

Article

An Evaluation of Interventions to Promote Adolescent Gender Forgiveness

James Kwame Mahama^{1,*}, Agnes Amshetu Osman¹¹ Department of Educational Foundations Studies, University for Development Studies Tamale, Ghana

*Correspondence: James Kwame Mahama (bordohlity@yahoo.co.uk)

Abstract: The purpose of this study was to examine indicators of forgiving behaviour and intervention among adolescent students in Junior High School in Bimbilla in the Nanumba North Municipality of Ghana. This study adopted the Pragmatist philosophy. The mixed methods experimental design was used for the study. The study population comprised all adolescents in Junior High Schools in the Nanumba North Municipality of the Northern Region, Ghana. Purposive, random sampling techniques Krejcie and Morgan's table of determination of sample size were used for the schools and respondents for the study. Two major instruments were used for this study: a questionnaire and an interview guide. The interview schedule was used to gather the qualitative data whereas the quantitative data was gathered using the questionnaire. The study indicated that both the REACH model and Process model are efficacious in reducing the level of depression among adolescent students when their levels of forgiveness are increased through forgiveness counselling regardless of gender and age. The findings also revealed that both REACH and Process models were good interventions for the adolescents in showing greater emotional regulation (increased forgiveness, reduced anger and reduced depression, enhanced sense of well-being, positive feelings and positive thoughts towards the offender). It is recommended that counsellors organise training programmes with parents in conjunction with Non-governmental organisations on using the Process and REACH models. This will bring awareness of the interventions and encourage parents to seek assistance anytime their adolescents need assistance. It is once again recommended that teachers and school administrators consider forgiveness interventions (the Process model and REACH model) as a very effective strategy for treating unforgiveness to improve students' psychological well-being.

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1. Introduction

Forgiveness, on the other hand, improves happiness, as well as cardiovascular health. From a psychological and neurological standpoint, this work converges with other significant studies in demonstrating that forgiveness is a constructive, "healthy" approach for an individual to overcome a situation that would otherwise be a substantial source of stress [1]. Despite its importance in both the individual and communal contexts, the brain basis of interpersonal forgiveness is still little understood. Children and adolescents, however, are not insulated from the severe difficulties that plague today's society. Adolescence is a pivotal time for depressive symptoms to appear, which can be understood as a failure to complete the developmental process of emotion regulation [2, 3]. Because of the hormonal changes connected with this developmental stage of life, adolescents have been reported to exhibit more extreme mood swings and emotional reactivity to social cues than persons of other ages [4]. They can have normal mood swings or, in rare circumstances, moods and behaviours marked by destructive rage and

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depression, depending on their capacity to regulate emotions [5, 6]. It has also been found that “encouraging forgiveness improves anger control while lowering trait anger and anger expression-out/anger expression-in” [7].

Only a few studies have looked into gender differences in the relationship between forgiveness and psychological health outcomes [8]. Females are often more forgiving than males, according to meta-analyses, while males are more vengeful. There have been inconsistent results when it comes to gender differences in anger management methods among teenagers, with some research indicating no differences (and others revealing females to have weaker anger control strategies [9-11]. Not only in the United States but also around the world, adolescent anger in classroom settings has become a severe issue [12]. Scholars now believe that aggressive behaviour, which has been the primary focus of school prevention and remediation programmes for decades, should not be the primary or exclusive focus of treatment within schools because such programs do not always address the underlying emotions of anger and hostility that fuel aggressive acts [13, 14]. Research conducted over the last decade has connected teenage anger to negative consequences such as poor academic performance, and delinquency, including substance misuse, social issues, and long-term behavioural disorders [15].

For many adolescents in the Bimbilla Township, their development trajectory has been disrupted due to conflict and displacement and the paths they thought their lives would take have gone wildly off course. Many expected that they would finish school, get good jobs and one day have a happy family life. For young people from this place and their lives have instead been rocked by war, their caregivers are likely to be under significant stress and their capacities to support their children through this formative period of their lives will be stretched. Therefore, many conflict-affected adolescents will be struggling to negotiate the transition to adulthood without adequate support. Their development is put at further risk because their difficult circumstances make them more vulnerable to protection risks. In conflict-affected situations, many adolescents will be required to take on adult responsibilities earlier than expected to support their families. Many will stop going to school so that they can earn a living or marry early, which affects their long-term potential and leaves them highly vulnerable to a range of risks including exploitation, physical and sexual violence and early pregnancy. Adolescent boys are particularly vulnerable to child labour and forced recruitment into armed groups. For adolescent girls, who are often already isolated and marginalised, crisis heightens their vulnerability to gender-based violence [16].

One promising area for reducing depression and anger in children is forgiveness intervention [17]. Forgiveness is a person's internal, psychological response to injustice perpetrated by another person (or people). Without condoning, excusing, or forgetting, a person who forgives lessens resentment and offers benevolence to a wrongdoer. Forgiveness has been proven to be an effective way of regulating the negative effects of unforgiving attitudes. Depending on the offender's trustworthiness, a person who forgives may or may not reconcile with him or her [18].

