Relation between Emotional Recognition, Attachment Styles and Social Functioning among Psychiatric Patients

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ABSTRACT

Background: The relation between emotional recognition, attachment styles, and social functioning among psychiatric patients is a complex interplay that significantly impacts their overall mental health and quality of life. **Aim:** This study aimed to explore the relation between emotional recognition, attachment styles and social functioning among psychiatric patients. **Subjects and Method:** A descriptive correlational research design was used. The study subjects included a purposive sample of 121 psychiatric patients' admitted the inpatient units and outpatient clinic at Port Said Psychiatric Health Hospital. **Tools of data collection:** The tools following were utilized: The Bell-Lysaker emotion recognition task, Penn emotion recognition text, psychosis attachment measure, social functioning scale, in addition to personal and clinical characteristics sheet. **Results:** According to the study's findings, the mean emotional recognition score of psychiatric patients indicated good emotional recognition, while less than three quarters had intermediate attachment styles, and the majority had poor levels of social functioning. It found that there were no statistically significant association between emotional recognition, attachment styles, and social functioning. **Conclusion:** Nonetheless, no statistically significant association was observed among the psychiatric patients' total scores for emotional recognition, attachment styles, and social functioning. **Recommendations:** Educational intervention program aimed at improving emotional recognition and modifying maladaptive attachment styles to enhance social functioning are recommended.

Keywords: Attachment styles, Emotional Recognition, Psychiatric Patients, Social Functioning.

INTRODUCTION

Our daily lives involve a lot of emotion. Experimental psychologists have been attempting to comprehend and explain human emotion since the 19th century. In psychology, emotional states are attributed through the observation of nonverbal clues, both visual and auditory. This process is known as emotional recognition. Nonverbal signals, or a sender's visual, vocal, postural, and gestural indicators—a person exhibiting an emotional reaction are crucial in providing mental health care to patients (Mao & Amoranto, 2018).

Emotions are the bodily reactions that cause one to act in response to internal or external stimuli. Emotional facial expressions are a byproduct of evolution and are essential to the survival of the human species. There are a minimum of six fundamental emotions that are consistently and broadly acknowledged. The primary emotions happiness, sorrow, fear, surprise, disgust, and anger correspond to certain facial expressions, and the ability to accurately identify these emotions on the face is essential for adaptive behavior and successful social interaction (Krause, Linardatos, Fresco, & Moore, 2021).

It's unclear what causes a person to be incapable of processing facial expressions. There are various theories regarding facial processing inability. Some authors link it to content that deals with emotions, some to disorders in processing social and biological stimuli, and still others link it to a general deficit in visual attention and the processing of visual stimuli (Gica, Poyraz, & Gulec 2019).

Identification of facial recognition deficiency might be used for diagnostics. Participants with depressive, anxiety, and inadequate sentiments exhibited distinct emotional biases that made it difficult for them to recognize cheerful, pleasant expressions and paid far more attention to negative or threatening emotional expressions than participants with mental health issues did. Similarly, found that self-critical people see even smiling and expressing compassion as uncomfortable rather than as emitting positive sentiments (Jung et al., 2020).

Studies have indicated a robust correlation between emotional recognition and attachment style in individuals in mental health settings. For instance, those with avoidant attachment styles could find it difficult to identify their own emotions and to recognize the emotions of others, making it difficult for them to communicate their own feelings. Due to their potential inability to emotionally connect with others, these people may find it difficult to establish close relationships (Gao et al., 2021).

Attachment style in psychiatric patients significantly influences their emotional connections and mental health. Insecure attachment styles, linked to anxiety, depression, and personality disorders, complicate the development of therapeutic relationships and reduce psychotherapy effectiveness (Wei & Mallinckrodt, 2020). Secure attachments foster healthy adult relationships, whereas insecure attachments correlate with psychological problems and hinder treatment utilization (Green, 2022). Secondary attachment figures, provide security in the absence of primary attachments (Waters & Waters, 2020).

Insecure attachment is overrepresented in psychosis, with strong associations to trauma, poor service engagement, interpersonal issues, and maladaptive coping. Paranoia in these populations is linked more with attachment anxiety than avoidance, and there's limited evidence on attachment disorganization due to measurement challenges (Sood et al., 2022).

Psychiatric patients frequently have social function deficiencies, which can seriously impair their capacity to lead satisfying lives. These deficiencies can show up in a variety of ways, such as trouble forming and maintaining connections with others, issues in the workplace or in school, and difficulties with day-to-day tasks (Green, 2019).

