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## Managing anger among student-librarians using aggression replacement training and cognitive behavioral therapy

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# **Managing anger among student-librarians using aggression replacement training and cognitive behavioral therapy**

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## **Abstract**

The destruction of facilities in higher institutions by rampaging angry students during crisis has remained a re-occurring decimal and library schools have had their fair share. This study therefore was aimed at establishing the effectiveness of the application of aggression replacement training and cognitive behavioral therapy in the management of anger among student-librarians. The study was guided by two research questions as well as two hypotheses. The study applied the pre-test, post-test control group quasi experimental design. The target population of this study include, all student-librarians in federal universities running library and information science programmes in Nigeria but the sampled population was derived from three of the universities selected by regional location. The participants who were in 3<sup>rd</sup> year were those who displayed proneness to anger on the anger response scale. The research design contains two treatment-strategies which are 'Aggression Replacement Training' (ART) and 'Cognitive Behavioral Therapy' (CBT) as well as control group. Through simple randomization the 45 that formed the sampled population were grouped into three. with one group of 15 assigned into Aggression Replacement Training, another 15 to the Cognitive Behavioral Therapy and the last 15 forming the control group. The primary instrument used for data collection, was an anger response scale while the programmers spanned for ten weeks of ten sessions. The data collected in line with the research questions were analyzed using the mean ( $\bar{x}$ ) statistics whereas the Analysis of Co-variance (ANCOVA) was used to test the hypothesis. The outcome of the study shows that the application of aggression replacement training and cognitive behavioral therapy are effective tools in managing anger among student-librarians and by extension, all students. The study among others recommended the use of ART and CBT by counseling psychologists and other related professionals in the management of anger among student-librarians.

**Keywords:** Anger, Aggression replacement training, Cognitive behavioral therapy, Student-librarians, Management

## **1.0. Introduction**

Anger and its associated hydra-headed challenges have become a life threatening issue in our tertiary institutions that the study to knowing the ways forward has become a necessity. Anger which manifest in violence, tantrum, fighting, labeling among students and other vices has been defined as by American Psychological Association (2009) as an expected emotional response to events adding that it varies in intensity from mind irritation to intense fury and rage. As explained by Akinade (2009), anger is a naturally strong emotion that everyone feels from time to time in response to certain negative experiences which may also be a passing phase of annoyance or full blown ranges. He concludes by saying that anger is an emotional state that is often accompanied by biological changes.

The instinctive and natural way to express anger is to respond aggressively. In other words, people use a variety of both conscious and unconscious processes to deal with angry feelings. The negative expression of anger can turn into other disturbing emotions such as physical and verbal violence, antisocial behavior, hostility, bitterness and hate vandalism, withdrawal and psychosomatic disorder. Furthermore, this can devastate lives; destroying relationship, harming others, disrupting work and academic programmes in the school when it becomes collective, clouding effective thinking and affecting physical health

In our institutions of higher learning today noted Peacock (2003), students are faced situations and challenges that contribute to their being angry which include, non-conducive learning environment, lack of adequate facilities, incessant increment of fees, epileptic power supply, incessant strike by both academic and non-academic staff and poor funding. Worst still, some research findings have also shown and supported the assertion that exposure to violent media is causally related to subsequent aggression expression.

In Nigeria as a case in point students in higher institutions which student-librarians form a part, have demonstrated their proneness to anger as a result of long time neglect by government and other stakeholders who have failed in their responsibilities in providing the basic amenities and

enabling environment for teaching and learning. The end result has always been the expression of anger through protests that culminate to destruction of school facilities and in some cases loss of lives. It is on record that the case of suicide, attempted suicide, fighting among students and other vices are on the increase on our campuses. Exhibition of these behaviors in school situation no doubt is a big challenge to school management, lecturers and fellow students as the situation will not only affect the lecturers' competence in classroom interaction, they will also lower the academic performance of the students, Since anger metamorphoses into other social abnormalities if left unchecked it becomes imperative to embark on this study as to ascertaining if the application of ART and CBT will be effective tools in the management of anger among student-librarians.

