Effect of an Emotional Regulation Training Program on Social Functioning among Patients with Psychiatric Disorders

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ABSTRACT

Background: Difficulties in emotion regulation are commonly observed among psychiatric patients, significantly impacting their social functioning. Emotional regulation is essential for establishing and maintaining productive social interaction and relationships. **Aim:** The study aimed to assess the effect of emotional regulation training program on social functioning among patients with psychiatric disorders. **Subjects and Method: Design:** A quasi-experimental design of one group (pretest and posttest) was utilized conduct the study. **Setting:** The study was conducted at Port Said Psychiatric Health Hospital. **Subjects:** A purposive sample of 60 patients diagnosed with psychiatric disorders. **Tools:** Two tools were used for data collection; the first tool Difficulties in Emotional Regulation Scale (DERS), the second tool Social Functioning Scale (SFS). **The Results:** pre intervention 58.3% of the patients exhibited moderate levels of emotional regulation difficulties. Post and during follow up phase ,91.7% and 88.3% of them respectively reported mild levels of difficulties. Moreover ,78.3% of the patient's demons treated mild social functioning post program and follow up. compared to only 11.7% pre-intervention a statistically significant correlation was found between overall social functioning and emotional regulation difficulties during the follow up phase. **Conclusion**: the emotional regulation training program had a positive effect on emotional regulation and contributed to improvement in social functioning among the studied patients. **Recommendations**: Educational training program for family members and caregivers is recommended to enhance their understanding of emotional regulation, support patients in managing negative emotions and promote the use of effective emotion regulation strategies.

Key words: Emotional regulation, Psychiatric disorders, Psychiatric patients, social functioning.

INTRODUCTION

The concept of emotional regulation is a hot topic in modern psychology. Emotion regulation is the diverse collection of techniques people use to control their emotional experiences. Emotional control is an essential skill that has been connected to improved interpersonal interactions and higher levels of life satisfaction. Accordingly, the inability to control one's emotions has serious repercussions, has been connected to increased levels of stress, anxiety, and

depression, and is a key diagnostic characteristic of over half of all mental illnesses (Kalia & Knauft, 2020).

Emotion regulation plays an important role in shaping not only momentary emotion experience and behavior, but also broader and more enduring features of psychological functioning such as satisfying hedonic needs that aimed at producing pleasure and reducing pain, facilitating of specific goals and tasks, and optimization of social functioning (Aldao, & Nolen-Hoeksema, 2022; Cisler, & Koster, 2022).

Their social interactions may be hampered by these attachment fears, which may also lead to social disengagement or conflict. In order to improve psychiatric patients' social functioning and general well-being, effective treatment approaches frequently seek to strengthen secure attachment types and emotional awareness abilities (Berry, Barrowclough, & Wearden, 2023). Psychiatric patients' general mental health and quality of life are greatly impacted by the intricate interactions between their emotional recognition, attachment styles, and social function. An outline of the connections between these parameters can be found here (Sagone, Commodari, Indiana, & La Rosa, 2023).

On the other hand, the ability to engage with the social environment in a way that is typically regarded as normal is known as social functioning. One important outcome indicator for assessing the effectiveness of treatment is social functioning, which is defined as participation in social contacts and activities. The degree to which an individual performs within their social setting, with that function shifting between them, is known as social functioning (Rajkumar, 2023).

Conceptually, perform functioning can be thought of as one aspect of disability, in addition to physical functioning and satisfaction, which are all sub-domains of quality of life. Measures of social functioning commonly includes assessment of ability to make and maintain friends, quality of interpersonal relationships, participation in work and community activities, or quality of familial interactions (Lahiri, Van Ommeren & Roberts, 2017). According to Bandura (2023) Family functioning, friendship quality, functional impairment, general social functioning, social adaption, and social interactions are the six domains into which social functioning were divided. Each one includes an interpersonal component on day-to-day activities and the person's capacity to carry them out.

A society's social function is the manner in which its members interact with one another and participate in various social activities. Knowing these elements can help social workers,

psychologists, and healthcare professionals create support networks and interventions to improve social function for those who struggle in this area (Smith & Mackie, 2021).

In psychotic disorders, impaired social functioning is a basic characteristic. A significant percentage of individuals with psychotic disorders struggle to participate in leisure and community activities, build relationships with others, or operate in the workplace or at school (Schwarz, & Clore, 2021). Furthermore, because social functioning impairments are associated with negative outcomes and a lower quality of life, social functioning has emerged as a crucial outcome measure in the treatment of mental diseases and is recognized as a significant component in treatment efficacy (Morrison & Byrne, 2021).

Psychiatric mental health nurse often leads or co-facilitate emotional regulation training programs that incorporate evidence-based strategies, such as those from Dialectical Behavior Therapy (DBT) or Cognitive Behavioral Therapy (CBT) (Zhang & Wang, 2024). Psychiatric mental health nurse begins by conducting comprehensive assessments to evaluate the patient's emotional regulation capacity and its impact on social functioning. They use standardized tools, interviews, and observations to identify specific areas of emotional dysregulation, such as impulsivity, mood lability, or difficulty in identifying and expressing emotions. This evaluation helps tailor the training program to the individual's needs (Wainwright, Berry, Dunster-Page, & Haddock, 2021).

Furthermore, psychiatric mental health nurse emphasizes the practical application of emotional regulation skills to real-life social situations. They guide patients in understanding how regulated emotions contribute to better communication, reduced conflicts, and improved relationships. For instance, psychiatric mental health nurse help patients practice active listening, assertiveness, and empathy during social interactions (El-Azzab, Mohamed, & El-Nady, 2023).

