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Research Article

The Relationship between Emotional Intelligence and Severity of Anxiety and Depressive Disorders

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Abstract

Background: The impact of emotions on individuals is substantial and influences daily life greatly; this also includes emotional problems and potential psychological disorders. Yet, there is a lack of research in the study of emotional intelligence (EI) among individuals with psychological disorders in the Arab world, including Saudi Arabia. Consequently, this study looks into understanding the relationship between emotional intelligence and its influences on depression and anxiety within Saudi Arabia.

Objectives: The intention of this study was to investigate the relationship between Emotional Intelligence and the severity of Depressive and Disorders Anxiety among patients.

Method: The process was a cross-sectional study which involved a convenience sample. The total sample was 100 adult patients of both genders, diagnosed with either depressive or anxiety disorders. The sample was taken from the outpatient clinics at the King Fahad University Hospital in the city of Khobar and Al Amal Complex Mental Health Hospital in the city of Dammam. The patients were aged between 16 and 68 years old, with a mean age of 37.20 (SD ± 10.200). This study used the Schutte Emotional Intelligence Scale, Beck Depression Inventory, and Taylor Manifest Anxiety Scale.

Result: The results revealed that there was a statistically significant association between emotional intelligence and depressive disorders. There was also a statistically significant association between clinical and sociodemographic variables (e.g. gender, age, social, occupation and subtype of disorders variables) with levels of depressive and anxiety. Females had a higher level of emotional intelligence compared to males. Overall, no statistically significant association between emotional intelligence and the severity of anxiety and depressive disorders was identified.

Conclusion: The results did not confirm the main hypothesis, which may have been affected by the sample size and sample characteristics. Further studies conducted to identify whether emotional intelligence could be a significant component for certain psychological disorders or subtype within Saudi Arabia are warranted.

Keywords: *Emotional Intelligence; Depressive Disorders; Anxiety Disorders; Kingdom of Saudi Arabia*

Introduction

The importance and impact of emotions on the lives of individuals and those with whom they interact, is a new area of research that has recently gained interest. A greater understanding of emotions is now at the forefront, where researchers are trying to comprehend

how individuals deal with their surroundings [1]. According to estimates made by the World Health Organization (WHO), there are more than 300 million people globally living with some form of depression, which is an increase of more than 18% in comparison to the level in 2005 [2]. For anxiety disorders (AD), it is estimated there are approximately 264 million people globally with this condition. This total for 2015 reflects a 14.9% increase in comparison to 2005. Depression is ranked as the single largest contributor to global disability (7.5% in 2015); while anxiety disorders are ranked 6th (3.4%).

In Saudi Arabia (KSA), the total cases of depressive and anxiety disorders is greater than three million, for a country with a total population of 31.5 million, it was found that 4.5% of the population is diagnosed with some form of depressive disorders, with more females (8%) being diagnosed compared to males (5%). As age increases, the prevalence of depression also increases. Rates are highest for people 55 years and above. For anxiety disorders, the total rate was around 4.3% of the population with the highest concentration in patients aged between 40 - 54 years, with females (6%) higher than males (3%) [2]. Globally, there has been an increase in the prevalence of suicide and depression in all societies. It is predicted that depression will become the leading cause of disability for all populations by the year 2020 [3]. Furthermore, emotions raise several issues and threats that may affect the health of people. These threats may affect people physically, psychologically and socially [4].

Many studies performed to correlate the level of a high EI among different types of patients in many countries with the score of lower anxiety or depression. The studies which explore EI in patients with AD show that the deficit in any of these emotional skills can somehow contribute to the development and maintenance of the anxiety disorder [5]. According to our knowledge, no studies were found in Saudi Arabia, therefore, the purpose of this study was to investigate the relationship between emotional intelligence and mental health with social anxiety and depression in Saudi patients.