The goal of forgiveness intervention is to assist the person think about the perpetrator in new ways (reframing) and to generate empathy and compassion for the offender (while, at the same time, protecting oneself as necessary). As Ghana seeks to reduce the incidence of conflicts by setting up the National Peace Council by an Act of Parliament in 2011 (Act, 818), forgiveness Education must be made paramount among the adolescents in Bimbilla in particular and in Ghana as a whole. Given that the inability to forgive is related to anger and depression, it is reasonable to posit that an unforgiving attitude leads to mental health problems that are associated with negative behaviours. The REACH model and PROCESS model have the efficacy in enhancing forgiveness among adolescents and reducing levels of depression among them [19]. The purpose of this study was to examine indicators of forgiving behaviour and intervention among adolescents in

Junior High School in Bimbilla in the Nanumba North Municipality of Ghana. The study sought to answer three hypotheses and a research question.

H₀₄: There is no significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender.

H_{A4}: There is a significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender.

H₀₅: There is no significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender.

H_{A5}: There is a significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender.

H₀₆: There is no significant effect of Process and REACH models on depression among adolescents in JHS in Bimbilla based on gender.

H_{A6}: There is a significant effect of Process and REACH models on depression among adolescents in JHS in Bimbilla based on gender.

What are the indicators of forgiving behaviour after the intervention among adolescents in JHS in Bimbilla?

1.1. Interventions to Promote Forgiveness

Several research groups have developed and tested interventions for promoting forgiveness. Many of these interventions are designed for delivery to groups rather than to individuals. Several of the forgiveness intervention studies were based on the work of Enright and others were based on the theoretical work of McCullough and colleagues [20, 21]. Some of these intervention programs have focused on clinical populations, whereas others have had a more preventive or psychoeducational focus. Other researchers also are launching evaluations of intervention programs.

Writers conducted a meta-analysis of data from 12 group intervention studies. They reported that “these group interventions were generally effective, improving group members’ forgiveness scores by 43% of a standard deviation (Cohen’s $d = .43$). Among the eight intervention studies that involved six hours of client contact or more, group members’ forgiveness scores were 76% of a standard deviation higher than the scores of control group members (Cohen’s $d = .76$). In contrast, the four intervention studies that involved less than six hours of client contact were substantially less efficacious (Cohen’s $d = .24$). Thus, participation in short-term interventions (particularly those involving at least six hours of client contact) appears to be moderately effective in helping people to forgive specific individuals who have harmed them. Individual psychotherapy protocols that include forgiveness as a treatment goal also appear to be more efficacious than no-treatment control conditions [22-24].

Forgiveness intervention is one promising avenue for reducing children's anger and depression [17]. The goal of forgiveness intervention is to help the person think about the perpetrator in new ways (reframing), as well as to foster empathy and compassion for the offender (while, at the same time, protecting oneself as necessary). In addition, trait and state forgiveness, affective and decisional forgiveness, and treatments to encourage forgiveness, all with an eye towards the positive impacts of forgiveness on the health and well-being of victims (and, in some cases, offenders). Health, according to the researcher, includes social and relational components, mental symptoms or disorders, self-reported physical health, physiological signs of good health, well-being/happiness, chronic health conditions, and disease or disorder adjustment.

1.2. *Forgiveness and Gender*

Psychological research that directly investigated the impact of gender on forgiveness is indeed scarce. A study established that British undergraduate female students reported higher scores on state forgiveness than male students. State forgiveness refers to forgiving a specific offence or a single act of forgiveness for a particular offence [25]. On the other hand, there was no gender difference in trait forgiveness among British undergraduate students. Females were found to be more forgiving than males in some studies, while no gender difference was found in other studies [26]. In one qualitative study, it was revealed that a woman's experience of forgiveness could be interwoven with traditional feminine gender roles. To clarify gender differences in forgiveness, it appears that offence-specific forgiveness and the context of forgiveness need to be examined [27]

Another study found no gender difference in state forgiveness among adults in a community in the United States (a convenience sample) [28]. Some prior studies indicated the impact of religiosity, gender roles, and empathy on gender differences in forgiveness. For example, women were found to be more religious and spiritual than men, which might have contributed to women's trait of forgiveness [29]. Endorsement and internalization of masculine gender stereotypes were found to impede trait forgiveness among Christian males, [26]. Empathy toward the offender was found to be positively associated with state forgiveness for men, but not for women, although women were found to be generally more empathic than men [28]. Females are characteristically more forgiving than males, whereas males are more vengeful than females [30].

