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Emotion Regulation in Psychiatric Patients: An Exploratory Study

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Abstract

Literature at large highlights the importance of emotional regulation in normal functioning. To identify the emotional regulation strategies employed by individuals experiencing symptoms of different psychopathologies and to explore the differences across gender. Present study followed cross sectional research design. Data was collected from different psychiatry units of Lahore. A sample of 280 individuals was selected through non probability purposive sampling. Participants were divided in 3 main groups namely neurotic problems (n= 141), psychotic problems (n= 83) and substance abuse problems (n= 56) based on their reported symptoms and diagnosis. Detailed demographic form, Emotional regulation questionnaire and Brief symptom inventory were used to study the research variables. There were observed to be significant differences in use of emotional regulation strategies across 3 psychiatric groups as participants in neurotic group scored highest on reappraisal compared to those in psychotic group who scored lowest. Female participants scored high on suppression compared to male participants who scored higher on reappraisal. Individuals experiencing symptoms of less severe psychological disorders used emotional regulation based on reappraisal instead of using strategies based on emotional suppression compared to those who experience more severe psychological disorders. Men and women differed significantly in using strategies to manage their emotions.

Keywords: *Emotional Regulation, Psychopathologies, Emotional Suppression, Reappraisal, Gender Differences.*

Introduction

The significance of particular emotion regulation strategies and overall deficits in emotion regulation in context of psychopathology is widely recognized (Kraiss et al., 2020). Emotional regulation has been thought as processes through which individuals learn to appropriately respond to environmental needs and differentiate their emotions consciously and unconsciously (Feldman et al.,2007; Loevaas et al., 2018).

Strategies used to manage emotions at early stages of emotion formation process are labeled as antecedent-focused strategies and are usually viewed as adaptive, however, emotional regulation strategies employed later in the process are referred as response-focused strategies and are considered maladaptive (Gross,2007). Literature identified cognitive reappraisal and expressive suppression as two important emotional regulation strategies mainly because of their cognitive, physiological, and social consequences

(Gross,2015; Sheppes et al., 2015). Cognitive reappraisal is described as a form of cognitive change used to neutralize emotion-eliciting situation before they trigger negative emotions and cognitive reappraisal frequently leads to better outcomes as it occurs during early phases of emotion formation (Gross, 1998; Gross,2007). Cognitive reappraisal is usually considered adaptive as it does not create physiological arousal during threatening times (Gross & John, 2003). Expressive suppression developed during the later stages of emotion formation process frequently generates more negative consequences (Richards, 2004) like high levels of anxiety, negative affect, heightened physiological arousal and increased illness and distress (Gross,2015). Emotional regulation is an essential part of functional living, often linked with well being (Sohail & Ahmed, 2021). Emotional regulation deficits on the other hand are generally found to have adverse effects on well being. Problems related to emotional regulation has frequently been observed as part of clinical presentation of many psychopathologies (Garofalo & Velotti, 2014; Loevaas et al., 2018; Verzeletti et al., 2016). Emotional regulation may not only lead to the development of a particular disorder but also guard the prognosis (Becerra et al., 2013; Martin & Dahlen, 2005; Sheppes et al., 2015).

According to research data and health reports the number of psychiatric patients in Pakistan has significantly increased in past few decades (Javed, et al, 2020). The rise of psychological problems in the country requires health care professionals to pay more attention to factors directly affecting development and prognosis of these problems. As mentioned before, emotional regulation is an issue persistently reported by patients experiencing all types of psychopathologies. Unfortunately, thorough review of literature revealed lack of research on emotional regulation among people suffering from psychopathologies in Pakistan. Findings of the current research can be used to fill the gap in information related to this significant dimension of functioning and will also provide clinicians a good understanding into client's psychological profiles and thus be helpful in case conceptualization and designing more effective management plans. Main objectives of the research were (a) to explore the aspects of emotional regulation in psychiatric patients and (b) to assess the gender difference in emotion regulation among psychiatric patients.