Models of emotional intelligence

There are several models and measures of Emotional Intelligence (EI) which exist in the literature. They can be broadly classified under two frameworks: as trait (mixed) model or ability model [6]. The ability conception model describes EI as a set of interrelated abilities organized along four dimensions; perceiving emotions, using emotions to facilitate thought, understanding and managing emotions. The trait (mixed) model includes personality characteristics like empathy, happiness, and self-esteem [7]. According to Pérez., *et al*. (2005), the trait and ability model are two different constructs. The trait model is measured through self-report questionnaires, whereas the ability model is measured through tests of maximal performance [8]. The ability model measurement distinction has far-reaching theoretical and practical implications in comparison to the trait model. For example, for the trait of EI, it would not be expected to correlate strongly with measures of general cognitive ability or proxies thereof, whereas the ability of EI should be related to such measures. A number of researchers have attempted to develop self- report measures of EI. However, with the greater interest in emotional assessment, this has resulted in the more common use of self-assessment measures in the mental health field [9]. The assessment of EI is a topic of considerable interest and debate [10]; despite a significant amount of literature available on EI, there has been little work conducted and the literature is not clear on how to measure it or develop it [11].

EI in patients

Patients who have been diagnosed with some form of mental disorders generally have lower levels of EI than non- clinical samples [12,13]. Hertel and colleagues (2009) found that it is possible to distinguish between different clinical groups based on their levels of EI, specifically, the dimension of emotional understanding and suggest that there may exist specific EI profiles for different psychopathologies [5,14].

Ciarrochi., *et al*. (2001) showed that individuals with low EI tend to have relationships with maladaptive coping, higher psychopathology and an increased severity of Post-Traumatic Stress Disorder (PTSD) [15]. This is consistent with Fernandez., *et al*. (2006), who also

found a clear relationship between EI and PTSD [9]. Yaghoobi, Mohammadzade and Mohammadzadeh (2016) confirmed this through their study and concluded similar findings [16]. Moreover, the sample which focused on individuals in the Middle East by Ghazali (2014) showed an inverse relationship between EI and the severity of PTSD among refugee adolescents and children [17]. Aldery (2005) investigated the relationship between EI and personality disorders in a sample of 91 Egyptian undergraduate students, showing a significant relationship between the branches of EI and several personality disorders [18] and that students who have a higher level of EI tended to have fewer diagnosed personality disorders. Moreover, there were significant differences between male and female participants. In other studies, patients with higher levels of anxiety, depression, and social stress also show lower levels of general mental health [19].

Researchers have also investigated the relationship between EI and depression on samples from Middle Eastern countries [20-22] According to Sulaiman (2013) and Alabani (2010) who investigated university students from Oman and Egypt respectively, there were statistically significant negative correlations between EI and depressive symptoms. Similarly, Abdellatif., *et al*. (2017) investigated EI in relation to sociodemographic and clinical characteristics of 106 Egyptian clinical patients with depressive disorders, showing a significant relationship between EI in relation to the level of depression and other practices used to alleviate depression. Results also showed slightly higher EI scores in females, as well as older patients, within an age range of in excess of 60 years. As well as this, Alabani (2010) showed similar findings that the male gender patients exhibited lower EI in comparison to females. Yet, in Tannousa and Matarb's (2010) study among Jordanian adolescents and children aged 7 to 18 years, depressed females had lower EI scores than males [23].

Researchers have emphasized that social anxiety disorder (SAD) commonly appears as a co-morbid disorder with Major Depression disorder [12,24]. Nolidin, Downey, Hansen, Schweitzer and Stough (2013) studied the association between dimensions of EI and social anxiety in a clinical sample of 31 depressed Spanish adult patients and compared them to a control group of 28 non-clinical individuals. They found that the clinically depressed patients scored lower on the EI dimensions. Other evidence suggested that there was a negative correlation between self-report measure of EI and depression, anxiety disorders [25,26].

