EFFECT OF EMOTION REGULATION STRATEGY ON DEPRESSION SYMPTOMS AMONG SECONDARY SCHOOL STUDENTS IN ZARIA METROPOLIS

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Abstract
This study investigated effect of emotion regulation strategy on depression symptoms among secondary school students in Zaria metropolis. The study was guided by three objectives which were transformed into research questions, hypotheses. The study employed pre-test post-test quasi-experimental research design with the population of 79 students who exhibited moderate depression as identified using Depression Symptoms Checklist by Robert, Williams and Williams, (2020). A sample of 20 students from each school was drawn randomly for the purpose of this study. The instrument used for data collection in this study was Burns Depression Questionnaire (as adapted). It has a total of 23 items measuring cognitive, physical, emotional symptoms of depression and suicidal ideation. The instrument was measured on five point-Likert scale with a reliability coeffient of 0.808. Data were collected at the pre-test, and post-test respectively. Paired sample t-test was the statistical tool used to analyze the data collected in the study Findings of the study revealed that there is significant effect of emotion regulation strategy on cognitive, physical and emotional symptoms of depression, p = .000. It is concluded that emotion regulation strategy was effective managing cognitive, physical and emotional symptoms of depression among secondary school students. Based on the findings of the study, it was recommended among others that Educational Psychologists, Counsellors and teachers should employ emotion regulation strategy in managing symptoms of depression for better mental health, school adjustment and academic performance among secondary school students.

Keyword: Emotion regulation strategy; cognitive, physical and emotional symptoms, depression

Introduction

Depression is one of the most prevalent problems in the mental health of students at different educational levels, such as secondary school, college and university (Arslan, Ayranci, Unsal & Arslantas, 2009). Literature established that mental health disorders, particularly depression, is a common problem among students as psychological morbidity encountered by counselling centres in schools. This suggests that depression is one of the common problems among secondary school students. It has been highlighted that depression accounted for 39% of problems, a higher rate than anxiety and the self-esteem of students across different settings (Ibrahim, Kelly, Adams & Glazebrook, 2013).

Depression manifests it's self through a number of symptoms which includes cognitive, physical and emotional, to some extent suicidal urges. Cognitive symptoms includes guilt and shame, difficulty making decision, criticizing oneself and blaming others, loss of interest in family, friends/peer group, loneliness, loss of motivation, lack of interest in work and other activities. Physical symptoms includes feeling tired, difficulty sleeping or over sleeping, decreased appetite, frequent headache and worrying about one's health. Emotional symptoms includes feeling sad or down in the dumps, crying spells or tearfulness, loss of pleasure or satisfaction in life, feeling hopeless, worthless and inadequate, low self-esteem, spending less time with family and friends. At extreme level, depressed people develop suicidal urges which encompasses the thinking of ending one's

life. This situation calls for concerted efforts to be put in place so as to manage depressive symptoms among secondary school students in Zaria metropolis.

Several forms of treatment have been applied to depression. In this study, emotion regulation strategy was employed on students with depression symptoms. Many treatments appear to be promising. However, a clear indication of the best alternative methods has not yet been provided by the literature. Meta-analyses demonstrate that clients' depression improves with the mentioned treatments. However, a significant percentage of clients fail to respond to the treatment, indicate a partial improvement, or even discontinue the treatment (Sherman, 2016). Ineffectiveness of some behaviour modification techniques in the treatment of depression is possible due to poor skills in the administration of the technique or incompatibility of the technique in managing the depression symptoms. Wells and Sembi (2014) believe that for a treatment to be more widely effective, it should be accessible, brief, less demanding, and less potentially distressing interventions; emotion regulation strategy in managing depression is such an intervention. The goal of this treatment is to allow clients to develop flexible emotional awareness and control, and also to free them from worry/rumination and negative emotional reactions.

