

Dhaka Stress Scale-Adult: A scale for assessing psychosocial stressors among adults

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Abstract

Stress is an integral part of daily life and inevitable. This study was aimed to produce a culturally validated scale for measuring stressful life events of adults in Bangladesh and formulate the relative life change units of each event. The study used qualitative research, including a focus group and questionnaire, as well as quantitative statistical analysis in the validation process. Researchers first developed a provisional scale with 62 items that were translated in Bangla through a translation exercise. Using an open-ended question along with this provisional scale on 518 (260 rated on imagination and 258 on experience) subjects, researchers developed Dhaka Stress Scale-Adult with 58 items and the predictive interpretation of the overall score was made. Content validity was found excellent as I-CVI was 1 except 3 items and S-CVI was 0.91. In factor analysis on the two-factor model, no item had salient loading on more than one factor and there were 3 items failed to load on either factor. The correlation coefficient was 0.84 between this scale and the Presumptive Stressful Life Events Scale. In term of reliability, Cronbach's alpha values were ranging from 0.53-0.88. The scale is simple to administer to assess stress and usable for both clinical and research purpose.

Introduction

The stress is an integral part of human existence and inevitable. A life event is considered as stressor when it causes specific and significant psychological and physiological arousal that occurs when it threatens the ability to cope adequately. Stressful life events have long been linked with the development of psychological distress.^{1,2} Several studies have demonstrated that stressful life events have been associated with the later development of depression,³ self-harm,⁴ schizophrenia⁵ and anxiety spectrum disorders.⁶ Studies have also looked at symptom severity and stressful life events.⁷ The attempt to establish the causality between stressful life events and the development of mental illness, several authors have examined the interplay between stressful life events, vulnerability to these, and the later development of mental illness as part of the stress-diathesis model.⁸

In Bangladesh, significantly higher rate of stressors both in frequency and severity was found in self-harm,⁹ depression,¹⁰ schizophrenia^{11,12}, myocardial infarction,¹³ psychiatric disorders in female garments worker,¹⁴ and dissociative (conversion) disorders.^{15,16} All these findings are consistent with the view that stressful life

events have a positive association with the disorder in term of etiology. In these studies, Western and Indian screening tools such as Severity of Psychological Stressors Scale (SPSS) of DSM IV, Social Readjustment Rating Scale (SRRS),¹⁷ and Presumptive Stressful Life Event Scale¹⁸ were used to measure stressors. The researchers mentioned the difficulties and limitation of these scales as some of the measured stressors were not culturally suitable in term of inclusions and severity ratings. Alternatively, these scales lacked some stressors which were perceived as stressors in Bangladesh. For these reasons, most of the authors modified the scales to some extent before using. These efforts did not ensure overcoming limitations.

Several studies have attempted to evaluate the cultural validity of stressful life events screening scales. The SRRS was found to be culturally validated in Japanese¹⁹ and Malaysian²⁰ groups in the US. Attempts have been made to validate the SRRS in several different cultures and languages, with a variety of different methodologies employed, with no single gold standard. Several authors have attempted to use the original Holmes and Rahe techniques.^{21,22} A study in Spain attempted to validate the scale by rating a Spanish-translated and amended version of the scale, with a 1-100 point potential



life change unit score assessed in the survey population.²³ Another study has used focus groups and surveys.²⁴ In India, perhaps the most relevant attempt was developing a scale though SRRS cultural validation.¹⁸ None of these scales was found culturally suitable in the context of Bangladesh as experienced and judged by the researchers and thereby could not assess stress more perfectly. The objectives of the study were to produce a new culturally validated stress scale for assessing stress in Bangladeshi adults, to estimate the mean number of stressors experienced by adult population in the past year and to provide a quantitative estimate of stress expressed in mean stress score as experienced by Bangladeshi adult population on each specific psychosocial stressors.

Materials and Methods

This was a mixed methodological i.e. qualitative and quantitative type of study conducted from July 2015 to June 2016.

Scale formulation

Stress items of Dhaka Stress Scale-Adult (DSS-A) were selected from Social Readjustment Rating Scale-SRRS,¹⁷ Presumptive Stressful Life Events Scale-PSLES,¹⁸ all the relevant research on psychosocial stressors in Bangladesh and extensive clinical experiences of researchers to construct a culturally relevant primary list of stressors.