## **1.2. Statement of the problem**

In the Bible in the book of Genesis, it was revealed how Cain killed his brother as a result of anger. This means that the expression of anger is as old as creation. Be it as it may, our society today is bewildered by stories of aftermath of anger and our institutions of higher learning are not excepted as students have often times demonstrated their proneness of anger as a result of neglect from management or provocation from fellow students and sometimes host communities. In Nigeria as a case in point, students encounter several conflict situations each day by day as a result of anger caused by decay in the system. This is evidence in the prevalence of crime involving students as it no longer news that students are involved in criminalities like kidnapping; bullying, destruction of school property, cultism and even robbery

The causes of anger among students are on the increase as most of them can no longer meet up financially and government and managements seem not to be helping matters as a result, host communities and even innocent students feel unsafe and uncertain about how the next day will look like. Worst still, in the past students' restiveness was seen as the exclusive of the male students but in recent time female students have joined to the extent of participating in anger associated activities. Female students are now involved in cultism and in robbery as they appear to be more frustrated than the male (Oyenso, 2010). This sort of emotional and physical atmosphere can never promote the development of a healthy academic progress and productive citizenry.

It is in view of the above situation coupled with the fact that the effectiveness of aggression replacement training and cognitive behavioral therapy to the best of the knowledge of the researcher has not been verified in Nigerian institutions of higher learning neither have they been applied in the management of anger among student-librarians in particular and Nigerian students in general. This study therefore is aimed at filling the gap.

### **1.3. Research objectives**

The specific objective of this study was to ascertain the effectiveness of aggression replacement training and cognitive behavioral therapy in the management of anger among student-librarians.

Other objectives were:

1. To establish how effective aggression replacement training is in the management of anger among student-librarians.
2. To ascertain the extent of effectiveness of the application of cognitive behavioral therapy in managing anger among student-librarians.

### **1.4. Research questions**

The study was guided by the following research questions:

1. To what extent is aggression replacement training effective in the management of anger among student-librarians?
2. To what extent is cognitive behavioral therapy effective in the management of anger among student-librarians?

### **1.5. Hypotheses**

The following null hypotheses were tested as a further guide to the study at 0.05 level of significance.

Ho1: There is no statistical significance ( $P < 0.05$ ) difference between the mean anger response measures of the participants in the experimental groups and the control group in the post treatment test.

Ho2: There is no statistical significance ( $P < 0.05$ ) difference in the mean anger response measures of the participants treated with aggression replacement training (ART) and cognitive behavioral therapy (CBT).

## **2.0. Literature review**

### **2.1. Conceptual framework**

#### **2.1.1. Anger**

Anger, also known as wrath or rage, is an expected emotional response to events and varies in intensity from mild irritation to intense fury and rage (American Psychological Association, 2009). While Videbeck (2006) and Alia-Klein et al (2020) defined it as an intense emotional state involving a strong uncomfortable and non-cooperative response to a perceived provocation, hurt or threat. According to Orji (2014), anger is a person's response to a threat or perception of a threat against an individual or group. It can evolve from empathetic concern or perception of injustice and is related to cognitive factors such as hostility and cynicism, also an emotion that is often difficult to control because of the intense physiological reaction involved in the fight or flight responses that trigger anger (Lochman, 2004). The above definition corroborates the explanation of Medicine.net (n.d) that a person experiencing anger will often experience physical effects, such as increased heart rate, elevated blood pressure, and increased levels of adrenaline and noradrenalin. Some view anger as an emotion which triggers part of the fight or flight response (Harris; Schoenfeld, Gwynne & Weissler, 1964).

APA (2021) adapted definition from the Encyclopaedia of Psychology explained that anger is an emotion characterized by antagonism toward someone or something you feel has deliberately done you wrong adding that anger can be a good thing. It can give you a way to express negative feelings, for example, or motivate you to find solutions to problems. But noted that excessive anger can cause problems as increased blood pressure and other physical changes associated with anger make it difficult to think straight and harm your physical and mental health. As stated by Akinade (2009), anger may be passive or active. He explained that passive anger may be exhibited by backstabbing or spreading rumors while active can be shown by yelling or other forms of aggressive or physical outburst.

