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**ORIGINAL PAPER** 

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# THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE WITH RELIGIOUS COPING AND GENERAL HEALTH OF STUDENTS

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#### **ABSTRACT**

Aim. This research organized to determine the relationship between Emotional Intelligence (EI) with Religious Coping and Mental Health of students at Mazandaran University of Medical Sciences. Method: This descriptive and analytical study was conducted in 2014 on 335 students at Mazandaran University of Medical Sciences. Students were selected by stratified random sampling method. The instruments to gather data were Bradberry and Greaves Standard Emotional Intelligence Questionnaire, the 12-item General Health Questionnaire, and the Pargament's Religious Coping. Data was analyzed by SPSS 21 via descriptive and inferential statistics (Pearson and Spearman's correlation). Results: Among 335 students under investigation, 144 students were male (43%) and 191 ones were female (57%). Their ages were ranging from 17 to 34 years old (21.02±2.014). Average EI scores, positive religious coping, negative religious coping, and mental health were 91.27, 14.91, 4.86, 5.34, respectively. Moreover, there was a direct and significant relationship between EI and positive religious coping (r=0.282, P<0.001). Conclusions: According to the results of this study, there is a direct correlation between positive religious coping and emotional intelligence. So Strengthening religious coping can promote emotional intelligence that is one component of mental health.

Key words: Emotional Intelligence, Mental health, Medical Student.

# 1. INTRODUCTION

Before the Emotional Intelligence (EI) was ever introduced, psychologists were mostly tending to observe intelligence quotient. Today, psychology scholars have found that most of one's accomplishments are associated with the acts involved in the area of emotional intelligence (1). Presently, some scholars believe that EI has the potential to learn and advance, while others have considered it to be immobile (2). During the last 15 years, many scientific looks have been casted on the EI, on which several theoretical and empirical studies have been carried out (3, 4). It seems that the EI concept was propagated in psychology by Salovey in 1990 (5), and Promoted by Goleman in 1995 (6). EI is ability to perceive, identify, employ, and control of emotions (7). According to new findings, EI is divided into two categories of individual (personal competence and self-sufficiency) and social capabilities (the ability to manage one's relationships with others) (8). So far, international and national studies on assessment of EI level and its comparison with different factors impacting on college students have been scarce. Thus, there are no precise statistics available thereon, and there is only some contracted research in academic level in some regions of the world. For instance, according to a study conducted in 2008 on 180 students at Golestan University of Medical Sciences, EI scores of the students was estimated 102.29±12.57 (9), which was an average level. Another research on EI indicated that students' EI scores go on the gradual rise during their education years, which could be attributed to an increase in their clinical experiences and developmental evolutions (10). After years of study on EI, its role on general health of individuals was known (11) and demonstrated that people with higher EI levels can have more effective social relationships. Emotional intelligence has a important effects on medical students, because of this students work with peoples and in human relationships, emotional intelligence skills is very effective and important (12, 13). According to a study on medical students at university of Edinburgh 17% of medical students had symptoms

of psychological morbidity and based on a study in Iran, 52.3% students had psychiatric disorders (14, 15).

The research indicated that there is a significant relationship between EI and general health (16-18), but there is no study was done to investigate the relationship between EI and RC yet. Religious coping is a method that people take advantage from them for coping with their life stresses (19). Some studies have demonstrated an effective relationship between RC and reduction of stress, anxiety levels and depression (20, 21), which, these items predict general health.

## 2. METHOD

This descriptive and analytical study was done in 2014 on students at Mazandaran University of Medical Sciences. Sampling was done by stratified random sampling method and 335 students (from 2600 students, in accordance with Krejcie & Morgan's table) were selected from different semesters among six schools, including medical (43 students), paramedical (68 students), dentistry (48 students), nursing (47 students), midwifery (45 students), pharmacy (37 students) and hygiene (47 students) of the Mazandaran University of Medical Sciences. By proportion of the population of each school, samples were collected. 335 questionnaire (all of the items) were completed by selected students.

