

Development and Validation of Students Stress Dimension Questionnaire (Ssdq)

KEYWORDS

Stress, Students, Questionnaire, t-test, Assessment

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ABSTRACT
This article describes the process of development and standardization of the Students Stress Dimension Questionnaire (SSDQ) for Assessing Stress on a sample of 510 University Students of different faculties aged 18 to 35. Initially a 100-item scale was prepared based on '0' "1" and '2' format (where 0=never, 1=sometimes, 2=very often or frequently). In the testing process, 7 questions i.e q50,q53, q55, q56, q63,q64,q65 were found to be non-significant on t-test for equality of means(p-value >0.05) and were dropped leaving 93 items to form the final form of the SSDQ. Further, it was found to have high split-half reliability and adequate internal consistency (Chron-bachs alpha 0.865)

INTRODUCTION

Stress is vital for productivity but too much wrecks output. The Yerkes-Dodson law1 dictates that performance increases with physiological or mental arousal, but only up to a point. When levels of arousal become too high, performance decreases. The process is often illustrated graphically as a bell-shaped curve which increases and then decreases with higher levels of arousal. Different domains have different types of stress, with some being more readily visible than others. Swick (1987)2 reported that many college students find the academic experience very stressful. This may revolve around faulty techniques of attempting academics or the academics being not their focus or individual personality temperaments. Hence stress and academics has been oft correlated (Gall, 1988; Longmen and Atkinson, 1988; Walter and Siebert, 1981)3,4,5. The utilization of time and the perception that its use is structured and purposive is also related to stress as suggested by Bond and Feathers research on the psychological effects of unemployment and their development of the TSQ(Time structured questionnaire)(Feather and Bond, 1983)6. Using a University student sample, they found that those who reported more purpose and structure to their time also reported lesser stress and greater psychological wellbeing, more efficient study habits, optimism about the future, pure physical symptoms and less depression and hopelessness than others. Schuler, (1979)⁷ also relates time with stress and theorizes time management to be able to lower stress and the individual to gain greater efficiency, satisfaction and health. The future also relates with stress and future goals and ones views and feeling about the future can also be linked to stress as suggested by Jordan and Bird, (1989)8 in their development of FPT (Future perspective scale).

Stress is thought to be an important factor in many health problems also. There are numerous emotional and physical disorders that have been linked to stress including depression, anxiety, heart attacks, stroke, hypertension, immune system disturbances etc. Other physical problems related to chronic stress include the lowering of the immune response, chronic muscle tension, and increased blood pressure. These problems can eventually lead to serious life-threatening illnesses such as heart attacks, kidney disease, and cancer. Stress undetected and unmanaged is dangerous. Holmes and Rahe⁹ (and others) have found that indi-

viduals who have undergone several stressful life events over a year's time have a much higher probability of developing these types of serious illnesses, within a few years of the events, than non-stressed individuals. Also, chronic stress can lead to or exacerbate Mental illnesses such as depression and anxiety, bipolar disorder, cognitive problems, personality changes, and problem behaviors, among others.

Hence, since stress can affect efficiency and working of the people as well as their health status, focus on adequate and exhaustive assessment of stress is essential, especially in productive groups like students, managers, executives and others. We feel that stress is an entity affecting multidomains which all impinge upon and interrelate amongst each other thereby producing cumulative effects on the individual.

Since such a multi domain hypotheses has not guided the development of previous existing scales, consequently an accurate assessment of the actual stress affecting an individual, in its holistic form, has not been really possible. The stressors are both normative demands and critical life events. Normative stressors include appearance, school grades, employment, relationships, educational plans, careers, personal health, self-esteem, etc. Others include lack of social resources, relationship with peers, family and altruistic issues like poverty, gender inequality, etc. The stressors are responsible for low self-esteem among adolescent students, increase in antisocial behavior, rise in anxiety, drug abuse and even to the extent of leading to suicide.

Stark limitations in this area exist till now. Previous scales which were used to assess stress of students are far from complete. They were mostly developed in accordance with the western cultural settings. Some scientists have suggested that the Holmes and Rahe Stress Scale is weak in certain areas. Also, given that the actual stressors will be different in different countries with different sociocultural settings, there is a pressing need to have available a Stress Assessment Questionnaire which is tailored to the Indian socio-cultural milieu and value system, which reflects the system of many developing countries as well. Further, the last Scale given by a Psychiatrist from South East Asia was more than 30 years back when the factors affecting the socio cultural milieu were

starkly different from those of the present day with a major socio cultural & technological revolution having changed life altogether. Stress has been identified as a form of energy that people utilize essentially to tie their bodies into knots. Stress management is a concept of learning how to untie those knots and regenerate that energy into positive action and that can only be possible when all stressors have been identified and quantified. Hence, the aim of the study was to develop a structured assessment tool which would be able to provide a comprehensive measurement of stress in populations, especially stress experienced by University and College students in particular, as they are seen to be a most productive group for self as well as the nation.

This article describes the process of development and standardization of the Students Stress Dimension Questionnaire (SSDQ) for assessing Stress on a sample of 510 University and College students of different Faculties of a Central University situated in Varanasi (a City in Central India). A hundred item scale was prepared with scoring based on '0' "1" and '2' format (where 0=never, 1=sometimes, 2=very often or frequently).