Culture and emotional intelligence

Several studies have looked into how cultural background plays a role in EI levels. Hofstede (1991) defined national culture as collective mental programming, presented by different nationalities with different attitudes, values, behaviors, competences and perceptions [27]. This broad meaning is supported by several researchers [28-31]. According to Markus and Kitayama (1994) culture forms and sustains emotions, cultural beliefs, values, and traditions and impacts the way individuals think and react to stimuli [32]. It affects their relationships and behaviors when communicating and relating to others. They postulated that people in different cultures have strikingly different concepts of themselves, others, and of the interdependence of the self with others. Moreover, the impact of cultural differences on emotions is thought to affect emotion perception, expression, and regulation differently [33].

Many studies focused on the role of Eastern and Western cultural differences in both emotion experience and display [34-36]. For example, Western cultures value personal achievement and individual feelings whereas Eastern cultures value the interdependence of the self and their specific group [37]. Individuals in Eastern cultures consider themselves as a part of the whole and not specifically as an individual. In terms of emotional insight into self, Heine, Takata, and Lehman (2000) discussed that Western cultures place a significant value on their worth and are aware of their strengths, both perceived as well as actual [38]. This is in direct opposition to Eastern cultures which are more self-critical, and self-direct failure as a reflection on themselves. Moreover, Matsumoto (1993) indicated that Eastern cultures support emotional restraint and empathetic behaviors [36]. Also, there is greater need to suppress one's emotional reactions, so as not to offend others in the group [39]. Further, multiple studies have compared individualism versus collectivism differences for emotional experience in many countries [37,40-42]. The Arabic collective culture system, both the extended and nuclear families are greatly related to each other as groups, more than as individuals [43].

Saudi Arabia

Saudi Arabia is a country in which the majority of individuals are Muslims. Saudi Arabian culture as well that of other countries in the Arab Peninsula have all been shaped by Islamic religion [31]. Alkhathami (2015) notes that almost everyone in Saudi Arabia is identified as Muslim. Undoubtedly, Saudi culture, law and Islamic religious teachings have an influence on quality of life and social interaction and plays a significant part of everyday life. Therefore, an appreciation of the Islamic perspective from the Qur'an and Sunnah in relation to emotions is important, due to the role religion plays.

The holy Qur'an and Prophet's legacy include many verses and Hadiths that reflect individuals to be self-aware, informed of their emotions, and fully recognize their feelings. Verses encourage individuals to understand the deeper quality of internal feelings, as well support perceiving and supports self-awareness such as the holy Qur'an in chapter 51 verse 21 says: "and also in yourselves. Will you not then see". This is interpreted by the religiously educated scholars as a call for the individual to reflect sincerely, and delve into their minds to explore the real creature beyond and become aware of what one needs and how one feels towards other things. This recognition of emotions will then lead to the self-control and the control of emotions and their outbursts. Also, in another verse in chapter 13 verse 11 the holy Qur'an emphasizes that change begins from within, "Verily! Allah will not change the good condition of a people as long as they do not change their state of goodness themselves by committing sins and by being ungrateful and disobedient to Allah." Moreover, the Prophet Mohammad (PBUH) taught and encouraged Muslims to be aware and conscious of their emotions. He encouraged them to control their negative feelings, as well as to wisely express positive feelings. For example, "Narrated by Anas bin Malik: a man was with Prophet Mohammad (PBUH) when another man passed by and the former said: O Messenger of Allah! I love this man. Allah's Messenger asked, "Have you informed him?" He said, "No". Allah's messenger then said, "Tell him that you love him". So he went up to the man and said to him, "I love you for the sake of Allah" and the other replied "May Allah, for whose sake you love me, love you" [44]. This story revealed to us how the prophet of Islam teaches his followers the emotional literacy and how he calls them to recognize their emotions and to express them literally and not keep them internal.

