THE MEDIATING ROLE OF SELF-REGULATION BETWEEN EMOTIONAL ABUSE AND MENTAL HEALTH AMONG REGISTERED ORPHANS IN BENUE STATE, NIGERIA

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Abstract

This study investigated the mediating role of self-regulation in the relationship between emotional abuse and mental health among registered orphans in Benue State. Cross-sectional survey design was adopted using 203 orphans in Benue state. They comprised of 81 (39.9%) males and 122 (60.1%) females. Their ages ranged from 10-17years with a mean age of 13.419 years (SD=2.714). Census sampling was used to draw the participants for the study. Emotional Abuse Scale, Self-Regulation Questionnaire and Warwick-Edinburgh Mental Wellbeing Scale were used for data collection. Four hypotheses were generated and tested using Multiple Linear Regression, Hayes Process Analysis and Standard Multiple Regression. The result indicated that emotional abuse significantly influenced mental health among orphans. The result further showed that direct abuse did not significantly predict mental health while covert abuse made a significant contribution to mental health. The result also showed that self-regulation significantly influenced mental health among orphans. As for the dimensions, the result further showed that affect, awareness and empowerment made significant contributions to mental health. The result further showed that self-regulation did not significantly mediate the relationship between emotional abuse and mental health. The result also indicated that there was a significant joint influence of emotional abuse and selfregulation on mental health. It was recommended that the Government, Human rights and other legal agencies should endeavour to reinforce compliance with the Child Right and Abuse Act. This can be implemented by opening up referral/reporting lines and ensuring that justice is always exercised when cases are reported.

Key Words: Self-Regulation, Emotional Abuse, Mental Health, Registered Orphans, Benue State

Introduction

Mental health is a salient element for childhood and adolescent development. This form of health is even more important for children who have lost their parent(s). Orphans who have quality mental health are able to recognize their own abilities, can handle normal stresses in life and are able to

contribute to their immediate communities. However, there are psychological problems that contribute to the mental health of orphans worldwide (Mohammadzadeh et al., 2017; Chen et al., 2017). Mental health problems reported among children and adolescents areon the increase each year and these issues will likely continue to increase by about 50%

in 2030 (Bayera et al., 2020). A study conducted by the National Health and Morbidity Survey Statistics found that orphans are experiencing high rates of mental health problems, most commonly for those aged 16-19 years of which 29.2% comprised about 4.2 million people (Ministry of Health, 2015). Mental health problems are prevalent among non-orphaned children but are more prevalent among orphans who reside in orphanage homes. Researchers have shown that mental health disorders are more common among orphans than non-orphan children (Mohammadzadeh et al., 2017; Kaur & Rani, 2016; Bhat et al., 2015). Studies have also shown that orphans who reside in orphanage homes are exposed to emotional problems such as depression, anxiety and distress (Mohammadzadeh et al., 2017).

Research has also found that orphans living in orphanage centers in Selangor suffer from depression, anxiety and stress (Mohammadzadeh et al., 2017). An earlier studyfound that orphanedchildren in Malaysia are exposed to depression (MDD) (Wan-Salwina et al., 2014) than non-orphan children (Kaur et al., 2014; Wahab et al., 2013). However, only a few local studies have examined the mental healthand conducted interventions among children who live in orphanage homes (Mohammadzadeh et al., 2017; Wahab et al., 2013). Local studies have focused on mental health among different samples such as school students (Shamzaeffa& Tan, 2016; Shamsuddin et al., 2013). However, there are many factors that affect the mental health of orphans. Some of these likely factors include emotional abuse and self-regulation.

One of the likely predictors of mental health among orphans is emotional abuse. Emotional abuse entails any form of action exerted on an orphan that impairs their emotional development or sense of selfworth. This may include constant criticism, threats, or rejection, as well as withholding love, support, or guidance (Ackner et al., 2013). It is "a repeated pattern of caregiver behaviour or extreme incident(s) that convey to children that they are flawed, unloved, unwanted, endangered, or of value only in meeting another's needs". Mental health problems such as depression, anxiety disorders and suicidal behaviours have constantly been related with child abuse and neglect mainly among children and adolescents (Vachon et al., 2015). An indigenous study by Ngbea (2022) revealed a negative association between emotional abuse and psychological resilience among orphans in Benue State.