Focus group discussion

A focus group involving 10 mixed mental health professionals (five women and five men) familiar with working on those with mental distress and life stressors. Among them, one was 65 years old; three were 55-60 years old; three were 40-50 years old and three were 30-40 years old. They were of different professional backgrounds and experiences: five psychiatrists, three clinical psychologists and two psychologists. Informed consent was taken from the participants of the focus group in written format, explaining the research, purpose of research and their expected role. The participants were informed that they could leave the group at any point, including after consent has been given. In total, five sessions of focus group discussion were held in May and June, 2015. Each session was for 90 min with a 10 min break. It was an adequate length for a group of ten professionals to provide saturation for the research topic. The group was moderated by the primary investigator, with a supplementary researcher. The group discussion took place in English as a primary language, with Bengali used where appropriate. The focus group was participant lead, with the moderator ensuring that the focus remains on the primary research questions. The discussions were audio-taped that agreed by participants, and

transcribed verbatim for analysis. The recordings were securely stored until transcribed and then destroyed. The transcription did not contain information that could allow individuals to be linked to specific statements. Confidentiality was strictly preserved. The preliminary list of stressors was available during the focus group to guide the discussion. Through the focus group discussions, the researchers gathered information about possible life stressors not relevant to Bangladeshi adults and identify additional life stressors that need to be added to generate provisional DSS-A.

The moderator initiated the discussion with the welcome address and asked the group members to give their input one by one. Moderator recited all the stressors included in the list. Then asked the group members to identify the possible life stressors not relevant to Bangladeshi adults. Most of the items of the provisional list were agreed by members. Some of them were discarded because the members argued that they were not culturally appropriate. The members explored some new stressors appropriate for our culture and were not on the list. In this way, at the last sessions of focus group discussion, data were transcribed and researchers got some culturally relevant stressors which added and some stressors were discarded from the provisional list. Following stressors were discarded as it has been agreed that these are either not relevant to adults in Bangladesh or incorporated and merged into another suitable stressor item. From Homes Rahe Scale, discarded items were: marital reconciliation, change in the health of family member, change in financial status, foreclosure of mortgage or loan, change in sleeping habits, vacation, and Christmas. From the Presumptive Life Event Scale, discarded items were: property or crops damaged, prophecy of astrologer or palmist etc, marriage of daughter or dependent sister, major purchase or construction of house, death of pet, appearing for an examination or interview, unfulfilled commitments, change or expansion of business, begin or end of schooling, change in working condition or transfer, change in sleeping habits, birth of daughter, reduction in number of family functions, change in social activities, change in eating habit, going on pleasure trip or pilgrimage. Following stressors are added as it has been agreed that these are relevant to adults in Bangladesh: spouse lives abroad for occupation, extreme job dissatisfaction, extreme workload, illegitimate pregnancy, failure to go abroad for employment/education, having only daughters (3 or more), lack of recreation, further marriage of husband, recurrent physical abuse/assault, lack of family support, serious mental illness of family member, financial constraints, concern about son and daughter's study, excessive internet/mobile abuse of a family member. Culturally relevant stressors for adults generated by the focus group discussion contri-

buted a lot to the development of a culturally validated screening tool and thus 62 items provisional DSS-A has been prepared.

Translation exercise

Provisional DSS-A then translated and backtranslated to Bangla and English by four psychiatrists and psychologist having competency in both Bangla and English and four language experts according to the guideline proposed by Beaton et al. (2006).²⁵ After random ranking of items, this provisional DSS-A with 62 items was pretested to resolve discrepancies and considered for data collection.

