Innovations

Association between emotion regulation and depression among clinically depressed patients in Federal Neuro Psychiatric Hospital Yaba Lagos Nigeria

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Abstract

Difficulties with emotion regulation may be a component that makes depressed individuals susceptible to future relapses. The study therefore investigated the association between emotion regulation and depression among clinically depressed patients. The study utilized a cross-sectional survey design method and adopted an ex-post facto design. A total number of two hundred and thirty (230) clinically depressed patients attending Federal Neuro-psychiatric Hospital Yaba, Lagos were purposively sampled. The results from the study showed 24.3% prevalence rate of depression and 97.8 prevalence rate of emotion regulation. The result further showed that there was significant inverse relationship between Acceptance, (r = -.76, p<.01) Focus thought rumination (r = -.27, p<.01), Positive refocusing (r = -.55, p<.01), Refocus planning (r = -.46, p<.01), Positive reappraisal (r = -.71, p<.01), Putting into perspectives (r = -.28, p<.01), Catastrophizing (r = -.70, p<.01), Emotion regulation (r = -.78, p<.01) and depression, Self-blame (r = .82, p<.01), Blaming others (r = -.65, p<.01) had significant positive relationship with depression. self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others jointly predicted depression level (R^2 = 0.81, F (10,219) = 95.72, p<.01). The result further revealed that self-blame (β = .89, t=6.18 p<.05), acceptance (β = -.41, t=-2.87 p<.05), focus thought rumination (β = -.59, t=-3.42 p<.05), positive refocusing (β = -.37, t=-3.83 p<.05), refocus planning (β = -.62, t=-4.33 p<.05), positive reappraisal (β = -.89, t=-4.61 p<.05), putting into perspective (β = .21, t=2.02 p<.05), blaming others (β = .89, t=6.18 p<.05) and emotion regulation (β = 2.69, t=3.07; p<.05) were significant independent predictors of level of depression among clinically depressed patients. While catastrophizing (β = -.16, t=-1.28, p>.05) have no significant independent prediction on depressive level of the clinically depressed patients. The study therefore recommends the establishing of therapeutic programmes to enhance the emotional regulation of depressed individuals in order to lessen their level of depression and to improve their functionality

1.1 Introduction

Depression is characterised by a breakdown in one's ability to regulate one's emotions. The defining symptoms of a severe depressive episode are a persistently disturbing trend and a decline in pleasant emotions.Emotional dysregulation is a potential mechanism for the development and maintenance of depression). Individuals prone to depression may engage in dysfunctional emotion regulation strategies, in which attempts to manage aversive experiences backfire and maintain or exacerbate symptoms. In addition, they may have a diminished awareness

of emotions, difficulty understanding them, and diminished tolerance for them. As a result, they have difficulty recovering from negative emotions, resulting in persistent depression (Joormann&Gotlib, 2010). Studies confirm that people with MDD use more maladaptive and fewer adaptive emotion regulation strategies (Joormann&Stanton, 2016). In addition, difficulties with emotion regulation appear to persist after recovery from MDD (Ehret et al., 2015; Halvorsen et al., 2015). In conclusion, controlling your emotions may have something to do with both the start and the return of depressive episodes.

Emotion regulation strategies are simple to operationalize and appear straightforward to teach and evaluate in experimental settings. It has been argued, however, that the view of emotion regulation as primarily involving discrete strategies to modulate emotional experience is too narrow (Gratz et al., 2015). Focusing solely on the specific actions that people take to regulate their emotions may result in a simplification of a complex concept and diminished clinical utility. It may be useful to measure broader abilities that can influence the control of emotions in significant ways. Complementary processes that likely influence the selection and successful execution of emotion regulation techniques include general emotion regulation skills (Tull&Aldao, 2015). Additionally, being easily overwhelmed by emotions may impede the use of effective and adaptive emotion regulation strategies and increase the rigid use of maladaptive emotion regulation strategies, such as avoidance (Tull&Aldao, 2015). Several authors have outlined the theoretical reasons for the significance of general emotion management skills (e.g., Thompson, 1994; Gratz &Roemer, 2004; Berking&Znoj, 2008; Hofmann &Kashdan, 2010). Empirical research shows that emotional clarity, awareness, and tolerance are negatively related to the development of psychopathology (Saarijarvi et al., 2001) and the use of maladaptive emotion regulation (Jeffries et al., 2016).