Significance of the study

Difficulties in emotion regulation and impairment social function are associated with a range of psychiatric conditions. However, there remains limited understanding of how emotional regulation challenges vary across different disorders (Aslan, Dorey, Grant, & Chamberlain, 2024). Emotional regulation difficulties can lead to several negative outcomes, including impaired interpersonal relationships, hindered daily functioning, and increased susceptibility to comorbid disorders (Neophytou, Theodorou, Artemi, Theodorou, & Panayiotou, 2023). Moreover, social functioning is significant impaired among schizophrenic patients and is repeatedly associated with poor adherence to medical treatment, poor prognosis, higher relapse rate and increased risk of

premature mortality (Abdel-Aziz, Abdel-Aziz, Kotb, & Zaki, 2023). Therefore, this study is essential for gaining insight into the relationship between emotional regulation difficulties and social functioning among patients with psychiatric disorders. This will allow for the development of interventions that will help psychiatric patients to regulate emotions effectively and efficiently and consequently enhancing social functioning.

The study aimed to

Explore the effect of an emotional regulation training program on social functioning among patients with psychiatric disorders through the following objectives:

1. Evaluate levels of emotional regulation difficulties among patients with psychiatric disorder.
2. Assess level of social functioning among patients with psychiatric disorders.
3. Design an emotional regulation training program for patients with psychiatric disorders.
4. Implement the emotional regulation training program for patients with psychiatric disorders.
5. Evaluate the effect of a training program about emotional regulation on patients social functioning.

Research hypothesis:

Implementation of an emotional regulation training program while significantly improves the level of social functioning among patients with psychiatric disorders.

SUBJECTS AND METHOD

Study Design:

Quasi-experimental one-group pretest-posttest design was utilized to meet the aim of this study.

Study Setting:

The present study was carried out in the inpatient departments at one of psychiatric Hospital which affiliated with the General Secretariat of Mental Health and Addiction Treatment (GSMHAT), Ministry of Health, Egypt.

Study Subjects:

A purposive sample of 60 psychiatric patient was selected from the hospital's inpatient departments participation were, either males or females who had previously diagnosed with a psychiatric disorder by qualified specialists.

Inclusion criteria:

1. Patients in the age ranges between 18–60 years.

2. Not suffering from any additional developmental or mental illnesses.
3. Able to communicate verbally and participate in the intervention.

Sample size:

A sample size was calculated by using the following single population.

Proportion formula:

Sample size (n) = [(Zα/2)2 *p (1-p)]/ d2 (Sullivan, 2017).

By considering the following assumptions:

p =16.93% prevalence of mental disorder for adult in Egypt (Ghanem, Gadallah, Meky, Mourad & El-Kholy, 2009).

d = 3% the margin of error

Zα/2 = 1.96 at 95% confidence of certainty.

n = [(Zα/2)2 *p (1-p)]/ d2 =59.9 considering 5% non-response rate.

The final sample size 60= psychiatric patients.

Tools for data collection:

Two tools were utilized to collect data in this study:

Tool I: Difficulties in Emotional Regulation Scale (DERS):

This scale was developed by Gratz and Roemer (2004), and translated into an Arabic language by Elsayed, Ramadan, Gemehy & Abd-ELgfar (2020). This scale consisted of 36 items designed to assess individuals' levels of difficulties in regulating emotions distributed as follows; non-acceptance of emotional response comprising six items (2, 11, 21, 23, 25, and 29), difficulties engaging in goal-directed behavior including five items (13, 18, 20, 26, and 33), six items (3, 14, 19, 24, 27, and 32) related to impulse control difficulties, lack of emotional awareness comprising six items (2, 6, 8, 10, 17, and 34), limited access to emotion regulation strategies encompassing eight items (15, 16, 22, 28, 30, 31, 35, and 36), and finally, five items (1, 4, 5, 7, and 9) covering lack of emotional clarity.

Scoring System:

Participants asked to indicate how often the items apply to themselves using a five-point Likert scale, with 1 = almost never, 2 = sometimes, 3 = about half the time, 4 = most of the time, and 5= almost always. The scoring was reversed in the negative items (1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34). Difficulties in emotional regulation scale provides a scoring of overall difficulties where higher scores correspond to greater difficulties. A score of 90 indicated mild overall emotional regulation

difficulties, a score ranging from 90 to135 showed moderate level, while, a score of more than 135 referred to high level (Elsayed et al., 2020).

The Arabic scale of DERS had validity and reasonable internal consistency, with Cronbach's Alpha α = 0.89. Validity was done by a panel of experts who decided that the scale is valid (Elsayed et al., 2020).

Tool II: Social Functioning Scale (SFS):

This scale was developed by Birchwood, Smith, Cochrane, Wetton and Copestake (1990), and translated by Atta, El Gueneidy and Lachine (2017) in an Arabic language to assess the levels of social functioning among individuals diagnosed with psychiatric disorders. The SFS contains 76 items that covered seven dimensions which including social withdrawal/engagement (5 questions), interpersonal communication (4 questions), and work / employment (4 questions). Additionally, independence performance (13 items), independence competence (13 items), recreational activities (15 items), and pro-social activities (22 items).