Data acquisition

This part of the study was conducted in the outpatient departments of all disciplines of faculty of medicine except Department of Psychiatry. A sample of 518 subjects, who are the caregiver of patients, consisting of both males (n=266) and females (n=252) of different socio-demographic status was enrolled randomly in this study after obtaining informed consent. Inclusion criteria were that they had no history of psychiatric illness in their life and no physical illness within 3 months. Of the sample, 260 subjects were asked to rate the imaginary stress that they have experienced each event though they had not really experienced that item of the provisional DSS-A in a Likert scale ranging from 1 to 5 where 1 represents not at all stress, 2, 3, 4 and 5 represent a little stress, a mild amount of stress, a moderate amount of stress and a great deal of stress respectively. In the original version of the scale, mean stress scores were presented after multiplying of these range of severities with 20. Another 258 subjects were asked to rate only those events of the provisional DSS-A which they had actually experienced in the last year in the same way. Every subject was requested to add additional events in the blank space which were not on the scale. Several responses were received from both imagined and experienced group. These were considered and evaluated carefully and the majority of these were discarded as the items were either included in one of the items already existing in the provisional DSS-A or were chronic/ongoing or were a description of a state or too vague to be included. Only two stressors were included namely, not yet get married despite appropriate age and victim of gender discrimination for analysis.

Scale validation

The two principle psychometric properties namely reliability and validity for this scale were measured. A 6-membered expert committee (psychiatrists having competency in both Bangla and English) reviewed the DSS-A. They provided their valuable opinion about face validity. Content validity was assessed by the item-level content validity index (I-

CVI) and the scale-level content validity index (S-CVI). Content validity indices were assessed by three psychiatrists. Each expert rated each item either 1 (not relevant), 2 (somewhat relevant), 3 (quite relevant) or 4 (highly relevant). Then, for each item, the I-CVI was computed as the number of experts giving a rating of either 3 or 4 (thus dichotomizing the ordinal scale into relevant and not relevant), divided by the total number of experts. The S-CVI was measured by averaging calculation method (S-CVI/Ave), i.e. by the average of the I-CVIs for all items on the scale. The scale was judged to have good content validity if the I-CVI = 1 for each item and the S-CVI/Ave ≥ 0.9 , as recommended by Polit and Beck (2006).²⁶ Internal consistency was assessed by Cronbach's alpha (Drost, 2007).²⁷ An instrument that is used clinically should have a coefficient alpha of 0.80 or higher often closer to 0.90. Cronbach's alpha should lie between 0 and 1. Values are usually expected to be above 0.7 and below 0.9. Alpha below 0.7 broadly indicates poor internal consistency and above 0.9 suggests that the items are very similar and perhaps fewer items could be used to obtain the same overall information (Peacock and Peacock, 2011).²⁸

Data analysis

Data analysis was performed by statistical package for social science (SPSS), version-20. Statistical analysis was done using frequencies and percentages and by applying Spearman's rank correlation test, Intra-class correlation coefficient and t-test. All tests were two-tailed and $p < 0.05$ was considered statistically significant.

Results

Sample characteristics

Participants characteristics are depicted in Table I. Of the sample, 266 were male and 252 were female. The male: female ratio was 1.06:1. Their age ranged from 18 to 80 with a mean of 32.6 (SD=10.7) years. Almost half of the respondents were married (48.8%) and only 15 were separated. Among the subjects, 373 were from the urban background and 145 were from rural. Most (95.9%) of the subjects were Muslim (95.9%), only 1 case was Buddhist. Of the cases, 168 were service holders, 124 were student, 101 were housewives and only 2 were farmer. About educational status, 35.5% of them were graduate and only 12 persons were illiterate.

Life events experienced in last year

The mean of total numbers of life events experienced by the Bangladeshi people was 4.1 with a range of 3.5-6.4. Of the cases, the 51-60 age group experienced the highest numbers of life events with a mean of 6.4. It was 6.2, 5.3 and 5.2 in the 41-50, 60+

Characteristics	n (%)
Mean age (years)	32.6
Gender	
Male	266 (51.4)
Female	252 (48.6)
Marital status	
Unmarried	169 (32.6)
Married	253 (48.8)
Separated	15 (2.9)
Divorced	37 (7.1)
Widow/widower	44 (8.5)
Family status	
Nuclear	388 (74.9)
Joint	130 (25.1)
Residence	
Urban	373 (72)
Rural	145 (28)
Religion	
Muslim	497 (95.9)
Hindu	17 (3.3)
Christian	2 (0.4)
Buddhist	1 (0.2)
Level of education	
Illiterate	12 (2.3)
Primary	34 (6.6)
Secondary	115 (22.2)
Higher secondary	173 (33.4)
Graduate and above	184 (35.5)
Occupation	
Unemployed	15 (2.9)
Student	124 (23.9)
Housewife	101 (19.5)
Farmer	2 (0.4)
Businessman	72 (13.9)
Service	168 (32.4)
Retired	7 (1.4)
Day laborer	3 (0.6)
Others	26 (5)

and 31-40 age groups respectively. This figure revealed that an individual experienced an average of four stressful life events in a year without having any psychiatric disorder. Female cases experienced

