 10, allowing to compare the score of one scale to another directly (Kovacs, 2003). The raw scores

corresponding to T scores for four levels of stress, frequency and percentage level of stressors were spell out for respondents, that is, 20.9% respondents expressed mild stress, 32.2% of moderate stress, 29.6% of moderately high stress, and 17.2% of high level of stress in their lives.

Table 6

*Gender wise T-Scores for the SLESC (N=1132)*

Level of Stress	T-Scores	Boys (n = 632)		Girls (n = 500)	
		Raw Score	f (%)	Raw Score	f (%)
Mild Stress	≤ 40	≤ 154	166(26.3)	154	71(14.2)
Moderate Stress	41-50	155-286	234(37.0)	155-286	131(26.2)
Moderately High Stress	51-60	287-418	173(27.4)	287-418	162(32.4)
High Stress	61-70 ≥	419-550 ≥	59(9.3)	419-550	136(27.2)

Results presented in Table 6 demonstrated that the girls scored high on SLESC scores across 4 levels of stress as compared to boys. Moreover, frequency and percentages are spelled out for boys and girls, respectively.

Table 7

*Gender Differences on Stressful Life Events Scale (N = 1132)*

Variables	Boys	Girls	t	p	Cohen's d
	(n = 632)	(n = 500)			
	M (SD)	M (SD)			
SLESC (Total)	255.76(122.51)	325.21(132.53)	9.13	.00	0.54
Trauma Related Stressors	108.09(60.75)	130.36(62.26)	6.06	.00	0.36
Social Stressors	58.90(35.70)	77.89(40.25)	8.40	.00	0.50
Familial Stressors	28.01(16.81)	35.72(18.50)	7.33	.00	0.44
Emotional Stressors	44.33(23.12)	58.06(24.20)	9.72	.00	0.58
Personal Stressors	16.43(11.96)	23.17(14.02)	8.73	.00	0.51

The mean SLESC scores and standard deviations and *t*-value were computed for boys and girls to see the gender differences. The Table 7 shows a significant difference in the Stressful Life Events Scale for Children scores of boys and girls. It can be observed that the mean score on SLESC for girls falls in the range of moderately high stress category and for boys mean score on SLESC falls in the range of moderate stress category of scores. Results for Cohen's *d* analysis indicate medium effect size for all variables investigated.

## Discussion

Stressful events in life evoke feelings of distress in children. The SLESC provides a detailed overview of stressful situations found in the children's life. It is an indigenous, reliable and valid scale developed to assess stress in children, consisting of 61 items with 10 point rating scale and five subscales namely trauma related stressors, social stressors, familial stressors, emotional stressors and personal stressors. The response categorization was decided after reviewing already existing scales for measuring stressful events in children and response categorization used in the life event and coping inventory (Dise-Lewis, 1988) was followed for current scale. The items of the scale were generated empirically with major consideration to take into account children, parents, teachers and child psychologists, relevant to the indigenous cultural specific phenomenon of SLESC. Particular importance was given to the information gained through children regarding their perception of stressful events, considering the fact that children understand and respond to stressful experiences in unique manner (Masuda & Holmes, 1978; Dohrenwend & Shrout, 1985). This effort was made in order to include the items from perspective of children as the perception of elders might be different from the children. The initial pool of items was generated by two judges and was evaluated by children to understand their perceptions of the stressful events occurring to their lives.

Surprisingly some of empirically generated but unique and literature supported items like, "my mother got remarried" (Moos, 2004), "I m caught for theft" (Kostelnik et al., 1998), items related to teachers' behavior; "insulted by the teacher", "scolded by teacher", and "punished by teacher" (Bauwens & Horurcade, 1992) and items related to peers; "having fight with class fellow", "when my peers threaten me" (Pincus & Friedman, 2004) were reported, and ranked high by children as well as these were retained through factor analysis. Varimax rotation was used to make SLESC's factors. According to Nunnally (1978) Varimax rotation provide the best way to determine construct validity of scale. The inter-correlation among the subscales was highly significant. Items grouped into these factors were representative of cluster named to them but some items related to harassment like "when a stranger stares at me", "when a stranger tries to touch me", "if somebody undresses in front of me", "someone talks shameful things", and "someone shares dirty jokes", were labeled as social stressors as these were retained with items relating to social stressors. Moreover, many items related to scholastic stressors were retained but could not form a single factor representing school related stressors. Item-total correlation and internal consistency reliability

measure of the scale (Cronbach, 1957) were highly significant. The test retest reliability with different sample would also strengthen the reliability of the scale.

While comparing boys and girls on stressful life events, highly significant gender differences were identified over the total scores and subscales with medium effect size. It can be clearly observed that girls scored high on all domains of stressful life events when compared with boys' scores, indicating that in Pakistani cultural perspective girls bear the tendency to perceive stressful life events as more stressful than boys. These results are different from previous literature indicating no gender differences in levels of stress among children (Williamson et al., 2003). On the other hand the results are in line with an earlier research (Dise-Lewis, 1988) signifying the claims that female children tend to be more responsive to the stressful life events.

The major purpose of SLESC was to describe the experience of stressful life events and to facilitate exploration of stressors in daily lives of children. It was an effort made to devise a new scale to overcome the difficulties in administering foreign scales to Pakistani population of children, which have resulted in a lot of irrelevant events being given importance and important events being left out. The SLESC appear to capture a broad range of potentially stressful life events based on children' experiences ranging from trauma to personal stressors in such a way that the scores may correlate with some measures assessing psychological issues. Hence SLESC is an indigenously developed, valid and reliable scale for assessing stressful life events for children.

### **Implications and Suggestions**

Children view their world differently than parents do (Bagdi & Pfister, 2006) and SLESC provides child report version of scale adding strength to validity and reliability by first hand report. Exchanging ideas and engaging in dialogue with children about how they perceive various situations with stressful events clear conversation between children parents and teachers can play vital role in nurturing children's emotional wellbeing carefully and helping them to cope effectively with daily life hassles as well as major stressful life events (Bagdi & Pfister, 2006). Although the sample obtained for the development of Stressful Life Event Scale for Children was large enough to be up to the mark, the initial attempt to develop SLESC needs additional studies to replicate the psychometric characteristics, especially the factorial structure should include clinical sample too.

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