

Student's Coping Strategy: Comparison Within Undergraduate Male Health Professional Students

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Abstract

Background of the problem:

Stress is prevalent among medical professionals and the medical students are under significant training stress which can cause distress and influence health outcomes.

Objectives

The purpose of the study was to determine the effects of academic stress on health outcomes in medical students

Methods

Total 735 medical students from different medical college selected for the present study. For measure the academic of stress, Gadzella's (1991) Students-life Stress Inventory (SSI) was used. In assessing the Health outcomes, the Medical Outcome Study: Short-form 36 (MOS SF-36) that was developed by Ware, Snow, Kosinski, Gandek (1993) was used.

Results

The findings of the study shows that, Academic stressors and Reaction to stressors were correlated negatively with General health perception, Physical functioning, Role of functioning, Social functioning, Bodily pain, and Mental health.

Conclusion

The study found that there was Negative correlation between Academic Stress and Health outcomes.

Introduction

Coping is a psychological construct that involves the use of emotional processing and emotional expression in response to a stressful situation. (Stanton & Franz, 1999). Coping is a conscious attempt to address and alleviate demands perceived as stressful. Folkman, et.al (2006). Coping styles correctly handle stressful events (Wood, 2007). Coping processes have also been defined instead on whether they involve approaching the stressful situation or avoiding it (Charles et.al. 1994). "Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales". Journal of Personality and Social Psychology. 67 (2): 319–333. Coping is expending conscious effort to solve personal and interpersonal problems, and seeking to master, minimize or tolerate stress or conflict. Academic Stress was found to be a part of students' life and could give impact on how students cope with the demands of Academic life. Three general strategies or styles of coping with stressful situations have been identified by Kohn et

al. (1994): (a) problem-focused coping, directed at remedying a threatening or harmful external situation; (b) emotion-focused coping including ventilating, managing, or relieving one's emotional response to such a situation; and (c) avoidance-focused coping involving attempts to remove oneself mentally or even physically from threatening or damaging situations. Research by Kohn et al. (1994) found that both problem-focused and emotion-focused coping were significantly related to positive adaptation to stress, while avoidance-focused coping was related to both positive and negative adaptation to stress. Academic Stress was found to be a part of students' life and could give impact on how students cope with the demands of academic life. There are number of reports available and indicates that medical school's environment is not congenial and friendly to enhance psychological and physical health of students (Guthrie et al., 1998; Given et al., 2002; Vitaliano et al., 1989, Singh 2015, Singh 2015b,). It is less than 3% in any population suffers from psychiatric diseases. Similar figure also observed with medical students before taking admission in medical school (Institute for Health System Research, 2002; Yusoff et al., 2013a; Yusoff

et al., 2013b; Smith et al., 2007). Coping strategies have been found to moderate stressful experiences. Coping strategies included individual lifestyle adaptations, family support, religious structures and study groups

Methods

Target Population

In all,388 medical students (MBBS) during the academic year 2014-2015 selected as a sample size for the study. The data was collected from the students Govt. Medical College Aurangabad, Govt Medical College, MGM Medical College, Aurangabad, Medical College Latur, Shankarao Chavan Medical College Nanded, Government Medical College Akola and Punjab Rao Deshmukh Medical College Amravati. Instructions were given to the students before filling these questionnaires by the Researcher or Research Assistant

Demographic information

The demographic information was collected through respondents in the form of different descriptive tests. The demographic information about, age, sex, daily smoking etc. was obtained before seeking responses.

Consent form

This form was formatted in English language & give to all participants of this study. The written consent will be taken from each subject before screening procedure.

Data processing:

The collected data was analyzed as a whole . The data was checked for accuracy and completeness and was coded and put up into the SPSS Descriptive statistics for all studied variables, Regression analysis, was considered statistically technique throughout the study and the level of significant was set-up at 0.05 level.

Results of the study

The results concerning this are presented in the form of tables. For the sake of convenience and methodical presentation of the results, following order has been adopted.

TABLE – 1
MEAN SCORES AND STANDARD DEVIATION OF THE COPING AND ITS SUBSALES AMONG YEAR WISE MALE MEDICAL STUDENTS

Sr. No	Coping	Years wise male medical students	Number	Mean Scores	Standard Deviations
1	Problem focus coping	First	170	17.74	4.87
		Second	108	18.47	4.58
		Third	78	16.88	4.74
		Fourth	32	19.59	3.78
2	Wishful Thinking	First	170	8.25	3.38
		Second	108	9.19	2.96
		Third	78	8.89	2.83
		Fourth	32	8.93	3.05
3	Seeking social support Detachment	First	170	9.31	3.68
		Second	108	9.42	3.35
		Third	78	10.03	3.01
		Fourth	32	10.93	2.19
4	Seeking social support	First	170	10.44	3.80
		Second	108	11.73	3.19
		Third	78	10.29	3.49
		Fourth	32	12.68	3.06
5	Focusing on the positive	First	170	6.75	2.86
		Second	108	6.86	2.54
		Third	78	6.70	2.67
		Fourth	32	7.59	1.79
6	Self-blame	First	170	5.22	1.87
		Second	108	5.06	1.89
		Third	78	5.02	1.75
		Fourth	32	5.37	1.80
7	Tension reduction	First	170	4.32	2.27
		Second	108	4.56	1.92
		Third	78	4.84	1.94
		Fourth	32	5.12	1.38
8	Keep of self	First	170	5.19	2.10
		Second	108	4.95	1.77
		Third	78	5.37	1.77
		Fourth	32	4.78	1.67
Coping	First	170	67.27	15.47	
	Second	108	70.26	13.86	
	Third	78	68.06	11.93	
	Fourth	32	75.03	9.83	