In addition, it is well recognized that emotional abuse constitutes a major public health concern that has devastating consequences for both the victim and the society as a whole (Gilbert et al., 2012). Compared to research on physical and sexual abuse, less is known about the long-term impact of childhood emotional abuse on mental health (Ackner et al., 2013). Researchers have speculated that emotional abuse is a core component underlying all forms of child abuse that has equivalent, if not greater, developmental consequences than childhood experiences of physical and/or sexual abuse (Vachon et al., 2015; Chamberland et al., 2012). Despite the high rate of co-occurrence with other forms of child abuse (Vachon et al., 2015; Waxman et

al., 2014), the independent effects of emotional abuse on poor mental and physical health outcomes are rarely investigated and not well understood. Outside emotional abuse, self-regulation could also predict mental health among orphans.

Another likely determinant of mental health among orphans is self-regulation. Selfregulation entails the ability to understand and manage one's behaviour and their reactions to feelings and events around them. It includes being able to regulate reactions to strong emotions like frustration, excitement, anger and embarrassment, being calm after an exciting/upsetting event and focusing on a task (Li et al., 2023). In line with this, Mojsa-Kaja and Ivcevic (2023) found that selfregulation is useful for improving symptoms of insomnia and affective disorders. Other researchers (Li et al., 2023; Hajifathali et al., 2021) have also found that self-regulation skills are vital in maintaining a positive mental health among children. This implies that since children and adolescents are still developing in physical, emotional and social dimensions, there is need for them to acquire self-regulation skills to cope with orphanhood.

This study is anchored on the attachment theory developed by Bowlby (1969). The theory asserts that a secure attachment bond to at least one primary caregiver is critical for the development of children (Bowlby, 1969). Once an attachment pattern is formed, it tends to persist and influence an individual's perceptions of self and others throughout the lifespan (Ainsworth, 1979). According to the theory, emotional abuse likely interferes with the development of a secure attachment

bond, and the consequent insecure attachment patterns could help to explain the association between childhood emotional maltreatment and mental disorders. Childhood emotional abuse has been linked to depression (Hamilton et al., 2013), anxiety (Taillieu & Brownridge, 2013), dissociative symptoms, post-traumatic stress disorder, psychotic disorders (Ackner et al., 2013), substance use problems (Rosenkranz et al., 2012), several Axis II personality disorders (Waxman et al., 2014), as well as lower selfesteem (Taillieu & Brownridge, 2013) and decreased quality of life (Bruce et al., 2012). This theory presupposes that children who are well attached to their parents may develop to be mentally healthier than orphans who lack this parental bonding that is necessary for normal child development.

Emotional Abuse and Mental Health

Scott et al. (2023) examined the associations between experiences of child maltreatment and mental disorders in the Australian population. A population-representative survey was conducted by computer-assisted telephone interviewing. The study sampled Australian residents aged 16 years and older. Results indicated that compared with nonmaltreated Australians, maltreated participants had about three times the odds of any mental disorder, generalized anxiety disorder, major depressive disorder and severe alcohol use disorder, and almost five times the odds of post-traumatic stress disorder. Associations between experiences of child maltreatment and mental disorders were strongest for sexual abuse, emotional abuse and multi-type maltreatment. They concluded that mental disorders are significantly more likely to occur in

individuals who experience child maltreatment, particularly multi-type maltreatment. This study is significantly related to the present study but differs in that, it assessed mental disorders rather than mental health, child maltreatment rather than emotional maltreatment and it also failed to adopt an orphan-sample for the study.

Barros et al. (2022) investigated the effect of traumatic childhood experiences on the relationship between depression and psychological well-being in a sample of university students. This study employed cross-sectional survey design. Several regression models were used to analyze the interaction between variables, with multivariate SEM being applied to hierarchize the relationships found. Results indicated that emotional neglect and abuse stand out as the types of maltreatment with the greatest impact on mental health, associated first with a decrease in the selfacceptance dimension of psychological wellbeing and then with depressive symptomatology in adulthood. This study is criticized for failing to adopt an orphan sample and also, the setting was not in Benue State.

