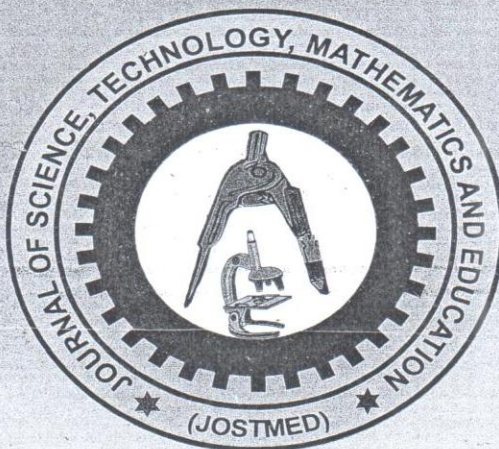


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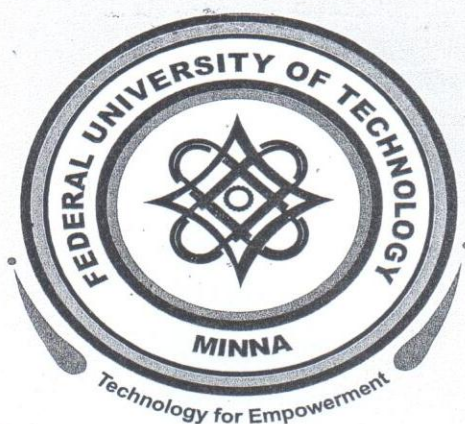


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**ARTICLES AND RESEARCH REPORTS
ON SCIENCE**

EFFECTIVENESS OF RATIONAL-EMOTIVE BEHAVIOUR THERAPY IN REDUCING BULLYING BEHAVIOUR AMONG IN-SCHOOL ADOLESCENTS BASED ON GENDER AND AGE

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Abstract

Bullying behaviour is a deliberate, unprovoked, aggressive behaviour displayed repeatedly with the aim of harming or hurting others. It is characterised with imbalance of power (physical/psychological). This study investigated the effectiveness of Rational-Emotive Behaviour Therapy (REBT) in the reduction of in-school adolescents bullying behaviour. REBT is a theory based on the assumption that human beings are born with the ability of rational thinking and constructive behaviour. The theory attributes bullying behaviour to the irrational aspects of in-school adolescents belief system formed in childhood. The research design adopted in the study is quasi experimental in nature using 2x2x2 factorial design. It is made up of two (2) row groups (one experimental and one control) and two column groups (age and gender). Instrument used in purposively selecting the participants in the study was Bullying Identification Questionnaire (BIQ). Perpetrators of bullying behaviour (i.e bullies only) were identified and participated in the study. REBT treatment procedure packages were administered to participants in the treatment group. It was revealed that REBT produced significant reduction in the bullying behaviour of in-school adolescents, mean difference was observed in the pre and post-test scores of participants in the treatment group. ANCOVA was used to test for significant reduction of bullying behaviour yielding $F = 85.8$, $df (1, 47)$; gender and age had moderating effects on the reduction of bullying behaviour of in-school adolescents $F (df=1,47)=34.2$; $F (df=1,47) =51.9$, $p<0.05$ respectively. It is recommended that REBT be used in the treatment of bullying behaviour of secondary school students

Key words: Bullying behaviour, In-school adolescents, Rational-emotive behaviour therapy

Introduction

Bullying behaviour is the intimidation or mild aggression perpetrated by someone who possesses more strength to the less powerful on a constant basis, bearing it in mind to hurt the less powerful one physically/ emotionally. Bullying behaviour is quite common in schools worldwide as revealed by prevalence studies (Lumsdem, 2002; Nansel, Craig, Overpeck, Saluja and Ruan, 2004; Popoola, 2005; Aluede, Adeleke, Omoike & Afen-Akpaida, 2008, Mustapha, 2010).