Anger therefore becomes the predominant feeling behaviorally, cognitively, and physiologically when a person makes the conscious choice to take action to immediately stop the threatening behavior of another outside force (Raymond & Raymond, 2006). The totality of it all is that

anger is an emotional outburst which may be negative or positive depending on the situation and the outcome of the action(s) that follows thereafter. This is to say, that anger can have many physical and mental consequences. The external expression of anger can be found in facial expressions, body language, physiological responses, and at times public acts of aggression.

### **2.1.2. Aggression Replacement Training (ART)**

Aggression Replacement Training (ART) which was developed in the United States in the 1980s by Arnold P. Goldstein and Barry Glick and now used throughout North America as well as Europe, South America, and Australia in human services systems including juvenile justice systems, human services schools and adult corrections. (Robert, 1999), is a social skills training programme which aims to replace antisocial behaviours with desirable pro-social behaviours. It consists of three main teaching components, namely the development of pro-social behaviours (behavioral component), anger control (affective component) and moral reasoning (cognitive component) (College of Policing, 2019). According to Glick, and Goldstein, (1987) and Goldstein, Glick and Gibbs (1998) ART is a cognitive behavioral intervention for reduction of aggressive and violent behaviour, originally focused on adolescents. It is a multimodal program that has three components: social skills, anger control training and moral reasoning. As explained by National gang center (2021), it is a 10-week, 30-hour cognitive-behavioral program administered to groups of 8 to 12 juvenile offenders three times per week. ART and has three main curriculum components: Structured Learning Training, which teaches social skills; Anger Control Training, which teaches youth a variety of ways to manage their anger; and Moral Education, which helps the youth, develop a higher level of moral reasoning. ART therefore, enhances pro-social skill competency and overt pro-social behavior, reduces the level of rated impulsiveness, decreases the frequency and intensity of acting-out behaviors, and enhances the participants' levels of moral reasoning.

### **2.1.3. Cognitive Behavioral Therapy (CBT)**

Cognitive behavioral therapy (CBT) is a type of psychotherapeutic treatment that helps people learn how to identify and change destructive or disturbing thought patterns that have a negative influence on behavior and emotions (Hofmann, Asnaani, Vonk , Sawyer & Fang, 2012) .

According to Beck (2011), CBT is a psycho-social intervention that aims to reduce symptoms of various mental health conditions, primarily depression and anxiety disorders. (Field, Beeson & Jones (2015). While Wikipedia (2017) sees it as a form of psychological treatment that has been demonstrated to be effective for a range of problems including depression, anxiety disorders, alcohol and drug use problems, marital problems, eating disorders, and severe mental illness. Numerous research studies suggest that CBT leads to significant improvement in functioning and quality of life. In many studies, CBT has been demonstrated to be as effective as, or more effective than, other forms of psychological therapy or psychiatric medications. As observed by Cherry (2021), Cognitive behavioral therapy focuses on changing the automatic negative thoughts that can contribute to and worsen emotional difficulties, depression, and anxiety. These spontaneous negative thoughts she added have a detrimental influence on mood and through CBT, these thoughts are identified, challenged, and replaced with more objective, realistic thoughts.

As a matter of fact, CBT is based on the combination of the basic principles from behavioral and cognitive psychology. It is different from historical approaches to psychotherapy, such as the psychoanalytic approach where the therapist looks for the unconscious meaning behind the behaviors and then formulates a diagnosis. Instead, CBT is a "problem-focused" and "action-oriented" form of therapy, meaning it is used to treat specific problems related to a diagnosed mental disorder (Beck, 2011).

## **2.2. Theoretical and empirical framework**

Most of those who experience anger reveals Novaco (2000) explain its arousal as a result of "what has happened to them", psychologists point out that an angry person can very well be mistaken because anger causes a loss in self-monitoring capacity and objective observation. To this end, modern psychologists view anger as a normal, natural, and mature emotion experienced by virtually all humans at times, and as something that has functional value for survival. Uncontrolled anger can, however, negatively affect personal or social well-being (Novaco, 2000 & Fiero, n.d) and negatively impact those around them. While many philosophers and writers have warned against the spontaneous and uncontrolled fits of anger, there has been disagreement over the intrinsic value of anger. The issue of dealing with anger has been written about since

the times of the earliest philosophers, but modern psychologists, in contrast to earlier writers, have also pointed out the possible harmful effects of suppressing anger. (Kemp & Strongman, 1995)