Aye et al. (2021) examined the association between childhood abuse and adult mental health problems, including mental distress and PTSD symptoms. A community-based cross-sectional study was conducted. The Wald test and multiple linear regression analysis were applied for testing differences between proportions and the association between childhood abuse and adult mental health outcomes, respectively. A total of 2377 men and women aged 18–49 years were

included. After adjusting for confounding variables, positive associations were found between childhood abuse with adult mental distress and PTSD symptoms among women and older men. They concluded that childhood abuse is prevalent among both men and women in the Yangon Region of Myanmar and associated with adult mental health problems. This study is also useful to the present study since they examined related variables, however, they differ in the instruments used to measure emotional abuse and mental health. More so, the study was not caried out in Benue State.

Murphy et al. (2020) examined the effects of different types of maltreatment on psychiatric outcomes. They also examined patterns of comorbidity among different types of child maltreatment. Participants were randomly selected from the total birth cohort of all children born in Denmark in 1984. Multivariate analysis demonstrated that all types of maltreatment were associated with psychiatric outcomes independent of other forms of adversity and parental history of psychiatric conditions. The strength of these associations was consistent for some, but not all conditions. Findings were consistent with emerging transdiagnostic models of psychopathology, which demonstrate that the risk for psychopathology appears to operate at the broad dimension level, rather than the level of specific diagnoses. That notwithstanding, the study was carried out in a foreign country and the context differs from the present study.

Self-Regulation and Mental Health

Mojsa-Kaja and Ivcevic (2023) examined whether insomnia could constitute a media-

tion mechanism that explains the relationship between emotion regulation strategies (rumination, reappraisal, suppression) and stress-induced mental health outcomes during the COVID-19 pandemic. The crosssectional study was conducted among young individuals (N = 281, 85.4% women) in Poland. The direct and indirect effects of emotion regulation strategies on depression, anxiety, and stress were calculated using a bootstrap estimation technique. Results indicated that all analyzed indirect effects were significant. The results showed that insomnia mediated the relationships between all 3 emotion regulation strategies and stress, anxiety and depression. They concluded that the presented results shed the light on the role of insomnia on the relationships between emotion regulation strategies and emotional states experienced during the COVID-19 pandemic. However, this study was limited to the COVID-19 context and also neglected the orphan population from the study.

Li et al. (2023) investigated whether selfesteem (SE) and emotion regulation strategies (cognitive reappraisal (CR) and expressive suppression (ES)) affect the association between CT and mental health in adulthood, including depression and anxiety symptoms. They performed a cross-sectional study of 6057 individuals (39.99% women, median age = 34 years), recruited across China via the internet. Multivariate linear regression analysis and bias-corrected percentile bootstrap methodologies were used to assess the mediating effect of selfesteem, and hierarchical regression analysis and subgroup approach were performed to examine the moderating effects of emotion regulation strategies. After controlling for age and sex, they found that (i) SE mediated the associations between CT and depression symptoms in adulthood, and CT and anxiety symptoms in adulthood; (ii) cognitive reappraisal moderated the association between CT and self-esteem; and (iii) expressive suppression moderated the association between of CT and mental health in adulthood via self-esteem, and such that both the CT-SE and SE-mental health pathways were stronger when expressive suppression is high rather than low, resulting the indirect effect was stronger for high expressive suppression than for low expressive suppression. This study has the major weakness of using emotion regulation rather than self-regulation which is the mother-concept used in the present study.

Hajifathali et al. (2021) evaluated the relation between three components of self-regulation including integrative self-knowledge, mindfulness, self-control, and some variables of mental health and self-conscious emotions. A total of 233 Iranian university students voluntarily enrolled in the study. The correlation between self-regulating variables, mental health, and self-conscious emotions were analyzed using Pearson's correlation coefficient test. Results indicated a negative correlation between selfregulating variables, depression, and anxiety. Their data also revealed that self-esteem positively related to integrative selfknowledge, mindfulness, and self-control. Among self-conscious emotions variables, authentic pride had a positive correlation with self-regulating variables whereas feelings of shame appeared a negative relationship with them. They concluded that integrative self-knowledge, mindfulness, and self-control as self-regulating components correlated to mental health and self-conscious emotions. This study is criticized for using university students rather than orphans for the study.

Aali et al.(2021) investigated the psychological profile and quality of life in allergic patients and to identify the role of cognitive emotion regulation strategies in this field. Data were collected using the Psychological Health Checklist, the World Health Organization Quality of Life Questionnaire and the Short Form Cognitive Emotion Regulation Questionnaire. The results of multivariate regression analysis showed that self-blame, other blame and rumination have a significant and positive relationship with symptoms of mental health disorders which can predict them significantly. Also, positive refocusing and planning have positive significant relationships with quality of life and can predict them significantly. Conclusively, the study demonstrated the role of cognitive emotion regulation strategies on mental health and quality of life in these patients. However, the study was not carried out among orphans but patients. This limitation is covered in the present study.