Table- 1 Shows the Mean scores and Standard deviation of the Coping and its eight subscales of year wise male medical students. The mean scores (SDs) of Coping with respect to Problem focus coping of first year male medical students were obtained 17.74(4.87), second year male medical students were recorded 18.47(4.58), third year male medical students was got 16.88 (4.74) and fourth year male medical students were observed 19.59 (3.78) respectively. Whereas, The mean scores (SDs)

of Coping with respect to Wishful Thinking of first year male medical students were obtained 8.25(3.38), second year male medical students were recoded 9.19(2.96), third year male medical students was got 8.89 (2.83) and fourth year male medical students were observed 8.93(3.05) respectively. However, The mean scores (SDs) of Coping with respect to Seeking social support Detachment of first year male medical students were obtained 9.31(3.68), second year male medical students were recoded 9.42(3.35), third year male medical students was got 10.03(3.01) and fourth year male medical students were observed 10.93 (2.19) respectively. Meanwhile, The mean scores (SDs) of Coping with respect to Seeking social support of first year male medical students were obtained 10.44(3.80), second year male medical students were recoded 11.73(3.19), third year male medical students was got 10.29 (3.49) and fourth year male medical students were observed 12.68 (3.06) respectively.

While considering, the mean scores (SDs) of Coping with respect to Focusing on the positive of first year male medical students were obtained 6.75(2.86), second year male medical students were recoded 6.86 (2.54), third year male medical students was got 6.70(2.67) and fourth year male medical students were observed 7.59 (1.79) respectively. Meanwhile, the mean scores (SDs) of Coping with respect to Self-blame of first year male medical students were obtained 5.22(1.87), second year male medical students were recoded 5.07 (1.89), third year male medical students was got 5.02(1.75) and fourth year male medical students were observed 5.37(1.80) respectively. Meanwhile, the mean scores (SDs) of Coping with respect to tension reduction of first year male medical students were obtained 4.32 (2.27), second year male medical students were recoded 4.56(1.92), third year male medical students was got 4.84 (1.94) and fourth year male medical students were observed 5.12 (1.38) respectively. Meanwhile, the mean scores (SDs) of Coping with respect to keep of self of first year male medical students were obtained 5.19 (2.10), second year male medical students were recoded 4.95 (1.77), third year male medical students was got 5.37(1.77) and fourth year male medical students were observed 4.78 (1.67) respectively. Finally, the mean scores (SDs) of Coping with respect to coping of first year male

medical students were obtained 67.27(15.47), second year male medical students were recoded 70.26(13.86), third year male medical students was got 68.06 (11.93) and fourth year male medical students were observed 75.03(9.83) respectively.

**TABLE – 2
DIFFERENCES OF COPING OF YEAR WISE
MALE MEDICAL STUDENTS**

Sr. No	Coping	Source of Variance	DF	SS	MSS	F-ratio s
1.	Problem focus coping	Between groups	3	211.62	70.54	3.20 *
		Within groups	384	8443.20	21.98	
2.	Wishful Thinking	Between groups	3	64.33	21.44	2.17
		Within groups	384	3782.58	.85	
3.	Detachment	Between groups	3	88.80	29.59	2.61
		Within groups	384	4342.01	11.30	
4.	Seeking social support	Between groups	3	239.01	79.67	6.41 *
		Within groups	384	4768.32	12.41	
5.	Focusing on the positive	Between groups	3	20.93	6.97	.97
		Within groups	384	2736.47	7.12	
6.	Self-blame	Between groups	3	4.67	1.55	.45
		Within groups	384	1314.04	3.42	
7.	Tension reduction	Between groups	3	25.63	8.54	2.02
		Within groups	384	1621.75	4.22	
8.	Keep of self	Between groups	3	12.50	4.16	.23
		Within groups	384	6957.04	18.11	
Coping		Between groups	3	1911.05	637.01	3.26 *
		Within groups	384	74986.41	195.27	

Table -2, depicted the differences of Coping along with its eight subscales of year-wise Male medical students. The result given in Table -6.13 reveals that significant difference of Coping was found in year wise male medical students (F=3.26, P<.05). In order to find out the differences of eight subscales of Coping between year wise male medical students; F-ratio was computed for each category separately. The result reveals that significant differences were found in Coping with respect to Problem focus coping (F=3.20, P <.05), Seeking social support

(F=6.41, P<.05). However, insignificant differences were found in Wishful Thinking (F=2.17), Detachment (F=2.61), Focusing on the positive (F=0.97), Self-blame (F=0.45), Tension reduction (F=2.02) and Keep of self (F=0.23) among year wise male medical students.