Scoring System:

Responses of participants for these dimensions were measured on a 4 points Likert scale; ranged from "0" to "3". The scores ranged from 0 to 15 for social withdrawal/ engagement, 0 to 12 for interpersonal functioning, 0 to 12 for work/ employment, 0 to 39 for independence performance, 0 to 39 for independence competence, 0 to 45 for recreational activities, and finally 0 to 66 for pro-social activities, with a total score ranging from 0 to 228.

The mid-point for the overall scale and each subscale was calculated; scoring less than mid-point score indicate low social functioning and scoring of equal or more than mid-point, indicate high functioning (Atta et al., 2017).

Regarding Social Functioning Scale, its Arabic version showed a satisfactory validity and high internal consistency, with Cronbach's Alpha α = 0.91. Validity was done by an Egyptian panel of experts who decided that the scale is valid (Atta et al., 2017).

In addition to **Personal and Clinical Data Sheet:** This sheet was developed by the researcher in an Arabic language. The sheet elicits personal characteristics as age, sex, and marital status, level of education, working status and income. It also includes questions that cover data related to diagnosis, duration of illness, number of previous psychiatric hospitalization, and date of last hospitalization.

Pilot Study:

A pilot study was conducted from the beginning to mid of November 2022, out on 10% of the total study sample involving six patients who were selected randomly. The purposes of the pilot study were to test the applicability and clarify the feasibility of the study tools, and it served to estimate the proper time required for answering the questionnaire. It also, helped to find out any obstacles and problems that might interfere with data collection. Psychiatric patients who were shared in the pilot study were excluded from the entire sample of research work. In accordance with the findings of pilot study, the tools were applicable and vibrant. Thus, no modifications were required.

Field Work:

Initially, an official letter was issued by the Dean of the Faculty of Nursing at Port Said University and submitted to the hospital director requesting permission to conduct the study. After approval was granted, the director suffered the researcher to the nursing staff in the inpatient departments. The research introduced herself and explain the study's objectives to the responsible nurses, who then determined specific days -Monday and Tuesday each week for data collection spanned four months, from December 2022 to the end of March 2023.

Eligible patients were identified through consultation with the charge nurses; after obtaining informed consent, data were collected through individual face to face interview conducted in private areas within the inpatient unit to ensure confidentiality. Between four to five patients were interviewed per day between 9 a.m. and 1.00 p.m. with each interviewed lasting approximately 30to 45 minutes depending in participation's responses. Upon completion of interviews, the researcher confirmed that each item in the study tools was filled out. Afterwards, gratitude was conveyed to the patients for their kind donation of effort and time.

Ethical Considerations:

The research proposal was approved by the Scientific Research Ethics Committee of the Faculty of Nursing at Port Said University through issuing an ethical approval with code number (47) (2/3/2025) Likewise, the researcher obtained a written agreement from the General Secretariat of Mental Health and Addiction Treatment (GSMHAT), Ministry of Health, Egypt. Subsequent a clear explanation of the study's aim, the aforementioned hospital's director provided his approval to conduct the study. Moreover, informed consent to share in the study was obtained from psychiatric patients after clarifying the purpose of the study in an understandable language. By assigning a code number to each patient's questionnaire, anonymity was meticulously conserved. The patients who were being studied were assured of their ability to withdraw from the study at any time without facing any consequences,

confirming their intentional contribution. Each participant was given guarantees that the information gathered would be kept confidential and exclusively utilized for the research objectives. The process of data collection did not disturb the harmony of the work of the above-mentioned hospital.

Program phase:

Preparation, data collection, planning, implementation, and evaluation of a program persisted for 7 months plus 20 days from the first of December2022 to the 15th of July 2023. The study moved through four phases as the following:

Phase I: Preparation and Assessment Phase:

At the first, the researcher reviewed all patients' medical records in each ward to detect psychiatric patients and the nurses were asked about the patients who were able to communicate effectively. The researcher met the studied patients and clarified to them the purpose of the study and how the program will be implemented, and the written formal consent of each patient was taken with helping from administrative officials; the researcher began to fill in the written pre mentioned tools individually (pretest). The time needed for filling each one extended from 30 to 45 minutes depending on the response of each patient.

Phase II: Planning Phase:

Based on the results obtained from the previous phase (pre-test), and a review of the related literature, an educational program Explore effect of an emotional regulation training program on social functioning among patients with psychiatric disorders was developed. The content stressed mainly self-management categories (physiological, cognitive, and behavioral) and their application of it to detect levels of difficulties in emotional regulation among patients with psychiatric disorders. Also, a simple booklet was developed based on the review of the recent related literature. The program objective was developed during this phase.

Phase three: Implementation phase:

An emotional regulation training program was carried out over eight months plus 15 days, three sessions per week, each session lasted from 45 minutes to one hour. During the first session, the objectives of the program were clarified. Moreover, the studied patients were informed about the session`s time, the phases of the study, content, and extent. Each session began with, a summary of what was provided during the preceding session and the objectives of a new one. The studied patients were permitted to request an explanation or clarification of any point involved in the sessions. The program was presented in a concise and clear form emphasizing the program

objectives, using different teaching methods such as group discussion, demonstration, and modified lectures and suitable media a printed booklet and role playing.

The program was implemented on a small group basis, each group three days/ week for four weeks to complete eleven sessions. The sessions were conducted inside the patients' ward. This educational program aims to enhance the skills of regulating emotions for patients with mental disorders and improve their ability to express feelings, which is reflected in the improvement of the level of social performance.

Phase IV: Evaluation phase:

After the implementation of the program (post-test) through the pre-mentioned tools. After completion of post-test, the studied patients were thanked for the effort and the time they offered. This process was carried out again after one month (follow-up test). A printed booklet that included all information involved in the program was presented to the studied patients.