Studies have indicated a correlation between deficiencies in social function and a variety of mental health illnesses, such as anxiety disorders, bipolar disorder, depression, and schizophrenia. Addressing and resolving social function deficiencies is frequently necessary for the effective treatment of these diseases (Harvey & Penn, 2018).

Research suggests that individuals with insecure attachment styles may struggle with social functioning and emotional regulation. As such, individuals with psychiatric disorders may have difficulty forming and maintaining social onnections due to struggles with emotional recognition and insecure attachment styles (Mikulincer & Shaver, 2020).

Significance of the study

It is important to comprehend how emotional recognition, attachment styles, and social functioning relate to one another in mental patients for a number of reasons. Firstly, emotional recognition deficits can significantly impair social interactions and relationships, which are vital for overall well-being and recovery. Secondly, attachment styles, formed early in life, influence how individuals perceive and respond to social and emotional cues, thus impacting their mental health and social functioning. Lastly, elucidating these connections can inform therapeutic interventions, helping mental health professionals tailor treatments to improve

patients' social skills, emotional regulation, and attachment security, ultimately enhancing their quality of life and treatment outcomes.

AIM OF THE STUDY

This study aimed to explore the relation between emotional recognition, attachment styles and social functioning among psychiatric patients.

Objectives

The following objectives were met by the study:

1. Measure the ability to correctly identify emotional recognition patterns and emotional states among psychiatric patients.
2. Assess the levels of adult attachment styles among psychiatric patients.
3. Determine the levels of social functions among psychiatric patients.
4. Find out the relation between emotional recognition, attachment styles and social functions among psychiatric patients.

SUBJECTS AND METHOD

Study Design

To perform the study, a descriptive correlational research approach was chosen.

Study Setting

The Port Said Psychiatric Health Hospital and Addiction Treatment's inpatient and outpatient mental health clinics served as the study's sites. The General Secretariat of Mental Health and Addiction Treatment (GSMHAT), a division of the Ministry of Health, is associated with the facility. The hospital is divided into five parts: a special unit for children, one unit for drug-dependent patients, one unit for male and female patients, and two inpatient mental units. Lastly, there is a single outpatient psychiatric clinic that is open daily from 10 a.m. to 2 p.m. It has three treatment-specific rooms: a first room with two psychiatrists, a second room with a consultant who specializes in psychiatric treatment, and a third room with two helping nurses.

Study Subjects

A purposefully selected sample of mental health patients who were admitted to inpatient units and regularly visited the outpatient clinic at Port Said Psychiatric Health Hospital for treatment or follow-up was included in the study. They were chosen according to the following criteria:

1. Psychiatric patients' both sexes.
2. Onset of illness more than six months.
3. Able to communicate in a coherent and relevant manner.

Sample Size:

The sample size will be determined by using the following equation.

$$\text{Sample Size (n)} = \frac{Z^2}{D^2} \, P \,(100 - P) \quad \text{(Dobson, Prager \& Wilson 1984)}.$$

Where:

P: The expected prevalence of psychotic and mental disorders among psychiatric patients in Egypt is =16.9 % (Ghanem, Gadallah, Meky, Mourad, & El-Kholy, 2009; Ibrahim, 2021).

Z: A percentile of standard normal distribution determined by 95% confidence level = 1.96.

D: The width of the confidence interval = 10.

$$\text{Sample Size (n)} = \frac{1.96^2}{[7]^2} \; 16.9 \times (100 - 16.9) = 110 \text{ patients}$$

The calculated sample size was 110 patients. Due to the design effects (1.25), expected non-participating rate (10%).

So, the final sample size was 121 patients.

Tools for Data Collection:

Tool I: The Bell-Lysaker Emotion Recognition Task (BLERT):

Bryson, Bell, and Lysaker (1997) designed the test, which Abd-Elhamid, Gafaar, & Abdelaal (2022) translated into Arabic. It assesses the capacity to recognize seven different emotional states: happiness, sadness, fear, disgust, surprise, rage, or no emotion at all. The BLERT is appropriate for use since emotion recognition is recognizing the emotion expressed by others through a variety of facial expressions and voice tones. The 21 recorded vignettes

that make up the BLERT each feature the same actor delivering one of three basic speeches for ten seconds. Each picture represents a different emotion.

Scoring System

Accuracy scores are ranging from 0 to 21 with total correct out of 21; with higher mean scores indicating better performance. Because it uses dynamic emotion recognition and displays Egyptian facial expressions in its vignettes, this exam is among the most trustworthy psychometric tools available (Ezz El-Deen, 2013).

Reliability

detection test has a Cronbach's Alpha $\alpha = 0.84$, making it one of the most trustworthy psychometric tools available (Ezz El-Deen, 2013).