Characteristics	Mean life events
Age	
18-20	3.5
21-30	4.3
31-40	5.2
41-50	6.2
51-60	6.4
61+	5.3
Total	4.1
Range	3.5-6.4
Sex	
Male	4.7
Female	5.1

slightly more life events (5.1) than male (4.7) with a ratio of 1: 1.08. Widow/widower, divorced and separated people also experienced more life events than married and unmarried people as expected.

Frequency of different life events

In this study, some events were commonly experienced by most of the respondents among the experienced group (n=258) but produced less stress such as marriage (196), gain a new family member (134), financial loss (115), lack of family support (113), lack of recreation (107), broken affairs (99) etc. Some events not though experienced by most of the cases but produced severe stress such as death of spouse (34), extramarital relationship of spouse (54), divorce (22), death of a child (22), further marriage of husband (17).

Individual stress score

DSS-A is shown in Table III. It contains 58 stressful life events. Bangla version of DSS-A was also prepared with the same contents. We assigned a cut-off score of 30 for this scale. The life events having life change units less than 30 were deducted from scale such as not yet get married despite appropriate age, the victim of gender discrimination and trouble of receiving health service and thus forming final version of DSS-A with 58 items. The items in the scale were asked to rate in terms of mean stress experienced or emarginated by a person in a Likert scale ranging from 1 to 5. Mean stress scores are presented hereafter multiplying the original mean with 20. In this scale, death of spouse perceived as most stressful life event with a mean stress score of 96 and gain a new family member ranked as least stressful life event with a mean stress score of 33. The items are ranked according to decreasing in the severity of perceived stress. In case of same mean stress score, we considered the fraction of that score.

Mean stress score according to the area of stressor

Table III

Mean ranked stress score of each life events of DSS-A

Rank No.	Life events	Mean stress score	Rank No.	Life events	Mean stress score
1	Death of spouse	96	30	Recurrent physical abuse or assault	69
2	Extramarital relationship of spouse	95	31	Broken affairs	69
3	Divorce	95	32	Extreme workload	69
4	Death of a child	95	33	Broken engagement	68
5	Further marriage of husband	94	34	Son or daughter leaving home	67
6	Death of a close family member	94	35	Miscarriage	66
7	Imprisonment for jail sentence of self or a family member	94	36	Trouble with superior or boss	65
8	Having no children	93	37	Failure to go abroad for employment or study	64
9	Marital discord	93	38	Pregnancy	62
10	Serious illness of child	92	39	Lack of family support	61
11	Death of a close friend	91	40	Excessive internet or mobile abuse of a family member	60
12	Loss of job or unemployment	89	41	Unwanted pregnancy	60
13	Illegitimate pregnancy	89	42	Problems with colleague or subordinate	59
14	Concern about son or daughter study	88	43	Started menopause	59
15	Marital separation	87	44	Serious family argument other than spouse	57
16	Threat to personal safety	87	45	Spouse lives apart within country due to occupation	57
17	Extreme job dissatisfaction	87	46	Minor violation of law or litigation	57
18	Spouse lives abroad for occupation	86	47	Discord with neighbor	55
19	Serious physical illness of a family members	86	48	Retirement	53
20	Dowry	85	49	Transfer of jobs	53
21	Friction with child	85	50	Change in personal habit	52
22	Financial loss	82	51	Change of occupation	48
23	Theft robbery or mugging	81	52	Lack recreation	47
24	Having large amount of debt	80	53	Wife begins or stops works	46
25	Loss of any major organ or major surgery	78	54	Outstanding personal achievement	46
26	Serious physical illness or injury of self	76	55	Having only daughters	46
27	Sexual difficulties	74	56	Change in residence	45
28	Serious mental illness of a family member	74	57	Marriage	42
29	Excessive drug abuse of a family member	73	58	Gain a new family member	33

The type or area of stressor is shown in Table IV. The individual stressors were grouped into nine types according to the social area of activities. Again, these areas were ranked according to decreasing in severity of perceived stress. Of the nine types, the financial area was ranked as most stressful area with a mean stress score of 85. The stressors related to the conjugal area was next to the financial area with a mean stress score of 82. The mean stress score of other seven areas was ranged from 75 to 63 indicates that these social areas also produced a lot of stress on life.