On the need for healthy anger management, Golden (2004), posits that teaching adolescent healthy anger management will help them to identify and recognize the negative emotions behind their anger. It will also help them to identify, challenge and replace unrealistic expectations and conclusions, learn relaxation skills and stress reduction strategies and develop problem-solving skills

Writing on the social skill based on structured learning training" as a means of controlling anger which is also the behavioral components of ART, Wikipedia (2021) noted that many youths with criminal behavior and/or have difficulties controlling their anger lack social skills and through the ART intervention which focuses on social skills that are particular to reducing aggressive behavior they are taught on how to control their anger through anger control training. This is the affective component of ART that moves from the teaching of social skills, to losing anti-social skills and replacing them with pro-social skills. The anger control training uses the anger control chain. This is a process taught to the youth to deal with situations that cause them to get angry (Brannstrom; Kaunitz, Andershed, South. & Smedslund, 2016).

In their narrative based on one systematic review covering 16 studies which focused on the effect of ART on re-offending for all crime types (measured by official statistics for either re-arrest or reconviction) and other outcome measures which included anger control, social skills and moral reasoning inasmuch as, the majority of primary studies (11 of 16) were based on evidence from the USA, with the remaining single studies conducted in the UK, Australia, Norway, Russia and Sweden, Brannstrom, Kaunitz, Andershed, South. & Smedslund (2016), posit that ART has produced impressive results working with gangs in Brooklyn, New York, communities. More rigorous evaluations have assessed the effectiveness of ART as an intervention for incarcerated juvenile delinquents. In these studies, ART enhanced pro-social skill competency and overt pro-social behavior, reduced the level of rated impulsiveness, decreased the frequency and intensity of acting-out behaviors, and enhanced the participants' levels of moral reasoning they concluded.

Aggressive Replacement Training (ART) has been suggested for anger management as the ART program has been evaluated in some studies. A Washington State Institute for Public Policy (2004) in her study on *Outcome Evaluation of Washington State's Research-Based Programs for Juvenile Offenders*, found that when ART is delivered competently, the program reduced felony recidivism and was found to be cost-effective. For the 21 courts in which ART service providers were rated as either competent or highly competent, the 18-month felony recidivism rate was 19 percent. This is a 24 percent reduction in felony recidivism compared with the control group, which is statistically significant. Moreover, the cost-benefit analysis demonstrated that when ART is delivered by competent courts, it generates \$11.66 in benefits (avoided crime costs) for each \$1.00 spent on the program. When not competently delivered, ART costs the taxpayer \$3.10. Averaging these results for all youth receiving ART, regardless of court competence, produces a net savings of \$6.71 per \$1.00 of costs.

In another perspective, CBT has also been recommended for anger management as the new CBT is keeping pace with development in the academic discipline of psychology in areas such as attention, perception, reasoning and decision making among others (Graham, 1998). It is important to emphasize that advances in CBT have been made on the basis of both research and clinical practice. Indeed, CBT is an approach for which there is ample scientific evidence that the methods that have been developed actually produce change. In this manner, CBT differs from many other forms of psychological treatment. (APA, 2017)

On the benefits of CBT Hofmann SG, Asnaani A, Vonk IJ, Sawyer AT, Fang A (2012) opine that the underlying concept behind CBT is that thoughts and feelings play a fundamental role in behavior in that the goal of cognitive behavior therapy is to teach people that while they cannot control every aspect of the world around them, they can take control of how they interpret and deal with things in their environment. In her contribution, Cherry (2021) posits that CBT is often known for the following key benefits:

- ❖ It allows you to engage in healthier thinking patterns by becoming aware of the negative and often unrealistic thoughts that dampen your feelings and moods. (Hofmann ; Asnaani , Vonk , Sawyer & Fang, 2012)

- ❖ It is an effective short-term treatment option; for example, improvements can be seen in five to 20 sessions.
- ❖ It has been found effective for a wide variety of maladaptive behaviors.( Hofmann ; Asnaani , Vonk , Sawyer & Fang A, 2012)
- ❖ It is often more affordable than some other types of therapy.
- ❖ It has been found to be effective online as well as face-to-face.( Kumar; Sattar , Bseiso , Khan & Rutkofsky , 2017)
- ❖ It can be used for those who don't require psychotropic medication.