1.3. *Depression and Gender*

Depression is one of the few major mental disorders for which gender has played a comparatively central role in research the term "gender" typically arises in one of two ways. Most commonly, it serves as an implicit, if ill-defined, synonym for differences between women and men in the incidence, prevalence, causes, or treatment of the disorder. The gendered responding framework assumes that gender plays a role in the way all individuals respond to distressing emotions ranging from basic negative affect to an episode of major depression [31]. From a more psychological perspective, two variables have been implicated in contributing to the gender difference in depression: interpersonal orientation and rumination. Researchers have suggested that the higher levels of these constructs among women are associated with their higher rates of depression. The prevalence of major depression is higher in women than in men thus in 2010 the global annual prevalence was 5.5% and 3.2%, respectively, representing a 1.7-fold greater incidence in women [32].

Although it is well documented that women are twice as likely to be diagnosed with major depression, population-based estimates indicate that there are still a significant number of men who suffer from the disorder, and there is evidence that the gender gap is narrowing. Researchers and practitioners working in the area of men's mental health have increasingly suggested that major depression can be "masked" in men and that this may produce an underestimate of the true rates at which men suffer from the disorder. It has been clear for some time that men are roughly half as likely as women to be diagnosed with major depression (Cochran & Rabinowitz, 2000).

It has also been suggested that the prevalence of depression in men has been underestimated due to men's greater tendency to express depression in ways that do not correspond to the symptoms tapped by structured interviews based on the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), [33]. For example, the greater prevalence of substance use disorders in men may reflect, at least partially, the presence of underlying depression. It excludes the possibility that some men may mask depression or express it differently than women.

Several theories have been put forth to account for this sex difference, including biological factors, social learning of gender roles, and coping and response styles. Men may be less likely than women to ruminate in response to depressed moods and more likely to distract themselves [34]. Men again are less likely than women to seek help for depression, evidence shows that men and women differ on average in the frequency with which they experience depression and in how they respond to the disorder. It should be noted that none of these findings pertains to differences in the expression of the disorder per se (that is symptom differences) hence, reports that there are no differences between men and women in the number of hospitalisations for depressive episodes this implies that both sexes suffer the same level of depression [34].

Men feel depression in the same way as women, but the difference lies in what men 'do' when they are depressed. They argue that through risk-taking behaviours, violence, substance abuse, and aggression, depressed men are employing five coping mechanisms against the hidden pain. They try to "avoid it", men tend to forget or not think about problems; "numb it", for example through substance abuse; "escape it", maybe spending many hours at work; "hating me, hurting you" through either self-abuse or/and anger related behaviours and violence; "stepping over the line" for instance, committing suicide [35].

1.4. Concepts of Anger and Gender

Research indicates that differences exist between adolescent males and females regarding behavioural decision-making processes and expression of emotions [36]. Although research depicts females as more emotionally expressive, males have a reputation for being more predisposed to anger. Females experience anger but may express it differently than males [37]. For example, instead of expressing anger by striking objects, adolescent females may talk to friends or peers [38]. Conversely, other studies purport that females express anger similarly to males, but experience difficulty recognizing and admitting the emotion due to social expectations and constraints [39]. Males, on the other hand, tend to display anger more commonly and comfortably [38]. One of the many reasons that adolescent males may feel comfortable expressing anger is because it is socially acceptable [40].

An extensive number of studies have investigated anger; however, there appears to be a lack of studies exploring anger differences between genders. Writers conducted a study on gender differences, investigating autonomy-connectedness between genders. Their study indicated differences related to anger and sensitivity between genders. However, the study did not attempt to determine whether males and females were equal in anger at the beginning or end of the study [39]. Similarly, incorporating social and relational competencies into anger management groups reduced anger, but there was no discussion of anger differences between genders [40]. Some writers recounted that women expressed more self-anger (i.e., anger directed internally toward themselves) than males, but did not investigate whether differences existed between genders before the study [37].

Although limited, few studies have attempted to examine anger differences between genders. Females expressed subjective anger, or self-anger, more often than males [37]. A study found that both genders' self-reports (assessments) indicated no significant differences. Upon further examination of their data, however, they concluded that although self-reports specified no differences, males verbally reported higher responses of anger [41]. In contrast, a similar study determined that no anger differences existed between males and females. They declared that although genders may express anger and respond to situations differently, they generally experience similar levels of anger [42]. As can be seen from the preceding studies, inconsistencies exist in the literature. Contradicting studies indicate that researchers are unclear as to whether differences in anger exist between genders.

2. Materials and Methods

This study adopted the pragmatist philosophy of Science because of the nature of the study. Effects of REACH and Process Models on Forgiveness, anger and depression of the JHS Students in the Nanumba North Municipality requires a blend of approaches. The mixed methods experimental design was used for the study. The study population comprised all adolescents in Junior High Schools in the Nanumba North Municipality of the Northern Region, Ghana. The total population of the study was made up of three thousand six hundred and thirty-two (3632) JHS adolescents in the Municipality. About 1888 (55%) of the adolescents were males, while 1744 (45%) were females. The accessible population for the study comprised eight (8) JHS with a population of one thousand six hundred and thirty-six (1636) JHS adolescents in the Bimbilla Township. About 952 (58%) of the adolescents were males, while 684 (42%) constituted females. This is because the conflict mostly occurred in the Bimbilla Township.