METHOD Sample

A random sample of 510 University students (including male and female) studying in different faculties i.e. Faculty of Science, Social Science, Commerce, Law, and Arts, of Banaras Hindu University were randomly selected for the study on which the data was collected.

Procedure:

The different items of the scale were devised keeping in mind the following; a) various elements of different Questionnaire/Scales like General Health Questionnaire [Goldberg and Hillier, 1979]¹⁰, Patient Health Questionnaire [Kroenke K, Spitzer RL, Williams JB]¹¹, Presumptive Stressful Life Event Scale [Singh G, KaurD, Kaur H.1984]¹², Health Assessment Questionnaire [James F. Fries, MD, and colleagues, Stanford University 1978]¹³, Perceived Social Support Assessment [Zimet, G.D et al, 1990]¹⁴, b) a few reviews in the literature on the subject and also c) through discussions with experts in the field and community opinion leaders. These sources served as a perfect foundation for the development of the new Stress Assessment Scale.

Through this, a 100-item scale was prepared based on 3 point Likert scale'0' "1" and '2' format (where 0=never, 1=sometimes, 2=very often or frequently occurring). Items of the scale are written in both English and Hindi language. All the items are negatively stated. The items are easy to understand and response alternatives simple to grasp. The SSDQ has been designed for use with community samples having at least Intermediate education. The questions are general in nature but relatively having content specific to University/ College student population. The scores are obtained by summing all the scores of 100 items and mapping them.

Results:

A structured assessment Tool in the form of Students Stress Dimension Questionnaire (SSDQ) was formed. Initially, the tool was made up of 100 items and were grouped under ten Domains namely Physical, Personal, Interpersonal, Social, Behavioral, Familial, Stress coping, Physical and sexual abuse, Mood and Thought and Educational Domains giving it a multidimensional, holistic nature.

Table 1. Mean Stress Score of entire Sample

Mean	Variance	Std. Deviation
75.83	329.918	18.164

Table 1 show the Mean Stress Score for entire sample which was found to be 75.83. Variance was found to 329.918, while the Standard Deviation was found to be 18.164.

Table 2. Items of Students Stress Dimension Questionnaire (SSDQ) & Significance (n=100)

naire (SSDQ) & Significance (n=100)					
Item no.	Is the item significant in measuring stress				
	value)	· ·			
1	.000	Yes			
3	.000	Yes			
3	.000	Yes			
5	.000	Yes			
5	.000	Yes			
6	.000	Yes			
7	.000	Yes			
8	.000	Yes			
9	.000	Yes			
10	.000	Yes			
11	.000	Yes			
12	.000	Yes			
13	.000	Yes			
14	.000	Yes			
15	.000	Yes			
16	.000	Yes			
17	.000	Yes			
18	.000	Yes			
19	.000	Yes			
20	.000	Yes			
21	.000	Yes			
21 22		Yes			
22	.000				
23	.000	Yes			
24	.000	Yes			
25	.000	Yes			
26	0.002	Yes			
27	.000	Yes			
28	.000	Yes			
29	.000	Yes			
30	.000	Yes			
31	.000	Yes			
32	0.001	Yes			
33	.000	Yes			
34	0.002	Yes			
35	.000	Yes			
36	.000	Yes			
37	.000	Yes			
38	.000	Yes			
39	.000	Yes			
40	.000	Yes			
41	.000	Yes			
42	0.001	Yes			
43	0.001	Yes			
44	0.007	Yes			
45	0.007	Yes			
46	.000	Yes			
		Voc			
47	0.004	Yes			
48	.000	Yes			
49	0.006	Yes			
50	0.141	No			
51	0.035	Yes			
52	0.013	Yes			
53	0.259	No			
54	0.026	Yes			
55	0.076	No			
56	0.063	No			
57	0.001	Yes			
58	.000	Yes			
59	.000	Yes			
60	0.001	Yes			
61	0.003	Yes			
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ORIGIN	AL RESEARCH PAPER		Volume	: 6 Issue : 7 Jul	y 2016 ISSN - 22	249-555X IF: 3.919 IC Value: 74.50	0
62	0.017	Yes	31	0.001	.863	Yes	
63	0.071	No	32	.000	.862	Yes	
64	0.350	No	33	0.002	.862	Yes	
65	0.065	No	34	.000	.862	Yes	
66	0.004	Yes	35	.000	.862	Yes	
67	0.004	Yes	36	.000	.860	Yes	
68	0.001	Yes	37	.000	.862	Yes	
69	.000	Yes	38	.000	.862	Yes	

63	0.071	No
64	0.350	No
65	0.065	No
66	0.004	Yes
67	0.004	Yes
68	0.001	Yes
69	.000	Yes
70	.000	Yes
71 72	.000	Yes
72	.000	Yes
73	.000	Yes
74	.000	Yes
75	.000	Yes
76	.000	Yes
77	.000	Yes
78	.000	Yes
79	.000	Yes
80	.000	Yes
81	.000	Yes
82	.000	Yes
83	.000	Yes
84	.000	Yes
85	.000	Yes
86	.000	Yes
87	.000	Yes
88	.000	Yes
89	.000	Yes
90	.000	Yes
91	.000	Yes
92	.000	Yes
93	.000	Yes
94	.000	Yes
95	.000	Yes
96	.000	Yes
97	.000	Yes
98	0.00	Yes
99	0.00	Yes
100	0.009	Yes