One of the greatest benefits of cognitive behavioral therapy added Hofmann; Asnaani, Vonk, Sawyer & Fang (2012) is that it helps clients develop coping skills that can be useful both now and in the future.

### **3.0. Methodology**

#### **3.1. Research design**

This study adopted the pre-test, post-test control group quasi experimental design. This is defined by Nworgu (2015) as an experiment where random assignment of subjects to the experimental and control group is not possible. In this case, intact or pre-existing groups are used. The design contains two-treatment strategies which are Aggressive Replacement Training (ART) and Cognitive Behavioral Therapy (CBT)

#### **3.2. Population sample**

The population sample of this study stood at 45 obtained base on the outcome of an anger response questionnaire administered to third year students of the department of Library and Information Science of University of Nigeria, Nsukka (South), University of Ibadan (West) and Bayero University, Kano (North) with each producing 15 participants. Those chosen for the study scored high and moderate in the anger response questionnaire and were considered prone to anger. As an intact group, they were subsequently grouped into three of 15 each with one group assigned to ART as experimental group 1, another to the CBT as experimental group 2 and the third as the control group

### 3.3. Instrument for data collection

The primary instrument used to collect data for the study is the anger response scale which was adopted from Novaco Anger Inventory also known as NAI-25 (Novaco, 1973). It consist of 25 items with response format ranging from (0) very little to (4) very high. The NAI-25 short form purports to measure the degree of anger people would feel if placed in certain situations.

### 3.4. Instrument validity and reliability

The instrument was validated by three professors in educational psychology in Nnamdi azikiwe University, Awka while the reliability test conducted through test-retest shows a reliability scale of between .78 and .98. It is pertinent to state that the treatment programmers lasted for over two months of ten sessions.

### 3.5. Method for data analysis

.The data collected in line with the research questions were analyzed using the mean (x) statistics whereas the Analysis of Co-variance (ANCOVA) was used to test the hypothesis. Statistical decisions were made at 0.05 level of significance.

## 4.0. Data presentation and analysis

**Table 1:** Pre and post test anger level of participants

| Group     | Anger response level |          |     |       |
|-----------|----------------------|----------|-----|-------|
|           | High                 | Moderate | Low | Total |
| Pre-test  | 12                   | 3        | -   | 15    |
| Post-test | 6                    | 6        | 3   | 15    |

The data obtained and displayed in table 1 show a reduction in the anger levels of the participants after being exposed to the aggression replacement training (ART). As can be seen, in the pre-test the number of participants whose anger levels were high and moderate stood at 15 but after the post-test came to 12 an indication that the aggressive replacement training was effective.

**Table 2:**

| Group     | Anger response level |          |     |       |
|-----------|----------------------|----------|-----|-------|
|           | High                 | Moderate | Low | Total |
| Pre-test  | 10                   | 5        | -   | 15    |
| Post-test | 5                    | 7        | 4   | 15    |

The data in table 2 is the outcome of the assessment of the student-librarians' anger levels before and after being exposed to the cognitive behavioral therapy this is with a view to ascertaining the effectiveness of the therapy in reducing the anger level of the participants. They show a reduction in the anger levels of the participants after being exposed to cognitive behavioral training. Prior to the exposure (pre-test), the participants whose anger levels were high and moderate were 15 but after the post-test they reduced to 11. This shows that the CBT was effective.

### Testing of hypotheses

The first null hypothesis states that there is no statistical significant ( $P < 0.05$ ) difference in the mean anger response measures of the participants in the experimental groups and the control group in the post treatment test. This implies that the scores of the groups to the post-test would be analyzed for significant difference. A significant difference in the post-test mean scores of the two groups in favor of the treatment group would indicate that the treatment therapies were effective in anger reduction. In view of this, the mean scores of the control and treatment groups on 'Anger Response Scale' (ARC) in the post-test were compared. Subsequently, an analysis of covariance was carried out between the scores of the experimental and control groups using 'Analysis of Covariance (ANCOVA) statistics.

