

PERCEIVED STRESS AND COPING STRATEGIES AMONG UNIVERSITY STUDENTS

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ABSTRACT

The purpose of the study is to assess both perceived stress and coping strategies among university students in a specific cultural context. A sample of 223 undergraduate students from Qatar University responded to self-rating questionnaires, Perceived Stress Scale (PSS) and Brief Cope Inventory adapted forms. Based on the Perceived Stress Scale, the results show that a majority of participants evinced a moderate stress level (76 %) followed by a high stress level (12 %) and that girls are significantly more stressed than boys are. In addition, a high academic level is correlated with more perceived stress. Based on the Brief Cope Inventory, most of the participants used religion and a positive coping strategy. These results reveal that the effect of stress depends on the way it is perceived. Coping strategies are influenced by social and cultural characteristics. Culture affects our stress perception and individual choice of coping strategies. Assessing students' problems may help prevent the bad effects of stress on health and academic performance. Results also invite further study, particularly in the form of a longitudinal follow-up.

Keywords: Perceived stress, coping strategies, Cultural context, University students.

INTRODUCTION

The link between stress and health is attested by numerous researches, which agree that different psychobiological or behavioral factors may affect this relationship (Lovallo, 2005). Stress affects both physical health (Lovell, Moss, & Wetherell, 2011) and psychological well-being.

To a high level of stress are associated all kinds of physical manifestations such as diabetes, insomnia, headache, cardiovascular and immune system diseases (Cherewatenko & Perry, 2003).

Stress is a dynamic interaction between the individual and his/her environment (Lazarus, 1999 and Lazarus and Folkman, 1984). It is neither an isolated environmental stimulus nor a psychological response. It consists in a relationship between environmental demands and the ability to deal with them.

To cope with stressful situations and maintain a state of equilibrium with the environment, people use different kinds of behavior and strategies such as those coping strategies consisting in thoughts and actions employed to deal with a threatening situation.

Based on this transactional definition of stress, we observe that a student's life is very stressful due to various factors such as studies, exams, competition or parents' pressure. This fact justifies our study and allows a real comprehension of this particular context.

In fact, the consequences of a stressful academic environment and life in general are various and contingent on our own perceptions. In our study, we used self-reported measures related to the degree to which situations in an individual's life are perceived as stressful. Individuals consider the severity of the stressful situations differently, depending on their own perception of the situation.

Even the research field recognizes the stress as a dynamic interaction between a person and his/her environment. Unfortunately, we have observed that the cultural factor is neglected in most of the traditional research paradigms concerning stress and coping strategies.

In that sense, we believe that the meaning of events in people's lives cannot be understood without referring to the cultural context.

The aim of our overview is to help future research to build a cross-cultural model investigating the field of stress and coping. The study is conducted within the context of an Arab culture and we simultaneously evaluate the stress and the coping strategies among university students. In this particular case, it is interesting to explore some aspects of the students' psychological health taking into consideration the perceived stress and the most used coping mechanisms they resort to.

Method

Participants

A total of two hundred and twenty three undergraduate male and female students were recruited from the Qatar University. The mean age of the participants was 22.6 years (SD-1.75). Of the 223 participants (38) 17 % were male, (185) 83 % were female. (174) 78% Qatari and (49) 22% from other nationalities. Most of them were from higher socio-economic status.

Measurements

Participants were asked to complete a demographic profile and two self-rating questionnaires: The Perceived Stress Scale (Cohen, Kamarck, and Mermelstein, 1983) and The Brief Cope Inventory (Carver, C. S., 1997).

We used a validated Arabic version of the two scales (Almadi et al., 2012 and Ayman et al., 2015).

The Perceived Stress Scale

The Perceived Stress Scale (PSS) was based on Lazarus' stress theory, and was designed to measure the degree to which individuals perceive their lives as unpredictable, uncontrollable, and overwhelming.

The PSS is a 14-item scale that includes questions about participants' stressful thoughts or feelings related to situations in their life within the last month. Each item is rated on a 5-point answer scale ranging from 0: "never" to 4: "very often". The PSS is not a diagnostic instrument, so no cut-off points are provided.

The total PSS scores were computed by reversing the scores on the seven positive items, and then adding the responses to all 14 items for each participant.

Questions B4, B5, B6, B7, B9, B10, and B13 were the positively stated items. The scores of the PSS can range from 0 to 56.

In this study, we used the 14-item PSS version due to its notable good psychometric properties and the evidence of its validity [102].

The Arabic version of Perceived Stress Scale, used in this study, has good reliability and validity (Almadi T. & al. 2012)

The Brief COPE

The Brief COPE scale is a validated short form of the COPE inventory 15 for measurement of coping in health related research. The Brief COPE consists of 14 scales of two items each. Both cognitive and behavioral strategies of coping are included and are rated by the four-point Likert scale, ranging from “I haven’t been doing this at all” (score one) to “I have been doing this a lot” (score four). In this study, there were no cut-off point scores for coping strategies.