Limitation of the study:

- During the implementation of the training program, several challenges were encountered.
- There was lack of privacy; there was no specific place for conducting the program.
- The researcher was exposed to many interruptions by other patients and staff member which lead to distractibility of the study subjects.
- Some patients were discharged before completing the goal so the researcher beginning with new participants' patient.
- **Statistical Analysis**:

  Data were fed to the computer and analyzed via IBM SPSS software package version 22.0. (SPSS Inc., Chicago, IL, USA). Qualitative data were described through frequencies and percentages. Quantitative data was tested for normality by Kolmogrov-Smirnov test. Normally quantitative variables were presented using descriptive statistics including means, and standard deviations. Moreover, quantitative variables were correlated using the Pearson's correlation coefficient. A statistical significance of the obtained findings was considered at the p-value $\leq$ 0.05.

RESULTS

Table 1 Clarifies that, less than two-thirds (65.0%) of the studied patients are aged between < 20 to <40 years old and half (50%) of them were females. Also, this table reveals that more than half (53.3%) of the studied patients were singles and more than one third (38.3%) of them had preparatory education.

Regarding working status, slightly less than two thirds (65.0%) of the studied patients were working. In relation to perception of monthly family income, half (50.0%) of the studied patients perceive that their family income wasn't enough. Also, it is obvious from this table that 91.7% of the studied patients were living with their family members.

Table 2 displays that more than half (61.7%) of the studied patients had affective disorder, while the rest of them (38.3%) had suffered from schizophrenia. More than three quarters (80.0%) of the studied patients had psychiatric disorder from less than one year. As regard previous psychiatric hospital admission, more than two thirds (68.3%) of the studied psychiatric patients admitted to the hospital previously, and more than half (51.3%) of them hospitalized three times or more, also 56.7% of them admitted to psychiatric hospital against their will.

Table 3, reveals that 51.7% of the studied psychiatric patients had high non acceptance dimension of emotional regulation difficulties which improved post-program to all of them had mild difficulties and slightly decreased in follow-up (91.7%). As regards difficulties engaging in goal directed behavior dimension, it is obvious from this table that 58.3% of the studied psychiatric patients had moderate level which improved post-program to 83.3% of them had mild difficulties. Concerning impulse control difficulties, 91.7% of the studied psychiatric patients had moderate level which improved post-program to 83.3% of them had mild difficulties. Moreover, this table displays that more than 68.3% of the studied psychiatric patients had moderate difficulties regarding lack of emotional awareness which improved to 83.3% of them had mild difficulties and decreased to 46.7% of them in follow-up. On the subject of limited access to emotion regulation strategies, 58.3% of the studied psychiatric patients had moderate level which improved to 90% of them had moderate difficulties and decreased to 81.7% in follow-up phase. Likewise, it is noticed from this table that 43.3% of the studied psychiatric patients had moderate lack of emotional clarity dimension which improved post-program to 83.3% of them had mild difficulties.

Figure 1. indicates that 58.3% of the studied patients had moderate level of overall emotional regulation difficulties, while 41.7% of them had high level.

Table 4. clarifies that there were statistically significant differences between pre-, post-program and follow-up mean scores regarding social functioning dimensions. As shown in the table, the highest mean score was regarding pro-social activities domain (39.5±5.4) post-program and follow up compared to pre-program mean score (12.8 ±7.1). whereas, the lowest mean score was regarding employment status domain (5.8±.83) post-program and follow-up compared to pre-program mean score (1.08±0.6).

Figure 2. Displays that the majority of the studied psychiatric patients had (88.3%) a low level of social functioning where only 11.7% demonstrated a high level.

Table 5 Clarifies that the age of the studied patients and perception of monthly income were considered the most significant predictors of emotional regulations difficulties preprogram ((p= 0.038, 0.001) respectively, While, the most significant predictors of emotional regulations difficulties post-program were residence, followed by perception of monthly income (p= 0.068, 0.133) respectively. The table additionally clarified that age and marital status were the most significant predictors of emotional regulations difficulties follow- up program (p= 0.116, 0.265) correspondingly.

Table 6. It is vibrant from the table that there was statistically significant correlation between overall social functioning and emotional regulation difficulties among the studied patients in follow-up phase.

Table 1: Frequency Percentage distribution of the studied psychiatric patients according to their personal characteristics (n=60).

Personal characteristics	Frequency	%
Age/years		
< 20	4	6.6
20> 40	39	65.0
40 < 60	16	26.7
> 60	1	1.7
Mean ±SD	**33.3 ± 12.49**	
Sex		
Male	30	50.0
Female	30	50.0
Marital status		
Single	32	53.3
Married	18	30.0
Divorced	9	15.0
Widow	1	1.7
Level of education		
Not read and write	6	10.0
Read and write	9	15.0
Basic education	10	16.7
Preparatory	23	38.3
Secondary	12	20.0
Working status		
Not working	21	35.0
Employed	31	51.7

Workmanship	8	13.3
Perception of monthly income of the family		
Not enough	30	50.0
Enough	25	41.7
Enough and more	5	8.3
Residence		
Urban	30	50.0
Rural	30	50.0
Living status		
Alone	5	8.3
Live with family member	55	91.7

Table (2): Frequency and Percentage distribution of the studied psychiatric patients according to their clinical characteristics (n=60).