Table 3: Summary of Analysis of covariance of the post-test scores of participants according to treatment

| Sources of variation | Sum of squares | DF | Mean squares | F      | Sig  |
|----------------------|----------------|----|--------------|--------|------|
| Rows                 | 2470.45        | 2  | 1239.720     | 434.43 | .05* |
| Column               | 61.58          | 2  | 30.79        | 10.79  | .05* |
| Interaction          | 47.27          | 4  | 11.81        | 4.14   | .05* |
| Within               | 230.85         | 81 | 2.85         |        |      |
| Total                | 2819.15        | 89 | 31.68        |        |      |

**Key:** \*Sig=Significance @  $P < 0.05$ , Row=Experimental groups (ART & CBT) control group, Columns=Anger response measure

The summary of the ANCOVA of the post-test scores of the participants shows that ART and CBT as contained in the row had a statistical difference ( $F(2,81)=434.43, P < .05$ ). It also shows a statistical difference in the columns ( $F=10.79, DF=2/81, P < .05$ ). Furthermore, there was a significant interaction effect ( $F=4.14, DF=2/8, P < .05$ ). This shows that there was a significant difference in the anger response measure of the participants exposed to the Aggression Replacement Training (ART), Cognitive Behavioral Therapy and the control group. Going by this findings, the null hypothesis one ( $H_{01}$ ) is hereby rejected.

Table 4: Summary of ANCOVA of the participants treated with ART and CBT on anger response

| Sources of variation | Sum of squares | DF | Mean squares | F     | Sig   |
|----------------------|----------------|----|--------------|-------|-------|
| Rows                 | 128.25         | 1  | 128.25       | 34.70 | <.05* |
| Column               | 38.71          | 2  | 19.35        | 5.34  | <.05* |
| Interaction          | 40.55          | 2  | 20.27        | 5.49  | <.05* |
| Within               | 199.26         | 54 | 3.69         |       |       |
| Total                | 406.77         | 59 | 6.89         |       |       |

**Key:** \*Sig=Significance @  $P < 0.05$ , Row=Experimental groups (ART & CBT) control group, Columns=Anger response measure

The analysis as summarized in table 4 above reveals that ART and CBT strategies in the rows had statistical difference on the anger response measures of the participants ( $F_{(Crit 1.54)} = 34.70, P < 0.5$ ). It further shows a statistically significant difference in the columns ( $=5.34, DF=2/54, P < 0.05$ ). There is also significant interaction effect ( $F=5.49, DF=2/54, P < 0.05$ ). The inference is that the participants exposed to ART seem to have benefited from the therapy more than those in CBT group. All the same, the findings show that there was no significant difference between anger response of the participants exposed to ART and those exposed to CBT.

Table 5: Unadjusted X, Y mean scores and adjusted Y mean based on anger response

| Columns |    |       |       |       |       |       |       |
|---------|----|-------|-------|-------|-------|-------|-------|
| *Rows   | NO | X-X   | Y-X   | X-X   | Y-X   | X-X   | Y-X   |
| ART     | 15 | 72.93 | 38.73 | 85.85 | 47.71 | 92.62 | 56.75 |
| CBT     | 15 | 71.13 | 41.33 | 82.16 | 61.33 | 93.22 | 64.00 |

\*Rows: ART and CBT

\*Note: The lower the adjusted Y-mean, the better the treatment

The analyzed data in table 5 show the adjusted Y-Mean scores of treated participants ART (38.73, 47.7 and 56.75), CBT (41.33, 61.33 and 64.00) were lower than the X-Means scores ART (72.93, 85.85 and 93.62, CBT (71.13, 82.16 and 93.22). The result as analyzed proves that the ART and CBT treatment strategies were effective in reducing anger responses among participants though the result shows that those exposed to ART seem to have benefitted from the programmer more than those exposed to CBT. The implication is that there was statistical significant difference between the anger response measures of the participants exposed to ART and those exposed to CBT. The result proves that a significant difference existed between the experimental group groups over their anger response ( $F_{(crit\ 1.54)=34.70}$ ,  $P<0.05$ ). In view of this, null hypothesis 2 (H02) which postulates that ‘There is no statistical significance ( $P<0.05$ ) difference in the mean anger response measures of the participants treated with aggression replacement training (ART) and cognitive behavioral therapy (CBT)’ was rejected.