Table 3. Significance & Chronbachs alpha of individual items of SSDQ (n=100)

Item no.	Level of	Chronbachs	
(or Ques-	Signifi-	alpha after de-	Whether selected
tion no.)	cance	leting items	Willetiner selected
	.000	.860	Yes
1	.000	.860	Yes
	.000	.861	Yes
3	.000	.861	Yes
	.000	.861	Yes
5	.000	.861	Yes
4 5 6	.000	.860	Yes
7	.000	.861	Yes
8	.000	.860	Yes
9	.000	.860	Yes
10	.000	.860	Yes
11	.000	.860	Yes
12	.000	.860	Yes
13	.000	.860	Yes
14	.000	.860	Yes
15	.000	.861	Yes
16	.000	.860	Yes
17	.000	.859	Yes
18	.000	.860	Yes
19	.000	.860	Yes
20	.000	.860	Yes
21 22	.000	.861	Yes
22	.000	.861	Yes
23	.000	.861	Yes
24	.000	.862	Yes
25	0.002	.862	Yes
26	.000	.862	Yes
27	.000	.862	Yes
28	.000	.863	Yes
29	.000	.862	Yes
30	.000	.862	Yes

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31	0.001	.863	Yes
32	.000	.862	Yes
33	0.002	.862	Yes
34	.000	.862	Yes
35	.000	.862	Yes
36	.000	.860	Yes
37	.000	.862	Yes
38	.000	.862	Yes
39	.000	.862	Yes
40	.000	.861	Yes
41	0.001	.862	Yes
42	0.001	.862	Yes
43	0.007	.862	Yes
44	0.008	.862	Yes
45	.000	.862	Yes
46	0.004	.862	Yes
47	.000	.862	Yes
48	0.006	.863	Yes
49	0.141	1.003	No
		.863	
50	0.035		Yes
51	0.013	.863	Yes
52	0.259		No
53	0.026	.864	Yes
54	0.076		No
55	0.063		No
56	0.001	.863	Yes
57	.000	.863	Yes
58	.000	.863	Yes
59	0.001	.862	Yes
			Yes
60	0.003	.862	
61	0.017	.863	Yes
62	0.071		No
63	0.350		No
64	0.065		No
	0.005		
65	0.004	.862	Yes
65	0.004		Yes
65 66	0.004 0.004	.862	Yes Yes
65 66 67	0.004 0.004 0.001	.862 .862	Yes Yes Yes
65 66 67 68	0.004 0.004 0.001 .000	.862 .862 .860	Yes Yes Yes
65 66 67 68 69	0.004 0.004 0.001 .000 .000	.862 .862 .860 .860	Yes Yes Yes Yes Yes
65 66 67 68 69 70	0.004 0.004 0.001 .000 .000	.862 .862 .860 .860 .861	Yes Yes Yes Yes Yes Yes Yes Yes
65 66 67 68 69 70 71	0.004 0.004 0.001 .000 .000 .000	.862 .862 .860 .860 .861	Yes
65 66 67 68 69 70 71	0.004 0.004 0.001 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861	Yes
65 66 67 68 69 70 71 72 73	0.004 0.004 0.001 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .860 .861	Yes
65 66 67 68 69 70 71 72 73 74 75	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .860 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .860 .860 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .860 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .860 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 80 81 82 83	0.004 0.004 0.001 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85	0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	0.004 0.004 0.001 .000	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860 .860 .860	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90	0.004 0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860 .860 .860	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 88 89 90	0.004 0.004 0.001 .000 .00	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .859 .859 .859 .859 .859	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91	0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93	0.004 0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 90 91 92 93	0.004 0.004 0.004 0.004 0.001 0.000 0.00	.862 .862 .860 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860 .860 .860 .860 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .861 .860 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 88 88 89 90 91 92 93 94 95 96 97	0.004 0.004 0.004 0.001 .000 .000 .000 .	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	0.004 0.004 0.004 0.004 0.001 .000 .0	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .861 .861 .861 .861 .861 .861 .861 .861	Yes
65 66 67 68 69 70 71 72 73 74 75 76 77 77 78 79 80 81 82 83 84 85 88 88 89 90 91 92 93 94 95 96 97	0.004 0.004 0.004 0.001 .000 .000 .000 .	.862 .862 .860 .860 .861 .861 .861 .861 .861 .861 .861 .860 .860 .860 .860 .860 .860 .860 .860	Yes

With reference to Table 2 & 3, the items were analyzed statistically on t-test for Equality of Means to find the Level of Significance of each item. The items which were not found significant on t-test for Equality of Means [q50, q53, q55, q56, q63, q64, q65 (p-value >0.05)] were removed

from the final questionnaire item list. Hence, the final SSDQ comprises only 93 items as the above 7 items were removed from the final list.