Objective of the Study

The objectives of this study were to identify potential relationships between EI and depressive and anxiety disorders in a group of clinical participants, as well as to identify differences with EI in relation to demographic variables. The hypotheses of the study were as follows: H1. There would be an association between Emotional Intelligence (EI) and Anxiety (AD) and Depressive Disorders (DD). H2. Patients who have been diagnosed with Major Depressive Disorders (MDD), and Persistent Depressive Disorder (PDD) would have a significantly lower EI score. H3. Patients who have been diagnosed with AD would have a significantly lower EI score. H4. There were statistically significant differences in the relation between EI in Patients with anxiety and depressive disorders in the light of sociodemographic variables. H5. Female patients would have a higher level of EI compared to males.

Methods

Study design

A cross-sectional research design was used to assess the relationship between EI and severity of depressive and anxiety disorders among patients diagnosed with one of type of depressive or anxiety disorders.

Setting

The study was carried out in two places, the out-patient clinic of Psychiatric Department of King Fahad University Hospital (KFUH) in Khobar city and Al Amal Complex Mental Health Hospital (ACMHD) in Dammam city. The samples of this study were collected between August 2017 and January 2018.

Participants

The convenient sample consisted of 100 participants. They were adult patients attending the outpatient clinics, with 48 patients from

the outpatient department of KFUH and 52 patients from the outpatient department in ACMHD, who were diagnosed with psychiatrists using DSM-5 criteria at the outpatient clinics as being affected with one of type of depressive disorders. Specifically, Major depressive disorder (MDD) or Persistent depressive disorder (PDD) or as one of type of anxiety disorders; Social Anxiety disorder (SAD), or Generalized Anxiety Disorder (GAD), or Panic Disorder (PD), or Agoraphobia (AP), or Specific Phobia (SP). All patients were aged between 16 - 68 years old. Exclusion criteria included patients with depression or anxiety due to substance abuse and those diagnosed with a combination of anxiety and depression disorders. The sociodemographic and clinical data of the participants were taken (e.g. age, gender and marital status, level of education, occupation and diagnosis).

Instruments and materials

In order to collect the necessary information for this study, three tools were used; The Schutte Emotional Intelligence Scale (SEIS) [45,46]. The Beck Depression Inventory (BDI-II) [47-49]. Taylor Manifest Anxiety Scale (TMAS) [50]. The brevity of the scales and their reliability and validity made them a reasonable choice for seeking brief self-report measures. Table 1 shows the corresponding reliability estimates.

Items	No. of Items	Cronbach's Alpha
Schutte Emotional Intelligence	33	0.879
Beck Depression Inventory	21	0.901
Taylor Manifest Anxiety Scale	50	0.767

Table 1: *Reliability of tools.*

Procedure

Before starting, the purpose of the study was explained to participants. They were assured that data collection would only be used for the purpose of the study. The participants were given clear instructions and informed of their right to withdraw from the study at any time. They were also informed that all questionnaires would be completed anonymously. Explanations were provided for words in the items that the participants had difficulty in understanding. The participants completed the three questionnaires in the psychiatry department. All participants gave their informed consent, with 10 opting to not participate. Prior permission was granted to carry out the study from both the hospital and university authorities.

Results

Sociodemographic and clinical characteristics of the participants

Table 2 shows the sociodemographic characteristics of participants. In total, there were 100 patients of which 55 (55%) were female. The mean age of the study population was 37.20 years (SD ± 10.2, age range 16 - 68 years). The mean age of patients diagnosed with depression was slightly higher than those diagnosed with anxiety [38.9 years (SD ± 10.8) and 35.3 years (SD ± 9.2), respectively]. Male patients diagnosed with anxiety disorders accounted for higher rates than those diagnosed with depressive disorders (60.4% and 30.8%, respectively); which was in contrary to what was reported in females (anxiety disorders: 39.6% and depressive disorders 69.2%, respectively). The majority of participants held a bachelor's degree (58%), married (69%) and currently with job (49%). Patients attending the King Faisal University Hospital (KFUH) were closer in their numbers (48 patients) to those registered from the ACMHD (52 patients).