## **5.0. Discussion of findings**

An anger being an emotional reaction to stress or conflict that is due to external events being at variance with one’s liking if negatively exhibited leaves one in regrets thus it is like a wild wind that blows no good. This is why finding an effective method(s) of managing it when it arises becomes pertinent. The findings in this study therefore have proved that the application of ART in the management of anger among student-librarians is an effective therapy. As the result shows that there was a reduction in the anger levels of the participants of this study when they were exposed to aggression replacement training (ART).(see table 1). The findings also show that there was a significant difference between the experimental participants and the control group in the anger response measure as seen in table 3. The outcome of this study affirms to the assertion of Brannstrom, Kaunitz, Andershed, South. & Smedslund (2016) who posit that ART enhances pro-social skill competency and overt pro-social behavior, reduced the level of rated impulsiveness, decreased the frequency and intensity of acting-out behaviors, and enhanced the participants’ levels of moral reasoning.

The outcome of this study also suggested that Cognitive Behavioral Therapy (CBT) was effective in enhancing anger management of the participants as their anger levels also reduced after being exposed to CBT as seen in table 2, an indication that CBT is an effective therapy in the management of anger among student librarians. The result is therefore in tandem with the that of Golden (2004) who asserted that CBT is generally effective for the treatment of anger and aggressive acting-out behaviors noting that teaching adolescent healthy anger management will help them to identify and recognize the negative emotions behind their anger. It is important to emphasize that advances in CBT have been made on the basis of both research and clinical practice. Indeed, CBT is an approach for which there is ample scientific evidence that the methods that have been developed actually produce change. In this manner, CBT differs from many other forms of psychological treatment. (APA, 2017).

The result further established that the group exposed to ART seems to have benefitted from the programme more than those exposed to CBT which proves that there is significant difference between anger response measures of the student-librarians exposed to ART and those exposed to CBT, It was on this ground that the null hypotheses were rejected. The basis for the superiority could be attributed to the fact that while CBT is morally based, ART is multimodal psycho-educational intervention with unique design as it has behavioral components; such as structured learning, an effective component (anger control training) and cognitive component (moral reasoning) (National gang center, 2021)

## **5.1. Conclusion and recommendations**

In conclusion, one can deduce based on the findings that Aggressive Replacement Training (ART) and Cognitive Behavioral Therapy (CBT) are effective in the management of anger among student-librarians. The study further demonstrates that student-librarians anger levels tend to differ depending on situation and since Art and CBT have been found to improve social skills and reduce behavioral problem they no doubt will serve as better panacea to managing anger among student-librarians and by extension all students. While ART is to help student-librarians set goals they can accomplish and find resources necessary to follow through and replace their anger and aggressive behavior with more productive behavior, CBT using the rethink approach is about cognitive restructuring of the cognitive repertoire of the student-librarians in more

productive behavior. It is in view of the above findings that the following recommendations are made:

- On the need for healthy anger management, Golden (2004), posits that teaching adolescent healthy anger management will help them to identify and recognize the negative emotions behind their anger. It will also help them to identify, challenge and replace unrealistic expectations and conclusions, learn relaxation skills and stress reduction strategies and develop problem-solving skills. Against this backdrop, it is recommended that curriculum planners inculcate the studying of ART and CBT as general course in all higher institutions of learning bearing in mind that when a child is taught the way to follow, when he grows will never depart from it..
- It is a known axiom that prevention is better than cure, government and other stakeholders in higher education should work to prevent students' anger from emanating (SAFE) by playing safe through the provision of necessary facilities and basic amenities like regular power supply, water, conducive teaching and learning environment, adequate security on campus, effective campus transport system and functional libraries. As it has been observed in recent times that the absence of all these have been anger arousal for students causing them most times to go on rampages, that have resulted in the destruction of lives and property and eventually closure of schools. The aftermath of students' unrest is in the public domain and therefore any identified remedies like the application of ART and CBT should not be treated with a hand-wave.
- Counseling psychologists and other related professionals involved in managing students' unrest and crisis should as a matter need employ these strategies as to helping students manage their anger before it gets out-of-hand that may eventually lead to wanton destruction of school property and loss of lives as stitch in time saves nine.
- Security agents including the school security personnel should be well tutored on these strategies as to helping in the effective management of students' anger instead of resorting to use of force which in most cases escalates the situations.

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