Tool II: Penn Emotion Recognition Text (ER-40):

It was created by Kohler (2020) in English, and a researcher translated it into Arabic to look into patterns of emotional recognition. The 40 color photos in the ER-40 depict static faces with four fundamental expressions: happiness, sadness, rage, fear, and neutral expressions. One image at a time, participants identified the appropriate emotion label for each face. Accuracy scores were the main dependent variable; they ranged from 0 to 40 with total correct out of 21. Stimuli are balanced for poser's gender, age, and ethnicity, and for each emotion category, four high-intensity and four low-intensity expressions are included. Participants viewed one image at a time and chose the correct emotion label for each face. Accuracy scores, ranging fromn0 to 40, were the primary dependent variable.

The tool was tested for Internal consistency reliability using Cronbach's Alpha test of Penn Emotion Recognition Text was alpha coefficient= 0.80 which indicates that the excellent scale reliability.

Tool III: Psychosis Attachment Measure (PAM):

The instrument was created in English by Crowell, Fraley, and Shaver (1999) and translated into Arabic by Abd El Hamed (2014). It was built on pre-existing self-report attachment measures. The two attachment aspects of "anxiety" and "avoidance" were used to evaluate attachment in schizophrenic individuals. It comprises sixteen items, eight of which evaluate the avoidance construct and eight of which evaluate the anxiety construct, respectively.

Scoring System

Patienta's responses are rated on a four-point Likert scale, 1 represents strongly disagree and 4 represents strongly agree. The anxiety and avoidance dimensions score was classified as low (8≤16), middle (16≤24), or high (24-32) based on the scores for each dimension. A lower number denotes secure attachment, while a higher overall score represents a generally unstable attachment type..

Reliability

test which Arabic version of Psychosis Attachment Measure (PAM) (tool III) was anxiety alpha coefficient = 0.83, and avoidance alpha = 0.81 which indicates that the Arabic version demonstrated excellent scale reliability.

Tool IV: Social Functioning Scale (SFS):

This scale, which was created in English by Birchwood, Smith, Cochrane, Wetton, and Copestake (1990), was translated into Arabic by Atta, El Gueneidy, and Lachine (2017) in order to measure the social functioning of people who have been diagnosed with psychiatric disorders. The Social Force Survey (SFS) has 76 statements and questions covering seven aspects, such as work/employment (4 questions), interpersonal communication (4 questions), and social withdrawal/engagement (5 questions). In addition, pro-social activities (22 statements), leisure activities (15 statements), independence performance (13 statements), and independence competence (13 statements).

Scoring System

Participants' answers to these dimensions were recorded on a four-point Likert scale, with scores ranging from 0 to 308 overall. If the percent score was equal to or higher than 60%, the social functioning was deemed high; if it was lower, it was deemed low.

Reliability

With a Cronbach's Alpha α = 0.91, the Arabic scale of SFS demonstrated strong internal consistency. Experts in the panel determined the validity of the scale (Atta,El Gueneidy, & Lachine, 2017).

Furthermore, the Arabic version of the Personal and Clinical characteristics sheet was created. Psychiatric patients' personal information, such as age, gender, education

level, place of residence, marital status, employment status, and monthly income. In addition to clinical data, these comprise the psychiatric patient's diagnosis, the number of hospital admissions, and the illness's onset.

Preparatory Phase

It involved reading through relevant material and gaining theoretical understanding of different study-related topics through books, articles, online journals, and periodicals. The creation of a sheet with personal and clinical features was also included. During this phase, the General Secretariat of Mental Health and Addiction Treatment (GSMHAT) also granted consent for the study to be conducted.

Tools validity

The Penn Emotion Recognition Text was translated into an Arabic language by the researcher and then retranslated to English. Revision the Penn Emotion Recognition Text tool (Tool II) was reviewed for its validity by a panel of seven experts in the field of the study who revised the tools for clarity, relevance, applicability comprehensiveness, understandability, and applicability and proved to be valid.

Pilot Study

An initial pilot study was conducted prior to initiating the data collection stage. Twelve mental patients (10%) out of the entire sample of the mental patients under study underwent it. It was carried out from April 1 to April 30, 2023, to evaluate the study tools' applicability and viability, as well as to determine how long the tools would take to finish. Determining any barriers and issues that might impede the gathering of data was also helpful. The pilot study participants who were psychiatric patients were not included in the sample of research. The pilot study's conclusions indicated that the tools were useful and unambiguous. Therefore, no changes have been made.