Clinical characteristics	Frequency	%
Current diagnosis		
Schizophrenia	23	38.3
Affective disorder	37	61.7
Onset of the disorder (years)		
< 1	48	80.0
1 < 2	9	15.0
2 < 3	2	3.3
≥ 3	1	1.7
Previous psychiatric hospital admission		
Yes	41	68.3
No	19	31.7
Frequency of psychiatric hospital admission (n=41)		
Once	6	14.6
Twice	14	34.1
Three times and more	21	51.3
Type of admission		
Against his will	34	56.7
By his will	26	43.3

Table 3: Frequency and percentage distribution of the studied psychiatric patients according to sub-dimensions of emotional regulation difficulties (n=60).

Emotional Regulation Difficulties	Pre-program		Post-program		Follow up	
	N	%	N	%	N	%
Non acceptance of emotional response (Non acceptance)						
- Mild emotional difficulties	5	8.3	60	100.0	55	91.7
- Moderate emotional difficulties	24	40.0	0	0.0	5	8.3
- High emotional difficulties	31	51.7	0	0.0	0	0.0
Difficulties engaging in goal-directed behavior (Goals)						
- Mild emotional difficulties	5	8.3	50	83.3	50	83.3
- Moderate emotional difficulties	35	58.3	10	16.7	10	16.7
- High emotional difficulties	20	33.3	0	0.0	0	0.0
Impulse control difficulties (impulse)						

- Mild emotional difficulties	0	0.0	50	83.3	49	81.7
- Moderate emotional difficulties	55	91.7	10	16.7	11	18.3
- High emotional difficulties	5	8.3	0	0.0	0	0.0
Lack of emotional awareness (awareness)						
- Mild emotional difficulties	0	0.0	50	83.3	28	46.7
- Moderate emotional difficulties	41	68.3	10	16.7	32	53.3
- High emotional difficulties	19	31.7	0	0.0	0	0.0
Limited access to emotion regulation strategies (strategies)						
- Mild emotional difficulties	5	8.3	54	90.0	49	81.7
- Moderate emotional difficulties	35	58.3	6	10.0	11	18.3
- High emotional difficulties	20	33.3	0	0.0	0	0.0
Lack of emotional clarity (clarity)						
- Mild emotional difficulties	10	16.7	50	83.3	54	90.0
- Moderate emotional difficulties	26	43.3	10	16.7	6	10.0
- High emotional difficulties	24	40.0	0	0.0	0	0.0

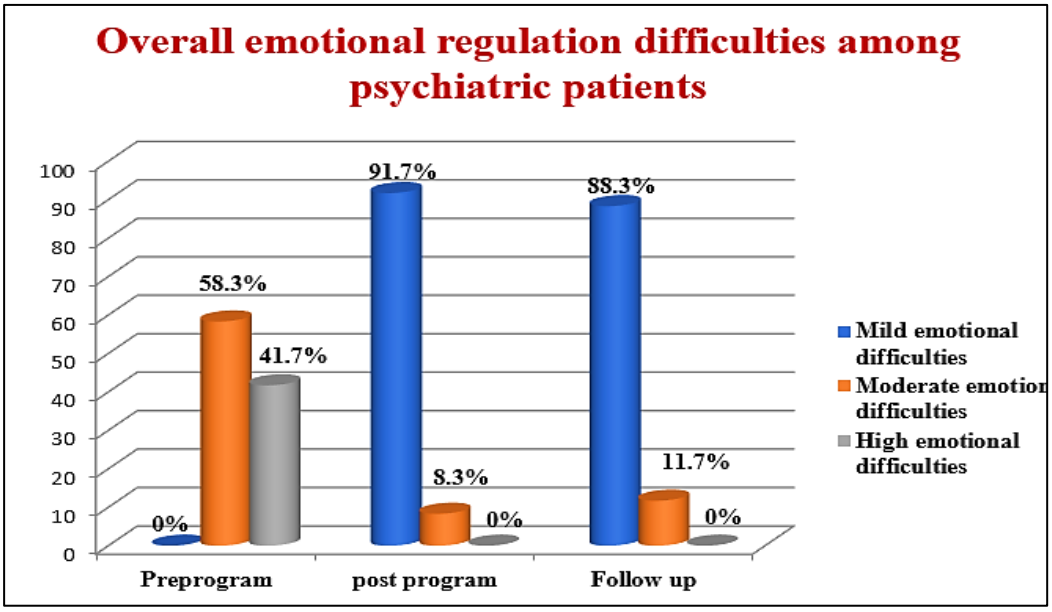

Figure 1. Frequency and percentage distribution of the studied psychiatric patients according to overall emotional regulation difficulties

Table 4: Distribution of mean scores of overall social functioning and its dimensions among the studied psychiatric patients (n=60).

Social Functioning Dimensions	Pre-program Mean ±S. D	Post-program Mean ±S. D	Follow-up Mean ±S. D	T	Sig.
Social engagement/ Withdrawal	7.4 ±2.1	10.6±2.1	10.6±2.1	9.27	**.000****
Interpersonal functioning	7.8 ±2.7	8.6±2.7	8.6±2.7	8.12	**.000****
Independence/ Competence	18.5 ±7.4	22.9±5.3	22.9±5.3	8.73	**.000****
Independence/ Performance	23.6±7.4	34.5±3.2	34.5±3.2	10.33	**.000****

Recreation activities	13.4 ±6.1	28.5±2.9	28.5±2.9	17.8	.000**
Pro-social activities	12.8 ±7.1	**39.5±5.4**	**39.5±5.4**	23.8	.000**
Employment status	1.08±0.6	**5.8±.83**	**5.8±.83**	9.82	.000**
Overall Social Functioning	**89.1±25.2**	**148.8±12.0**	**148.8±12.0**	**27.3**	.000**