Various factors such as the child rearing practices of the family, association with violent peers among others have been recognised to be closely associated with aggression in youths. Similarly, counselling theories have viewed the causes of aggressive behaviour such as bullying in various ways. These theories include innate or biological theory, drive theories, social learning theories among others. Rational-Emotive Behaviour theory viewed bullying as behaviour that emanates from a person's evaluative belief that is rigid, absolute and dysfunctional. Studies of bullying behaviour revealed short - and - long-term devastating consequences on the bullies, the bullied as well as spectators. Peppler and Craig (2002) identified the effect of bullying on the bullied to include feeling anxious, insecure and lack of confidence. They stressed that they go to school everyday with the fear harassment, taunting and humiliation. For the bullies, they are at increased risk for negative outcomes that include

inability to develop and maintain positive relationships (Idowu & Yahaya, 2006) exhibition of deviant behaviours such as harassment, date violence, wife battering, gang attack and child abuse at adult stage (Peppler & Craig, 2002). These findings provide compelling reasons for initiating interventions to prevent bullying in schools. To reduce the prevalence of bullying and the devastating effects on individuals involved, various strategies emanating from different psychological theories have been developed by various researchers across the globe. Examples of such strategies include: Restorative Group Conferencing (RCG) by Burssens and Vettenburg (2004); Urban Improve (a theatre-based youth-violence prevention programme for elementary school children); Victim's Impact Statement by Borg (1998) among others. RCG was recommended for escalated bullying behaviour at interventory stage, that should be reserved for serious problems. Borg (1998) found Victim Impact Statement had effect on elementary school bullies while secondary school bullies felt indifferent or satisfied with the victim's feeling. Thus, indicating that the strategy was not effective for secondary school bullies. This study focused on reducing bullying behaviour of in-school adolescents before it leads to serious problem using Rational-Emotive Behaviour Therapy (REBT).

Rational-Emotive Behaviour Therapy (REBT) framework assumed that human beings are born with the ability of rational thinking and constructive behaviour. REBT attributes bullying behaviour to the irrational aspects of client's belief system, which were formed in childhood. The REBT therapist engages the bullies in an educational process that directly teaches the client how to identify and replace irrational and self-defeating beliefs with more rational and self-helping beliefs. One of the main objectives in REBT is to show bullies that how they perceive and interpret the events in their lives has a direct impact on how they feel. The central aim of REBT is to increase the clients' adaptability with the introduction of a more rational and constructive philosophy of themselves, others and the world.

Rational-Emotive Behaviour Therapy is one of the earliest forms of cognitive therapy. According to Ellis (1973), when an emotional consequence (C) follows an activating event (A), it is not A that causes C but the individual's beliefs (B). See fig. 1