Although maladaptive emotion regulation techniques are most predictive of general psychopathology (Aldao& Nolen-Hoeksema, 2010), there is empirical evidence that patients diagnosed with MDD use adaptive emotion regulation strategies less frequently than healthy controls. Self-reported problem solving and reappraisal were inversely related to depressive symptoms in a previous meta-analytic analysis (Aldao et al., 2010). Recent research demonstrates that depressed people utilise reappraisal and acceptance of feelings less frequently than healthy controls (Liu & Thompson, 2017). In addition, research indicates that maladaptive emotion control mechanisms can inhibit the employment of adaptive ones. A study by Watkins and Moulds, (2005a) for instance, directed rumination skewed problem-solving in depressed patients. In addition, a recent meta-analysis of self-reported emotion regulation strategies revealed a negative correlation between maladaptive and adaptive emotion regulation strategies (Naragon-Gainey et al., 2017). Recently, it has been claimed that self-compassion is an important emotion management method that is especially useful for dealing with low moods (Diedrich et al., 2014). Studies show that self-reported self-compassion is negatively linked to depressive symptoms (MacBeth&Gumley, 2012), and self-compassion may help prevent new episodes of major depressive disorder (MDD) (Ehret et al., 2015).

Given the prevalence of maladaptive emotion regulation techniques and the link between habitual strategy use and general emotion regulation skills (Tull and Aldao, 2015), depressed people may struggle with emotional awareness, clarity, and tolerance. Insufficiencies in emotional awareness and clarity may result in difficulty in identifying emotions and ineffective emotion control (Gross, 2015). Prior research has connected emotional awareness and clarity (i.e., alexithymia) with depressive symptoms (Honkalampi et al., 2000). Depressed individuals report having limited emotional awareness (Donges et al., 2005), clarity of negative feelings (Thompson et al., 2015), and greater alexithymia than healthy controls (Loas et al., 1998; Nandrino et al., 2012). Lastly, Naragon-Gainey et al. (2017) found that having low emotional tolerance, or being easily overwhelmed by feelings, may make people more likely to use unhealthy ways to avoid or repress feelings.

Difficulties with emotion regulation may be a component that makes depressed individuals susceptible to future relapses. According to studies, the regulation of emotions among individuals with remitted MDD is comparable to that of depressed individuals. People who have gotten over depression report using more unhealthy ways to control their emotions, such as rumination (Aker et al., 2014; Halvorsen et al., 2015), suppression (Watkins

&Moulds, 2009), and avoidance (Brockmeyer et al., 2012), though the research on suppression isn't always clear (Joormann and Stanton, 2016; Liu and Thompson, 2017). On this note, there is reason to believe that the capacity to regulate emotions leads to the improvement as well as recurrence of depression. This study will investigate how emotion regulation and its dimensions relates with level of depression among clinically depressed patients look at both specific (maladaptive and adaptive) and general (emotional awareness, clarity, and tolerance) ways to control emotions to get a full picture of how people with a present and remitted MDD (emotional awareness, clarity, and tolerance) deal with their emotions.

1.2 Research hypotheses

There will be significant relationship between emotion regulation and depression

Emotion regulation and subdimensions will significantly predict level of depression among clinically depressed patient

Methods

2.1 Research Design

The study adopted a cross-sectional survey in which ex-post facto designs. A cross-sectional survey is a type of survey that allows the researcher to obtain data at once from a representative sample of different strata of the population.

2.2 Population

The population for this study were patients who had been clinically diagnosed of depression in Federal Neuro Psychiatric Hospital, Yaba Lagos, Nigeria and were attending clinic at the time of the research. Depressed patients are individuals who had met the clinical criteria on the DSM-I. Depressed patient has varying symptoms. They range from lasting feelings of unhappiness and hopelessness, to losing interest in the things you used to enjoy and feeling very tearful. There have physical symptoms too, such as feeling constantly tired, sleeping badly, having no appetite or sex drive, and various aches and pains. The symptoms of depression range from mild to severe. At its mildest, they may simply feel persistently low in spirit, while severe depression can make them feel suicidal, that life is no longer worth living.

2.3 Sample and Sampling Technique

A prevalence rate of depressive symptoms was gotten from a study on Epidemiology of depression in primary care: Findings from the Mental Health in Primary Care (MeHPriC) project, Lagos, Nigeria by Adewuya, et al., (2021)

Participants for this study were purposively selected from the outpatient on their clinic day. The patients were identified through their appointment registers with the assistance of the record personnel.
For this study male and female patients who are clinically depressed were purposively selected; this gave all the potential participants equal right to participate in the study. A total of two hundred and thirty (230) clinically depressed patients were selected from the out-patient unit of the Federal Neuro Psychiatric Hospital Yaba, Lagos to cater for attrition rate.