Emotional Abuse, Self-Regulation and Mental Health

Zhou and Zhen (2022) examined the mechanisms underlying the effect of physical and emotional abuse on depression and problematic behaviours through emotional regulation and anger in Chinese adolescents. The participants were 1689 adolescents (with age ranging from 12 to 17 years) from junior and senior high schools in Zhejiang Province,

China. Structural equation modeling was used to examine the research hypotheses. Results indicated that physical abuse had direct positive effects on problematic behaviours but not on depression. However, emotional abuse had direct effects on depression and problematic behaviours, and indirect effects on both psychopathologies through expressive suppression and anger. They concluded that physical and emotional abuse had distinct effects and influencing mechanisms on adolescents' externalizing and internalizing problems. Compared with physical abuse, emotional abuse elicited more harms and subsequent psychopathologies.

Pomerantz (2019) examined how childhood emotional maltreatment (CEM) influence symptoms of anxiety. The study hypothesized that engagement in a healthy lifestyle would mediate the relationship between CEM and symptoms of anxiety. It was also hypothesized that gender would moderate this relationship. The study analyzed emotional abuse and emotional neglect separately. Results indicated that engaging in a healthy lifestyle partially mediated the relationship between emotional neglect and anxiety. The mediating effect of lifestyle behaviours on emotional abuse and anxiety was not significant. In addition, gender was not found to moderate emotional abuse or emotional neglect and symptoms of anxiety. The limitations of the current study and future directions were discussed.

Kaiser and Malik (2015) examined the impact of emotional maltreatment on the mental health among adolescents. The study further explored the moderating role of optimism. A cross sectional survey research

design was used. The sample of 400 male and female adolescents with age range 14 to 18 was obtained from various public and private schools and colleges of Sargodha city. The findings indicated that emotional maltreatment is a significant predictor of mental health problems among adolescents. Results further indicated that optimism partially moderated the relationship between emotional maltreatment and mental health. Therefore, the following hypotheses were postulated:

- i. Emotional abuse will significantly influence mental health among registered orphans in Benue State.
- ii. Self-regulation will significantly influence mental health among registered orphans in Benue State.
- iii. Self-regulation will significantly mediate the relationship between emotional abuse and mental health among registered orphans in Benue State.
- iv. There will be a significant joint influence of emotional abuse and self-regulation on mental health among registered orphans in Benue State.

Design

This study adopted cross-sectional survey design to examine the mediating role of self-regulation in the relationship between emotional abuse and mental health among registered orphans in Benue State. This design is appropriate because it allowed the researcher to collect data via self-reported tools across numerous orphans in Benue State at a single point in time. Thus, in this study, the independent variable is emotional abuse, the mediating variable is self-regulation while the dependent variable is

mental health.

Sampling Technique

The population of registered orphans in Benue State is currently 424. Thus, the researcher used all the registered orphans for the study except children that were less than 10 years because they were too young to comprehend and respond honestly to the questionnaire that were excluded. Therefore, 221 orphans were excluded and the remaining 203 considered for the study. The researcher used census sampling method where all the potential registered orphans (n=203) considered for this study were used.

Participants

The participants for this study were 203 orphans in Benue state. They comprised of 81 (39.9%) male and 122 (60.1%) female orphans. Their ages ranged from 10-17 years with a mean age of 13.419 (SD=2.714). Among them, 101 (49.8%) were Tiv, 12 (5.9%) were Idoma while 90 (44.3%) were from other ethnic groups. In terms of their religion, 152 (74.9%) were Christians while 51 (25.1%) were Muslims. As for their educational levels, 56 (27.6%) were at the primary level, 141 (69.5%) were at the secondary level while 6 (2.9%) were at the tertiary level. Considering their duration in orphanage home, 102 (50.2%) were there for less than a year, 91 (44.9%) were there for 1-10 years while 10 (4.9%) were there for more than 10 years.

