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IMPACT OF TRAIT EMOTIONAL INTELLIGENCE ON PSYCHOLOGICAL WELL-BEING IN STUDENTS OF HEALTHCARE DISCIPLINES

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ABSTRACT

The objective of the present study was to examine the predictive relationship of emotional intelligence (EI) with psychological well-being (i.e., Depression, Anxiety & Stress) among students enrolled in healthcare disciplines. Total two hundred students were selected from different medical universities and colleges using purposive sampling technique with the age range of 19-30 years (M= 23.2, SD =2.04). The assessment measures used in this study were; Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF; Petrides, & Furnham, 2006) and Depression Anxiety and Stress Scale (DASS-21, Lovibond & Lovibond, 1995). Results of Linear Regression Analysis indicated that trait emotional intelligence contributed 4.6% variance in psychological distress $\Delta R^2 = .46$, $F (1, 197) = 10.511$, $p = .00$. *The results demonstrate that trait emotional intelligence significantly influences psychological distress. Findings of this research may help the implications for the medical students to prevent their stress, depression and anxiety in future.*

Keywords: *Negative Life Events, Internalizing Problems, Gender, Adolescents*

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INTRODUCTION

Medical education is inherently a stressful profession. This profession is arduous and demands highly, cognitive and emotional performance. There is individual variability to respond to stressors; stressful conditions can impair social, emotional and occupational functioning of an individual if he/she is not well prepared to face such situations. On the other hand, if they are well equipped cognitively and emotionally then these potentials serve as buffers to overcome these stressors. According to researchers (e.g., Lewis, Rees, & Hudson, 2004), emotional intelligence is an important area in mental health. There are numerous factors involved in an individual's coping with life stressors; among them emotional intelligence has been considered as an important one.

Emotional intelligence (EI) is a well-known area that has fascinated experts in various disciplines for the last many years. According to the Mayer and Salovey (1997), "emotional intelligence is the ability to perceive accurately, appraise, and express emotions; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth". Further, Petrides and Furnham (2001) gave the alternative method of measurement of emotional intelligence in order to create a difference between EI as a 'cognitive-emotional ability' and EI as "a personality trait' which is also known as emotional self-efficacy. According to Petrides (2010), Emotional Intelligence (EI) is also called as self-adequacy, and it is defined as "a constellation of emotional self-perceptions, localized at the low level of personality hierarchy and measured through self-reporting questionnaires".

Mayer and associates (2004) have highlighted the significance of trait emotional intelligence and emphasized to explore the role of trait EI with various masses broadly unstudied and in various settings to completely comprehend the extent of EI practically. It is certain that EI has contribution in helping healthcare professional to cope with occupational as well social stressors and improve their well-being. According to researchers (i.e., Elam, Strattons & Andrykowski, 2001; Lewis, Rees & Hudson, 2004), emotional intelligence is an important area in mental health.

Research on the medical residents showed that they experience high level of burnout and it is associated with depression and problematic patient care (Thomas, 2009). Other studies have suggested that individual's perception of stress

and capacity to deal with stressful situation affect psychological problems (Panagopoulou, Montgomery, & Benos, 2006; Shirom, Nirel, & Vinokur, 2009). There have been conducted numerous studies on emotional intelligence and its association with stress (Karimi, Cheng, Bartram, Leggat & Sarkeshik, 2014; Ruiz-Aranda, Extremera & Pineda-Galán, 2014), as well as in health in general (Martins, Ramalho & Morin, 2010).

According to World Health Organization (2014) mental health is defined as well-being in which every individual realizes his prospective and able to cope tensions or difficulties of life, do work successfully and effectively, and make input for themselves and society". Veenhoven (2009) describe the word "well-being" as 'quality-of-life'. While Awartani, Whitman, and Gordon, (2008) defines well-being as an ability of the individual's physical, psychological and potential related to spirituality. Several scholars (Ryff, 1989 & Gallagher, 2008; Furnham & Petrides, 2003) have discussed about the theory of emotional intelligence and its association with psychological and subjective well-being.