Emotion Regulation (ER) developed by Gross (1998) which refers to the automatic or controlled, conscious or unconscious process of individuals influencing emotions in self, others, or both which proposes that emotions themselves have an innately adaptive potential that if activated can help clients change problematic emotional states or unwanted self-experiences. This view of emotion is based on the belief, now gaining ample empirical support, that emotion, at its core, is an innate and adaptive system that has evolved to help us survive and thrive. Emotion regulation (ER) is the processes by which individuals influence which emotions they have, when they have them and how they experience and express these emotions. These processes may be automatic (unconscious) or controlled (conscious) that serve to up-regulate or down regulate positive or negative emotions. These processes are categorised into 5 time points in the process of emotion generation at which individuals can regulate their emotions: 1) situation selection (avoidance, social withdrawal), 2) situation modification (keeping distance, using safety signals), 3) attentional deployment (distraction, rumination), 4) cognitive change (rationalization, reappraisal), and 5) response modulation (expressive suppression, experiential avoidance). These strategies may be applied before or after experiencing emotion. Accordingly, the first four groups of strategies are called antecedent-focused, while the latter is considered response- focused strategies (Gross, 2002). These strategies are carefully designed to manage the negative consequences of depression as it is one of the most widespread psychological problems across the world and a major factor in problems of mental health. The issue of students' mental health is a global problem that covers all developed and non-developed societies, both modern and traditional. Secondary school education, specifically boarding school system marks a transitional period for students during which students move away from family and home for the first time and miss the conventional supervision of elder and the family social support. In addition, some students might have to deal with financial decisions and difficulties for the first time in their lives. These changes have been recognized as risk factors for developing depression, which is associated with several problems in school notably academic achievement, school adjustment, meeting new people, changing environment, loneliness and security concerns and illnesses, accomplishing school responsibilities and obligations. Students make efforts to embrace new experiences and changes in academic pursuit, social aspects, behavioural, emotional, and economic situations. Inability of some secondary school students to deal

with these concerns constitutes serious problems leading to depression. A number of studies have indicated a high prevalence of depression among students compared to the rest of the population. More importantly, incidence of suicidal ideation and practices among students at different levels indicates that the psychological and mental problems of students continue to increase. Different efforts by different stakeholders in the areas of mental health and psychological wellbeing have been put in place to manage the problem of depression, yet the prevalence persists. This motivates the researchers to investigate the effect of emotion regulation strategy on depression symptoms among secondary school students in Zaria metropolis.

Purpose of the Study

The main purpose of the study was to investigate the emotion regulation strategy on depression symptoms among secondary school students in Zaria metropolis. The specifically, the study sought to determine:

1. the effect of emotion regulation strategy on cognitive symptoms of depression among secondary school students in Zaria metropolis.
2. the effect of emotion regulation strategy on physical symptoms of depression among secondary school students in Zaria metropolis.
3. the effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria metropolis.

Research Questions

The following research questions were raised for the purpose of this study:

1. What is the effect of emotion regulation strategy on cognitive symptoms of depression among secondary school students in Zaria metropolis?
2. What is the effect of emotion regulation strategy on physical symptoms of depression among secondary school students in Zaria metropolis?
3. What is the effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria metropolis?

Hypotheses

The following hypotheses were tested in this study:

Ho_1: There is no significant effect of emotion regulation strategy on cognitive symptoms of depression among secondary school students in Zaria metropolis.

Ho_2: There is no significant effect of emotion regulation strategy on physical symptoms of depression among secondary school students in Zaria metropolis.

Ho_3: There is no significant effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria metropolis

Methods

This research employed pre-test post-test quasi-experimental design in investigating effect of metacognitive and emotion regulation strategies on depression symptoms among secondary school students in Zaria metropolis. Pre-test post-test quasi-experimental design is one of the most frequently used quasi experimental research designs in which group of research participants or subjects is pretested, given some treatment or independent variable manipulation, then post tested. If the pre-test and post test scores differ significantly, then the difference may be attributed to the independent variable (Colman, 2015). This research design was deemed fit in this study because the independent variable, emotion regulation strategy was manipulated to determine its effectiveness on depression symptoms among secondary school students in Zaria metropolis. The population of this study stood at 779 SS 2 students at Government Secondary School (WTC) and Barewa College, Zaria, while the target population of the

study comprised of 79 SS 2 students who were identified with moderate cognitive, physical and emotional symptoms of depression using Depression Symptoms Checklist by Robert, Williams and Williams, (2020). Both the two schools are boarding; Government Secondary School (WTC) Zaria is a girls' school while Barewa College, Zaria is a boys' school. This selection of boarding schools was based on the premise that boarding school system makes it feasible for an experiment to be conducted and any change observed could be attributed to effect of the treatment rather than extraneous variable since students do not go out of the schools and have access to other external factors that may disrupt the treatment administered. The study targeted SS two students who were expected to have been adjusted in the school since they stayed halfway of their secondary school education. They were also targeted because they were the most stable set which could be followed up if need be.