Validity and reliability

Six member expert committee (psychiatrists having competency in both Bangla and English) reviewed the 58 items of DSS-A and they agreed with each other that the design was understandable and surface appearance was acceptable, the design made sense to them, they appreciated the implication, the item was able to measure what it was meant to be measured, the scale as a whole able to measure what it was meant to be measured.

Content validity was assessed by three psychia-

Table IV

Mean stress score and Cronbach's alpha according to area of stressors

Area	Mean stress scores	Cronbach's alpha
Financial	85	0.72
Conjugal	82	0.72
Legal	75	0.74
Other interpersonal	71	0.63
Familial	69	0.81
Occupational	65	0.65
Other stressors	65	0.53
Living circumstances	63	0.88
Physical illness/injury	63	0.54

trists. The result shows that all items had good content validity except item numbers 16, 50 and 54. The I-CVI of item 16, 50 and 54 were 0.33, 0.66 and 0.66 respectively. Scale level content validity index (S-CVI) was measured by averaging the I-CVIs of all items. The value was 0.91.

Concurrent validity was assessed between PSLES and DSS-A. Table IV shows that the correlation coefficient was 0.838 which reflected a very strong positive correlation between two scales. Moreover, the correlation was statistically significant as p value was <0.001.

Cronbach's alphas were calculated from various permutations of the DSS-A (Table IV). Internal consistency for the 58 items DSS-A was 0.83. DSS-A was explained by the two-factor model. The first factor consisted of 28 items with salient loadings (>0.40). The second factor consisted of 31 items. No item had salient loading on more than one factor and 5 items failed to load on either factor. Cronbach's alpha of different stress areas was ranged from 0.53 to 0.88. All social areas were moderate to strongly correlated with each other except physical illness/injury and other areas which were weakly correlated. The term "communality" for a given variable can be interpreted as the proportion of variation in that variable explained by the two factors. For example, communality = 0.74 implies that 74% of the variation death of a child is explained by the factor model. Communalities of 58 items were ranged from 0.36 to 0.85. Communalities of 9 items were slightly below than the expected level.

Discussion

The present study was conducted to develop a new scale: DSS-A to measure stressors of the adult population in Bangladesh. Sequential system approach for a scale development was followed in the construction of the current scale.²⁹ Firstly, items of the scale were constructed through reviewing of

related studies and focus group discussion. Then items were selected finally for the scale and the mean stress score was calculated through the item analysis of field data. Finally, the psychometric properties of the scale were assessed and established. The study design to develop this scale was adopted following the tasted design of other developing other stress scales of similar nature.^{17-19, 21, 23, 30, 31}

The DSS-A is designed to identify stressful life events experienced by normal adult population of Bangladesh in the past year and measuring the types, frequency and quantity of stressors but can be used for any time frame to life long. It has both Bangla and English versions. It is a self-reported scale applicable for either sex of above 18 years of age. It comprises 58 items that are rated on given mean stress score and takes 15-20 min. The items are rated on given mean stress score on the left of each event. If the person experienced that event in the past year, is written that number on the blank space to the right. If any event happened more than once, is multiplied for each occurrence. The simple sum of all items rating constitutes the total score. On the basis of the other valid stress scales and research reports, researchers have extrapolated the general guidelines of interpretations of the overall scores of DSS-A. Score 150 or less suggesting mild level of stress, score 151 to 300 suggesting moderate level of stress and score 301 or more suggesting severe level of stress. Thus, it can screen the potential risk population. However, this interpretation is not absolute because of the large differences in each person's ability to cope and particular reaction to stress, and because of the lack criterion referred validity tasted on large healthy as well as sick population. Therefore, the interpretation should be considered as probable and approximate.