Researchers like, Austin, Saklofske and Egan (2005), conducted a study about "Personality, well-being and health correlates to trait emotional intelligence". Study revealed that interpersonal skills of high trait emotional intelligence among people are related with results, for example, better prosperity, social and individual connections. Further, Dyrbye, Thomas and Shanafelt (2005) conducted a survey to analyzed status of depression and emotional wellness issues in medical students. Finding of the investigation from United Kingdom showed that 33% of first-year therapeutic students had minor psychological well-being issues. Another research conducted in United Kingdom revealed that students showed the occurrence of distress (from 25% to 52%.4) during the first year medical studies. Different investigations have found related conclusions and suggest that this disappointment in students' emotional well-being proceeds all through their medicinal foundations.

At present the association between emotional intelligence and depression among medical students is an important topic for researches. Number of studies (Munsawaengsub, Yimklib, Nanthamongkolchai & Apinanthavech, 2009) discussed that Trait EI is a preserving aspect with regard to emotional well-being and psychological well-being, presenting for link with depression and somatic complaints. A study conducted by Salgueroand and associates (2012) to examine link between emotional intelligence and depression. Study showed the weak relationships between ability EI and depression.

Medical students have different challenges during their studies and practices, due to constant burden, majority of them suffers from anxiety, depression or stress. Various studies (Morken et al., 2013; Kumar, 2017) have documented depression, anxiety and stress among medical students, which negatively affects their performance in their respective field. They suggested that little stress is useful for students; it keeps them to focus on task; though extreme work can be unbearable and affects their results. In their study, Fernandez, Alcaide, Extremera, and Pizarro (2006) examined the relationship between EI, anxiety and depression among young students in their joint study. Study revealed that emotional abilities has an impact on psychological connection and self-esteem, and self-revealed emotional intelligence was linked to the levels of depression and anxiety (Bandura, 1997). In their study, Hunt and Evans (2004) found that emotional intelligence can significantly predict healthy functioning and support to reduce distress and traumatic stress. Other researchers (Evans & Wight, 2007) argued that traumatic experiences have been generally debated in context to medical students and reports of "high levels of perceived stress amongst these groups are common".

Studies examined the association between EI and stress in healthcare professionals (Nikolaou & Tsoussis, 2002; Landa et al., 2007) revealed that those with an odd state of passionate insight, experienced less worry at work. A study on EI and perceived stress in undergraduates conducted (Pau et al., 2007). Findings show that emotional intelligence and perceived stress are associated, while inquiry showed an opposite correlation between two variables.

Despite of empirical evidence of the association of psychological well-being with arrangement and enactment and to a well behavior effects, in Pakistan few researches have focused on the psychological well-being of these professionals. In this regard the existing research aims to investigate the role of Trait EI in psychological well-being of health care professionals. Therefore, this study focuses on to investigate its role in psychological well-being. By conducting researches like this we will be able to fill the gap to help those healthcare professionals by developing evidence based prevention and interventions so that they utilize their full potentials to contribute in the respective disciplines.

Following hypothesis was framed for present study:

1. Trait emotional intelligence would significantly predict psychological distress in students of healthcare disciplines.

METHOD

Participants

In this study, a sample of 200 medical students were recruited from different medical colleges/universities (public & private sector) situated in different areas of Karachi (a city of Sindh Province), Pakistan. Sample of the existing study was divided into two groups (male = 82 & females = 118) with ages between 19 years and 30 years (*M*= 23.2, *SD* =2.04) and their minimum education was MBBS 1st year and maximum education 5th year. Among them 25.5% were studying in MBBS 1styear, 21.5% were in the 2nd year, 20.5% were in the 3rdyear, 18.2% were in the 4th year and 14.3% were studying in the 5th year

Measures

Personal Information Form

Personal information was obtained through items focusing the respondent's age, gender, residence, highest level of education, last three years academic grade achieved, parental education, family structure, dual earners families, parental employment and family income, etc.