Table 4.Item Means of Students Stress Dimension Questionnaire (SSDQ) (n=93)

Summary Item Statistics							
	Mean	Mini- mum	Maxi- mum		Maxi- mum / Mini- mum	Vari- ance	N of Items
Item Means	.815	.547	1.069	.522	1.955	.011	93

Table 5- Values of Chronbachs Alpha for individual items on SSDQ (n=93)

Item no. Value of Chronbachs Alpha 9	011 33002 (11-73)	
q 18 859 q88 .859 q89 .859 q1 .860 q7 .860 q9 .860 q10 .860 q11 .860 q12 .860 q13 .860 q14 .860 q17 .860 q17 .860 q20 .860 q21 .860 q21 .860 q37 .860 q37 .860 q70 .860 q70 .860 q70 .860 q79 .860 q79 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q87 .860 q87 .860 q87 .860 q87 .860	Item no.	Value of Chronbachs Alpha
a 88 .859 g 1 .860 g 2 .860 g 7 .860 g 9 .860 g 10 .860 g 11 .860 g 12 .860 g 13 .860 g 14 .860 g 15 .860 g 17 .860 g 19 .860 g 19 .860 g 19 .860 g 20 .860 g 37 .860 g 3 .860 g 3 .860 g 81 .860 g 82 .860 g 83 .860 g 84 .860 g 85 .860 g 86 .860 g 97 .860 g 97 .860 g 97 .860 g 97	a 18	
g89 .859 g1 .860 g2 .860 g7 .860 g9 .860 g10 .880 g11 .860 g12 .860 g13 .860 g14 .860 g15 .860 g17 .860 g19 .880 g20 .860 g21 .860 g37 .860 g69 .860 g70 .880 g79 .860 g79 .860 g81 .860 g81 .860 g82 .860 g83 .860 g84 .860 g85 .860 g87 .860 g87 .860 g91 .860 g91 .860 g91 .860 g92 .861 g23 .861	g 88	859
q 1 .860 q7 .860 q9 .860 q10 .860 q11 .860 q12 .860 q13 .860 q14 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q37 .860 q37 .860 q30 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q87 .860 q91 .860 q94 .860 q97 .860 q94 .860 q97 .860 q97 .861 q84 .861	Q 00	050
q2 860 q7 860 q9 880 q10 .860 q11 .860 q12 .860 q13 .860 q14 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q37 .860 q69 .860 q70 .880 q79 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .861	q07	
q7 860 q10 860 q11 .860 q12 .860 q13 .860 q14 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q69 .880 q70 .860 q73 .860 q79 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q97 .860 q97 .860		.000
q9 .860 q10 .860 q11 .860 q12 .860 q13 .860 q14 .860 q17 .860 q19 .860 q20 .860 q21 .880 q37 .860 q37 .860 q70 .860 q73 .880 q74 .860 q37 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q91 .860 q91 .860 q92 .861 q94 .860 q97 .860 q97 .860 q97 .861 q4 .861 q4 .861	<u>q2</u>	.860
q10 860 q11 860 q12 880 q13 860 q14 860 q17 860 q19 860 q20 860 q21 860 q37 860 q69 860 q70 860 q74 860 q79 860 q81 860 q81 860 q82 860 q83 860 q84 860 q85 860 q87 860 q87 860 q87 860 q87 860 q87 860 q91 860 q91 860 q91 860 q91 860 q97 840 q94 861 q97 861 q97 861 q84	q/	
q11 .860 q13 .860 q14 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q69 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q87 .860 q87 .860 q90 .860 q91 .860 q97 .860 q97 .860 q91 .860 q92 .861 q84 .861 q97 .860 q97 .860 q97 .860 q97 .861 q84 .861 <td>q9</td> <td></td>	q9	
q11 .860 q13 .860 q14 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q69 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q87 .860 q87 .860 q90 .860 q91 .860 q97 .860 q97 .860 q91 .860 q92 .861 q84 .861 q97 .860 q97 .860 q97 .860 q97 .861 q84 .861 <td>q10</td> <td>.860</td>	q10	.860
q12 .860 q13 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q69 .860 q70 .860 q74 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q87 .860 q87 .860 q87 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q90 .860 q91 .860 q92 .861 q4 .861 q5 .861 q6 .861	q11	.860
q13 .860 q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q69 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q87 .860 q87 .860 q87 .860 q87 .860 q87 .860 q91 .860 q92 .861 q5 .861 q6 .861 q8 .861 q6 .861 q8 .861 q8 .861 q22 .861 q75 .861	g12	.860
q14 .860 q17 .860 q19 .860 q20 .860 q21 .860 q69 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q84 .860 q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q97 .860 q97 .860 q97 .860 q97 .861 q6 .861 q6 .861 q22 .861 q24 .861 q71 .861 q72 .861 q73 .861 q74 .861 q8 .861 q6 .861 q77 .861	a13	.860
q15 .860 q17 .860 q19 .860 q20 .860 q21 .860 q37 .860 q69 .860 q70 .860 q74 .860 q879 .860 q81 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q91 .860 q91 .860 q97 .860 q97 .860 q97 .861 q4 .861 q5 .861 q6 .861 q8 .861 q22 .861 q71 .861 q72 .861 q71 .861 q72 .861 q73 .861 q74 .861	g14	
q17 .860 q20 .860 q21 .860 q37 .860 q69 .860 q70 .860 q73 .860 q74 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q22 .861 q71 .861 q72 .861 q73 .861 q74 .861 q8 .861 q8 .861 q8 .861 <t< td=""><td>g15</td><td>860</td></t<>	g15	860
q19 .860 q21 .860 q37 .860 q69 .860 q70 .860 q74 .860 q79 .860 q80 .860 q81 .860 q82 .860 q84 .860 q85 .860 q86 .860 q87 .860 q91 .860 q91 .860 q94 .860 q97 .860 q97 .860 q94 .861 q4 .861 q8 .861 q6 .861 q8 .861 q22 .861 q24 .861 q24 .861 q24 .861 q24 .861 q24 .861 q3 .861 q4 .861 q4 .861 <	g17	
q20 .860 q37 .860 q69 .860 q70 .860 q73 .860 q74 .860 q80 .860 q81 .860 q82 .860 q84 .860 q85 .860 q86 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q22 .861 q24 .861 q24 .861 q25 .861 q70 .861 q8 .861 q6 .861 q8 .861 q2 .861 q23 .861 q71 .861 q75 .861 q76 .861 <t< td=""><td></td><td></td></t<>		