In total, this scale covers 14 dimensions. These are self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. Every dimension has two items. The coping dimensions also can be divided into two major categories: problem-focused strategies (i.e. active coping, planning, and using instrumental support) and emotion-focused strategies (i.e. positive reframing, acceptance, religion, using emotional support, and denial).

The Arabic version used in this study has good reliability and validity (Ayman M. & al., 2015)

Procedure

Completion of the questionnaire was voluntary and would not affect students’ progress in their studies. A face-to-face session was held with students. Data was collected by a guided self-administered questionnaire. The time taken by the students for filling in the questionnaire was around 15 minutes.

Results

Perceived Stress

Findings revealed that 76.7% from the total of students had moderate stress. Whereas 12.6% showed high stress and 10.8 % exhibited low stress.

In addition, the results illustrate that Perceived stress was associated with gender since we observe that girls are more stressed than boys are. A 2X2 ANOVA revealed a significant effect of gender, $F(1, 26) = 0.236, > 0.005$.

Furthermore, perceived stress is correlated with the academic level: we have observed an increase of the stress the higher the academic level is. This result confirms that a university is a stressful environment.

At the same time, the results illustrate that Perceived stress was not associated with nationality, social status, course major and employment. Stress concerns all students whatever their situation might be.

Table 1: Descriptive statistics of different variables and stress level among undergraduates

Variables		Low Stress		Medium Stress		High Stress		Total	
		Number	%	Number	%	Number	%	Number	%
Gender	M	9	4	27	12.1	2	0.9	38	17
	F	15	6.7	144	64.6	26	11.7	185	83
Nationality	Q	18	8.1	142	63.7	14	6.3	174	78
	NQ	6	2.7	29	13	14	6.3	49	22
Academic level	1	7	3.1	31	13.9	5	2.2	43	19.3
	2	6	2.7	46	20.6	11	4.9	63	28.3
	3	5	2.2	51	22.9	7	3.1	63	28.3
	4	6	2.7	43	19.3	5	2.2	54	24.2
Social status	Single	13	5.8	97	43.5	13	5.8	123	55.2
	Married	11	4.9	68	30.5	15	6.7	94	42.2
	Non	0	0	6	2.7	0	0	6	2.7
Course Major	Hum.	11	4.9	80	35.9	16	7.2	107	48
	App. Sc	13	5.8	91	40.8	12	5.4	116	52
Employment	Yes	11	4.9	47	21.1	5	2.2	63	28.3
	No	13	5.8	124	55.6	23	10.3	160	71.7
Total		24	10.8	171	76.7	28	12.6	223	100

Coping Strategies

Based on the Brief Cope Inventory, the most commonly used coping strategies were religion (mean 7.91 ± 1.6), acceptance (mean 7.24 ± 1.3), and planning (mean 7.20 ± 1.4) followed by Positive reframing (mean 6.90 ± 1.3). The lowest scores were on substance use (2.57 ± 0.4), behavioral disengagement (mean 4.06 ± 1.4) and denial (mean 4.08 ± 1).

These results show that students use the most common positive strategies such as religion or planning. At the same time, the less used strategies are considered as negative such as substance abuse or behavioral disengagement.

Furthermore, coping strategies are not associated with gender, nationality, academic level, or social status.

Table 2: Different patterns of the coping strategies used by students

Variables	Level			SD	Mean
	High	medium	Low		
Self-distraction	10	8 -4	3	1.89	6.19
Active coping	10	9 -5	4	1.75	6.76
Denial	7	6-2	1	2.11	4.08
substance use	5	4 -2	1	1.23	2.57
Use of emotional support	8	7-3	2	2.10	4.84
Use of instrumental support	9	8-4	3	2.29	5.85
Behavioral disengagement	7	6-2	1	1.85	4.06
venting	9	8-3	2	2.19	5.45
Positive reframing	10	9-5	4	2.00	6.90
Planning	10	9-5	4	1.74	7.20
Humor	7	6-3	2	1.75	4.65
Acceptance	10	9-5	4	1.83	7.24
Religion	10	10 -6	5	2.02	7.91
Self-blame	9	8-3	2	2.17	5.43

Discussion and conclusion

In conclusion, our study reveals the complexity of understanding the stress and its multi-factorial causes and forms. It is clear that a university is a special context in which students have to manage stressful situations and maintain a state of psychological equilibrium using different personal strategies.

At the same time, we have to consider the cultural context in which individuals evolve. Culture affects our stress perception and individual choice of coping strategies. In our study, the high level of the recourse to religion as a coping strategy can explain the strong effect of the cultural context.

In accordance with the theory of coping, the belief systems of individuals play a role in their coping process facing adversity (Lazarus and Folkman, 1984, Pargament et al., 2000). Among these diverse systems of beliefs, religion and spirituality have been isolated by many studies as major determinants of psychological adjustment (Koenig, 2008).

Furthermore, assessing students' problems may help prevent the bad effects of stress on health and academic performance. This would require specific stress management programs in which we can help students to cope positively with their usual problems.

Our study also invites further studies, particularly in the form of longitudinal follow-up to better understand the stress psychology.

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