Table 1. Distribution of Students by, Population, Gender and Sample Size

JHS	Male	Female	Population
DEM. JHS	198	96	294
JILO JHS A	107	81	188
JILO JHS B	102	76	178
BIMBILLA JHS	102	85	187
OUR LADY	135	98	233
CENTRAL A	105	75	180
CENTRAL B	102	88	190
NURIA	101	85	186
Total	952	684	1636

Source: Field data

A purposive sampling technique was used to select eight JHS for the study. Demonstration JHS, Jilo JHS "A", Jilo JHS "B", Bimbilla JHS, Our Lady of Fatima JHS, Central JHS "A", Central JHS "B" and Nuria JHS. The three instruments (Enright Forgiveness Inventory, Depression Mood Scale and Anger Self-Report) were first administered to the accessible population of 1636 students, out of which 348 students qualified by the criteria set out in the instrument, which is, the students scored below 210 of the EFI. The students consisted of 125 females and 223 males. A simple random sampling technique was used to select sixty (60) respondents from the 348 qualified students who responded to the Enright Forgiveness Inventory, Depression Mood Scale and Anger Self-Report items. According to Creswell (2018), 60 participants in a mixed-method, experimental design is enough since it will provide insights into the value that underlies the goals of the therapy. Krejcie and Morgan's (1970) table of determination of sample size selection also guided the decision. It ensured fair distribution of the population and gender. Therefore, the total number of students who took part in the pre-test was made up of sixty (60). Thirty (30) males and thirty (30) females.

The pre-test scores were used to determine participants who are unforgiving and have anger and depression problems. Participants who are unforgiving and have anger and depression problems were further randomly sampled using simple random sampling. Participants that are twenty (20) formed each of the groups, two experimental groups and one control group. Purposive sampling was utilised to sample 3 of the participants to be interviewed. The interviews were conducted after the intervention had been done. The participants were from both the experimental groups and the control group. The purpose was to confirm or disconfirm the quantitative (quasi-experimental) study's results- to

provide personal, contextual, and qualitative experiences drawn from the setting or culture of the participants along with the quantitative outcome measures.

Two major instruments were used for this study: a questionnaire and an interview guide. The interview schedule was used to gather the qualitative data whereas the quantitative data was gathered using the questionnaire. Quantitative data were analysed using the Enright Forgiveness Inventory (EFI), Anger self-report questionnaire (ASR), and Depressed Mood Scale (DMS). One-way and Two-way Analyses of Covariance (ANCOVA) were used to test the hypotheses. Qualitative data were also in line with the research objective and interests. Coding of the data was therefore done for specific research questions or objectives. In the analysis of the data for this study, themes were organized mainly at the semantic or explicit level. The semantic approach of analysis involves identifying themes within the explicit surface meaning of the data, focusing mainly on what the participants had said [43].

2.1. Intervention: Using the Enright Process Model of Forgiveness

Session 1: Introduction, Welcoming and Orientation

The researcher and the participants did a self-introduction in this session, after that set goals for the intervention, established rules that guided the conduct of the intervention and determined the periods of meeting. Finally, there was a distribution of the training manuals for the intervention counselling to the participants.

Session 2: The Sources and Concept of Forgiveness

During this section the sources of hurt and circumstances leading to hurt, what forgiveness is and what it is not forgiveness, difference between forgiveness and reconciliation were discussed. Participants were asked to do the following as a home exercise: Who hurt you and how deeply were you hurt? And what are the reasons for wanting to forgive?

Session 3: Common Reaction to being hurt (defense mechanisms)

The researchers and participants reflected on the previous week's assignment. Causes, effects and how they dealt with hurt as well as discussion on the effects of deepening and easing hurt time were discussed. Participants were assigned to write letters they would send to the person who hurt them (the offender) about psychological problems and the struggles they endured as a result of their offence.

Session 4: The Cost and Benefits of Committing to Forgiveness

There were reflections on the previous exercise. Participants discussed the issue of forgiveness whether it works, or whether they would have to consider other alternatives instead of forgiveness. They also deliberated on whether they were willing to consider forgiveness. Again, as homework participant was asked to write about four reasons why they consider forgiving and five reasons why they doubted forgiveness in their notebooks.

Session 5: Broadening your View about the Person that hurt you

There was a reflection on the homework. The researchers then introduced the topic broadening your view about the person who hurt you. There was a discussion on what life was like for the person that hurt you. They looked at how they viewed the one who hurt them based on global and spiritual perspectives. Participants identified the vulnerabilities in the person's childhood, adolescence or adulthood and a way of seeing the person as redeemable within their belief system as a home assignment.

Session 6: Nature of Compassion and Working Towards Compassion

There were reflections on the previous session's home assignment. This was done by using a guided imagery exercise. Participants discussed whether they noticed any changes

in their feelings towards the person who hurt them. The researcher made participants with interpersonal hurts discuss the kinds of gifts they will give to the person who hurt them (offender).