Trait Emotional Intelligence Questionnaire-Short Form

The Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF; Petrides, & Furnham, 2006) is 30 item questionnaire derived from the full Trait Emotional Intelligence Questionnaire designed to measure global trait emotional intelligence (Trait EI). This questionnaire uses a 7-point Likert-style response option format, ranging from *1 = Completely Disagree* to *7 = Completely Agree* (Cooper, & Petrides, 2010). Test-retest reliability over a 12-month time period was revealed as a range from .59 to .86. Cronbach's alpha remained significant in both genders with a range of .68 to .86. Internal consistencies of overall sales were .76. Concurrent validity was emphasized to provide evidence of a predictive ability distinct from existing measures. After accounting for the variances in the Big 5 personality dimensions, Trait EI was able to show correlations with theoretically related constructs (e.g., rumination, Life satisfaction, and coping) (Petrides, Pérez-González, &Furnham, 2007).

Depression Anxiety and Stress Scale

The Depression Anxiety and Stress Scale (DAAS-21; Lovibond & Lovibond, 1995) measures the negative emotional states of depression, anxiety and stress. The high scores on each scale indicated high levels of severity of a range of symptoms. This scale uses 4-point severity scales. The scale Cronbach's alphas ranging from .81 to .94 for the subscales and can be used with non-clinical population (Antony, Bieling, Cox, Enns, & Swinson, 1998). It has good internal reliability for all scales, i.e.Depression (α = .91), Anxiety (α = .81), Stress (α = .89) (Lovibond & Lovibond, 1995). Further, the correlations between Depression and Anxiety is .42, Anxiety and Stress is .46 and between Depression and Stress is .39. The subscale of depression is highly correlated with the Beck Depression Inventory (r = .74) (BDI; Beck et al., 1996) and subscale of Anxiety is correlated (r = .81) (Beck & Steer, 1990).

Procedure

Sample of the present research comprised of 200 students from various medical colleges/universities, situated in different areas of Karachi. In order to collect research data, first educational institutions were identified. A letter of permission along with the sample of demographic information, consent form and other psychological measures were provided to heads of the institutions. After getting permission from authorities (principals or administrators) of selected institutions, the researcher personally explained the purpose of study to the entire sample individually and or in groups. The Consent Forms were distributed to the respondents; those respondents who did not want to participate in the study and wished to return the forms were allowed to do so. After establishing the rapport, Personal Information Form was completed which focused on the subject's age, gender, birth order, and highest level of education, academic grade achieved residence, parental education and family structure. TEIQue-SF was administered in order to measure the emotional intelligence of respondents. After administering TEQue-SF, DAAS was administered. After the completion of data collection, the examiner thanked all the respondents and authorities.

Statistical Analysis

After completing the data collection, TEIQ*ue*-SF and DASS were scored according to standardized scoring procedures. Descriptive statistics was carried out to describe the frequencies and percentages. Further on, Simple Linear Regression Analysis was applied for investigating predictive relationship.

RESULTS

Table 1
Demographic Information of Sample (N = 200)

Variables		*f*	*%*
Gender	Male	82	41
	Female	118	59
Age group	Below 25	192	96
	Above 25	08	04
Academic level	MBBS	74	25.5
	1st year	60	21.5
	2nd year	33	20.3
	3rd year	18	18.5
	4th year	15	14.2
	5th year		
Financial status	Monthly income in Rupees		
	21.000-30.000	14	6.9
	31.000-40.000	31	15.3
	41.000-50.000	127	63.5
	50.000+	28	14.3
Living status	Home	126	64
	Hostel or Paying guest	74	36

Table 2
Psychometric Properties of Measures under Investigation (N = 200)

Variables	***n***	***M***	***SD***	***α***
Stress	200	1.45	.53	.80
Depression	200	1.48	.61	.82
Anxiety	200	1.44	.59	.78
DASS	200	1.46	.48	.81
TEIQue	200	4.20	.49	.75
Age	200	23.18	.61	-

Table 3
Correlation between the Variables under Investigation (N = 200)

Variables	**1**	**2**	**3**	**4**	**5**
1. Stress	1	.52**	.45**	.77**	-.10
2. Depression	-	1	.61**	.86**	-.27**
3. Anxiety	-	-	1	.84**	-.17*
4. Depression Anxiety And Stress	-	-	-	1	-.22**
5. Trait Emotional Intelligence	-	-	-	-	1