In the present study, 58 stressors of diverse nature were included as items of DSS-A. Higher ranking top 10 stressors in descending order were death of spouse, extramarital relationship of spouse, divorce, death of a child, further marriage of husband, death of a close family member, imprisonment or jail sentence of self or a family member, having no children, marital discord and serious illness of child. All these stressors are of familial category. This finding simulates with the report of most of the representative studies on normative and sick population.^{6-24,30,31} It can be said that familial or broadly interpersonal stressors have greater adverse impact on the people and have higher causal relationship with psychiatric as well as other medical disorders. In depth studies on detrimental effect of stress in health and disease are utmost need.

Construction of items of DSS-A was based on most reputed and globally used Social Readjustment Rating Scale-SRRS,¹⁷ and Presumptive Stressful Life Events Scale-PSLES¹⁸ developed for the assessment of stressors among Indian adults. The

item construction was further strengthened by careful analyzing the identified psychosocial stressors in the relevant research in Bangladesh and the clinical experience of the researchers. The items were cross-checked and finally considered by a series of focus group discussions of the experts and analyzing the item proposals of the subjects. According to the cut-offs of the mean stress score for each event and loading of each item, the items were finally included. Therefore, it can be said that the items of this scale are culturally relevant obtained through a sound systemic way.

In this study, Content validity was excellent as item-level content validity index (I-CVI) was 1 except 3 items and scale level validity index (S-CVI) was 0.91. According to Polit and Beck (2006),²⁶ the scale will be judged to have excellent content validity if the I-CVI=1 for each item and SCVI \geq 0.9. So, the content validity of the DSS-A was excellent as both I-CVI and S-CVI were within expected level. In the factor analysis of two-factor model, no item had salient loading on more than one factor and three items failed to load on either factor. According to these criteria, each factor obtained in the present study appeared stable. A similar finding was observed by Deacon et al. (2004)³² where two-factor analysis was done. Item 1-10 loaded similarly like this study but communalities were different. For assessing concurrent validity, the correlation coefficient was 0.84 between DSS-A and presumptive stressful life events scale.¹⁸ that was fairly acceptable. For the internal consistency for the DSS-A, Cronbach's alpha values were ranging from 0.53-0.88 which was in an acceptable range. Therefore, it can be viewed that DSS-A has excellent reliability and validity. Subsequent studies are required to strengthen their psychometric properties.

This study establishes some psychometric properties of the DSS-A. Development of a new scale was driven by the need of an interview-based measure of potentially stress-causing life events in Bangladeshi adults, specially meant for the Bangladeshi milieu that could be used in both research and clinical setting. Furthermore, it is expected that such an instrument would permit the assessment of antecedent stressors caused due to them and their relationship to psychiatric disorders. In terms of a consistent and reliable measures of stressful life events among adults, it was found that this instrument revealed substantially similar internal consistency between two independent and nearly matched samples in term of age, sex and socio-economic status.¹⁸ Further, the sample of both studies broadly shares common milieu of the Indian subcontinent.

In this study, on an average, an individual experienced four stressful life events in a year. In an Indian sample, Sing et al. (1984)¹⁸ reported the mean number of stressful life events experienced an individual in a year was about two. This difference

could be mainly due to the time trends and partly respondents' biasness. In our study, female cases experienced slightly more life events (5.09) than male (4.72) with a ratio of 1: 1.08 that simulate with the finding of other studies. Sing et al. (1984)¹⁸ reported that a significantly higher rate of life events experienced by females. The possible explanation of excess of stressors among women is the presence of certain vulnerability factors with them blended with the sociocultural factors.

This study has some limitations. The sample size was not large enough, collected from an urban tertiary hospital setting who were caregivers of patients. A random selection of a large community sample from multiple areas could overcome this drawback and lent high content validity to this scale. The stressors loaded based on the response and rating of the subjects of the study and thus unless the measure is further validated with a large sample, the findings of this scale are also prone to various biases.

DSS-A is the first culturally appropriate and valid and reliable scale in Bangladesh to assess stress among adult population developed both in English and Bangla. It is based on sound methodology and provides a methodological foundation for a similar type of research. The stressors of this scale are culturally loaded, thus suitable for assessing stressors in Bangladeshi culture. The reliability and validity of DSS-A need to be evaluated across national samples. Further, the stressors of people with a psychiatric disorder and general medical condition should be studied to evaluate its psychometric properties as well as its ability to identify the vulnerable group for treatment and prevention.