Instruments

Instruments in this study are standardised instrument. Two research instruments were adopted and used to obtain data from the study participants. All were presented on a single research protocol title research questionnaire. The questionnaires were divided into different sections. The research instrument comprised of socio-demographical variables, and outcome variablemeasures of emotional regulation

Section A - Socio-demographic

Respondents' socio-demographic and background variables was collected under this section. These included age, gender, marital status, educational qualification, religion and socio-economic status.

Section B

The instruments that used in this section included validated instruments.
Beck Depression Inventory – II (BDI-II)

Beck Depression Inventory (BDI-II).

BDI-II - Beck Depression Inventory-Second Edition developed by Beck, Steer, and Brown (. The BDI-II is a widely used 21-item self-report inventory measuring the severity of depression in adolescents and adults. Items receiving low Relevance ratings included item 3 (Past Failure), item 6 (Punishment Feelings), and item 21 (Loss of Interest in Sex). Items receiving low Specificity ratings included item 11 (Agitation), item 19 (Concentration Difficulty), and item 21 (Loss of Interest in Sex). The BDI have been validated and widely used among the adult population in Nigeria. The internal consistency of questions within the BDI estimated by Cronbach's alpha several studies results show that Cronbach alphas ranged from 0.75 to 0.92, whereas inter-item correlations ranged from 0.53 to 0.78. The validity analysis show that factor loadings for all items of Beck Depression Inventory ranged from 0.77 to 0.93. (Linus, Okechuku, Eneh, Eze&Eseabasi ,2020).

Cognitive emotion regulation questionnaire (CERQ-P)

CERQ is a questionnaire measuring cognitive coping strategies developed by Garnefski and Kraaij (2007). The Cognitive Emotion Regulation Questionnaire (CERQ) is a multidimensional questionnaire constructed in order to identify the cognitive emotion regulation strategies (or cognitive coping strategies) someone uses after having experienced negative events or situations. Contrary to other coping questionnaires that do not explicitly differentiate between an individual's thoughts and his or her actual actions, the present questionnaire refers exclusively to an individual's thoughts after having experienced a negative event. Nine cognitive emotion regulation strategies were distinguished within the CERQ on theoretical and empirical bases; each referring to what someone thinks after the experience of threatening or stressful events. CERQ is made of 36 items used to evaluate nine cognitive strategies after experiencing a threatening or stressful life event. Four items are used to evaluate each of the cognitive emotion regulating strategy. Therefore, out of the nine strategies, five strategies are used to evaluate adjusted cognitive emotion regulating strategies (Acceptance, Positive reappraisal, Planning, Putting into perspective, and Positive refocusing) and the remaining four to evaluate unadjusted cognitive emotion regulating strategies (Self-blame, Rumination, Catastrophising, and Blaming others) (Garnefski, Baan, &Kraaij, 2005). The CERQ can be administered in normal and clinical populations, with different age groups. The items are rated on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always). Individual subscale scores are obtained by summing up the scores belonging to particular subscale or cognitive emotion regulation strategy (from 4 to 20). Higher scores reflect greater use of the strategy. CERQ had good factorial validity and high reliabilities, with Cronbach's αs ranging between .75 and .87.and 0.93.

Statistical Analysis

The data collected with the questionnaire was analyzed with both descriptive and inferential statistics. The descriptive statistics used to find the mean and standard deviation of the data while inferential statistics of correlation analysis and multiple regression analysis were used to test the hypotheses set for the study.

3.1 Results : Descriptive Statistic Showing the Demographic Distribution of study Respondents

Variables	Options	Frequency	Percentage
Age (M=36.39, S.D=10.00)	20-24 years	22	9.6
	25-29 years	61	26.5
	30-34 years	35	15.2
	35-39 years	60	26.1
	40-44 years	29	12.6
	45 and above	23	10.0
	Total	230	100.0
Religion	Christianity	206	89.6
	Islam	24	10.4
	Total	230	100.0
Duration of illness	1-4 years	189	82.2
	5 years and above	41	17.8
	Total	230	100.0
Sex	Male	37	16.1
	Female	193	83.9
	Total	230	100.0
marital status	Single	93	40.4
	Married	124	53.9
	Separated	12	5.2
	Widowed	1	.4
	Total	230	100.0
Socio-economic status			
	No response	38	16.5
	Middle class	107	46.5
	Low class	85	37.0
	Total	230	100.0
Educational qualification			
	SSCE	28	12.2
	OND	45	19.6
	B.SC	70	30.4
	M.SC	77	33.5
	Ph.D	10	4.3
	Total	230	100.0