q21 .860 q37 .860 q69 .860 q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q22 .861 q23 .861 q24 .861 q23 .861 q24 .861 q71 .861 q72 .861 q73 .861 q74 .861 q75 .861 q76 .861 q77 .861	Q17 ~20	
q69 .860 q70 .860 q74 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q22 .861 q24 .861 q23 .861 q24 .861 q27 .861 q71 .861 q72 .861 q73 .861 q74 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861	Q20 - 21	
q69 .860 q70 .860 q74 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q22 .861 q24 .861 q23 .861 q24 .861 q27 .861 q71 .861 q72 .861 q73 .861 q74 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861	<u>qz ı</u>	
q70 .860 q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q90 .860 q91 .860 q97 .860 q97 .860 q3 .861 q6 .861 q8 .861 q2 .861 q23 .861 q24 .861 q23 .861 q24 .861 q70 .861 q71 .861 q72 .861 q73 .861 q74 .861 q75 .861 q76 .861 q77 .861 q78 .861 q95 .861 q96 .861	q3/	
q73 .860 q79 .860 q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q8 .861 q8 .861 q22 .861 q23 .861 q24 .861 q27 .861 q8 .861 q8 .861 q8 .861 q8 .861 q9 .861 q8 .861 q8 .861 q8 .861 q9 .861 q8 .861 q9 .861 q9 .861 q9 .861	lq69	
q74 .860 q79 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q2 .861 q23 .861 q24 .861 q27 .861 q70 .861 q8 .861 q8 .861 q8 .861 q8 .861 q22 .861 q74 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 <tr< td=""><td>q/0</td><td>.860</td></tr<>	q/0	.860
q74 .860 q79 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q8 .861 q8 .861 q22 .861 q23 .861 q24 .861 q27 .861 q24 .861 q27 .861 q70 .861 q8 .861 q8 .861 q9 .861 q8 .861 q9 .861 q9 .861 q7 .861 q7 .861 q7 .861 q9 .861 q9 .861	q73	
q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q22 .861 q23 .861 q24 .861 q27 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q97 .861 q98 .861 q98 .861	q74	.860
q80 .860 q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q22 .861 q23 .861 q24 .861 q27 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q97 .861 q98 .861 q98 .861	q79	.860
q81 .860 q82 .860 q83 .860 q84 .860 q85 .860 q87 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q16 .861 q22 .861 q24 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q98 .862	a80	
q82 .860 q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q2 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q98 .861 q98 .861 q98 .862	g81	
q83 .860 q84 .860 q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q2 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q97 .861 q98 .861 q98 .861 q98 .862	g82	
q84 .860 q85 .860 q87 .860 q90 .860 q91 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q2 .861 q22 .861 q23 .861 q24 .861 q73 .861 q74 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q98 .861 q98 .861 q98 .862	g83	
q85 .860 q86 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q98 .861 q98 .861 q98 .861 q98 .861 q98 .862	g8/I	860
q86 .860 q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q97 .861 q98 .861 q98 .861 q98 .862	Q04 Q05	
q87 .860 q90 .860 q91 .860 q94 .860 q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q24 .861 q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q95 .861 q96 .861 q98 .861 q98 .861 q98 .862	~04	
Q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	Q00	
Q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q87	1.860
Q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q90	
Q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q91	
Q97 .860 q3 .861 q4 .861 q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q94	
q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q98 .861 q98 .861 q98 .861 q98 .861 q98 .862	197/	.860
q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q98 .861 q98 .861 q98 .861 q98 .861 q98 .862	q3	
q5 .861 q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q98 .861 q98 .861 q98 .861 q98 .861 q98 .862	q4	.861
q6 .861 q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	la5	.861
q8 .861 q16 .861 q22 .861 q23 .861 q24 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	a6	.861
q16 .861 q22 .861 q23 .861 q24 .861 q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	a8	
q22 .861 q23 .861 q24 .861 q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	g16	861
q23 .861 q24 .861 q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862		
q24 .861 q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	g23	
q41 .861 q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	g21	
q71 .861 q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	- 41	
q72 .861 q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	Q4 -71	
q75 .861 q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q/	
q76 .861 q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q/2	
q77 .861 q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q75	
q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862		
q78 .861 q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q77	
q92 .861 q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q78	
q93 .861 q95 .861 q96 .861 q98 .861 q25 .862	q92	
q95 .861 q96 .861 q98 .861 q25 .862	a93	.861
q96 .861 q98 .861 q25 .862	a95	.861
q98 .861 q25 .862	a96	
q25 .862		
	g 25	942
<u> </u>	~24	042
	[4 20	.002