Conclusion

A new measure of psychosocial stressors among adults using mixed-methods is developed. Results suggest that the new scale is culturally valid and reliable to measures the stressors among Bangladeshi adults.

Ethical Issue

The ethical clearance was obtained from the Institutional Review Board of the University.

Conflict of interest

Authors declare no conflict of interest.

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Dhaka Stress Scale-Adult (DSS-A)

Below are stressful life events which you may have experienced. To the left of each event is the mean stress score. If you experienced that event in the past year, write that number on the blank space to the right. If the event happened more than once, multiply for each occurrence. When you are finished enter your total value at the end of the list.

Mean stress score	Stressful Event Life events	Score
96	Death of spouse	
95	Extramarital relationship of spouse	
95	Divorce	
95	Death of a child	
94	Further marriage of husband	
94	Death of a close family member	
94	Imprisonment or jail sentence of self or a family member	
93	Having no children	
93	Marital discord	
92	Serious illness of child	
91	Death of a close friend	
89	Loss of job or unemployment	
89	Illegitimate pregnancy	
88	Concern about son or daughter study	
87	Marital separation	
87	Threat to personal safety	
87	Extreme job dissatisfaction	
86	Spouse lives abroad for occupation	
86	Serious physical illness of a family members	
85	Dowry	
85	Friction with child	
82	Financial loss	
81	Theft, robbery or mugging	
80	Having large amount of debt	
78	Loss of any major organ or major surgery	
76	Serious physical illness or injury of self	
74	Sexual difficulties	
74	Serious mental illness of a family member	
73	Excessive drug abuse of a family member	
69	Recurrent physical abuse or assault	
69	Broken affair	
69	Extreme workload	
68	Broken engagement	
67	Son or daughter leaving home	
66	Miscarriage	
65	Trouble with superior or boss	
64	Failure to go abroad for employment or study	
62	Pregnancy	
61	Lack of family support	
60	Excessive internet or mobile abuse of a family member	
60	Unwanted pregnancy	
59	Problems with colleague or subordinate	
59	Started menopause	

57	Serious family argument other than spouse	
57	Spouse lives apart within country due to occupation	
57	Minor violation of law or litigation	
55	Discord with neighbor	
53	Retirement	
53	Transfer of job	
52	Change in personal habit (sleeping, eating etc.)	
48	Change of occupation	
47	Lack of recreation	
46	Wife begins or stops work	
46	Outstanding personal achievement	
46	Having only daughters (3 or more)	
45	Change in residence	
42	Marriage	
33	Gain a new family member	
Total Score		

Interpretation:

Score 150 or less= Mild level of stress

Score 151 to 300= Moderate level of stress

Score 301 or more= Severe level of stress

ঢাকা মানসিক চাপ পরিমাপক-প্রাপ্তবয়স্ক সংস্করণ

আপনার জীবনে ঘটতে পারে এরকম মানসিক চাপসম্পন্ন ঘটনাবলীর তালিকা নীচে দেয়া হলো। প্রত্যেক ঘটনার বাম দিকে মানসিক চাপ মান দেয়া আছে। তালিকার কোন ঘটনার বিগত বছরে আপনার জীবনে ঘটে থাকলে তার মান ডান দিকে লিখুন। কোন ঘটনা একবারের বেশী হলে ঐ মানকে তত দিয়ে গুণ দিন। এভাবে শেষ পর্যন্ত যাবার পর মোট মান যোগ করুন।