Methodology

A cross sectional research design was employed to achieve the study objectives. Non probability purposive sampling technique was used to select a sample of 280 including both male (*n*= 160) and female (*n*= 120) participants diagnosed with different psychiatric disorders from major public hospitals of Lahore. Mean age of participants was 27.34 (*Sd*= 9.02) years and education included graduation (5 %), under graduation (13%), intermediate level (10%), 10^{th} grade (42%) and 30 percent were uneducated. Majority of the participants was doing office jobs (30 percent) but also included laborers (20%), housewives (19%), businessmen (12%), farmers (14%) and 5 percent participants were unemployed.

Instruments

Data was collected through demographic form, emotional regulation questionnaire (ERQ) and Brief symptom inventory (BSI). Personal information like age, gender, family income, education, family system, marital status, Information about psychological disorder and physical disease was collected through demographic form which was specifically designed for this study. Emotional Regulation Questionnaire was used to assess participant's tendency to regulate their emotions. It included 10 items and each item is rated on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). This questionnaire identified two main types of emotional regulation tendencies namely cognitive reappraisal and expressive suppression. Alpha reliability was reported to be .79 for cognitive reappraisal and .73 for emotional suppression **(**Preece, 2018).

Brief Symptom Inventory developed by Derogatis (Franke et al., 2017) was used to assess the symptoms of psychopathologies and included 53 items covering nine symptom dimensions, namely anxiety, phobic anxiety, obsession-compulsion, somatization, paranoid ideation, depression, interpersonal sensitivity,

hostility, and psychoticism. It also assessed three global indices of distress, including global severity index, positive symptom distress index and positive symptom total. Global indices measure past or current level of symptomatology, number of reported symptoms and intensity of symptoms respectively. BSI reported to have satisfactory psychometric properties.

Procedure

After the approval of institutional ethical and review board, permission to use emotional regulation questionnaire was taken from the original authors. Questionnaire was then translated into Urdu by following a standard translation and back translation procedure. Statistical analysis were run to assess the psychometric features of the translated version which were observed to be in the acceptable to good range, as the reliability and validity indices ranged from 0.76 to 0.90. Permission was taken from psychiatry departments of different hospitals of Lahore to collect data. Then informed consent was taken from all participants and their informants before collecting information from them. Data was collected through individual sessions and same order from all participants, that is, the demographic questionnaire was filled first, then ERQ and BSI were filled. All the participants were appreciated for their cooperation. Data was then analyzed through SPSS 21.00, both descriptive and inferential statistical procedures were used to analyze the data.

Analysis

A large majority of the sample was living in joint family system (70 %) and most of the participants were married (58 %) but sample also included unmarried individuals (32 %), divorced (7 %), separated (2%), and widowed (1%). Sample revealed to have 23 thousand Mean (*SD*= 12.33) family income. Participants were divided into three broad categories of psychological disorders namely neurotic psychological disorders, psychotic conditions and substance abuse problems. There are 141 participants in neurotic group (males= 69, females= 72), 83 in psychotic group (males= 40, females= 43) and 56 in substance abuse group (males= 51, females= 5).

Table 1: Mean differences in Scores of Emotional Reappraisal and Suppression Across Groups.

	Substance abuse (n=56)		Neurosis (n=141)		Psychosis (n=83)			
Source	Mean	SD	Mean	SD	Mean	SD	F	Sig
Reappraisal	3.60	0.41	3.78	1.26	2.98	1.62	10.55	.000
Suppression	4.79	0.22	4.68	1.49	5.19	1.18	4.49	.012

Emotional reappraisal strategy was observed to be highest among those having neurotic problems. Individuals in psychotic group scored highest on emotional suppression whereas it was found to be lowest in neurotic group revealing significant differences in using strategies to manage emotions.

Table 2: Correlation of Emotional Reappraisal and Suppression with Different Psychopathologies.

Psychological Problems	Reappraisal	Suppression
Depression	-.38*	-.46*
Anxiety	.41*	-.32*
Somatization	-.29*	.37*
OCD	-.45*	.51*
Interpersonal insensitivity	-.13	-.02
Schizophrenia	-.50*	.42*
Phobia	-.31*	-.49*
Paranoid Ideation	-.39*	-.40*
Hostility	-.20*	-.37*

*Correlation was significant at the 0.05 level.

Emotional Reappraisal found to have inverse association with all psychological disorders with strongest inverse correlation with schizophrenia, however interestingly, it showed positive correlation with anxiety disorder only. High levels of emotional suppression on the other hand were observed to be strongly associated with high scores on OCD, somatoform and schizophrenia. Emotional suppression was also observed to be associated with reduction in scores on depression, anxiety and phobia.