Distribution of the General Population of Senior Secondary School Students of Government Girls Secondary School (WTC) and Barewa College, Zaria and Target Population Identified

Schools	General Population	Target Population	Percentage
G.G. S.S. (WTC)	338	46	58%
Barewa College	441	33	42%
Total	779	79	100%

Table 1, shows that 46 students constituting 58% were identified with moderate depression symptoms at Government Girls Secondary School while 33 students representing 42% were identified at Barewa College, Zaria. It could be observed that the population of students with depression symptoms is higher at G.G.S.S. (WTC) constituting 58% than at Barewa College. The researcher discovered that many students identified with the depression symptoms were victims of Boko Haram insurgency from Maiduguri, whose parents were either killed or displaced. The students were sponsored by their Government throughout their secondary school education. Most of these students exhibited symptoms of depression. A sample of 20 students who were identified with moderate level of depression symptoms was randomly selected in each of the schools. Selection of students with moderate level of depression is based on the researcher's assumption that mild depression did not constitute too much problem and could be adjusted by reinforcement from the environment while severe or extreme depression may require clinical attention. Thus, students with moderate level of depression symptoms were considered fit for this study.

The instrument used in this study was Burns Depression Questionnaire (as adapted). It has a total of 23 items measuring cognitive, physical, emotional symptoms of depression and suicidal urges. Items one to eight measure cognitive symptoms, nine to fourteen measure physical symptoms while fifteen to twenty three measure emotional symptoms respectively. The instrument was measured on five point-Likert scale ranging from not at all (0), somewhat (1), moderately (2), a lot (3), to extreme (4) which rates the level of depression symptoms among secondary school students. The researchers targeted those students with moderate depression symptoms based on the assumption that moderate depression could be treated within the purview of psychological techniques. This was done through administration of the Depression Checklist thereby screening those students found with moderate depression who were involved in the study. Professionals in the Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria validated the content of the instrument. Some items were fine-tuned and rearranged to suit

the objectives of the research. After meticulous scrutiny, the instrument was certified to be pertinent to measure what was purported to measure. All their observations were effected accordingly. Cronbach alpha coefficient was used to establish the internal consistency of the instrument. Thus, the reliability of .808 was established. Data were collected at three stages, pre-test, treatment sessions; which encompass six weeks treatment with emotion regulation strategy and post-test to compare the pre-test scores and post-test to measure the efficacy of the intervention after control of the intervening variables. The data collected were subjected to statistical analyses using Paired sample t-test.

Results

Hypothesis 1: There is no significant effect of emotion regulation strategy on cognitive symptoms of depression among secondary school students in Zaria Metropolis.

Table 2: Paired Sample t-test Analysis Comparing Mean Scores of Pre-test and Post-tests Cognitive Symptoms of Depression among Secondary School Students Exposed to Emotion Regulation Strategy in Zaria Metropolis

Groups	N	Mean	SD	t	df	P
Pretest	20	11.50	3.41	6.52	19	.000
Posttest	20	5.00	2.73			

Table 2 shows significant effect of emotion regulation strategy on cognitive symptoms among secondary school students in Zaria metropolis as shown by the mean of 11.50 for pre-test and the mean of 5.00 for post-test; t= 6.52 and p= 0.000 which is lower than 0.05 level of significance. Thus, the null hypothesis which states that there is no significant effect of emotion regulation strategy on cognitive symptoms among secondary school students in Zaria metropolis is hereby rejected.

Hypothesis 2: There is no significant effect of emotion regulation strategy on physical symptoms of depression among secondary school students in Zaria Metropolis.