Field Work

The General Secretariat of Mental Health and Addiction Treatment and the Ministry of Health and Population both provided written legal consent for the study to be conducted at Port Said Psychiatric Health Hospital. After approval-from the directors of previous mentioned study settings, the researcher visited the study setting from two to three days/week to collect data. The 121 patients (males or females) were attended by the inpatient department

and outpatient clinic in Port Said Psychiatric Health Hospital. The researcher arranged with the head nurse for the most suitable time for data collection. The researcher arranged with the head nurse for the most suitable time for data collection about all patients (males or females) who met inclusion criteria and recorded their names and numbers in each unit. Then used patient's files to collect more information (males or females) who met inclusion criteria and recorded their names and numbers in each unit. Then the researcher used patient's files to collect more information. The researcher introduced him /her and explained the aim of the study to the patients and took written consent from them this as patients may be not aable to give their consent. For at least fifteen minutes, each patient was interviewed one-on-one in a separate room to build rapport, maintain privacy, and prevent distractions. The tools were used by the researcher.

Patients were then given an explanation of the study's instruments, reassured that all information would be kept private and utilized exclusively for the study, and had one-on-one interviews to ensure their privacy. Depending on the patient's attentiveness, focus, and comprehension level, the interview lasted anywhere from 70 to 90 minutes. Every day, two to four patients were interviewed. The researcher used the pre-made instruments to gather data from the chosen site. Six months of data collection were conducted at Port Said Psychiatric Health Hospital and Addiction Treatment, starting in June 2023 and ending in November 2023.

Administrative Design

The manager of the Port Said Psychiatric Health Hospital and Addiction Treatment received official letters from the dean of the Port Said University Faculty of Nursing asking for their cooperation and permission to conduct the research, along with an explanation of the study's purpose, before any steps in the study were taken. Additionally, approval to carry out the study at the Port Said Psychiatric Health Hospital and Addiction Treatment was received by the General Secretariat of Mental Health and Addiction Treatment.

Ethical Considerations

An approval was taken from Scientific Research Ethics Committee in Faculty of Nursing at Port Said University **(04/08/2024** (40))**. The psychiatric patients were informed that their participation is voluntary and they have the right to withdraw from the study at any time without rationalization. Additionally, all data collected from the studied subjects processed in a total confidentiality and used only for the purpose of the study.

Statistical Analysis

The Statistical Package of Social Science program (SPSS) version 26 was used to arrange, edit, store, tabulate, and analyze the data that had been gathered. The statistical analysis was carried by using software. Standard deviation and mean were used to express quantitative data. While percentages and figures were used to express qualitative data. Appropriate tables and figures were used to present the data. The correlation between variables was tested using Pearson's correlation coefficient and chi-square (X2) statistical techniques. For statistical significance, a P value of < 0.05 was used.

RESULTS

Results reveal that in **Table (1)**, this study is conducted on 121 patients. Regarding their age, it was found that 41.3% of patients age ranges between (25-<36) years old, followed by 28.9% aged between 36-<46 years old. Additionally, it is noted that more than half of mental health patients (51.2%) were female but less than half (46.3%) were married. Looking to their level of education, it is found that, less than one-third of the patients (31.4%) had a university level of education, while those patients who read and write only constituted less than one quarter of the subjects (21.5%).

working (58.7%) and more than two thirds worked as crafts man (70.4%). On the other hands, regarding family income, more than two thirds of the psychiatric patients (67.8%) stated that they didn't have adequate monthly income. Looking at their residence, more than half of the psychiatric patients (55.4%) were living in rural areas and more than one third of them (39.7%) were living in family with husband/wife.

Table (2): Illustrates the clinical characteristics of the psychiatric patients. The results clarified that, nearly one third of the psychiatric patients (31.4%) diagnosed with generalized anxiety disorders followed by 29.8% diagnosed with schizophrenia and only 4.1% diagnosed as acute psychosis. Regarding the onset of illness, less than two thirds of the patients (61.2%) had illness from one to less than five years, while 19.8% reported that the onset of illness was less than one years ago.

For previous psychiatric hospitalization, the highest percentage of psychiatric patients (89.3%) admitted to psychiatric hospital previously, it can be observed that, 38.9% of the patients were perviously admitted to psychiatric hospitals from one to five times. Regarding

duration of current hospitalization; the highest percentage of psychiatric patients (46.4%) admitted to hospital less than one month; while 60.7% admitted voluntarily.

Table (3): Show the mean score of the psychiatric patients' according to their emotional recognition levels. It was found that mean score of patients with good emotional recognition is M ± SD is 5.81±.53.

Table (4): shows the distribution of the studied psychiatric patients according to the correct and incorrect response to emotional recognition pictures. The highest percentage of patients (89.3%) recognized correctly the second anger picture expression and 85.1% recognized correctly the fifth picture expression of sad emotion .

