## Sensation Seeking and Stress. Is There a Relation?

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Abstract: Background: Sensation seeking is used to describe general features including high risk behaviors and inability to tolerate boredom. This study was conducted to investigate the relations between sensation seeking and stress among students of Bandar Abbas. Methods: In this cross sectional study, 400 students who had all the enrollment criteria were chosen by cluster sampling. A questionnaire was used to collect data. Results: The study showed that the mean excitement score was  $16.66 \pm 3.39$  and with a maximum score of 27 and a minimum score of 8. Also, the mean score of experiment seeking was  $7.70 \pm 1.86$  with a maximum score of 13 and a minimum score of 3. The mean score of tolerance towards boredom was  $2.22 \pm 1.3$  with a maximum score of 9 and a minimum of 0. The mean score of escape inhibition was  $1.34 \pm 0.226$  (max: 2, min:0). Among all the participants, 35.3% had a moderate sensation seeking had no significant associations with stress.

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Keywords: Sensation seeking, Excitement, Stress

### Introduction:

Due to differences of catecholamine system, the optimum level of excitement is different among people (1). Scientists have found two latent genes that have a role in the creation of the characteristics that are involved in danger seeking behaviors (2). These behaviors are different according to age, gender, culture and race. Asians have lower scores than Europeans in sensation seeking behaviors. Younger people are more passionate in seeking adventure, risks and new experiments (3). People sensation seeking behavior with specific characteristics in sports, jobs, experiment more dangerous entertainments and are more susceptible to substance use and high risk sexual behaviors (4). Joshua et al showed in their study that people with higher scores of sexual excitement have more sexual partners and sexual relations and used contraceptives less than the others. Legrand et al showed that participants with higher sensual seeking scores tend to drink more. They also showed that these behaviors are significantly more frequent among men than women. Sterin et al reported that these people tend to tattoo or pierce their body more often than the others and experience social, physical and financial risks more frequent (5-7). Also, previous studies have shown that disruptive behaviors such as smoking are related to stressful behaviors (8). Since more than one third of the Iran's population is young, it is necessary to assess and solve their problems because, as World Health Organization declared, mental health is the essential task in the governments' most responsibilities (9, 10). This approach can push them to move forward and develop their country. Therefore this study aimed to assess the association between stress and sensation seeking among students.

# Methods:

This was a descriptive study that was conducted in Bandar Abbas in 2008 on 400 highschool students. The samples were selected from 61 highschools. Those who were not willing to participate, or experienced a traumatic event 3 months prior to the study, or consumed psychoactive drugs were excluded from the study. The questionnaires that were distributed to the participants were consisted of three sections. The first section included 21 questions that asked about demographics. The second portion was Zuckerman sensational questionnaire with 40 questions and the last section included Cohen's Perceived Stress Questionnaire. Data were entered SPSS v. 19 software and information were described using descriptive statistics such as frequency, mean and standard deviation and ANOVA, and T test were used to analyze the relationship between them. A pvalue below 0.05 was considered as significant.

#### **Results**:

In this study, 244 (61%) were female and 136 (39%) were male. Also, 311 (77.8%) were in the eleventh grade and 89 (22.2%) were high school seniors. Among all the participants, 366 (91.5%) were raised in domestic regions and 34 (8.5%) lived in urban areas. Also, 178 (44.6%) spent their time watching television, 263 (65.8%) had no problems in expressing their feelings, 199 (49.8%) declared that they have little dependency towards others. As table 1 shows, the mean score of excitement was 16.66  $\pm$  3.39, the mean score of experiment seeking was 7.70  $\pm$ 1.86, the mean score of boredom susceptibility was 2.22  $\pm$  1.12 and the mean score of inhibition escape was 1.34  $\pm$  0.0=226.

Table -1: Dimensions of sensational seeking among the participants

	Mean	Standard Deviation	Minimum	Maximum
Excitement	16.66	3.39	8	27
Experiencing	7.7	1.86	3	13
Boredom susceptibility	2.22	1.12	0	9
Escape inhibition	1.34	0.226	0	2

Most of the participants (284, 71%) had moderate stress and none of them had no stress, 56 (14%) had mild stress and 60 (15%) had severe stress. Also, as table -3 shows, none of the parameters of sensational seeking were significantly related to stress.

Table -3: Scores of sensational seeking parameters among participants with different amounts of stress levels

	Stress			P – value
	Mild	Moderate	Severe	
Excitement	$14.03 \pm 3.02$	$13.65 \pm 2.6$	$14.01 \pm 3.17$	4.82
Experiment	$7.76 \pm 1.8$	$7.69 \pm 1.80$	$7.71 \pm 2.21$	0.963
Boredom	$3.07 \pm 1$	$2.92 \pm 1.06$	$2.65 \pm 1.17$	0.092
Escape Inhibition	$4.83 \pm 1.12$	$4.49 \pm 1.44$	$4.66 \pm 1.56$	0.222

### Discussion:

According to the results of this study, a significant relation was detected between sensational seeking and the amount of perceived stress among high school students of Bandar Abbas (P=0.017). This means that students with higher scores of sensational seeking have more stress than other students. Also, on the other hand, different aspects of sensational seeking such as excitement, susceptibility to boredom, experimenting and inhibition escaping were not significantly related to perceived stress (p>0.05 for all relationships). Despite many studies, family education and economic status of the family was not related to stress and sensational seeking. This study showed that there is a significant relationship between perceived stress and sensational seeking. Since no other studies have been conducted in this

issue, it is crucial to conduct further studies in this regard.

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