Instruments

The instruments to data gathering were demographic information questionnaire, Bradberry and Greaves Standard emotional intelligence questionnaire, the 12-item Goldberg General Health Questionnaire (GHQ-12), and the Pargament's Religious Coping (RCOPE). One of the questionnaires was 28-item Bradberry and Greaves Standard Emotional Intelligence Questionnaire including self-consciousness, selfmanagement, social awareness, and relationship management subscale. Based on a study to determine validity of the research, this questionnaire was distributed in a 97 persons that showed a correlation coefficient equal to 0.68 (Significant at 0.01) (22). Another research conducted on 540 students using Cronbach's alpha demonstrated 0.822 for male and 0.839 for female groups of students (23). Likert Scale was used in which questions with positive content were scored from 1 to 6 (never to always) and questions with negative content from 6 to 1 (always to never). According to one's score achieved in this study, i.e., below 59, 60-79, 80-89, and 90-100, he/she would be assigned to weak and worrying, weak-to-average, average, and high EI clusters, respectively (24). Demographic Information Questionnaire included age, gender, discipline, work history, marital status, and academic level.

General Health Questionnaire (GHQ-12) included 12 items that assessed four subscales: self-reliance, anxiety, conformity to ordinary life conditions, and depression. Scoring method from A to D was 0, 0, 1, and 1, and general score of the test is variable from 0 to 12. Lower scores indicate better mental health: scores lower and higher than three indicate mental wellness and mental disorder, respectively (25). In a research on Australian primary school students (2011), reli-

ability of the General Health Questionnaire was calculated 0.87 by Cronbach's alpha test (26). In addition, Sabzeh Aray Langaroodi et al. (2014) calculated its reliability in primary school students to be 0.79 using Cronbach's alpha test (27).

Religious Coping Questionnaire(RCOP) includes 14 questions, whose first seven items assess positive attitudes and second seven items negative ones. Scoring is completed using Likert scale: from 0 to 3 are scored by four options from never to always. Positive Religious Coping (PRC) is one's management that people apply to lives negative events by seeking assistance of the God. Negative aspect of religious coping evaluates the uncertain and avoidant relationship with the God (28). Pargament et al. reported internal consistency (Cronbach's alpha) of Religious Coping Scale 0.8 (29, 30).

Criterias and Ethical Considerations

The inclusion criteria was mental health (assessed with self reporting), lack of chronic diseases, post graduated students, resident students and exclusion was dissatisfaction of students during the study. After reception of consent form, questionnaires were handed out. Some of the parameters of consent form was ensure the non-disclosure of informations, give the overall results to students and exclusion in case of dissatisfaction. After getting permission from department of education, based on lists of students that selected with randomized method, after explanation details of the study and getting consent form from students, questionnaires were distributed.

Data Analysis

Data was analyzed using SPSS 21.0 (released 2007; SPSS for Windows, SPSS Inc., Chicago, IL, USA). Basic descriptive for quantitative variables was presented using mean (SD) and n (%) for qualitative variables. Pearson and Spearman's correlation used for assessment of correlation between main and demographic variables. Also normality of data was approved by Kolmogotov-Smirnov test (*P*=0.751).

## 3. RESULTS

Through 335 students, 144 students were male (43%) and 191 ones were female (57%). Most of the students were single (87.8%), and a number of 316 of them (94.3%) had no work experience. Age average of students was 21.02±2.014. Frequencies of associate's, bachelor's, master's, and doctorate degrees were 8 (2.4%), 198 (59.1%), 1 (0.3%), and 128 (38.2%) respectively.

Mean and standard deviation of EI scores for PRC, NRC and mental health of students are presented in the Table 1. Moreover, absolute and relative frequencies of EI variables and mental health are summarized in the Table 2.

According to the Table 2, the most of the students had higher levels of EI (68.1%) and the most of them had slight degrees of disorder in their mental health. Correlations among age, EI, positive religious coping, negative religious coping, and mental health are presented in the Table 3.

In addition, Spearman correlation test showed that there

General health	NRC	PRC	EI	Scale
5.34±1.955	4.86±4.325	14.91±4.718	91.27±8.055	Mean±Standard deviation

Table 1. Mean and standard deviation scores of El, positive and negative religious coping and general health

Score	El	Absolute frequency	Relative frequency	General health	Absolute frequency	Relative frequency	
	weak	0	0	Mental health	34	119/	
	weak to average	31	9%	- Mental nealth	34	11/6	
	average	76	23%	AA + - 1 - d' d	201	89%	
	high	228	68%	Mental disorders	301	07/6	

Table 2. Absolute and relative frequencies of students El and general health

is an inverse, significant relationship between academic level and negative religious coping (P=0.002), with which and mental health no special relationship was found (P=0.064).