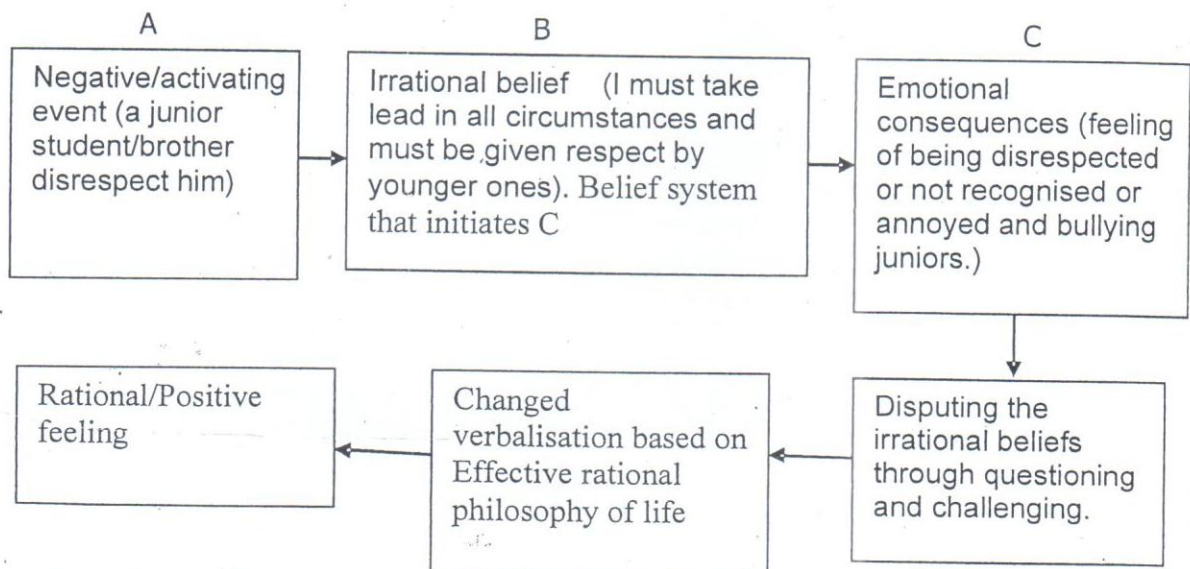


Fig. 1: The A-B-C model that underlies the use of REBT

According to Ellis (1993), emotion, in turn, helps to sustain irrational beliefs, i.e. goal of REBT is to change pervasive patterns of irrational thinking. It largely consists of the use of logic-empirical method of scientific questioning, challenging and debating (Ellis, 1977) so the REBT therapist is challenging and confrontational, asking questions like, where is it written that you

must be respected by everyone especially those weaker than you? Or, who said you are not worthy, if not recognised by someone else?

A common technique used in this form of therapy is to engage in self attacking exercise, in which clients are encouraged, to deliberately do something they find embarrassing, to show that the consequences are not catastrophic. RET was changed to REBT in 1993, 2001.

Purpose of the Study

Bullying behaviour is the primary variable of interest. Bullying behaviour at adolescence period without appropriate intervention, progresses to serious deviant or criminal behaviour at adulthood stage (Peppler & Craig, 2002, Idowu & Yahaya, 2006). The purpose of this study is to identify in-school adolescents that bully others, then subject them to treatment using Rational-emotive behaviour therapy; the study also aimed at creating awareness on how effective REBT is in reducing bullying behaviour among in-school adolescents. Bullying behaviour has been found to be perpetrated by both male and female adolescents, this study is observing if treatment will be effective for both gender or not. Age has also been observed to affect treatment of bullying (Borg, 1998), it is therefore pertinent to consider whether age will have impact on treatment of bullying behaviour in adolescents.

Research Questions

- (i) Is there any difference in the reduction of bullying behaviour among in-school adolescents exposed to REBT and those in the control group?
- (ii) Is there any difference in the reduction of bullying behaviour among in-school adolescents exposed to REBT based on age?
- (iii) Is there any difference in the reduction of bullying behaviour among in-school adolescents exposed to REBT based on gender?

Hypotheses

- (i) There is no significant difference in the reduction of bullying behaviour among adolescents exposed to REBT and those in the control group.
- (ii) There is no significant difference in the reduction of bullying behaviour among adolescents exposed to REBT experimental treatments based on gender.
- (iii) There is no significant difference in the reduction of bullying behaviour among adolescents exposed to the REBT experimental treatments based on age.

Methodology

This study is a qualitative research; thus, adopting the Quasi-experimental research design using two x two x two (2 X 2 X 2) factorial design. The experiment had three levels: the experimental level (Gp), age level (B) and Gender (M). The experimental level was made up of two (2) groups: Rational-Emotive Behaviour Therapy (Gp1), and the control group (Gp2). The age had two levels 10 -14 (B1) and 15 – 19 yrs (B2), and gender had two levels, Male (M1) and Female (M2). The design is a completely randomised 2 X 2 X 2 factorial design.

The independent variable of primary interest is Rational-Emotive Behaviour Therapy, gender and age are moderating variables. Scores from the Bullying Identification Questionnaire were used in the selection of the bullies. Research has shown that bullying interaction involved three distinct groups: bully, victim and bully-victim. BIQ was used to categorise in-school adolescents into four groups: bully, victim, bully-victim and neutral. Respondents that scored 22 and above on bullying items and very low on victimisation items participated in the treatment. Similarly, those that tick 3 or 4 on at least 3 or 4 bullying items were not denied participation even if their cut off score was less than 22. Only the bullies are selected to participate in this study.