Speaking about recognition of neutral picture expression, majority of the patients (88.4%) recognize the first picture expression. On other hand, the majority of the patients 86.0%, recognize the third, and the sixth picture expression of fear emotion. The table also presents that 87.6% of the patient recognized correctly the fifth picture expression of disgust emotions. Finally, it can be also observed that 83.5% and 87.6% of the patients identified the third picture expression of mild intensity happiness and extreme intensity happiness respectively.

Figure (1): Shows the distribution of the psychiatric patients' according to their attachment styles levels. It was found that less than three quarter of the psychiatric patients (73.6%) had intermediate attachment styles, while 5.7% had low attachment styles.

Figure (2): clarifies that 93.3% of the psychiatric patients had poor level of social functioning, and only 6.6% had good level.

Table (5): shows the correlation between total score of emotional recognition, total score of attachment styles and total score of social functioning in the psychiatric patients. It was found that there were no any statistically significant association between them.

Table (1): Percentage distribution of the psychiatric patients' according to their personnel characteristics (n=121).

Personnel characteristics	N	%
Age (Years)		
25-<36	50	41.3
36-<46	35	28.9
46-<56	25	20.7
56-<66	11	9.1
Gender		
Male	59	48.8
Female	62	51.2
Marital status		
Single	33	27.3
Married	56	46.3
Divorced	16	13.2
Widowed	16	13.2
Educational levels		
Not read and write	15	12.4
Read and write	26	21.5
Basic education	17	14.0
Secondary education	25	20.7
University education	38	31.4
Working status		
Working	71	58.7
Not working	50	41.3
Occupation n=71		
Office worker	21	29.6
Crafts man	50	70.4
Family income (Account to patient)		
Enough	39	32.2
Not enough	82	67.8
Residence		
Urban	54	44.6
Rural	67	55.4
With whom do you live?		
Alone	18	14.9
With both parents	35	28.9
With one parent	7	5.8
With husband/wife	48	39.7
With son/daughter	13	10.7

Table (2): Percentage distribution of the psychiatric patients' according to their clinical characteristics (n=121).

Clinical characteristics	N	%
Current diagnosis		
Acute psychosis	5	4.1
Schizophrenia	36	29.8
Bipolar disorder (manic episode)	8	6.6
Bipolar disorder (Depression episode)	22	18.2
Generalized anxiety disorder	38	31.4
Others (e.g. Somatoform disorder, ADHD, Autism, etc…...)	12	9.9
Onset of illness		
<1year	24	19.8
1 -<5 years	75	62.0
5 -<10 years	15	12.4
10 -<15 years	3	2.4
15 -20 years	4	3.3
Previous hospitalization		
No	13	10.7
Yes	108	89.3
Number of previous psychiatric hospitalization/times (n=108)		
1 time: 5 times	42	38.9
6 times: 10 times	29	26.9
11 times: 15 times	37	34.2
Duration of current hospitalization/days (n=56)		
<1 month	26	46.4
1-<2 month	13	23.2
>2 month	17	30.4
Status of current admission (n=56)		
Voluntarily	34	60.7
Involuntary	22	39.3

Table (3): Mean score of psychiatric patients' emotional recognition levels as measured by BLERT* (n=121)
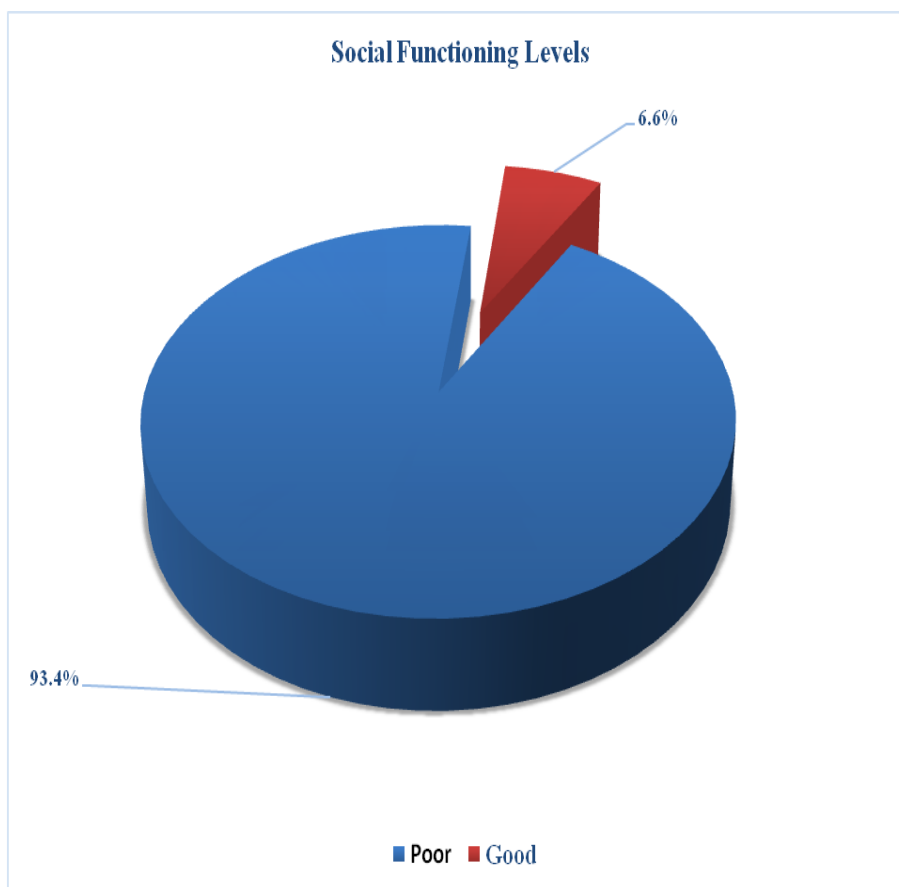
Emotional recognition	Mean ± SD
Good emotional recognition	5.81±0.53
Poor emotional recognition	11.54±1.27
*BLERT is The Bell-Lysaker Emotion Recognition Task	