q27 .862 q28 .862 q30 .862 q31 .862 q33 .862 q34 .862 q35 .862 q36 .862 q37 .862 q40 .862 q41 .862 q42 .862 q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q69 .863 q29 .863 q31 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863 q100 .863		
q28 .862 q31 .862 q33 .862 q34 .862 q35 .862 q36 .862 q39 .862 q40 .862 q42 .862 q44 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q51 .863 q57 .863 q58 .863 q59 .863 q62 .863	q27	.862
q30 .862 q31 .862 q34 .862 q35 .862 q36 .862 q38 .862 q39 .862 q40 .862 q42 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q67 .862 q68 .862 q69 .862 q69 .863 q32 .863 q49 .863 q51 .863 q57 .863 q59 .863 <td>q28</td> <td>.862</td>	q28	.862
q33 .862 q34 .862 q35 .862 q38 .862 q39 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q62 .863	q30	
q33 .862 q34 .862 q35 .862 q38 .862 q39 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q31	.862
q34 .862 q35 .862 q38 .862 q39 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q33	.862
q36 .862 q37 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q62 .863	q34	
q38 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q51 .863 q57 .863 q58 .863 q59 .863 q62 .863	q35	
q39 .862 q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q36	
q40 .862 q42 .862 q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q67 .862 q68 .862 q69 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q38	
q42 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863		
q43 .862 q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q40	
q44 .862 q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q62 .863	q42	
q45 .862 q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q43	
q46 .862 q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q44	
q47 .862 q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q59 .863 q62 .863	q45	
q48 .862 q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q59 .863 q59 .863 q62 .863	q46	
q60 .862 q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q47	
q61 .862 q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q48	
q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863		
q66 .862 q67 .862 q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q61	.862
q68 .862 q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q66	.862
q99 .862 q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q67	
q29 .863 q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q68	
q32 .863 q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q99	
q49 .863 q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q29	
q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q32	
q51 .863 q52 .863 q57 .863 q58 .863 q59 .863 q62 .863	q49	
q57 .863 q58 .863 q59 .863 q62 .863	q51	
q58 .863 q59 .863 q62 .863	q52	
q59 .863 q62 .863	q57	
q62 .863	q58	
q62 .863	q59	
q100 .863	q62	
	q100	.863

Table 6.Reliability of SSDQ (n=93)

Reliability Statistics						
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items				
.862	.865	93				

With reference to Table 6, we used Chronbachs alpha to estimate the Reliability and measure for Internal Consistency of the items in the questionnaire i.e. how closely related the set of items are as a group. The Alpha coefficient for the final 93-item was found to be 0.865, suggesting that the items have relatively high internal consistency as a reliability coefficient of 0.70 or higher is considered "acceptable" in most of the research situations.

Table 7. Mean, Variance & Correlation of the individual items of SSDQ (n=93)

	•	· ·		
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item De- leted
q1	74.94	321.055	.337	.860
lq2	74.98	320.949	.343	.860
q3	75.06	322.481	.285	.861
la4	75.03	323.113	.248	.861
q 5	75.08	324.033	.219	.861
q6	75.04	322.687	.276	.861
q7	75.02	321.845	.296	.860
la8	75.06	323.101	.253	.861
lq9	74.95	321.896	.303	.860
q10	75.02	321.454	.313	.860
q11	74.93	321.085	.333	.860
q12	74.98	320.551	.338	.860
q13	75.05	320.932	.320	.860
q14	74.95	321.525	.301	.860
q15	74.94	321.174	.299	.860
q16	75.00	321.631	.284	.861
q17	74.95	321.237	.297	.860
q18	74.95	319.317	.364	.859
q19	74.97	320.437	.331	.860
q20	75.00	321.348	.301	.860