The target population of the study are all secondary school bullies in Ilorin metropolis. The selected sample in the two schools were divided into two: Rational-Emotive Behaviour Therapy (REBT) group and control group. Participants in the control group were not exposed to treatment. Stratified random sampling technique was used for selecting the two schools from the pool of schools. Co-educational schools were selected to determine if gender affect treatment. Purposive sampling technique was employed in selecting the study sample using Bullying Identification Questionnaire. Five experts in the Counsellor Education Department, University of Ilorin, ascertained the content validity of the instrument. The reliability coefficient of BIQ was 0.70 using measure of consistency.

Treatment Procedure

The following steps were taken to collect data for this study:

- (i) pre-treatment phase
- (ii) treatment phase
- (iii) post treatment phase

Pre-treatment phase: The main instrument used for assessment was the self-report survey titled "Bullying Identification Questionnaire". It was an adapted version of Bullying Category Measure first developed by McConville and Cornel (2003) but was adapted by Stein, Dukes and Warren (2007). BIQ has 2 sections, first required demographic data on age, school and gender. The second section contains self-report survey to identify the bullies among secondary school students. The 18 items cover physical, verbal and relational bullying behaviour categorised into bullying and victimisation items with 4 points Likert-type scale of response. The inventory was administered to the randomly selected sample intact classes. Responses were scored according to the two levels, bullying items and victimisation items. Only subjects that scored high on bullying items alone were included in the treatment. The cut off point for bullying items was 22, however students that scored higher on at least three or four bullying items were not excluded from treatment programme even if they scored less than 22 in the section. A sample of forty-eight went through the treatment procedure. The number of participants varied with gender, with more males (14) than females (10).

Treatment and Post Treatment Phases: The treatment was spread to cover eight weeks. There was the REBT treatment group and one control group that were exposed to a lecture that had no relationship with the treatment group. The sessions covered one hour per week. The last session was used for the evaluation of the total programme and the post treatment assessment. Rational-Emotive Behaviour Therapy was not applied to the control group. They were only exposed to placebo in form of lecture on factors that threaten the environment and ways to control the degradation.

Method of Data Analysis

The data obtained from this study were analysed to determine whether the independent variables: Rational-Emotive-Behaviour Therapy had effect on the reduction of bullying behaviour among in-school adolescents in secondary schools in Ilorin, Nigeria.

The analysis covered the effectiveness of Rational-Emotive Behaviour Therapy in the rows. It also covered the moderating effects of age and gender (in columns) on the reduction of bullying behaviour among in-school adolescents. Analysis of Covariance (ANCOVA) was used to test the hypotheses,

Results

To test the effectiveness of Rational-Emotive Behaviour Therapy in reducing bullying

behaviour of in-school adolescents in Ilorin, Nigeria, descriptive statistics were used to answer the research questions as shown in table 1

Table 1: Means (X and Y) in-school adolescents bullying behaviour scores on experimental levels (rows), gender and age levels (columns)

NO	Exptl level	Male				Female				10-14yrs				15-19yrs						
		N		Y-x	x	N		X-x	Y-x	x	N		X-x	Y-x	x	N		X-x	Y-x	x
1.	REBT	1	22.	13.	9.8	1	26.	15.	10.	1	25.	14.	10	8	23	12.9	10.			
	Grp	4	9	1		0	2	6	6	6	3	7								5
2.	Contr	1	26	24	2.0	0	23.	25.	-	1	24.	24.	-	1	25.	23.7	2.2			
	ol Grp	5				9.	7	1	2.6	4	6	9	0.3	0	9					

Keys:

X-x = pre-test mean scores

Y-x = post-test mean scores

N = No of participants in a group

x = mean difference between pre and post-tests

Table 1 shows that the pre-test mean scores of the two groups were 22.9 and 26.0 for the males while the females had scores of 26.2 and 23.7 respectively. For participants within the age range of 10-14yrs, the pre-test scores were 25.0 and 24.6, while those within the age range of 15-19yrs had scores of 23.0 and 25.9 respectively. The post-test mean scores for the males were 13.1 and 24.0. For the females, the scores were 15.6 and 25.1. participants within the age range of 10-14yrs had post-test scores of 14.7 and 24.9 while those within age range of 15-19yrs had mean scores of 12.9 and 23.7; the results of the comparison of post-test mean scores of the treatment groups indicated reduction in bullying behaviour taking a critical look at the mean differences in the various groups.