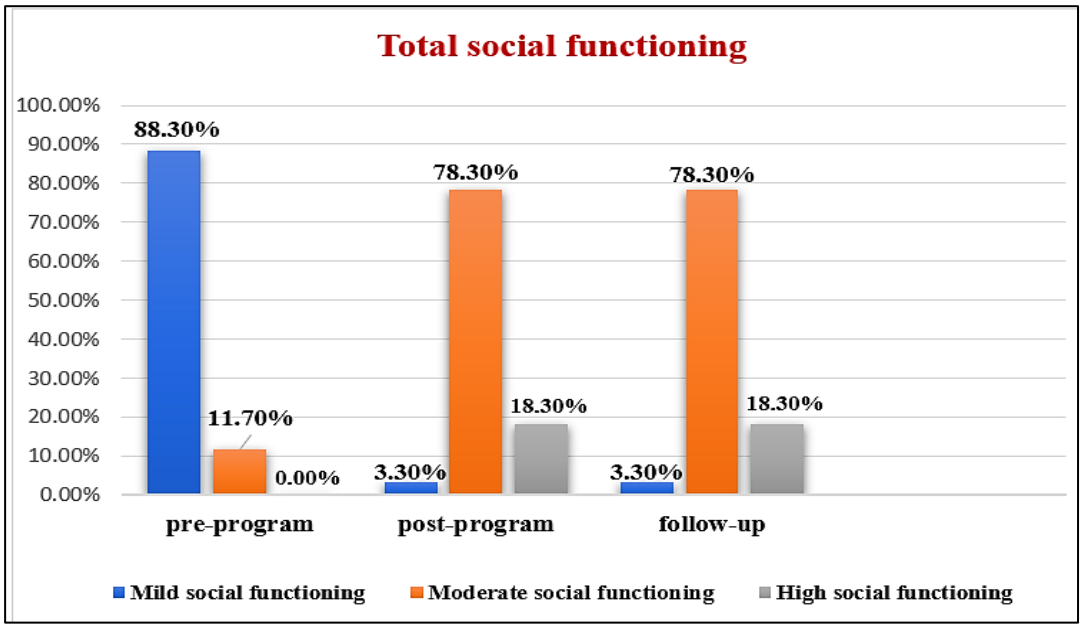

Figure 2. Percentage distribution of the studied psychiatric patients according to their overall social functioning (n=60).

Table 4: Multiple linear regression model for factors affecting emotional regulations difficulties among the studied psychiatric patients (pre, post, and follow-up the program).

Personal and Clinical Characteristics	Overall Emotional Regulations Difficulties Pre-program			Overall Emotional Regulations Difficulties Post-Program			Overall Emotional Regulations Difficulties Follow up		
	S. E	β	T P Value	S. E	B	T P Value	S. E	B	t P Value
Age	0.069	0.148	2.129 **(0.038)**	.132	0.080	0.610 **(0.544)**	0.405	0.648	1.599 **(0.116)**
Gender	1.753	0.237	0.135 **(0.893)**	3.332	0.243	0.073 **(0.942)**	10.251	1.542	0.150 **(0.881)**
Marital status	1.074	0.412	0.383 **(0.703)**	2.042	0.009	0.005 **(0.996)**	6.281	7.081	1.127 **(0.265)**
Level of education	0.632	0.903	1.429 **(0.159)**	1.200	0.720	0.610 **(0.551)**	3.963	1.415	0.383 **(0.703)**
Working status	1.204	0.932	0.774 **(0.442)**	2.288	0.960	0.073 **(0.676)**	7.039	7.781	1.105 **(0.274)**
Perception of monthly income of the family	1.322	4.451	3.367 **(0.001)**	2.512	03.839	0.005 **(0.133)**	7.730	8.726	1.129 **(0.264)**

Place of residence	1.592	1.693	1.063 **(0.293)**	3.026	0.5.643	0.610 **(0.068)**	9.310	9.196	0.988 **(0.328)**
Current diagnosis	0.655	0.322	0.492 **(0.625)**	1.245	0.293	0.073 **(0.815)**	3.829	3.009	0.786 **(4.36)**
R^2	**0.288**			**0.163**			**0.163**		
Adjusted R^2	**0.176**			**0.032**			**0.032**		
F (value)	**2.573 (0.019)**			**1.246 (0.293)**			**1.242 (0.295)**		

F, p: F and p values for the model **R2: Coefficient of determination** **R: coefficient of regression**
SE: Estimates Standard error **β: Standardized Coefficients**

Table 6: Correlation between patients' total social functioning and their emotional difficulties among the studied psychiatric patients (pre, post, and follow-up the program) (n=60).

Emotional Regulation Difficulties	Overall Social Functioning	
	R	p-value
Pre-program	.070	.594
Post-program	.135	.303
Follow up	**.804***	**.033**

r- Pearson correlation coefficient **Significant level (p< 0.05)**

DISCUSSION

Effective emotional regulation allows individuals to respond to life's challenges in a healthy manner without losing control or acting impulsively. promotes mental health and resilience, in contrast difficulties in regulation may lead to narous problems that significantly affect relationships, wellbeing, and ability to contribute to society (Iwakabe, Nakamura, & Thoma, 2023).