Table 3: Paired Sample t-test Analysis Comparing Mean Scores of Pre-test and Post-tests Physical Symptoms of Depression among Secondary School Students Exposed to Emotion Regulation Strategy in Zaria Metropolis

Groups	N	Mean	SD	t	df	P
Pretest	20	9.35	2.51	10.56	19	.000
Posttest	20	3.75	1.77			

Table 3 shows significant effect of emotion regulation strategy on physical symptoms of depression among secondary school students in Zaria metropolis as the mean of 11.50 for pre-test and the mean of 5.00 for post-test indicated; t= 10.56 and p= 0.000 which is lower than 0.05 level of significance. Thus, the null hypothesis which states that there is no significant effect of emotion regulation strategy on physical symptoms among secondary school students in Zaria metropolis is hereby rejected.

Hypothesis 3: There is no significant effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria Metropolis.

Table 4: Paired Sample t-test Analysis Comparing Mean Scores of Pre-test and Post-test Emotional Symptoms of Depression among Secondary School Students Exposed to Emotion Regulation Strategy in Zaria Metropolis

Groups	N	Mean	SD	t	df	P
Pretest	20	12.35	3.91	5.81	19	.000
Posttest	20	5.05	3.64			

Table 4 shows significant effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria metropolis as vindicated by the mean of 12.35 for pre-test and the mean of 5.05 for post-test; t=5.81 and

p= 0.000 which is lower than 0.05 level of significance. Thus, the null hypothesis which states that there is no significant effect of emotion regulation strategy on emotional symptoms of depression among secondary school students in Zaria metropolis is hereby rejected.

Discussion of Findings

This study found significant effect of emotion regulation strategy on cognitive, physical and emotional symptoms of depression among secondary school students in Zaria metropolis. This finding is backed up by Omran, (2011) who conducted a study on effect of cognitive emotion regulation strategies on depression and anxiety. Findings revealed cognitive emotion regulation strategies with depression and anxiety were analysed by multiple regression analysis. The result showed that catastrophizing, self-blame and rumination were related with high level of anxiety and depression and refocusing, positive reappraisal and planning subscales related with low level of anxiety and depression and that the symptoms were moderated by emotion regulation strategy.

This finding also found support from Javidan and Mohammadi, (2017) conducted a study to compare cognitive distortions and emotion regulations in people with depressive disorder, obsessive - compulsive disorder and normal individuals. In terms of cognitive distortions and emotion regulation, there was significant difference between depressed patients and normal individuals and also significant difference was observed between obsessive - compulsive disorder clients and normal individuals with emotion regulation significantly moderated cognitive, physical and emotional symptoms of depression. Another that supported the efficacy of emotion regulation strategy on depression symptoms was conducted by Mehrabi, Mohammadkhani, Dolatshahi, Behrooz, Pourshahbaz and Mohammadi (2014) who did a study on Emotion Regulation in Depression. Their results generally concluded that emotion regulation is an important mediator/moderator mechanism in the pathogenesis of depression symptoms.

Conclusion

Based on the findings of the study, it was concluded that emotion regulation strategy significantly influenced the cognitive, physical, and emotional symptoms of depression among secondary school students in Zaria metropolis. The findings indicate that appropriate emotion regulation strategies can help students manage negative thoughts and emotions and reduce the severity of depressive symptoms.

Recommendations

Based on the findings and conclusion of the study, the following recommendations were made:

1. Educational psychologists and school counsellors should incorporate emotion regulation strategies into counselling programmes to help secondary school students manage negative thoughts, anxiety, sadness, and other emotional difficulties associated with depression.
2. School counsellors should organize regular guidance and counselling sessions to teach students healthy emotion regulation strategies such as positive reappraisal, planning, positive refocusing, and effective coping with stressful situations.
3. Teachers should be trained to recognize early signs of cognitive, physical, and emotional symptoms of depression among students and refer students with identified difficulties to school counsellors or educational psychologists for appropriate intervention.
4. School authorities should collaborate with counsellors, educational psychologists, teachers, and parents to provide supportive mental health programmes that promote

emotional well-being, school adjustment, and improved academic performance among secondary school students.

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