Session 7: Finding Meaning in Suffering

Participants in this session were taken through finding meaning in suffering. The discussion was based on what they learnt from being hurt and their experiences from being hurt, whether it made them stronger, more sensitive or more mature. Participants discussed what new purpose they may develop that involved how they interacted with others as they contemplated their suffering.

Session 8: Practice, General Discussion, Evaluation and Post-test

There was a summary of all the activities of the sessions from 1-7. This required an open discussion on the whole intervention process. Here, participants were made to evaluate the intervention orally. The intervention sessions were then terminated. There was a follow-up within two weeks where the post-test was administered.

2.2. Intervention 2: Using the REACH model of forgiveness

Session 1: Introduction, Welcoming and Orientation

The researchers and the participants did a self-introduction in this session, after that set goals for the intervention, established routines or rules that guided the conduct of the intervention and determined the periods of meeting. There was distribution of the training manuals for the intervention to the participants.

Session 2: The Sources and Concept of Forgiveness

During this section the sources of hurt and circumstances leading to hurt, what forgiveness is and what it is not forgiveness, difference between forgiveness and reconciliation, were discussed. Participants also discussed decisional and emotional forgiveness. Each participant was asked to write about five effects of emotional unforgiveness as homework.

Session 3: Recall the Hurt

There was a group discussion of the hurt and the difficulties involved in forgiving. There was also a discussion on the benefits of forgiveness to a relationship and the forgiver. Then each participant with interpersonal hurt wrote five (5) sentences about the importance of forgiving a transgressor as homework.

Session 4: Empathizing with the One Who Hurt You

In this session, participants and the researcher reflected on the previous week's assignment. The participants were then taken through how to empathize with the one who hurt them. The researcher after that encouraged participants to write letters expressing their feelings about the harmful event and the offender and to express that they were working to forgive the offender. Participants also talked about others' experiences concerning the hurt by using words like disappointed, annoyed, angry, worthless, pleased, satisfied, frustrated etc. Again, participants did the empty chair exercise with multiple repetitions with sympathy, compassion and love. Participants with interpersonal hurts did the following as homework. What were the reasons why your victims responded the way they did? And what were some of your reactions toward the offender?

Session 5: Altruistic Gift of Forgiveness

There were reflections on the previous assignment. The participants were taken through focusing on feelings of freedom received after seeking divine forgiveness and

forgiveness from others. Participants who were hurt interpersonally wrote a letter of gratitude for being forgiven by someone who hurt them as homework.

Session 6: Commitment to Forgiveness

There were reflections on the previous week's exercise. The researchers took participants through activities that encouraged them to commit to forgiveness. The activities involved the presentation of gifts, and washing the hands of the transgressor. Participants wrote about how much they forgave emotionally and how they felt.

Session 7: Holding onto Forgiveness

The researchers and the participants recapped the previous week's assignment. There were discussions on the topic of holding onto forgiveness. Here the participants and the researcher discussed the following: love, compassion, sympathy, and empathy which are ingredients of holding onto forgiveness. Ways of controlling rumination were also discussed. Participants wrote about negative emotional feelings that worried them how that affected their emotional health and how forgiveness helped in overcoming these negative emotional feelings.

Session 8: Review of the Sessions and Post-Test

There was a summary of all the activities of the sessions from 1-7. This required an open discussion on the whole intervention process. Here, participants were made to evaluate the intervention orally. The intervention session was then terminated. There was also a follow-up within two weeks where the post-test was administered.

3. Results

This section presents quantitative data on three hypotheses of the study.

Hypothesis 1 H_0 1: There is no significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender. H_{A1} : There is a significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender.

Hypothesis one sought to examine the effect of the Process model and REACH model on forgiveness based on gender. A two-way ANCOVA test was conducted to test this hypothesis. The independent variables were the groups (Process model, REACH model and control) and gender. The pre-test forgiveness score was used as the covariate. The dependent variable was the post-test forgiveness score. Table 2 presents a summary of the results.

Table 2. Two-way ANCOVA Test for Differences between Process and REACH Model on Forgiveness based on Gender

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	η_p^2
Corrected Model	34060.023 ^a	6	5676.671	95.495	.000	.915
Intercept	3.021	1	3.021	.051	.823	.001
Forgiveness	25458.798	1	25458.798	428.276	.000	.890
Group	11.613	2	5.806	.098	.907	.004
Gender	23.324	1	23.324	.392	.534	.007
Group * Gender	50.614	2	25.307	.426	.656	.016
Error	3150.577	53	59.445			
Total	169652.000	60				

Source: Field Survey

The result from the two-way ANCOVA revealed no significant effect of the Process model and REACH model on forgiveness based on gender, $F(1, 53) = .392, p = .534, \eta_p^2 = .007$ (Table 200). The result indicates that male and female participants did not respond

differently to the Process model and the REACH model in terms of enhancing forgiveness among adolescents in JHS. This further suggests that the two therapies equally worked for male and female adolescents in improving the level of forgiveness.