Table (4): Frequency distribution of correct and incorrect response of psychiatric patients as measured by ER-40* (n=121)

Emotions	Picture Expression Number	Correct		Incorrect	
		N	%	N	%
Anger	1	98	81.0	23	19.0
	2	108	89.3	13	10.7
	3	104	86.0	17	14.0
	4	100	82.6	21	17.4
	5	107	88.4	14	11.6
	6	92	76.0	29	24.0
	7	104	86.0	17	14.0
Sad	1	93	76.9	28	23.1
	2	96	79.3	25	20.7
	3	102	84.3	19	15.7
	4	100	82.6	21	17.4
	5	103	85.1	18	14.9
	6	82	67.8	39	32.2
	7	101	83.5	20	16.5
Neutral	1	107	88.4	14	11.6
	2	97	80.2	24	19.8
	3	98	81.0	23	19.0
	4	103	85.1	18	14.9
	5	99	81.8	22	18.2
	6	105	86.8	16	13.2
	7	105	86.8	16	13.2
Fear	1	94	77.8	27	22.3
	2	102	84.3	19	15.7
	3	104	86.0	17	14.0
	4	101	83.5	20	16.5
	5	100	82.6	21	17.4
	6	104	86.0	17	14.0
Disgust	1	96	79.3	25	20.7
	2	104	86.0	17	14.0
	3	102	84.3	19	15.7
	4	104	86.0	17	14.0
	5	106	87.6	15	12.4
	6	99	81.8	22	18.2
Mild intensity Happy	1	98	81.0	23	19.0
	2	83	68.5	38	31.5
	3	101	83.5	20	16.5
	4	85	78.5	26	21.5
Extreme intensity happy	1	95	78.5	26	21.5
	2	89	73.6	32	26.4
	3	106	87.6	15	12.4
*Is Penn Emotion Recognition Text					
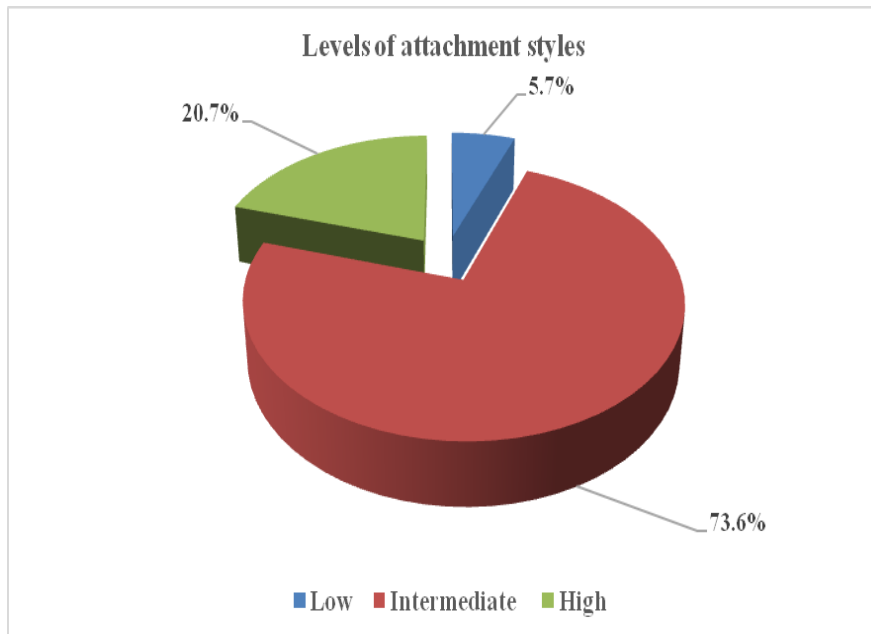
Figure (1): Percentage distribution of total attachment styles levels among psychiatric patients (n=121)