According to the subtypes diagnosis of anxiety and depression, MDD was found with higher rank (41.0%) followed by GAD and panic disorder (23.0% and 15.0%, respectively). Meanwhile, the prevalence of subtype GAD was found among patients with anxiety disorder (47.9%), followed by patients with panic disorder (31.3%), the rate of MDD was the dominant among patients with depression disorder (78.8%) and followed by PDD (21.2%). In general, there was no statistically significant association between the sociodemographic char-

		Total		Anxiety Disorders		Depressive Disorders		
		No.	%	No.	%	No.	%	P value
Gender	Male	45	45.0	29	60.4	16	30.8	0.003
	Female	55	55.0	19	39.6	36	69.2	
Age groups	< 30 years	23	23.0	9	18.8	14	26.9	0.589
	30 - 39 years	38	38.0	20	41.7	18	34.6	
	≥ 40 years	39	39.0	19	39.6	20	38.5	
Level of Education	Below secondary	14	14.0	4	8.3	10	19.2	0.090
	Secondary	28	28.0	11	22.9	17	32.7	
	University and above	58	58.0	33	68.8	25	48.1	
Social status	Single/divorce/widow	31	31.0	12	25.0	19	36.5	0.213
	Married	69	69.0	36	75.0	33	63.5	
Occupation	Employee	48	49.0	27	57.4	21	41.2	0.107
	Unemployed	50	51.0	20	42.6	30	58.8	
Clinic site	KFUH	48	48.0	16	33.3	32	61.5	0.005
	ALAMAL	52	52.0	32	66.7	20	38.5	
Type of Diagnosis	MDD	41	41.0	0	0.0	41	78.8	0.000
	PDD (Dysthymia)	11	11.0	0	0.0	11	21.2	
	GAD	23	23.0	23	47.9	0	0.0	
	Panic Disorder	15	15.0	15	31.3	0	0.0	
	SAD	9	9.0	9	18.8	0	0.0	
	Specific Phobia	1	1.0	1	2.1	0	0.0	

Table 2: *Association between anxiety/depression disorders according to the sociodemographic characteristics of the participants.*

acteristics of patients with anxiety or depression disorders except for gender, clinic attended, and type of sub-diagnosis given (P < 0.01 in each of the three elements), as seen in table 2.

Association between sociodemographic and clinical characteristics and emotional intelligence

According to the used categories of the emotional intelligence as low and high level, the overall prevalence of the high level (47.0%) was found less frequent than low level of EI (53.0%). On the other hand, when analyzing the level of EI with the different sociodemographic characteristics of the participants, higher rate of EI was found among females (57.4%), middle age group of 30-39 years (44.7%), participants with university education (61.7%), married (68.1%), unemployed people (55.3%), those attended ALAMAL clinic (53.2%) and those diagnosed with major depressive disorder (40.4%), respectively; however despite the high scores of EI reported by those categories but no any statistical association was found. For the clinical presentations either anxiety or depression, strong association was found between patients with high EI and those with low level of depression (69.8%, P < 0.001), but not with low anxiety (57.4%), as illustrated in table 3.

Logistic regression analyses was used to determine the predictors of emotional intelligence disorder model, as seen in table 4. Seven variables were entered in the fitting model of univariate regression analysis to identify if presence of statistical significant association between the covariates (gender, age, education level, social status, occupation, anxiety disorder, and depressive disorder) and EI as an out-