Hypothesis 2: H₀2: There is no significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender. H_A2: There is a significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender.

This objective examined whether there is a significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender. Statistically, the hypothesis tested whether differences exist in the anger mean scores of participants exposed to the Process model and REACH model of forgiveness and the control group based on gender. A two-way ANCOVA test was performed to test this hypothesis. The independent variables were the groups (Process model, REACH model and control) and gender. The pre-test anger score was used as the covariate. The dependent variable was the post-test anger score. The details of the analysis are shown in [Table 3](#).

Table 3. Two-way ANCOVA Test for Differences between Process and REACH Models on Anger based on Gender

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	η_p^2
Corrected Model	37214.757 ^a	6	6202.460	33.178	.000	.790
Intercept	29.254	1	29.254	.156	.694	.003
Anger	19340.642	1	19340.642	103.457	.000	.661
Group	2338.887	2	1169.444	6.256	.004	.191
Gender	28.994	1	28.994	.155	.695	.003
Group * Gender	33.662	2	16.831	.090	.914	.003
Error	9907.976	53	186.943			
Total	187870.000	60				

Source: Field Survey

A two-way ANCOVA was performed to determine the differences in the level of anger of adolescents in the Process model and REACH model groups based on gender ([Table 3](#)). The result revealed no significant gender effect of the therapies in reducing anger $F(1, 53) = .155, p = .695, \eta_p^2 = .003$. This result shows that male and female participants did not respond differently to the Process model and REACH model in terms of reducing the level of anger of the adolescents. This suggests that the Process model and REACH model were equally effective for both male and female participants in reducing anger.

Hypothesis 3: H₀3: There is no significant effect of Process and Reach models on depression among adolescents in JHS in Bimbilla based on gender. H_A3: There is a significant effect of Process and Reach models on depression among adolescents in JHS in Bimbilla based on gender.

The study also examined whether there was a significant effect of Process and REACH models on depression among adolescents in JHS in Bimbilla based on gender. This was done by examining whether there exists a difference in the depression scores of participants exposed to the Process and REACH models based on gender. To test this hypothesis, a two-way ANCOVA test was performed. The independent variables were the groups (Process model, REACH model and control) and gender (male and female). The pre-test depression score was used as the covariate. The dependent variable was the post-test depression score. The details of the analysis are shown in [Table 4](#).

Table 4. Two-way ANCOVA Test for Differences between Process and REACH Model on Depression based on Gender

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	η_p^2
Corrected Model	2487.745 ^a	6	414.624	4.758	.001	.350
Intercept	11813.484	1	11813.484	135.576	.000	.719
Depression	380.267	1	380.267	4.364	.042	.076
Group	621.794	2	310.897	3.568	.035	.119
Gender	233.764	1	233.764	2.683	.107	.048
Group * Gender	350.729	2	175.364	2.013	.144	.071
Error	4618.188	53	87.136			
Total	199546.000	60				

Dependent Variable: Depression Posttest

As presented in Table 4, the outcome of the two-way ANCOVA revealed no significant difference in the depression mean scores of participants exposed to the Process and REACH models based on gender, $F(1, 53) = 2.683, p = .107, \eta_p^2 = .048$. The result showed that male and female participants did not respond significantly differently to the Process model and the REACH model in terms of reducing their level of depression. This further suggests that the two interventions worked equally for both genders in reducing depressive mode.

This section also presents findings on the research question: *What are the indicators of forgiving behaviour after the intervention among adolescents in JHS in Bimbilla based on gender?* This research question sought to qualitatively identify the indicators of forgiving behaviour after the intervention based on gender. Specifically, the qualitative results of this research question were compared with the findings from hypotheses **one, two and three**. Several themes were outlined to discuss the reaction of the participants to this question.

The results are presented, thereafter.

Post Intervention Responses

This section presents the themes that emerged from participants' interviews after the intervention. The themes that emerged were a positive emotional state toward the wrongdoer, empathy and perspective taking, and positive behaviour towards the offender.

Positive Emotional State

In this study, each participant felt that they were calm and relaxed in life in general, and were able to deal with their emotions after the interventions in a constructive way irrespective of their gender. This result is consistent with previously reviewed literature stressing that there is no gender difference in trait and state forgiveness among students [25, 26-28]. Again the Enright therapeutic model of forgiveness has shown a great promise for men and women from various religious and non-religious backgrounds [44]. All of them reported that they felt happy and contented in their present lives. They felt that each time they went through a difficult situation, they experienced some emotions, but did not allow such negative emotions to affect them as they tried to resolve them almost immediately. They added that keeping a happy face is a way of finding meaning in their lives and they enjoyed the present moment. They believed that they were contented as a result of their achievements.