Table 4
Summary of Linear Regression Analysis with Trait Emotional Intelligence as predictor of Psychological Well-Being (N==200)

Outcome Variables	***R²***	***ΔR²***	***F***	***Sig.***
Trait Emotional Intelligence	.051	.046	10.51	.00*

*p <.05, *df* = 1, 197

Table 5
Coefficients for with Trait Emotional Intelligence as predictor of Psychological Well-Being (N==200)

Model	***B***	***SE B***	***ß***	***t***	***Sig.***
Constant	2.39	2.87			.00*
Trait Emotional Intelligence	-.22	.07	-.225		.00*

*p <.05

DISCUSSION

The hypothesis of the study stated that "Trait emotional intelligence will significantly predict depression in student of healthcare disciplines". Findings of present study are in line with the hypothesis and suggest that trait emotional intelligence significantly predicted psychological well-being (as measured through depression, anxiety and stress) collectively, β = -.225, ΔR^2= .046, F (1, 197) = 10.511, p = .000 (Table 4 & 5). The trait emotional intelligence has caused 4.6% variance in depression, anxiety and stress scores cumulatively. This implies that as TEIQ*ue* scores increase, the scores on depression decrease among health care students.

Similar findings have been reported by previous researches for instance, Ciarrochi and colleagues (2000) also observed negative relationship between emotional management skills and depression among students. In addition, Lam and Kirby (2002) asserted that emotional intelligence improves the enactment and productivity of persons across range of life domains and particularly in professional and academic domain. The potential reasons for such finding are that individuals high on emotional intelligence are well conscious of their feelings and consequently are well competent to regulate their emotions. Further, evidence suggests that emotional intelligence among healthcare students is stable and during student's academics and medical practices, it can serve as a protective factor against psychiatric symptoms and improves emotional well-being. Adequate academic performances requires rigorous emotional handling strategies, therefore emotional management strategies are pertinent for better mental health and healthy mind particularly among students of health care professions.

Previous researches have also found negative relationships between anxiety and emotional intelligence. Creed and Funder (1998) illustrate that anxiety symptoms among medical students during studies is common, because of their concern related to their performance and task accomplishment. Medical students have enduring anxiety due to excessive work and expectations of success in medical career. However, because of their understanding of emotions and feelings, and ability to regulate their emotions adequately are standing against the anxiety provoking situations. Understanding about anxiety-provoking conditions during medical students' life is a very important issue because it is required to solve difficulties during academic career. Emotional intelligence plays a vital role in order to deal with the daily life issues. Individuals who can control and deal with their feelings can easily hold dreadful situations.

Medical education is observed as a highly competitive profession. Due to their nature of job and its requirement they may also go under stress. Those who will take overly serious this might have a negative outcome on subjective working and learning. It has become important to understand that the daily experience of instructive situation, students might be tensed. However, in circumstances where stress is up to manageable landmark, it may have positive aspects.

In conclusion, this present study was carried out to determine the predictive relationship of trait emotional intelligence with psychological well-being among students of healthcare disciplines. Findings of this research revealed the area of emotional intelligence and its relationship with psychological well-being in

students. This study is a valuable piece to study mental health and future outcome of students in health care discipline. This study recommend the relation between emotional intelligence and psychological well-being, and may be a good direction to be followed in different occupations in order to investigate the relationships between emotional intelligence and well-being among different professionals, because this study introduced several motivating query for additional researches in healthcare profession as well different profession.

Despite these significant findings, there are certain confines in this research that needs to be improved in the future researches related to healthcare discipline. First, the assessment of emotional intelligence and psychological well-being was completed on the basis of self-reported questionnaires, in future, to assess emotional intelligence and well-being, comprehensive personality assessment is recommended to improve the quality of assessment techniques so that more valid and reliable information could be obtained, because measures we used in this study were self-reported and students at time may consciously suppress their true emotions and feelings. Second, the sample of present study included only medical students, while students from other healthcare disciplines were not included, thus the finding cannot be generalized to entire healthcare students. Further studies should focus on the inclusion of other disciplines to generalize the finding and to develop evidence based interventions.

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