		High EI		Low EI		
		No.	%	No.	%	P value
Gender	Male	24	45.3	21	44.7	0.952
	Female	29	54.7	26	55.3	
Age groups	< 30 years	12	22.6	11	23.4	0.448
	30-39 years	23	43.4	15	31.9	
	40 years and >	18	34.0	21	44.7	
Level of Education	Below secondary	7	13.2	7	14.9	0.877
	Secondary	14	26.4	14	29.8	
	University and above	32	60.4	26	55.3	
Social status	Single/divorce/widow	15	28.3	16	34.0	0.536
	Married	38	71.7	31	66.0	
Occupation	Employee	25	47.2	23	48.9	0.860
	Unemployed	28	52.8	24	51.1	
Clinic site	KFUH	24	45.3	24	51.1	0.564
	ALAMAL	29	54.7	23	48.9	
Type of diagnosis	MDD	19	35.8	22	46.8	0.452
	PDD (Dysthymia)	5	9.4	6	12.8	
	GAD	12	22.6	11	23.4	
	Panic Disorder	11	20.8	4	8.5	
	SAD/Specific Phobia	6	11.3	4	8.5	
Anxiety disorders	High level of anxiety	21	39.6	25	53.2	0.174
	Low anxiety or none	32	60.4	22	46.8	
Depressive disorders	High level of depression	16	30.2	31	66.0	
	Low level of depression	37	69.8	16	34.0	0.001

Table 3: *Association between sociodemographic characteristics and the level of Emotional inelegancy.*
EI: Emotional Inelegancy.

come. However, only depressive disorders were the unique factor associated with EI, whereas those patients with low level of emotional intelligence were five times more likely to be associated with high level of depression (OR: 5.291, 95% CI: 1.902 - 14.721, p value: < 0.001) when the non-adjusted test was performed and four times more likely to be associated with high level of depression when the adjusted odds was applied and AOR: 4.480, 95% CI: 1.932 - 10.393, p value: < 0.001).

Discussion

The present study examined the association between EI and the severity of anxiety and depressive disorders using self-report measures. There were a clear association between low levels of EI and the high level of depression (AOR: 4.480, 95% CI: 1.932 - 10.393). So those severely depressed patients were more likely to be under low level of EI. Strawn BL (2020) in his study found that EI, exhibited a significant, association with severity of depressive symptoms, which is consistent with our findings [51]. Furthermore, other author illustrated that high level of EI plays an important role in protecting against severe depression and further my lead to suicidal behavior

	Characteristics	OR	95% CI	P value	AOR	95% CI	P value
Gender	Male	1.690	0.551 - 5.190	0.359	-	-	-
	Female	R	-	-	-	-	-
Age	< 30 years	1.339	0.368 - 4.871	0.658	-	-	-
	30 - 39 years	0.561	0.186 - 1.690	0.304	-	-	-
	40 years and >	R	-	-	-	-	-
Level of Education	Below secondary	0.724	0.153 - 3.440	0.685	-	-	-
	Secondary	1.299	0.432 - 3.905	0.642	-	-	-
	University and above	R	-	-	-	-	-
Social status	Single/divorce/widow	0.840	0.289 - 2.446	0.750			
	Married	R	-	-	-	-	-
Occupation	Employee	1.479	0.527 - 4.154	0.458	-	-	-
	Unemployed	R				-	-
Anxiety Disorders	High level of anxiety	0.772	0.273 - 2.189	0.627		-	-
	Low anxiety or none	R	-	-	-	-	-
Depressive Disorders	High level of depression	5.291	1.902 - 14.721	0.001	4.480	1.932 - 10.393	0.001
	Low level of depression	R	-	-	-	-	-

Table 4: *Univariate and multivariate regression analysis of the emotional intelligence disorder and main characteristics of participants. OR: Odds Ratio; AOR: Adjusted Odds Ratio.*

[52]. However, in our study, no association was found between anxiety and EI, but was found with gender covariate with higher rate among males than females. Despite this study could not give a clear explanation of the male dominance in anxiety, it could be a result of the overwhelming stress faced in the daily life than female. Some studies, revealed a significant association between anxiety and females teenagers [53,54] where our study was only focused on adult age groups, therefore a difference was found between the different studies.