"I generally find myself enjoying the way life turns out. See, I try focusing more on good things happening every day, instead of worrying over bad moments. Whenever I have to deal with hard situations, I give it a try resolve it as objectively as possible,

and go through the situation, but never let me get so much affected. That is the way I remain happy and peaceful" (Participant 3).

They indicated that the interventions had helped in educating them not to have any regrets about their past decisions and happenings. A participant reported experiencing calm and peace in her life,

"Feeling inwardly calm and enjoying life at the present moment that I can live passionately and when I try regulating my emotions, life becomes more enjoyable" (Participant 2)

Empathy and perspective-taking

The participants said that they were able to identify with the transgressor after they were exposed to the interventions and that had helped them to forgive the wrongdoing. Even if others showed negative behaviour towards them, the participants conveyed the message that the situation was to be blamed, not the person. They were able to accept others as they were with their weakness and potentialities. Only when a person recognizes how she felt in a similar situation, can she assume how someone must be feeling in his or her situation. Even if some mistakes were committed by people around them, they tended to see it in a positive light. These ideas were expressed by both male and female students after they had gone through the intervention. For example, a participant said;

"I know the mistakes people make and I make it a point not to exaggerate it. I never blame myself or others because I know to err is human and I would have done the same harm if I were in that situation" (Participant1)

In all, the outcome of the analysis of research question one indicated that the REACH model and Process model were both effective in increasing forgiveness and as a result, decreasing both anger and depression among JHS students in Bimbilla irrespective of their gender. The qualitative results are in line with the quantitative results of hypotheses four, five and six. Thus, both results revealed that the participants demonstrated a significant improvement in their levels of forgiveness, which resulted in a decrease in anger and depression irrespective of their gender status. That is, these participants were able to forgive people who hurt them by developing positive affect, cognition and behaviour towards the offender.

4. Discussion

Hypothesis one

H₀₁: There is no significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender.

H_{A1}: There is a significant effect of Process and REACH models on forgiveness among adolescents in JHS in Bimbilla based on gender.

The results showed no significant difference in the forgiveness mean scores of participants exposed to the process and REACH models of forgiveness based on gender. This finding suggests that these two models are equal in their effects on forgiveness. This result revealed that male and female participants did not respond differently to the Process model and REACH model in terms of enhancing forgiveness. This implies that the Process model and REACH model were equally effective for both male and female participants in terms of reducing unforgiveness. This result is consistent with previously reviewed literature stressing that there is no gender difference in trait and state forgiveness among students [25, 26-28]. Again the Enright therapeutic model of forgiveness has shown a great promise for men and women from various religious and non-religious backgrounds [44]. The implication of this for counsellors is that the process

and the REACH models can be used to improve forgiveness for all manner of persons irrespective of gender, religion and ethnic background. The finding further supports earlier studies that “the use of explicit forgiveness interventions can help both men and women suffering from serious offences increase forgiveness and decrease psychological symptoms” [23, 45]. Previous studies confirmed that “females were found to be more forgiving than males on average; this assertion is inconsistent with the current findings” [25, 28-29]. In addition, another inconsistent finding was reported by another scientific study that husbands reported higher scores on overall marital forgiveness (i.e., trait forgiveness in marital relationships) than wives in their study with recently married couples [8]. A similar study reported, “Women were found to be more forgiving than men which is contrary to this current finding”. Their finding indicated a significant difference existed in gender responses to forgiveness studies and it indicates the impact of religiosity, gender role, and empathy on differences in forgiveness [29]. For example, “women were found to be more religious and spiritual than men, which might have contributed to women’s trait forgiveness”. Females are characteristically more forgiving than males, whereas males are more vengeful than females [9].

Hypothesis Two

Ho2: There is no significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender.

HA2: There is a significant effect of Process and REACH models on anger among adolescents in JHS in Bimbilla based on gender.

The results showed no significant difference in the anger mean scores of participants exposed to the process and REACH models of forgiveness based on gender. This finding suggests that these two models are equal in their effects on anger. This result revealed that male and female participants did not respond differently to the Process model and REACH model in terms of reducing anger. This implies that the Process model and REACH model were equally effective for both male and female participants in terms of reducing anger. Research indicates that differences exist between adolescent males and females regarding behavioural decision-making processes and expression of emotions [36]. Although research depicts females as more emotionally expressive, males have a reputation for being more predisposed to anger. Females experience anger but may express it differently than males. For example, instead of expressing anger by striking objects, adolescent females may talk to friends or peers [37, 38]. Conversely, other studies purported that females express anger similarly to males, but experience difficulty recognizing and admitting the emotion due to social expectations and constraints [39]. Males, on the other hand, tend to display anger more commonly and comfortably [38]. One of the many reasons that adolescent males may feel comfortable expressing anger is because it is socially acceptable [40].