Figure (2): Percentage distribution of the total social functioning levels among psychiatric patients (n=121)

Table (5): Correlation between total emotional recognition score, total attachment styles score, and total social functioning score among the studied psychiatric patients (n=121)

Items	Total Emotion Recognition Score		Total Attachment Styles Score		Total Social Functioning score	
	r	P value	r	P value	r	P value
Total Emotion Recognition Score			.114	.208	.040	.661
Total Attachment Score	.114	.208			.058	.522
Total Social Functioning score	-.017	.853	-.058	.524		
r is spearman rank correlation				**P: value is significant <.05**		

DISCUSSION

The relationship between emotional recognition, attachment styles, and social functioning is critical in understanding psychiatric patients' overall well-being. Emotional recognition, the ability to identify and interpret emotional cues, significantly impacts social interactions and relationships. Attachment styles, established early in life, influence one's approach to relationships and emotional regulation. These styles such as secure, anxious, avoidant, and disorganized affect how individuals perceive and respond to social cues. Psychiatric patients often exhibit impaired emotional recognition and maladaptive attachment styles, which can hinder social functioning and exacerbate mental health issues. Research indicates that addressing these interconnected aspects can improve therapeutic outcomes and social reintegration for psychiatric patients (Fonagy, Gergely, Jurist, & Target, 2002; Mikulincer, & Shaver, 2007).

The current study highlights the recognition of different facial expressions among patients with psychiatric disorders using the Bell-Lysaker Emotion Recognition Task (BLERT). The findings indicate that while psychiatric patients demonstrate reasonably high recognition rates for most emotions (anger, sadness, surprise, disgust), these rates are generally lower compared to those observed in the general population. This aligns with previous research, such as a meta-analysis by Kohler, Walker, Martin, Healey, & Moberg (2010), which shows that individuals without psychiatric conditions have higher accuracy in recognizing basic emotions from facial expressions.

The study found that psychiatric patients displayed varying abilities to correctly identify emotional expressions in the Penn Emotion Recognition Test. The highest

percentage of correct responses was for the second picture of anger, indicating that this emotion, particularly with its distinctive facial cues like furrowed brows and tight lips, is highly recognizable among psychiatric patients. This aligns with Amy et al., (2016) study who found that anger is easily identifiable emotion due to its universal facial features. Similarly, a study titled "Facial emotion recognition in patients with depression compared to healthy controls when using human avatars" reported that a substantial proportion of patients correctly identified the fifth picture of sad emotion, suggesting that the recognizable features of sadness, such as downturned lips and drooping eyelids, are easier for patients to discern, as supported (Monferrer et al., 2023).

Additionally, the study revealed that the first picture expression of a neutral emotion was correctly recognized by a significant number of patients. Neutral expressions, characterized by a lack of intense facial muscle contractions, were correctly identified by patients who could discern the absence of emotional cues, a finding consistent with the research of Matsumoto & Hwang (2011); Motomura et al., (2019). These results suggest that while certain emotions like anger and sadness are more easily recognized due to their distinctive features, the ability to recognize neutral expressions may rely on patients' capacity to notice the absence of emotional signals.

Recognition of fear was accurate in most patients for both the third and sixth picture expressions. Fear, identified by widened eyes and a slightly open mouth, signals potential threats, highlighting its evolutionary importance (Song et al., 2023). This accurate identification suggests the ingrained human ability to recognize fear for survival.

Recognition of happiness varied slightly between mild and extreme intensities among the studied subjects. Generally easy to identify by a smiling face, the intensity of happiness can affect recognition accuracy. These findings align with Kyranides, Christofides, & Çetin, (2022), suggesting that psychiatric patients' ability to recognize emotions depends on the distinctiveness of facial cues.

The present study also found that many patients exhibit an intermediate level of anxiety attachment, suggesting moderate discomfort with closeness and dependency but not extreme avoidance behaviors. According to Kaniuka, Lustyk, and Jared (2019), intermediate avoidance attachment may serve as a defense mechanism to help individuals cope with stress by keeping a certain distance to avoid rejection or disappointment. This

is particularly relevant for psychiatric patients who may have had unstable or traumatic relationships. Similarly, these patients show intermediate anxiety attachment, indicating a moderate fear of relationships without the overwhelming fear and dependence seen in high anxiety attachment. Cassidy and Shaver (2016) noted that such moderate levels of attachment anxiety could result from inconsistent caregiving, leaving individuals uncertain about the availability and support of others.