There was a statistically significant association within participants characteristics such as age and social states and the clinical manifestations like the EI, levels of anxiety and depression. Social states and occupation, as well levels of depressive symptoms were statistically significant in their association to anxiety. There was a statistically significant difference between males and females and low levels of anxiety symptoms. Females also had a higher level of EI in comparison to males (64% vs 35%), which supports hypothesis five. This finding is in agreement with similar work conducted by other researchers [20,21].

However, no statistically significant differences were identified within this study in the relationship between EI and anxiety and depressive disorders. The reasons for this are believed to be due to the small samples and wide range of subtypes for anxiety and depressive disorders which made it difficult to identify and isolate the relationship between one subtype of anxiety and depression directly with EI. It is expected that the various subtypes of the disorders will influence EI to a different degree with potentially more severe forms of anxiety, depression affecting EI the greatest. It should also be noted that cultural background will influence the responses. Undoubtedly, culture and origins from several surrounding social factors are considered as half of emotional intelligence [20]. Cultural universality and specificity are evident in the existing EI literature, however, additional studies are needed to explore this further. Even though, the relationship between EI and subtypes of anxiety, depression may not necessarily be linear. Therefore, studies solely focusing on one subtype of disorders using larger samples may allow statistical differences to be identified.

Strengths and Limitations

As no prior studies have investigated the correlation between EI and depressive and anxiety disorders in KSA, ours makes an initial contribution to provide new insight into EI in Saudi Arabia. Several limitations also need to be taken into account. Firstly, the study was based on self-report measures of EI, which does not directly tap people's emotional abilities but rather people's perceived beliefs about their emotional abilities. Additionally, the Schutte EI design should be able to give overall of scores, not specific scores for each dimension of EI. The self-reports tools (paper-and-pencil survey design) lacks the ability to examine the dynamics of explanations given by individuals about their mood and situation. Further, our study used the SEIS, BDI-II, TMAS, scales tested on a group of patients in KFUH and ACMHD. Therefore, the results of this study are affected by these scales and their effectiveness in measuring these elements. Secondly, our findings were affected by the sample chosen, that is to say, patients at different levels (e.g. age, social status, duration of diagnosed), and small for this type of study, limiting generalizability. Other variables that could be potentially related and influencing disorders were not evaluated (e.g. duration of disorders, severity, and medication use) and could also influence EI. The cross-sectional study design does not allow establishing causal relationships between the observed associations. Lastly, the sample was chosen based on their diagnosis, to be specific, patients with any form of anxiety and depressive disorders. It did not focus on specific disorder or specific type of anxiety or depression (such as panic disorder, social anxiety disorder or major depression disorder).

Conclusion/Recommendations

The main conclusion of this study is that, EI measures could be of great importance to be used in assessing the viability of predictors in clinical depression, where a reductions in EI scores is a consequence of contracting a depressive illness. Based on the findings of the current study, the following recommendations are suggested. For future studies, the sample size should be increased and EI measures, as complementary assessment, should be used. In addition, scales to investigate the branches of EI should also be used. Differences in EI between several groups such as with medication, non-medication and control groups need to be taken into account. Future studies should control for effects such as comorbidity, medication use, and duration of disorder. Further longitudinal research is also needed to clarify causal relationships between deficits in EI and patients. It would be beneficial if certain types of anxiety or depression were isolated and studied as opposed to the disorders in general to draw conclusions based on the different subcategories. The specific role of the Arab culture in terms of its impact in EI is also of interest. Furthermore, knowledge of the deficits of EI can be used in treatment programs to develop abilities of EI with tailor and specific early interventions for patients. Finally, if further studies are conducted within Saudi Arabia, it would help to understand whether similar trends are found in different demographics throughout the country, particularly among the new generations as teenagers and adolescents.

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Declaration of Authorship

The first and second authors (Maha Alshammari, Maan A Bari Qasem) designed and directed the study. Amen Bawazir contributed to the interpretation of the results and analyzed the data. All authors contributed to writing and revision of the manuscript.

Conflicts of Interest

The authors declare that they have no competing interests.

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