Instruments

Emotional Abuse Scale: Emotional abuse was measured using the Emotional Abuse Scale developed by Goodall and Sawrikar (2023). The scale is meant to measure

emotional abuse among adolescents and children. The scale has 23 items measured on a 5-point format of 0 (never) to 4 (A great deal). The scale has two dimensions; Direct Abuse (items 1-13) and Covert Abuse (items 14-23). The total score is obtained by summing scores across the items for each subscale. The author reported .93 and .97 for the subscales respectively while the overall scale had .98. The present study reported an alpha coefficient of .71, while the subscales; Direct abuse and Covert abuse had .71 and .72 respectively. Sample of items include; "Put you down or criticize you in front of others", "Lose their temper without warning".

Self-Regulation Questionnaire: Selfregulation was measured using the Self-Regulation Questionnaire developed by Hrbackova and Vavrova (2014). The questionnaire was developed to measure the level of self-regulation among minors. The scale is measured on a 5-point format of 1 (strongly disagree) to 5 (strongly agree). The 13-item scale has three dimensions; Affect (items 1-4), Awareness (items 5-9) and Empowerment (items 10-13). The total score is obtained by summing an individual scores across all the items. The author obtained an alpha coefficient of .73 for the overall scale, while the subscales had .81, .71 and .73 for the subscales respectively. The present study obtained an alpha coefficient of .89, while the subscales; Affect, Awareness and Empowerment had .77, .75 and .73 respectively. Sample of items include: "I can cheer myself up when sad", "I get upset every time things are not my way".

Warwick-Edinburgh Mental Wellbeing

Scale: Mental health was measured using the Warwick-Edinburgh Mental Well-being Scale developed by WAVES project (2010). This 14-item scale is uni-dimensional and is measured on a 5-point scale of 1 (none of the time) to 5 (all of the time). High scores on this scale imply positive mental health while low scores imply poor mental health. The scale has a reliability coefficient of .87 as reported by the author. The present study reported an alpha coefficient of .82. There are no items to be reversed and a sample of the items in this scale include; "I have been thinking clearly", "I have been feeling confident".

Procedure

This study was conducted among registered orphans in Benue State. From the 203 orphans were drawn from the following orphanage homes; NKST Community Based Orphanage Care Mkar (34), Divine Charity Orphanage Home Makurdi (2), Divine Care Foundation Christian Academy (6), Benita Children's Home Opkokwu (7), Mother Thereasa Orphanage Home Okpokwu (2), Erninya Orphanage Home Apa (22), Restoral of Pact Care Foundation Otukpo (16), Children of Mary Orphanage Home Otukpo (47), Faith Orphanage Home Gboko (6), Tivid orphanage Home Makurdi (34), and Mama Abayol Children's Home (27). The researchers sought ethic approval from the Ministry of Women Affairs and Social Development to collect data on orphans. Furthermore, the consent of the orphans was sought verbally using local language by explaining their involvement in the process and in the presence of their caregivers. Their consents were obtained before the administration of questionnaire. All ethical issues were taken into consideration in the

data collection process such that all the data collected were treated as confidential, informed consent was obtained, and the research process did not constitute any form of harm to the respondents. Two research assistants (postgraduate students) were adopted for data collection in the study. The sampled orphans were then exposed to the questionnaire copies. After administration, the 203 copies that were filled, returned and found useful were considered for statistical analysis.

Data Analysis

The data for this study were analyzed using both descriptive and inferential statistics. The researchers used mean, standard deviation, frequencies and percentages to describe the participants. On the other hand, hypotheses one and two were tested using multiple linear regression because both emotional abuse and self-regulation has multiple dimensions, hypothesis three was tested using Hayes Process Macro Mediation analysis while hypothesis four was tested using Standard Multiple Regression because two independent variables were tested together.

Results
Table 1:Summary of multiple linear regression showing the influence of emotional abuse on mental health among registered orphans in Benue State.

Variable	R	\mathbb{R}^2	F	df	ß	t	Sig.
Constant	.815	.664	197.755	2,200		21.912	.000
Direct Abuse					.022	.439	.661
Covert Abuse					803	-16.248	.000

The result shows that emotional abuse significantly influenced mental health among registered orphans; [$R^2 = .664$, F(2,200)=197.755, p<.001]. The result implies that emotional abuse explained 66.4% of the variance in mental health. As for the dimensions, the result further showed that direct abuse (β =.022, t=.439, p>.05) did not significantly predict mental health while covert abuse (β =-.803, t=-16.248, p<.001)

made significant negative contribution to mental health. This implies that direct abuse explained 2.2% while covert abuse explained 80.3% of the variances in mental health. More so, the contribution of covert abuse was negative, meaning the more covert abuse, the less the mental health, while that of direct abuse was positive. Therefore, hypothesis one was supported.