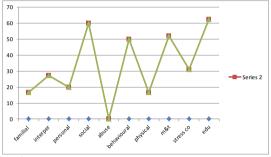
75.06 320.848 .331 .860 q21 lq22 75.00 322.147 257 .861 q23 74.99 323.165 .224 .861 321.948 74.88 274 q24 .861 74.86 325.360 .146 q25 .862 74.99 325.230 147 .862 q26 q27 74.95 324.295 .175 .862 <u>q</u>28 74.99 324.483 174 .862 75.04 .117 q29 325.901 .863 75.01 324.980 .158 q30 .862 q31 74.98 325.059 .154 .862 q32 74.98 326.468 .106 .863 74.91 q33 325.088 156 .862 74.87 325.102 156 q34 .862 <u>q35</u> 74.87 324.603 .178 .862 q36 74.95 324.114 .203 .862 lq37 75.01 321.782 324.487 297 .860 74.94 .192 q38 .862 <u>lq</u>39 75.01 325.263 .160 .862 q40 74.91 324.901 .165 .862 q41 74.92 324.026 209 .861 q42 74.90 325.720 .140 .862 q43 74.89 325.152 .166 .862 q44 74.92 325.839 .137 .862 <u>q</u>45 74.94 325.638 .137 .862 75.01 325.452 .151 .862 q46 75.00 325.108 .155 q47 .862 q48 74.95 324.500 .168 .862 <u>q49</u> 74.96 325.504 .129 .863 q51 74.86 327.507 .060 .863 74.99 326.933 084 q52 .863 75.00 328.134 .043 q54 .864 q57 74.99 327.130 .086 .863 q58 74.96 326.282 .119 .863 75.09 326.988 .089 q59 .863 lq60 75.11 325.958 .128 .862 325.079 75.11 q61 .161 .862 q62 75.21 327.186 .084 .863 75.22 325.621 q66 .164 .862 <u>q6</u>7 75.28 326.594 .120 .862 75.23 q68 325.690 .158 .862 1<u>q6</u>9 322.640 75.23 .299 .860 75.22 .328 q70 321.811 .860 1<u>q71</u> 75.19 322.953 .280 .861 75.19 q72 323.704 .251 .861 <u>1q73</u> 75.17 75.13 322.443 319 .860 322.463 .306 q74 .860 <u>lq75</u> 75.12 324.341 .204 .861 q76 75.13 323.964 .249 .8<u>61</u> 323.182 322.741 .238 .254 q77 75.04 .861 q78 75.07 .861 <u>lq7</u>9 75.09 321.911 .326 .860 q80 75.14 320.774 .368 .860 320.729 q81 75.15 .860 <u>.367</u> 75.15 321.394 .327 q82 .860 322.198 75.20 q83 .301 .860 q84 75.15 322.113 .294 .860 <u>.310</u> q85 75.08 321.608 .860 75.09 q86 320.862 343 .860 75.08 320.548 .355 .860 q87 q88 75.07 318.653 417 .859 75.07 317.754 452 .859 q89 75.06 319.880 .371 q90 .860 75.00 320.872 q91 .860 74.99 322.698 q92 .260 .861 <u>lq93</u> 74.93 323.822 .218 .861 q94 74.88 321.378 .308 .860 q95 74.86 322.295 .270 .861 q96 74.86 322.747 .261 .861 q97 74.83 321.284 .318 .860 74.88 q98 322.682 .261 861 q99 74.85 324.400 .192 .862 q100 74.76 327.010 .091 .863

Table 8.

Hotelling's T-Squared Test				
Hotelling's T-Squared	F	df1	df2	Sig
725.369	6.423	92	400	.000

Table 8.The items in our questionnaire had more than two response variables, so we used multivariate extension of student's t test i.e Hotellings t-test. This is the significance level of the test. If this value is less than 0.05, we say that the test was significant at the 0.05 level. If the value is less than 0.01, we say that the test was significant at the 0.01 level. This result is accurate as all the assumptions of the corresponding test are met.

Figure 1. Sample Bar graph of SSDQ Mapping of an individual student



Student Stress Dimension Questionnaire Items

I.		Student Stress Dimension Questionnaire
Item		Student Stress Dimension Questionnaire
no.		
	Q1	Do you get tension headaches?
	Q19	Do you have trouble in making your decision's ?
	Q3	Do you feel that your heart beats faster that others? (Sense of heart rate increase)?
	Q62	Do you feel your troubles are due to others?
	Q5	Do you feel dryness of mouth?
	Q15	Do you feel angered when you are delayed in any ways' (eg-lift, traffic light being kept waiting)?
	Q9	Do you feel increase in muscular aches and pains in body?
	Q74	Do you feel sad and depressed?
	Q11	Are you unable to relax?
	Q18	Are you not able to perform your duties & Responsibility well?
	Q13	Do you feel you can't express your feeling to any one?
	Q6	Do you feel that you could faint?
	Q98	I am feared much of Competition?
	Q16	Do you take any substances like Alcohol/To- bacco/any other Specific?
	Q7	Do you have sleep problems?
	Q17	Have you sought help from a Doctor for stress/Sleep disturbance/concentration difficulty? Learning difficulty/memory problem?
	Q30	Have you frequent broken ups with a Girl-friend/Boyfriend?
	Q2	Do you feel tired & have no energy?
	Q10	Are you frequently troubled by diarrhea, constipation or gas in abdomen?
	Q92	Does your mood changes frequently?
	Q21	Do you have very few interests/hobbies outside studies?
	Q99	I feel Pressured due to studies/career?
	Q24	Is your confidence/self-esteem lower than you would like it to be?
	Q25	Do you feel that there are too many dead- lines in work/Study/Life/ that are difficult to meet?
	Q8	Do you have changes in sexual desire/drive?