To test for significant difference in the reduction of bullying behaviour the following hypotheses were tested using Analysis of Covariance (ANCOVA).

Hypotheses 1: There is no significant difference in the reduction of bullying behaviour among in-school adolescents exposed to REBT and those in the Control group.

Table 2: Analysis of covariance showing pre and post treatment comparison of in-school adolescents' bullying behaviour based on REBT and control

Source	df	Sum of square	Mean square	Cal. F	Cri. F
Row	1	1083	1083.0	85.8*	4.08
Within	47	580.9	12.6		
Total	48				

*Significant at $p < 0.05$

The result on table 2 shows that Rational-Emotive Behaviour Therapy had a significant effect on the reduction of bullying behaviour. Cal. F value of 85.8 which is greater than critical F value of 4.08 which is significant

Hypothesis 2: There is no significant difference in the reduction of bullying behaviour among in-school adolescents exposed to experimental treatments based on gender.

Table 3: ANCOVA showing reduction in bullying behaviour across two groups based on gender

Source	df	Sum of square	Mean square	Cal. F	Cri. F
Row	1	1303.8	1303.8		
Column	1	1303.8	1303.8	34.2*	4.08
Within/error	47	1790.19	38.1		
Total	48	3094.0			

Keys:

Row = group

Column = gender

Table 3 indicates that the reduction in the bullying behaviour of in-school adolescents exposed to REBT is dependent on gender. Calculated F-value of 34.2, which was considerably greater than critical F-value of 4.08, showed that gender influenced reduction in bullying behaviour of participants in the experimental groups.

This indicated that gender had moderating effect in the reduction of bullying behaviour among in-school adolescents based on the group. This significant effect needs more clarification using simple effect analysis and simple comparisons if the simple effects were significant.

Table 4: Simple effect analysis and comparisons of interaction between gender, and between the experimental and control groups

Parameter	B	Std. Error	t	Sig.
REBT	13.1	1.6	8.1	0.000
Control group	0			
Male	4.1	1.5	2.9	0.006
Female	0			
REBT male	-5.5	2.0	-2.7	0.009
REBT female	0			

This parameter estimates reiterates the result revealed in Table 4 which spelt out the mean of each gender in relation to the experimental groups. The interaction between the two experimental groups and gender revealed that interactive effect is reflected in the Rational-Emotive Behaviour Therapy. When the groups were statistically controlled, significance of 0.006 was found which is less than alpha level of 0.05. This indicated that females were able to reduce their bullying behaviour more in the treatment group than males.

The table also indicated interaction between gender and REBT with significance level of 0.009 which is less than 0.05 alpha level. This means that female participants exposed to REBT were able to reduce their bullying behaviour more than the male participants

Hypothesis 3: There is no significant difference in the reduction of bullying behaviour among participants exposed to experimental treatments based on age.

Table 5: ANCOVA comparing means of bullying behaviour reduction based on group and age

Source	df	Sum of squares	Mean square	Cal. F	Critical F
Row	1	1624.8	1624.8	51.9*	4.08
Column	1	1624.8	1624.8		
Within/error residual	47	1469.2	31.3		
Total	48	3094			

*Significant $p < 0.05$

Keys:

Row = group

Column = age

Table 5 further demonstrates that age has moderating effect on the reduction of bullying behaviour using REBT package. Significant difference existed as Calculated F- value of 51.9 compared to critical F-value of 4.08 at $p < 0.05$. Age therefore has moderating effect in reduction of bullying behaviour using Rational-Emotive Behaviour Therapy.

Discussion

Hypothesis one stated that there is no significant difference in the reduction of bullying behaviour among participants exposed to REBT and those in the control group. The results of the two statistical analyses presented in Table 2 do not support this hypothesis since significant difference was found. This indicates that in-school adolescents exposed to Rational-Emotive Behaviour Therapy were able to reduce their bullying behaviour more than those who are in the control group who did not receive any treatment. Bullying behaviour in this study covers physical, verbal and relational. The findings of this study is congruent with the research findings of Egbochuku (2008) who found REBT effective in reducing test anxiety of adolescents in Nigerian secondary school.