#### 4. DISCUSSION

	1	2	3	4	5
1-Age	1				
2-EI	r=0.72				
Z-EI	p=0.191	1			
3-PRC	r=0.039	r=0.282			
3-PRC	p=0.482	**p<0.001	1		
4 NDC	r=0.127	r=-0.215	r=-0.059		
4-NRC	*p=0.021	**p<0.001	p=0.285	1	
5-General	r=0.057	r=0.025	r=0.064	r=0.025	
health	p = 0.30	p = 0.647	p = 0.240	p = 0.652	1

Table 3. Peasrson Correlation of EI with positive and negative religious coping and general health. \* Significant at p<0.05, \* Significant at p<0.01

According to results of this study, there is direct and significant relationship between religious coping and EI. Like this study in Ellen Pack's study, potential effect of religion on positive EI changes of Christians was proved (31). According to Elias and Van Dyke, additionally, there is a direct and significant relationship between positive religious orientation and higher EI levels (32), which was aligned with this study. Belief in existence of the Almighty God and His supreme controlling power can desirably reduce stress levels and grant an unrivalled spiritual power to human beings (33). In this study, students' positive religious coping was considerably higher than their negative religious coping that shows positive outlook related to religion by students.

Another study conducted among Rasht University students showed that there is no correlation between religious beliefs and elements of EI. The result is incongruent with the present study (33). This disagreement can be attributed to application of different religious questionnaires, that in the study was international standard questionnaire but in this study was Iranian questionnaire. There was no significant relationship between EI and general health. According to Jitna Porl et al., there was a significant and inverse relationship between EI and stress levels in students of nursing (34) which was incongruent with the results gained herein. Possible reason of this incongruity could be both low samples size in study (N=130) compared to present study and application of different questionnaires. Possessing high samples size could enhance accuracy of the results gained herein. In another research, a significant relationship was found between adults' EI and general health (35). The finding that was not aligned with the results found in present study. The reason to this issue could be differences in the type of studies, which was interventional type on Spanish adults with a low volume of samples. No special relationship between academic level and general health was founded. The

finding which was aligned with the research undertaken by Michael M (36). Another study indicated that there is a significant and direct relationship between increased levels of academic degrees and stress tiers (34). The finding which was not aligned with the results of this study. This incongruity could be associated with limitation of sample size in compared to the research as well as low age dispersion of the students taking part in present study.

In another research there was no significant relationship between academic degrees and mental health (37) that was aligned with the results of this study. Inverse, significant relationship was found between negative religious coping and academic degrees, that the findings was congruent with another study (38). There was no significant relationship between general health and religious coping. Like this study results Arjan W Bram et al. research, also, no significant relationship was founded between religious coping and depression (39).

Another study showed an inverse and significant relationship between general health and religious coping (36) that was not aligned with this study. It is seem can be attributed to the difference of the type of samples. Because in the study population were patients. In another research noted that the relationship between general health and religious coping is direct and significant (40) that was opposed to the results of this study. This contradiction could be related to the fact that this study used a population of patients, whose result of conditions are undoubtedly different from those of healthy people. The same this study there was no significant relationship between positive religious coping and general health of students in another study (41). Another research found a significant relationship between religious coping and general health (37) that was opposed to the results of this study because it used a population of patients as its samples.

# 5. CONCLUSION

According to the results of this study, most students possess high levels of positive religious coping and EI, and low health disorder levels. It is proposed to improve positive religious coping and EI levels of students. The endeavor which will bring success to the youth's lives. In addition, context causes for any mental disorder can be examined and resolved in early stages through offering consultation services. Also improving emotional intelligence by religious coping education, can improve nurses social relationships that improving quality of health care.

Study Limitations

Study limitation was a little inaccuracy in the answer because of the large number of questions. Further research to elucidate the variables relationships along with large sample size is recommended.

#### CONFLICT OF INTEREST: NONE DECLARED.

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