Emotional regulation difficulties and low social functioning are core characteristic of many psychiatric disorders including schizophrenia and affective disorders. Patients with psychiatric disorders experience problems in social functioning; these problems are significantly resulting from emotion awareness and regulation difficulties. Medication-based treatment for patients with psychiatric disorders may alleviate acute clinical symptoms; however, it is limited in terms of its ability to improve social and emotional functions (Tawfik, Harfush, Ramadan, & Gemeay, 2021). Therefore, the current study was conducted to unveil the relationship between emotional regulation difficulties and social functioning among patients with psychiatric disorders The results of this current study revealed that all the studied patients had moderate to high emotional regulation difficulties. This could be attributed to that patients with psychiatric disorders tend to perceive less positive affect, pay more attention to negative affect, and use less cognitive reappraisal to control negative emotions. More negative thoughts, selective attention to harmful stimuli, and increased

accessibility of negative memories which can result in rumination of these memories are all associated with difficulties in regulating emotions. This result is in line with the findings of Faul & LaBar (2023); Atta, El-Gueneidy & Lachine (2024).

The findings of the present study showed that the emotional regulation training program positively significantly improved the total levels of the studied patients' emotion regulation immediately post-implementing the program. Although this improvement declined after three months but still significantly better than the pre-program scores which means it needs to be provided continually for cumulative and consistent effect. The finding might be attributed to the skills acquired during the implementation of emotion regulation training program itself, as the program contains a wide variety of strategies that are aimed at providing patients with the opportunities to learn and apply several emotional skills such as expressing emotions by using facial expressions, verbal language, and behaviors. These strategies were applied by materials more attractive and interesting for the patients which enhance learning and acquisition of skills such as cartoon films & telling stories containing different emotions, as well as emotion cards.

The present findings supported by Arafat, Abdel Razek, and Osman Ali, (2024) who studied effectiveness of nursing intervention program based on emotional awareness and emotion regulation on the social functioning of patients with schizophrenia and reported that patient's ability to control their emotions significantly improved immediately after the program was implemented (P= 0.0001). Also, the study conducted by Opoka, Sundag, Riehle, and Lincoln (2021) in Germany entitled "Emotion-regulation in psychosis: Patients with psychotic disorders apply reappraisal successfully " revealed that all patients were able to down-regulate their emotions after following instructions. In addition, Moore, Gillanders, and Stuart (2022) in the United Kingdom who studied the impact of group emotion regulation interventions on emotion regulation ability concluded that patients' emotion dysregulation reduced after the program implementation. Furthermore, An Egyptian study carried out by Atta, et al. (2024) publicized that depressed patients' emotion regulation difficulties decreased from 167.35 ± 2.21 pre-intervention to 105.85 ± 3.33 post-intervention.

The study's meticulous results announced that, most of the studied psychiatric patients had moderate emotional difficulties pre-program which enhanced to the most of them had mild emotional difficulties post-program and follow-up phases. This result could be attributed to the development of mindfulness skills, concentrating on the current moment reduces emotional impulses. This forgoing present study finding was supported by the study of Ahmed, Sayed, and Shabo (2021) which entitled "impact of social and cognitive rehabilitation program on schizophrenic

patients" and proved that rehabilitation programs were effective in inhibit psychiatric patients' impulsive behaviors when experiencing difficult emotions.

Also, Zargar, Bagheri, Tarrahi, and Salehi (2019) who studied effectiveness of emotion regulation group therapy on craving, emotion problems, and marital satisfaction and found that emotional regulation training can reduce difficulties in emotional regulation via reducing impulsivity and the skills such as identifying emotions and their acceptance, as well as engaging in goal-directed behaviors can reduce impulsivity.

The present results showed that there was statistically significant improvement in the studied patients' total score of the emotion regulation difficulties at post-program and follow-up phases. As evidence, more than half of the studied psychiatric patients had moderate level of emotional regulation difficulties preprogram, while majority of them had mild emotional difficulties post program and follow up phases. The finding might be attributed to the effect of the training program which facilitated the psychiatric patient's emotional process regarding interpretation and regulation of their own emotions and teaching the patients how to cope with negative emotions such as anger, anxiety, and depression. Tawfik, et al. (2021) stated that people who used the anger-control manner had little emotional problems.

Along the same line, a study made by Opoka, et al. (2021) revealed that patient's ability to control their emotions significantly improved right away after the intervention program was put into action. Also, Gado, Behpilak (2022) who studied effect of emotion management program on emotion recognition and emotional expression found that there was significant improvement in patients' emotional regulation after the program implementation.

Results of the present study showed that the studied patients post-receiving emotional regulation training were significantly improved in the overall social functioning. Although this improvement after three months was still significantly better than pre-intervention which means it needs to be provided continually for cumulative and consistent effect. This is may be explained by the effect of intervention as it is not only facilitating the patient's emotional process regarding interpretation and regulation of their own emotion but also emotion interpretation for others which had a positive effect of interpersonal relationships.

This findings in the same line with Tawfik, et al. (2021) in Egypt who studied effect of an emotion regulation training intervention on social functioning of patients with psychiatric disorders and found that experimental group attended emotion management training intervention showed a significant improvement in emotional behavior, interpersonal relationships, and social behavior than

those in control group. Also, Zaki, Rabea & Nagy (2024) found that participation in the positive emotions program is accompanied by an improvement of social functioning.

In addition, Abdel-Aziz, et al. (2023) in Egypt who studied effect of psycho-educational program on social functioning among schizophrenic patients s demonstrated that the total social functioning score increased at post and follow up's tests with a highly statistically significant difference after of the psychoeducational program on improving social functioning of the studied sample through teaching individuals the skills of effective communication, problem solving skills, and how to express their emotions and requests.