Hypothesis two stated that there is no significant difference in the reduction of bullying behaviour among participants exposed to experimental treatments based on gender. The descriptive statistics in Table 1 shows that the female in-school adolescents exposed to REBT were able to reduce their bullying behaviour than their male counterparts comparing the mean difference in the pre-test and post-test scores of 10.6 and 9.8 respectively. This hypothesis was rejected as the results ANCOVA also revealed significant difference in the reduction of bullying behaviour among participants who are males and those that are females. This shows that both male and females do differ in their level of response to the treatment. The results revealed that female were able to reduce their bullying behaviour than male participants in REBT

The finding of the moderating effect may be due to the assertion by Dodge, Coie and Lynam (2006) which stated that the links between early bullying behaviour and subsequent bullying behaviour may not be strong for females as they are for males. Crick, Nelson, Norales, Cullerton-Den, Cases and Hickman (2001) and Underwood, (2002; 2003) found that girls are more likely than boys to engage in relational bullying behaviour which involves such

behaviours like spreading malicious rumour in order to get others to dislike a child or ignoring someone when angry at him or her.

However, the finding is not in agreement with the results obtained by Egbochuku, Obodo and Obadan (2008) when they treated examination anxiety with REBT. Similarly, Ojewola (2008) also revealed no significant difference in the reduction of aggressive behaviour among male and female across treatment groups. The result is also not in line with that of Adewuyi (2006) who found that gender had no effect on the attitude of teachers in the Federal Government owned secondary schools in Lagos state towards retirement, after exposing them to the treatment package of REBT.

Hypothesis three stated that there is no significant difference in the reduction of bullying behaviour among participants exposed to experimental treatments based on age. The hypothesis was rejected because significant difference existed in the reduction of bullying behaviour among participants who are within the age range of 15 and 19 years and the participants who are within the age range of 10 and 14 years.

The result of this finding was in line with other researchers. Borg (1998) worked on the effectiveness of victim's impact statement in reducing bullying behaviour among the bullies. He found that age of the bully had an effect on the bully's sympathy or regret after the event had been perpetrated. The difference between this finding and Borg's work was that the later researcher found that victim's impact statement was more effective at influencing the bully's moral development and reduction in bullying behaviour in the elementary school child than in an older child. However, the present research work found Rational-Emotive Behaviour Therapies to be more effective in reducing physical, verbal and relational bullying among adolescents between the age range of 15 to 19 years. The reason for this might be due to the level of cognitive development of the older bullies who have reached the formal operation stage according to Piaget. The therapeutic methods deal with thinking and emotions and the older adolescents are capable of exploring and utilizing them more effectively than the younger bullies.

Conclusion

This study focused on the effectiveness of REBT on the reduction of bullying behaviour of in-school adolescents in Nigerian schools. It also inquired into the effect of gender and age on the reduction of bullying behaviour. The following were the findings:

- (i) Rational-Emotive Behaviour Therapy produced significant reduction in physical, verbal and relational bullying behaviour among in-school adolescents than lecture on environment delivered to those in control group.
- (ii) There was significant difference in the reduction of these forms of bullying behaviour among participants exposed to treatment groups based on gender. Thus, female participants exposed to REBT reduced their bullying behaviour more than their male counterparts
- (iii) Age had moderating effect on the reduction of bullying behaviour among participants exposed to treatment groups. Participants within the age range of 15–19 years were able to reduce their bullying behaviour than those within the age range of 10–14 years.

Conclusively, REBT procedure is effective in reducing bullying behaviour among in-school adolescents. On gender effect, the treatment worked for both male and female participants in reducing their bullying behaviour, however, female participants exposed to treatment were able to reduce their bullying behaviour more than the males. Age had moderating effect on treatment. Participants within the age range of 15-19 years were able to reduce their bullying behaviour than those within the age range of 10-14 years.

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