A significant portion of the studied psychiatric patients exhibited a high level of anxiety attachment, likely due to early adverse experiences. May be these patients had familial troubles, or familial neglect, leading to poor social coping, social withdrawal, and avoidant coping styles. Psychiatric patients tend to experience significant fear of abandonment and a deep need for reassurance, exacerbating their psychiatric symptoms. High anxiety attachment is linked to psychiatric disorders like depression and anxiety and stems from early experiences of inconsistency or neglect, resulting in hypervigilance and a strong need for validation. This finding is in line with the findings of Lyons-Ruth, Dutra, Schuder, and Bianchi (2006), who found that a considerable proportion of psychiatric patients have high levels of anxious attachment, which is probably related to traumatic experiences experienced early in life.

The present study displayed that the highest percentage of psychiatric patients have a poor level of social functioning underscores significant concerns regarding the social integration and quality of life of individuals with psychiatric disorders. This observation is consistent with Harvey and Strassnig (2012); Eack, and Newhill (2007) who demonstrated the pervasive impact of mental illness on social functioning. No significant relation between the three variables and with whom agree or disagree.

CONCLUSION

Drawing on the results of this study, it can be said that the mean score of emotional recognition of psychiatric patients indicated good emotional recognition, less than three quarters had intermediate attachment styles, and the majority of them had poor levels of social functioning. Consequently, there were no statistically significant association between emotional recognition, attachment styles, and social functioning.

RECOMMENDATIONS

- Conduct longitudinal studies to observe how emotional recognition, attachment styles, and social functioning interact over time in psychiatric patients. This will help in understanding causal relationships and long-term outcomes.

- Educational intervention program aimed at improve emotional recognition and modifying maladaptive attachment styles to enhance social functioning. Cognitive-behavioral therapy (CBT), attachment-based therapy, and social skills training could be explored.

- Examine the impact of early life trauma on attachment styles and emotional recognition abilities. Understanding this relationship could inform targeted therapeutic approaches for individuals with a history.

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العلاقة بين التعرف على المشاعر وأنماط التعلق والأداء الاجتماعي لدى المرضى النفسيين

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الـخـلاصـة

المقدمة: العلاقة بين التعرف علي المشاعر وأنماط التعلق والأداء الاجتماعي لدى المرضى النفسيين هي تفاعل معقد يؤثر بشكل كبير على صحتهم العقلية العامة و جودة حياتهم. **الهدف:** هدفت هذه الدراسة إلى استكشاف العلاقة بين التعرف علي المشاعر وأنماط التعلق والأداء الاجتماعي بين المرضى النفسيين. **طرق وادوات البحث:** تم استخدام تصميم بحث ارتباطي وصفي. شمل عينة مقصودة من 121 مريضًا نفسيًا فى وحدات المرضى الداخليين والعيادات الخارجية في مستشفى بورسعيد للصحة النفسية. **أدوات جمع البيانات:** تم استخدام الأدوات التالية: مهمة التعرف على المشاعر بيل-ليساكر، نص التعرف على المشاعر بن، مقياس التعلق الذهاني، مقياس الأداء الاجتماعي، بالإضافة إلى استمارة الخصائص الشخصية والسريرية. **النتائج:** وفقًا لنتائج الدراسة، أشار متوسط درجات التعرف العاطفي للمرضى النفسيين إلى التعرف علي المشاعر الجيد، وكان أقل من ثلاثة أرباعهم أنماط تعلق متوسطة، وكان لدى الغالبية منهم مستويات ضعيفة من الأداء الاجتماعي. ووجدت أنه لا توجد فروق ذات دلالة إحصائية بين التعرف علي المشاعر وأنماط التعلق والأداء الاجتماعي. **الاستنتاجات:** لم يتم ملاحظة أي ارتباط ذي دلالة إحصائية بين الدرجات الإجمالية للمرضى النفسيين في التعرف علي المشاعر وأنماط التعلق والأداء الاجتماعي. **التوصيات:** يوصى ببرنامج تدخل تعليمي يهدف إلى تحسين التعرف علي المشاعر وتعديل أنماط التعلق غير التكيفية لتعزيز الأداء الاجتماعي.

الكلمات المرشدة: أنماط التعلق، التعرف العاطفي، المرضى النفسيين، الأداء الاجتماعي.