ORIGINAL RE	SEARCH PAPER
Q27	Do you think that you are under stress?
Q28	Do you think you are doing justice to your work/study?
Q32	Are you currently in relationship with someone?
Q33	Has a parent Romantic partner or friend repeatedly ridiculed you, put you down, ignored you, or told you that you were not good?
Q34	Do you feel that you have few friends?
Q44	Are you easily discouraged by others?
Q36	Do you have frequent conflicts with family member and colleagues?
Q37	I feel like other people don't understand me?
Q38	Do you think that you don't get the help and support you needed from your colleagues?
Q39	Do you often feel difficulty in Trusting others?
Q40	Had any of your family member's or acquaint- ance died by accident (Unnatural death/ Homicide/ or due to any chronic medical or surgical illness) in recent past?
Q41	Do you think that you don't get support from your colleagues when you are stressed?
Q42	Do you feel that you are not satisfied with your social life?
Q43	Do you seek help from others when you have trouble?
Q54	Do you not have proper communication with your entire family member's?
Q52	Does anyone in your family takes cigarettes/tobacco/alcohol/bhang/any other?
Q35	Do you not receive the respect from your family member's/friends/colleagues you deserve?
Q47	You are not able to carry out the acts that you know you have to do?
Q48	Do you feel fear in going out alone?
Q49	Do you feel you are dissatisfied with your Home life?
Q51	Does your family didn't give you full support for your studies in monetary terms?
Q78	Do you always think about problems even when you are supposed to be relaxing?
Q4	Have you experience Tremors in hand/body?
Q61	Do you feel nervous and stressed?
Q69	Have you stopped smiling?
Q26	Do you have legal/Disciplinary problem?
Q20 Q57	Do you get bored easily? Do you think that you often been in situations that was extremely frightening or horrifying or one in which you felt extremely helpless?
Q67	As an adult, have you ever been beaten, slapped around, or physically harmed by a ro- mantic partner, date, Family member, stranger
Q59	or someone else? Do you have difficulty in Adjusting with the new atmosphere away from home?
Q80	Do Negative thoughts keep coming into your mind regularly?
Q23	Do you find faults and criticize rather than praising, even if it is deserved?
Q14	Do you feel difficulty in taking up the initiative to do things?
Q70	Do you feel worthless?
Q58	Do you feel sad, being away from home?
	Are you not able to perform your duties &
Q96	Responsibility well? When you were child, did a parent, caregiver
Q66	or other person ever slap you repeatedly, beat you, or otherwise attack/harm you?
Q94	Do you feel difficulty in concentrating on your studies?
Q68	Have you ever been present when another person was killed seriously injured/Sexually or physically assaulted?
Q60	Do you frequently change your Residence/room partner?
Q100	Do you take your studies as essential work?
	, , , , , , , , , , , , , , , , , , , ,

Q71	There is nothing in the future to be hopeful about?
Q22	Do you take much of Tea/Coffee/Alcohol/ Nicotine/any other Drugs?
Q73	Are you not able to experience any positive feeling at all?
Q75	Do you feel that you had lost interest in just about everything?
Q76	Have you ever thought of killing/harming yourself? (How often?, Since when?)
Q77	Do you cry, when alone?
Q89	Do you feel like crying sometimes ?
Q79	Do you frequently have guilty feelings if you relax & do nothing?
Q29	Is your relationship with other people strained /Difficult?
Q81	Are you remain in doubt every time?
Q82	Do you worry on minor issues?
Q83	Do you see nothing in the future to be hopeful about?
Q84	Do you feel life is meaningless?
Q85	You not able to experience positive feelings?
Q86	Do repeated inappropriate thoughts come in your mind against your will?
Q87	Do you feel afraid without any reason?
Q88	Do upsetting thought's or memories about previous event/things?
Q31	Have you been personally harassed in form of unkind words or behavior from others?
Q90	Do you feel yourself lonely?
Q91	Does you thought get easily changed/influenced by other's?
Q46	Have you ever become very violent/ Impulsive towards your acquaintance /yourself or others?
Q93	Do you feel dissatisfied with your studies/ work?
Q45	Do you lose your Temper easily?
Q95	Do you have difficulty in learning / forgetfulness?
Q97	I am worried/ afraid of the Career and your future?
Q12	Do you think you do not feel good about yourself as a person?
Q72	Do you feel life is meaningless?

RELIABILITY AND VALIDITY OF THE TOOL

In order to establish the reliability of the tool the Cronbachs Alpha Coefficient was calculated for SSDQ. It was calculated using Statistics (Descriptive Scale Hotelling Anova) for final 93 items scale and found to be 0.865 and Guttman Split-Half Coefficient was found to be 0.636. Thus from the two coefficients it can be inferred that the tool is highly reliable and valid.

CONCLUSION

Stress in students has a great impact in their lives. If not understood, measured and managed properly this may be continued as everlasting problem. The students' stress rating scale (SSDQ) provides the comprehensive measurement of University and College students' stress. However this scale can be used to the students studying at any level of

Education with a basic understanding of English and Hindi language up to intermediate level.

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