Table 3: Mean and S.D of Emotional Reappraisal and Suppression Scores Across Gender

	Females		Males				95% CI	
Source	Mean	SD	Mean	SD	t	Sig	LL – UL	Cohen's d
Reappraisal	4.92	0.19	5.83	1.38	- 8.24	.00	0.66 – 1.16	1.0
Suppression	6.54	0.97	4.01	1.30	17.90	.00	2.27 – 2.79	2.16

Males= 160; Females= 120. df = 278; CI= Class interval, LL=lower limit, UL=Upperlimit.

Gender revealed to have significant ($p < 0.05$) differences in both emotional reappraisal and emotional suppression dimensions with females having higher scores on suppression and males scoring higher on reappraisal dimension.

Discussion

Emotions are integral part of human functioning and effective emotional regulation is considered pertinent to normal functioning (Tasneem & Panwar, 2022). Deficits in emotional regulation characterize many psychological disorders (Millgram et al., 2020). In present study, most participants scored high on emotional suppression which is in line other studies that observed high rates of psychological disorders among people using suppression based emotional regulation strategies (Katana et al., 2019; Nakatani et al., 2014).

Emotional reappraisal is highest in participants having neurotic problems and lowest among those with psychotic problems which is in line with many previous studies which identified inverse association of emotional reappraisal with various psychopathologies (Gross & Jazaieri, 2014; Sohail & Ahmed, 2021) and positive association with psychological wellbeing (Kraiss et al., 2020) and less severe psychopathologies (Aldao & Nolen-Hoeksema, 2012; Katana et al., 2019; Nolen-Hoeksema, 2012). This might be due to the fact that reappraisal requires active cognitive control which is compromised in most of the cases of psychotic conditions. Whereas, in most of neurotic conditions reality orientation and primary cognitive faculties are intact and individuals suffering from neurotic conditions can still use different cognitive skills adequately. This strength of individuals in neurotic conditions may help them reassign relatively positive meaning to negative emotional experiences. On the other hand, many symptoms in psychotic conditions reveal dysfunction of primary cognitive skills due to which individuals suffering from these conditions fail to use adaptive emotion regulation strategies like reappraisal and are rather most likely to use maladaptive emotional regulation strategies like emotional suppression. This is also evident in the findings of present study which reveal significant positive correlation with emotional suppression and symptoms of more severe psychopathologies.

There are very few researches conducted on gender differences in emotional regulation and studies have reported mixed results, some studies showed no significant gender differences in use of reappraisal and suppression (Gross & John, 2003) whereas, others reported significant gender variations (Nolen-Hoeksema, 2012). However, results of present study showed significant gender differences in emotional regulation this is supported by previous studies which show a similar pattern. One reason is that females and males use different biological mechanism to process emotions. Males are known to use reappraisal automatically compared to women as males observed to use brain areas involved in emotional processing more efficiently whereas, in females reappraisal is an effortful activity due to significant biological differences (Masumoto et al., 2016).

Most of the previous studies have shown that males use reappraisal more often than females. Western studies indicated that women show better emotional regulation and expression, they express their emotions more often and intensely, however, present findings do not support that as women scored significantly higher on suppression. This might be due to cultural practice where females are taught to suppress their emotional reactions and open expression of many emotions is not encouraged in females. Females are specifically taught to restrain their negative emotions like anger and may generalize it and start suppressing the positive emotions also which is likely to increase their psychological stress. This can also be supported by some researches reporting significant cultural variations in emotional regulation strategies employed in participants of western and Asian countries (Kuang-Hui et al, 2017). Asian cultures encourage interdependence and at times it may lead to emotional suppression for the prosocial benefits attached with it as is also pointed in some previous researches (Kwon et al., 2013). A research which studied emotional regulation difficulties and psychopathologies in Pakistani adolescents reported significant gender differences in emotional regulation pattern and described it different from pattern reported in western literature (Zafar et al., 2020) providing support for present findings.

In general, the findings revealed that individuals experiencing symptoms of different psychopathologies showed different emotional regulation processes. There were also significant differences of emotional regulation processes across gender.

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