The result of the descriptive statistics shows that 22(9.6%) of the respondents fall between age bracket of 20-24 years, majority 61(26.5%) belong to age bracket of 25-29 years, 35(15.2%) fall between the age range of 30-34

years, 60(26.1%) were between the age bracket of 35-39 years, 29(12.6%) belong to age range of 40-44 years and 23(10%) were 45 years and above old. Also, larger percent 206(89.6%) were Christians and 24(10.4%) were Muslims. In addition, majority 189(82.2%) had between 1-4 years duration of illness and 41(17.8%) had 5 years and above duration of illness. Based on gender of the respondents, 37(16.1%) were male, 193(83.9%) were female. As regards marital status, 93(40.4%) were single, majority 124(53.9%) were married, 12(5.2%) were separated and 1(0.4%) were widowed/widower. In respect to socio-economic status, 107 (46.5%) of the respondents were in middle class and 85(37%) belong to lower class socio-economic status. As regards educational qualification, 28(12.2%) acquired SSCE, 45(19.6%) possessed OND certificate, 70(30.4%) were B.Sc holder, 77(33.5%) acquired M.Sc certificate and 10(4.3%) were Ph.D holder.

Table 2: Descriptive Statistic Showing the prevalence of depression, and emotion regulation

	Options	Frequency	Percentage
Depression	Minimal	11	4.8
	Mild	44	19.1
	Moderate	119	51.7
	Severe	56	24.3
	Total	230	100.0
Emotion regulation	Low	225	97.8
	High	5	2.2
	Total	230	100.0

As regards the prevalence rate of depression, it was revealed that 11(4.8%) had minimal depression, 44(19.1%) had mild depression, 119(51.7%) had moderate depression, 56(24.3%) had severe depression. Based on the prevalence rate of emotional regulation, majority, 225(97.8%) had low level of emotional regulation and 5(2.2%) had high level of emotional regulation. This implies that there high prevalent rate of both depression and emotional regulation among participants sampled.

There will be significant relationship between emotion regulation and depression

Table 3: Zero-order correlation showing the relationship between self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others, emotion regulation and depression level

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
1. Depression	24.41	9.74	-										
2. Self-blame	12.63	3.21	.82**	-									
3. Acceptance	13.42	4.39	-.76**	.75**	-								
4. Focusthoughtrumination	16.72	3.67	-.27**	.16*	.61**	-							
5. Positiverefocusing	10.26	2.00	-.55**	.62**	.46**	-.05	-						
6. Refocusplanning	11.51	3.72	-.46**	.52**	.36**	.04	.66**	-					
7. Positivereappraisal	13.09	4.22	-.71**	.77**	.72**	.22**	.80**	.67**	-				
8. Puttingintoperspectives	11.07	2.85	-.28**	.46**	.36**	.03	.72**	.67**	.73**	-			
9. Catastrophizing	12.01	2.83	-.70**	.76**	.79**	.52**	.52**	.53**	.66**	.36**	-		
10. Blamingothers	15.98	4.88	.65**	.61**	.75**	.31**	.42**	.23**	.56**	.34**	.63**	-	
11. Emotion regulation	116.58	23.88	-.78**	.83**	.88**	.46**	.72**	.66**	.90**	.65**	.86**	.75**	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3 reveal that there was significant inverse relationship between Acceptance, (r = -.76, p<.01) Focus thought rumination (r = -.27, p<.01), Positive refocusing (r = -.55, p<.01), Refocus planning (r = -.46, p<.01), Positive reappraisal (r = -.71, p<.01), Putting into perspectives (r = -.28, p<.01), Catastrophizing (r = -.70, p<.01), Emotion regulation (r = -.78, p<.01) and depression. The results indicate that increase in the level of acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, significantly relates to decrease in depression level. Self-blame (r = .82, p<.01), Blaming others (r = -.65, p<.01) had significant positive relationship with depression. The result indicates that depressed patients with high level of self-blame and blaming others significantly report increase level of depression.

Emotion regulation will significantly predict the level of depression among clinically depressed patient. This was tested using multiple regression analysis. The results are presented in Table 3.