Table 2:Summary of multiple linear regression showing the influence of self-regulation on mental health among registered orphans in Benue State.

Variable	R	\mathbb{R}^2	F	df	ß	t	Sig.
Constant	.896	.803	7838.576	3,199		77.882	.000
Affect					.259	19.446	.000
Awareness					.800	60.939	.000
Empowerment					280	-27.887	.000

The result shows that self-regulation significantly influenced mental health among registered orphans; [$R^2 = .803$, F(3,199)=7838.576, p<.001]. The result further shows that self-regulation explained 80.3% of the variance in mental health **among registered orphans**. As for the dimensions, the result further showed that affect ($\beta = .259$, t=19.446, p<.001), awareness

(β =.800, t=60.939, p<.001) and Empowerment (β =-.280, t=-27.887, p<.001) made significant contribution to mental health. This implies that affect, awareness and empowerment explained 25.9%, 80% and 28% of the variance in mental health respectively. Therefore, hypothesis two was also supported.

Table 3:Summary of Process Mediation Analysis showing the mediating role of self-regulation on the relationship between emotional abuse and mental health among registered orphans in Benue State.

Variable	R	\mathbb{R}^2	F	df	ß	t	Sig.	LLCI	ULCI	
Constant	.834	.696	228.8120	2,	200	13.1240	.000	38.2970	51.8403	
Emotional Abuse					3769	-8.9911	.000	4595	2942	
Self-Regulation					6857	-17.7437	.000	.6095	.7619	
$Int_1(X * M)$					1177			3718	.0096	

The result shows that self-regulation did not significantly mediate the relationship between emotional abuse and mental health; $[R^2=.696, F(2,200)=228.8120, Int_1(X*M) (\beta=-.1177, p>.05]$. The result further showed

that both emotional abuse (β =-.3769, t=-8.9911, p<.001) and self-regulation (β =-.6857, t=-17.7437, p<.001) made significant contributions to mental health. Thus, hypothesis three was not supported.

Table 4: Summary of Standard Multiple Regression showing the joint influence of emotional abuse and self-regulation on mental health among registered orphans in Benue State.

Variable	R	\mathbb{R}^2	F	df	ß	t	Sig.
Constant	.834	.696	228.812	2,200		13.124	.000
Emotional Abuse					355	-8.991	.000
Self-Regulation					701	-17.744	.000

The result indicated that there was a significant joint influence of emotional abuse and self-regulation on mental health $[R^2=.696, F(2,200)=228.812, p<.001]$. The result further indicated that emotional abuse and self-regulation explained 69.6% of the variation in mental health. Thus, hypothesis 4 was also supported.

Discussion

Hypothesis one was tested to find out if emotional abuse will significantly influence mental health among orphans. Findings indicated that emotional abuse significantly influenced mental health among orphans. Emotional abuse entails any form of insult, neglect, comment or attitude meant to affect the victim's feelings. Therefore, it is not uncommon for orphans whose emotions are violated to experience mental health problems. This finding specifically indicated that covert abuse has more profound impact on mental health than direct abuse. This is in agreement with Scott et al. (2023) who revealed that compared with non-maltreated Australians, maltreated participants had about three times the odds of any mental disorder, generalized anxiety disorder, major depressive disorder and severe alcohol use disorder, and almost five times the odds of post-traumatic stress disorder. They further revealed that the associations between experiences of child maltreatment and mental disorders were strongest for sexual abuse, emotional abuse and multi-type maltreatment. Another concordant study by Barros et al. (2022) indicated that emotional neglect and abuse stand out as the types of maltreatment with the greatest impact on mental health, associated first with a decrease in the self-acceptance dimension of psychological well-being and then with depressive symptomatology in adulthood. Their results provided evidence that early trauma has an impact on mental health, increasing the risk of depression, however, its impact is greater on positive aspects of health, such as self-acceptance, a fundamental element in the construction of psychological well-being. In line with this, Aye et al. (2021) found that after adjusting for confounding variables, positive associations were found between childhood abuse with adult mental distress and PTSD symptoms among women and older men. They concluded that childhood abuse is prevalent among both men and women in the Yangon Region of Myanmar and associated with adult mental health problems. Still related, Murphy et al. (2020) demonstrated that all types of maltreatment were associated with psychiatric outcomes independent of other forms of adversity and parental history of psychiatric conditions.