An extensive number of studies have investigated anger; however, there appears to be a lack of studies exploring anger differences between genders. A similar study indicated that differences related to anger and sensitivity between genders but did not attempt to determine whether males and females were equal in anger at the beginning or end of the study [39]. Similarly, another study reported that incorporating social and relational competencies into anger management groups reduced anger, but there was no discussion of anger differences between genders [40]. Another study also supports the current findings that “women expressed more self-anger (i.e., anger directed internally toward themselves) than males, but did not investigate whether differences existed between genders before the study” [37].

Although limited, a small number of studies have attempted to examine anger differences between genders. Similarly, females expressed subjective anger, or self-anger,

more often than males [37, 38]. Other studies concluded that “although self-reports specified no differences, males verbally reported higher responses of anger” [41, 42]. In contrast, agreeing to this study determined that no anger differences existed between males and females [42]. They declared that although genders may express anger and respond to situations differently, they generally experience similar levels of anger [42]. As can be seen from the preceding studies, inconsistencies exist in the literature. Contradicting studies indicate that researchers are unclear as to whether differences in anger exist between genders.

Hypothesis three

H₀₃: There is no significant effect of Process and Reach models on depression among adolescents in JHS in Bimbilla based on gender

H_{A3}: There is a significant effect of Process and Reach models on depression among adolescents in JHS in Bimbilla based on gender.

The result indicates that male and female participants did not respond significantly differently to the Process model and the REACH model in terms of reducing their level of depression. This further suggests that the two therapies equally worked for both genders. Thus, an implication to counsellors is that the two therapies can be used to reduce depression in both male and female clients. This result further suggests that the two therapies equally worked for both genders. Addis (2008) reported that gender plays a role in the way all individuals respond to distressing emotions ranging from basic negative affect to an episode of major depression. A writer on his part attributed the role of gender to two psychological variables contributing to the gender difference in depression, these are interpersonal orientation and rumination [32]. The current findings are in line with the results obtained by a previous study that there are no differences between the men and women in the number of hospitalisations for depressive episodes, this therefore, implies that both sexes suffer the same level of depression [34]. Similarly, the result is consistent with the report by a previous scientific study that men feel depression in the same way as women, but the difference lies in what men 'do' when they are depressed [35]. On the contrary other writers asserted in their findings that “adolescent, young adult, and middle-aged adult girls and women are more likely to be diagnosed with greater symptoms of depression when compared to boys and men of similar ages” [46, 47]. The finding of this study suggests that participants continually use cognitive restructuring to manage their emotions, cognitions and behaviours. The result also shows how participants were involved in the therapeutic process and how they understood the effect of unforgiveness on their well-being. The implication of this finding for counsellors is that the two therapies are effective and can be used for all manner of persons irrespective of gender.

Qualitative findings on the research question - *What are the indicators of forgiving behaviour after the intervention among adolescents in JHS in Bimbilla?* showed that “when participants experience positive emotions it is much easier to let things go”. The feeling of hurt as depicted by the findings of this study could be explained against the fact that feeling offended and its interpretation involves personal factors such as gender and self-esteem which can influence the emotional state (feeling offended) concerning the expectation of the victim [48]. Those who are forgiving have a mixture of pleasant emotions in their personal growth. Experiencing positive affect may be a consequence of not keeping grudges within themselves and it is very important as it influences their personal growth. It can also be considered as an indicator of making peace with life. Experiencing positive emotions has certain physiological benefits as it improves the functioning of the cardiovascular system. Besides, it increases the likelihood of experiencing positive emotions in future [49].

Participants validated their positive affect by saying that it is important for them to feel happy and content in life as it will be reflected in the way they go about doing the daily activities of their lives. They wanted to feel happy and satisfied and it appeared as if they made an effort to feel so. Also, the finding could be explained against the background that the relation of the victim with the offender influences the interpretation of the offence which in turn influences the emotional cost involved [50]. This could therefore explain why participants involved in this study felt hurt by the offence hence, unforgiveness. Many expressed the viewpoint that their responses towards a transgressor could be different and that they put their trust in God and consequently will forgive themselves and others more easily. This response agrees with a similar study “Religiosity, to some extent, predicts the positive pervasive tendency toward forgiveness and negative approach toward continuous hatred which is also supporting the participant’s viewpoints” [51].

5. Conclusions and Recommendations

The study indicated that both the REACH model and Process model are efficacious in reducing the level of depression among adolescent students when their levels of forgiveness are increased through forgiveness counselling regardless of gender and age. The findings also revealed that both REACH and Process models were good interventions for the adolescents in showing greater emotional regulation (increased forgiveness, reduced anger and reduced depression, enhanced sense of well-being, positive feelings and positive thoughts towards the offender). It is recommended that counsellors organise training programmes with parents in conjunction with Non-governmental organisations on using the Process and REACH models. This will bring awareness of the interventions and encourage parents to seek assistance anytime their adolescents need assistance. It is once again recommended that teachers and school administrators consider forgiveness interventions (the Process model and REACH model) as a very effective strategy for treating unforgiveness to improve students' psychological well-being.

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