Table 4: Summary of Multiple Regression Analysis Showing the prediction of self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others, emotion regulation on depression level.

Predictors	**β**	**t**	**P**	***R***	***R^2***	***F***	***P***
Self-blame	.89	6.18	<.05				
Acceptance	-.41	-2.87	<.05				
Focus thought rumination	-.59	-3.42	<.05				
Positive refocusing	-.37	-3.83	<.05				
Refocus planning	-.62	-4.33	<.05	.90	.81	95.72	<.05
Positive reappraisal	-.89	-4.61	<.05				
Putting into perspectives	.21	2.02	<.05				
Catastrophizing	-.16	-1.28	>.05				
Blaming others	.84	4.20	<.05				
Emotion regulation	2.69	3.07	<.05				

The result revealed that self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others jointly predicted depression level (R^2 = 0.81, F (10,219) = 95.72, p<.01). When combined self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others and emotional regulation accounted for 81% of the change observed in the self-report depression level. This revealed that the collective presence of self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others significantly predicted depression level. The result further revealed that self-blame (β = .89, t=6.18 p<.05), acceptance (β = -.41, t=-2.87 p<.05), focus thought rumination (β = -.59, t=-3.42 p<.05), positive refocusing (β = -.37, t=-3.83 p<.05), refocus planning (β = -.62, t=-4.33 p<.05), positive reappraisal (β = -.89, t=-4.61 p<.05), putting into perspective (β = .21, t=2.02 p<.05), blaming others (β = .89, t=6.18 p<.05) and emotion regulation (β = 2.69, t=3.07; p<.05) were significant independent predictors of level of depression among clinically depressed patients. While catastrophizing (β = -.16, t=-1.28, p>.05) have no significant independent prediction on depressive level of the clinically depressed patients.

4.1 Discussion

In respect to the result of the findings it was reported that majority had moderate depression and had severe depression. As regards emotion regulation, majority of the participants had low emotion regulation and had high level of emotion regulation.

There was significant inverse relationship between acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal, putting into perspectives, catastrophizing, emotion regulationand depression. The results indicate that increase in the level of acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, significantly relates to decrease in depression level. It was further revealed that self-blame, blaming others had significant positive relationship with depression. The result indicates that depressed patients with high level of self-blame and blaming others significantly report increase level of depression.

The result revealed that the dimensions of self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal putting into perspectives, catastrophizing, blaming others jointly predicted depression level. The result further revealed that self-blame, acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal, putting into perspective, blaming others and emotion regulation were significant independent predictors of level of depression among clinically depressed patients. Joormann and Gotlib (2010) demonstrated that suppression issues are more prevalent in moderately depressed patients and that depression is linked with less regular reappraisal use. D'Avanzato et al. (2013) found that depressed individuals reported using cognitive reappraisal frequently, although less often than socially anxious participants. In their studies, Eftekhari et al. (2009) found that both cognitive reappraisal and suppression are correlated with the severity of depressive symptoms, with those who use cognitive reappraisal and low suppression reporting the lowest levels of symptoms among the groups under study, and those with high levels of the two strategies reporting effective ER and relatively few signs of depression.

Aldao and Nolen-Hoeksema (2010) explored the association between rumination, repression of the mind, and reevaluation with symptoms of sadness, anxiety, and eating disorders. The symptoms of all three diseases are highly linked with a latent component in cognitive emotion regulation that recognises all three techniques for emotion management. As a result of the limitations imposed by the use of an undiagnosed college sample for clinical populations, the findings of this study cannot be generalised. It's also possible that adaptive procedures, like reappraisal, are challenging for professional organisations to use, making the link between the use of reviews and the severity of symptoms less intense.

4.2 Conclusion

Based on the result of the finding it could be concluded that the dimension of emotion regulation such as acceptance, focus thought rumination, positive refocusing, refocus planning, positive reappraisal, putting into perspectives, catastrophizing if well manage will regulate the level of depression among clinical depressed patient. On the other hand, self-blaming and blaming others had a significant positive impact on the level of depression. So, individual with who are depressed and kept blaming themselves and others have high tendency to be more depressed.

4.3 Recommendation

The outcomes of this study present recommendations for establishing therapeutic programmes to enhance the emotional regulation of depressed individuals in order to lessen their level of depression and to improve their functionality. The session will concentrate on addressing the individual's dysfunctional emotional management.

The therapies will also change the cognitive-emotional function patterns of self-blame, ruminating, suppressing, and blaming others. This will help reduce the symptoms of depression.

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