The present study demonstrated that, there was statistically significant difference between pre-, post and follow-up scores regarding social engagement/withdrawal dimension. As evidence, three quarters of the studied patients were getting up before 9 am pre-program which changed to less than one fifth of them post-program and follow-up. In addition, more than half of the studied patients were sometimes starting conversation at home which increased post-program to more than two thirds. This outcome agreed with Elsherif et al., (2022) who discovered that there was significant improvement in patients' engagement after implementation of emotional regulation program.

The present study clarified that, there was statistically significant difference between pre-, post and follow-up scores regarding interpersonal functioning dimension. It was reported that less than half of the studied patients sometimes communicated with others in a sensible/rationale way which increased post-program to more than three quarters. This finding was reinforced by Karaman et al. (2020) which revealed that there was a significant increase in interpersonal functioning among the study subjects following the educational intervention.

The current findings displayed there was statistically significant difference between pre-, post and follow-up scores regarding independence/ performance dimension. It was found that more than two thirds of the studied patients were never looking for a job pre-program which changed post-program to less than half of them. Also, more than half of the studied patients were sometimes taken care of personal appearance and regular washing and bathing pre-program which improved post-program to most of them were often takes care of personal appearance regular washing and bathing. Similarly, Yüksel et al., (2021) reported that, there were a statistically significant difference between the pre-test and post-test regarding patients' independence performance mean score.

The current results illustrated that there was statistically significant difference between pre-, post and follow-up scores regarding independence/ competence dimension. As evidenced, most of the studied patients didn't need help in personal hygiene and taking care of their personal appearance

respectively and increased post-program to all of them. In the same context, Dubreucq et al. (2020) found that study participants showed a significant improvement in competence subscale more than control group.

In relation to multiple linear regression model for factors affecting emotional regulations difficulties among the studied psychiatric patients, the present findings clarified that changes occur in emotional regulations difficulties were related to place of residence at post-program phase. This is in harmony with Rabei, et al. (2019) who stated that emotional regulations difficulties could change depending on demographic characteristics and that symptom dimensions were related to patient residence, that explained patients who live in village had high level of self-empowerment than those who live in city. The presence of social support from individuals close to the patient, such as family members and neighbors, is empowering, and social support embodies access to relationships that provide emotional advice.

The current findings presented that the age of the studied patients and perception of monthly income were considered the most significant predictors of emotional regulations difficulties preprogram. This could be attributed to the fact that with increasing age the persons become more mature, more participate in society, more dependent on himself and control their anger. Also, this might suggest that patients' outcome is considered an important contributor to their financial support and maintaining a standard of living which contributes to increasing feelings of security, life satisfaction, self-esteem and emotional stability.

This finding is confirmed by Abdel-Aziz, et al. (2023) who discovered that there was relation between patients' age and their emotional regulation difficulties related to emotional awareness, and behavior control. In addition, the study by Elsherif, et al. (2022) appeared that patients aged (20-<30) years had positive significant correlation with patients' emotional behaviors than other age groups.

Regarding correlation between overall social functioning and emotional regulation difficulties among the studied psychiatric patients, the current results illustrated that there are no statistically significant correlations between overall emotional regulation difficulties and social functioning among the studied patients throughout the program phases. This result disagreed with Tawfik, et al. (2021) who concluded that there was negative statistically significant relation between emotional regulation difficulties and social functioning, which means an improvement in the social functioning of patients when their emotional regulation difficulties improved.

Also, inconsistence with Kimhy, et al. (2016) who studied the impact of emotion awareness and regulation on social functioning in individuals at clinical high risk for psychosis and stated that patients showed considerable difficulties in emotion awareness and regulation describing feelings contribute significantly to poor social functioning. Moreover, Favrod et al. (2019) found that participation in the positive emotions program for schizophrenia (PEPS) is accompanied by an improvement of social functioning. In addition, Arafat, et al. (2024) revealed that the social function scores improved immediately after implementing the emotion regulation training, which included all the dimensions of social function such as self-care, domestic, community level, and responsibility level.

Without a doubt, this current study is significant for both theoretical and clinical applications. the study's conclusions have a number of significant implications for patient care in the diagnosis, management, and treatment of psychiatric disorders. Better results are achieved when a comprehensive strategy that incorporates training in emotion regulation skills with conventional pharmaceutical and psychotherapeutic interventions addresses the emotional and cognitive components of psychiatric disorders.

CONCLUSION

Based on the findings of the present study, it can be concluded that:

The emotional regulation training program about social functioning had a positive effect on emotional regulation difficulties and social functioning among the studied patients. Statistically significant impairments were observed between pre-, post-program, and follow-up phases indicated among the studied patients who received emotional regulation training program.

RECOMMENDATIONS:

Based on the study's results, the following recommendations are proposed suggested:

1. Health care professionals should receive comprehensive training in emotional regulation strings and their application in clinical practice to enhance patient Care,
2. Establishing emotional regulation workshops and support groups can provide patients with a sense of Community, opportunities to share experiences and practical skills practice.
3. Psychiatric departments should implement structured educational programs to enhance social functioning among patients with Psychiatric disorders.
4. Regular assessments should be conducted to identify emotional regulation difficulties and Tailor interventions accordingly.

5. Continuous provision of psycho-educational programs for patients with psychiatric disorders for supporting their learning skills and maintaining the improvement in their social functioning.

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