Hypothesis two was tested to find out if selfregulation will significantly influence mental health among orphans. Findings indicated that self-regulation significantly influenced mental health among orphans. Selfregulation entails the ability to handle stressful activities such that one's emotions and thoughts are not negatively affected. Thus, orphans who have the ability to manage themselves are more likely to experience a positive mental health. This study agrees with Mojsa-Kaja and Ivcevic (2023) who found that insomnia mediated the relationships between all 3 emotion regulation strategies and stress, anxiety and depression. Also, Li et al. (2023) found that cognitive reappraisal moderated the

association between CT and self-esteem; and (iii) expressive suppression moderated the association between CT and mental health in adulthood. Another study by Hajifathali et al. (2021) found that integrative selfknowledge, mindfulness, and self-control as self-regulating components correlated to mental health and self-conscious emotions. Another congruent study by Aali et al. (2021) found the role of cognitive emotion regulation strategies on mental health and quality of life. Still in agreement, Davis and Hadwin (2021) and Kraiss et al. (2020) revealed that emotion regulation is not merely related with psychopathology, but also with well-being in general as well as hedonic and eudaimonic wellbeing.

Hypothesis three was tested to find out if selfregulation will significantly mediate the relationship between emotional abuse and mental health among orphans. Findings indicated that self-regulation did not significantly mediate the relationship between emotional abuse and mental health among orphans. This finding agrees with Zhou and Zhen (2022) whose finding indicated that physical abuse had direct positive effects on problematic behaviours but not on depression. However, they also found that emotional abuse had direct effects on depression and problematic behaviours, and indirect effects on both psychopathologies through expressive suppression and anger. Also, Pomerantz (2019) further indicated that optimism partially moderated the relationship between emotional maltreatment and mental health.

Hypothesis four was tested to find out if emotional abuse and self-regulation will jointly influence mental health among orphans. Findings indicated that emotional abuse and self-regulation jointly influenced mental health among orphans. Since emotional abuse and self-regulation are independent predictors of mental health, it is therefore not strange for these variables to jointly influence mental health. However, there are no studies that share same findings.

Conclusion

Based on the findings obtained from the present study, the following conclusions were drawn for the study:

- i. Emotional abuse is a significant determinant of mental health among registered orphans in Benue State.
- ii. Self-regulation is a significant determinant of mental health among registered orphans in Benue State.
- iii. Self-regulation is not a significant mediator of the relationship between emotional abuse and mental health among registered orphans in Benue State.
- iv. Emotional abuse and self-regulation are significant joint determinants of mental health among registered orphans in Benue State.

Recommendations

Based on the findings obtained from the present study, the researcher has made the following recommendations:

i. The Government, Human rights
Protection agencies, and other legal
agencies in the Benue state should
endeavour to reinforce compliance of
the citizens with the Child Right and
Abuse Act. This can be implemented in
one way by opening up referral /

- reporting lines and ensuring that justice is always exercised when cases are reported.
- ii. Clinical psychologists working with orphans in registered homes should design educational and psychosocial programs to inculcate self-regulation skills among these orphans. The aim should be to build their coping ability to avert compromise in their mental health when faced with stressors in orphanage homes.

Limitations of the Study

The researchers faced a number of challenges in the process of conducting this study. They include the following:

- i. This study was carried out among orphans ranging from 10 years above and some of them were not fluent in reading and comprehending English. Therefore, the researchers used translators who understood familiar languages to collect data from such orphans. However, the use of translators might is also associated with flaws in the translation process.
- ii. Also, the study design relied strictly on the responses of the respondents for inferences to be made. This implies that the respondents must have in some way faked their responses to appear good to the researcher.

Contributions to Knowledge

This study has made significant contributions to the area of mental health. Some of the contributions are highlighted below:

i. This study has contributed in shedding light on the long-term effect of emotional abuse perpetrated on

- orphans. The study has also indicated clear lines for establishing or strengthening the standard of care among orphans in orphanage homes.
- ii. In addition, this study has established the role of self-regulation as a protective factor for the development of mental health problems among orphans. It has highlighted that despite its role, the self-regulation ability of orphans has not been strong enough to moderate the influence of emotional abuse on mental health.

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