মানসিক চাপ মান	মানসিক চাপসম্পন্ন ঘটনাবলী	প্রাপ্ত মান
৯৬	স্বামী বা স্ত্রীর মৃত্যু	
৯৫	স্বামী বা স্ত্রীর বিবাহ বহির্ভূত সম্পর্ক	
৯৫	বিবাহ বিচ্ছেদ	
৯৫	সন্তানের মৃত্যু	
৯৪	স্বামীর পুনরায় বিবাহ	
৯৪	পরিবারের ঘনিষ্ঠ কোন সদস্যের মৃত্যু	
৯৪	নিজের বা পরিবারের কোন সদস্যের কারাবাস বা কারাদণ্ড	
৯৩	নিঃসন্তান	
৯৩	দাম্পত্য কলহ	
৯২	সন্তানের গুরুতর অসুস্থতা	
৯১	ঘনিষ্ঠ বন্ধুর মৃত্যু	
৮৯	চাকুরী হারানো বা বেকারত্ব	
৮৯	অবৈধ গর্ভধারণ	
৮৮	ছেলে-মেয়ের পড়াশুনা নিয়ে উদ্বেগ	
৮৭	স্বামী-স্ত্রীর আলাদা বসবাস	
৮৭	ব্যক্তিগত নিরাপত্তায় হুমকি	
৮৭	চাকুরীতে চরম অসন্তুষ্টি	
৮৬	পেশাগত কারণে স্বামী বা স্ত্রীর প্রবাসে অবস্থান	
৮৬	পরিবারের কোন সদস্যের গুরুতর শারীরিক অসুস্থতা	
৮৫	যৌতুক	
৮৫	সন্তানের সাথে দ্বন্দ্ব	
৮২	আর্থিক ক্ষতি	
৮১	চুরি, ডাকাতি বা ছিনতাই	
৮০	বিপুল পরিমানের ঋণ থাকা	
৭৮	বড় ধরনের অগ্নিহানি বা অস্ত্রোপচার	
৭৬	নিজের গুরুতর শারীরিক অসুস্থতা বা আঘাত	
৭৪	যৌন সমস্যা	
৭৪	পরিবারের কোন সদস্যের গুরুতর মানসিক অসুস্থতা	
৭৩	পরিবারের কোন সদস্যের অতিরিক্ত মাদকাসক্তি	
৬৯	বারবার শারীরিক আঘাত বা নিপীড়ন	
৬৯	প্রেমের সম্পর্ক ভেঙ্গে যাওয়া	
৬৯	অতিরিক্ত কাজের চাপ	
৬৮	বাগদান ভেঙ্গে যাওয়া	
৬৭	পুত্র বা কন্যার বাড়াই ছেড়ে যাওয়া	
৬৬	গর্ভপাত	
৬৫	উর্ধ্বতন কর্মকর্তা বা মালিকের সাথে সমস্যা	
৬৪	চাকুরী বা শিক্ষার উদ্দেশ্যে বিদেশ গমনে ব্যর্থতা	
৬২	গর্ভধারণ	
৬১	পারিবারিক সহায়তার অভাব	

৬০	পরিবারের কোন সদস্যের অতিরিক্ত ইন্টারনেট/মোবাইল আসক্তি নিয়ে উদ্বেগ	
৬০	অনাকাঙ্ক্ষিত গর্ভধারণ	
৫৯	সহকর্মী বা অধঃস্থান কর্মীদের সাথে সমস্যা	
৫৯	মাসিক বন্ধ হওয়া	
৫৭	পারিবারিক তর্ক বিতর্ক (স্বামী-স্ত্রী ব্যতীত)	
৫৭	পেশাগত কারণে স্বামী বা স্ত্রীর দেশের অন্যত্র অবস্থান	
৫৭	ছোটখাটো আইন লঙ্ঘন বা মামলা	
৫৫	প্রতিবেশীর সাথে কলহ	
৫৩	চাকুরী হতে অবসর গ্রহণ	
৫৩	চাকুরীতে বদলী	
৫২	ব্যক্তিগত অভ্যাসের পরিবর্তন (ঘুম, ক্ষুধা ইত্যাদি)	
৪৮	পেশার পরিবর্তন	
৪৭	বিনোদনের অভাব	
৪৬	স্ত্রীর কর্মগ্রহণ বা ত্যাগ	
৪৬	অসাধারণ ব্যক্তিগত কৃতিত্ব অর্জন	
৪৬	কেবলমাত্র কন্যা সন্তান থাকা (৩ বা ততোধিক)	
৪৫	বাসস্থানের পরিবর্তন	
৪২	বিবাহ	
৩৩	পরিবারে নতুন কোন সদস্যেও আগমন	
		সর্বমোট প্রাপ্ত মান

প্রাপ্তমানের ব্যাখ্যা:

প্রাপ্তমান ১৫০ বা তার কম= মৃদু মাত্রার চাপ

প্রাপ্তমান ১৫১ থেকে ৩০০= মধ্যম মাত্রার চাপ

প্রাপ্তমান ৩০১ বা তার বেশী= তীব্র মাত্রার চাপ