Table 6.14, presents the results in order to locate the differences of Problem focus coping among four groups male medical students; Scheffe post hoc test was applied for differences of Problem focus coping of year wise male medical students.

TABLE- 3

SCHEFFE POST HOC TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POSTS PAIRED MEANS ON PROBLEM FOCUS COPING OF YEAR WISE MALE MEDICAL STUDENTS.

MEAN SCORES				MEAN DIFFE RENCE	C.D.AT 0.5% LEVEL
I YEAR	II YEAR	III YEAR	IV YEAR		
17.74	18.47			.73	2.35
17.74		16.88		.86	0.94
17.74			19.59	1.85	1.38*
	18.47	16.88		1.58	.36*
	18.47		19.59	1.12	2.77
		16.88	19.59	2.71	2.47*

The results of the study showed that 1) there was insignificant difference of Problem Focus Coping was found between first and second year male medical students. 2) There was insignificant difference of Problem Focus Coping was found between first and third year male medical students. 3) There was significant difference of Problem Focus Coping was found between first and fourth year male medical students. The findings of the study shows that fourth year male medical students were found to have got more Problem Focus Coping rather than first year male medical students. 4) There was significant difference of Coping with respect to Problem Focus Coping was found between second and third year male medical students. The findings of the study shows that second year male medical students were found to have got more Problem Focus Coping rather than third year male medical students. 5) There was insignificant difference of Problem Focus Coping was found between second and fourth year male medical students. 5) There was significant difference of Problem Focus Coping was found between third

and fourth year male medical students. The findings of the study shows that fourth year male medical students were found to have got more Problem Focus Coping rather than third year male medical students.

TABLE- 4,

SCHEFFE POST HOC TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POSTS PAIRED MEANS ON SEEKING SOCIAL SUPPORT OF YEAR WISE MALE MEDICAL STUDENTS.

MEAN SCORES				MEAN DIFFE RENCE	C.D.AT 0.5% LEVEL
I YEAR	II YEAR	III YEAR	IV YEAR		
10.44	11.73			1.29	1.25*
10.44		10.29		.15	1.20
10.44			12.68	1.24	2.14
	11.73	10.29		1.44	.03*
	11.73		12.68	.95	1.94
		10.29	12.68	2.39	2.28*

The results of the study showed that.

- 1) There was significant difference of Seeking Social Support was found between first and second year male medical students. The findings of the study shows that second year male medical students were found to have got more Seeking Social Support rather than first year male medical students.
- 2) There was insignificant difference of Seeking Social Support was found between first and third year male medical students.
- 3) There was insignificant difference of Seeking Social Support was found between first and fourth year male medical students.
- 4) There was significant difference of Seeking Social Support was found between second and third year male medical students. The findings of the study shows that second year male medical students were found to have got more Seeking Social Support rather than third year male medical students.
- 5) There was insignificant difference of Seeking Social Support was found between second and fourth year male medical students.
- 6) There was significant difference of Seeking Social Support was found between third and fourth year male medical students. The findings of the study shows that fourth year male medical students were found to have got more Seeking Social Support rather than third year male medical students.

Discussion

The result (Table -2) reveals that significant difference of Coping was found in year wise male medical students. The findings of the study shows that , fourth year medical students have better coping ability due to more experience and ability to face problems from long time. In order to find out the differences of eight subscales of Coping between year wise male medical students; significant differences were found in Coping with respect to Problem focus coping and Seeking social support . However, insignificant differences were found in Wishful Thinking, Detachment, Focusing on the positive, Self-blame, Tension reduction and Keep of self among year wise male medical students. The findings of the study shows (Table-6.3) that fourth year male medical students were found to have got more Problem Focus Coping rather than their counterparts. In addition, fourth year male medical students (Table-6.4) also more Seeking Social Support coping rather than first, second and third year male medical students. The fourth year medical students have more competitive temperament , ability to solve problem efficiently and experience may contributed to their more Problem Focus Coping and Seeking Social Support coping. Stewart et. Al. used the COPE, a multidimensional coping inventory which includes evaluation of both problem-focused and emotion-focused coping strategies, in studies of Hong Kong Chinese medical students (Stewart et al, 1997, Stewart et al, 1999). Studies from developing countries like Pakistan, India, Thailand and Malaysia have reported stress among medical students and have underscored the role of academics as a source of stress (Shaikh et. al, 2004; Supe, 1998; Saipanish, 2003 and Sherina, 2004). But these studies have either not assessed the coping strategies or did not use biological factor as parameter to assess stress. A study from the United Kingdom has reported a higher rate of psychological morbidity and stressors related to medical training among the first year students in a new problem-based medical curriculum (Moffat et. al, 2004)

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