

RATIONAL EMOTIVE BEHAVIOURAL THERAPY AND ITS EFFECT ON UNDERGRADUATES' SUSCEPTIBILITY TO CYBERCRIME IN UNIVERSITY OF ABUJA.

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ABSTRACT

This study investigated the Rational Emotive Behavioural Therapy and its effect on undergraduates' susceptibility to cybercrime in University of Abuja. Two research questions were raised and two null hypotheses were formulated and tested. The research design was quasi-experimental non-equivalent control group; the study was carried out in three randomly selected faculties of the University of Abuja. A sample size of 361 from a population of 6416 students was taken which gave rise to 53 susceptible undergraduate students to cybercrime. Descriptive statistics was used to answer research questions while One-Sample t-test was used to test the null hypotheses. The results of the analysis showed that, there is a significant difference between the pre-test and post-test mean scores of experimental groups for undergraduates' susceptibility to cybercrime, and the interactive effect of the treatment plan had no regard for students' residence. It was concluded that REBT will make life on campus interesting; motivate learners to learn which would lead to higher academic achievement in their respective field of study. The strategy will also assist undergraduates in Nigeria to develop negative attitude towards cybercrime.

Keywords: Rational Emotive Behavioural Therapy, undergraduates, susceptibility, cybercrime, University of Abuja.

INTRODUCTION

Background of the Study

Nigeria, as a developing country, is confronted with myriad challenges that threaten the quality of education. The students' moral backgrounds are affected by the social vices, and this in turn affects the goals of the schools and the society. The social vices include the following: cybercrime,

drug abuse, violence, examination malpractice, and cultism. Cybercrime refers to any criminal activity that is carried out through the internet or other computer networks. It refers to the acts that are aimed at damaging the reputation, causing physical harm, or leading to economic and psychological losses to an individual, a group of people, or an institution through the use of computers, mobile phones, and other telecommunication devices.

Cybercrimes have been linked to poor academic performance, and they pose a threat to national security and the financial stability of the victims. While the exact date of the first cybercrime is difficult to determine, the earliest cases of attacks on digital networks can be used to trace the history of cybercrime. According to Kara (2008), in 1971, John Draper, a “phone phreak,” discovered a whistle that emitted the same tones as the telephone switching computers. A “phone phreak” is a computer programmer interested in how telephone networks work (they were the base of computer networks). Draper used the whistle to make a “blue box” (a device for making free long-distance calls) and even published instructions on how to make one.

As a result, wire fraud became a common issue. In 1973 a New York bank teller used a computer to embezzle more than \$2 million, and in 1978 the first electronic bulletin board system was set up, enabling hackers to exchange tips and information rapidly. In 1981, Ian Murphy (aka Captain Zap) became the first person to be convicted of cybercrime after he hacked into the AT&T network and changed its internal clock to avoid billing customers. He was sentenced to 1,000 hours of community service and 25 years of probation, which was a relatively light sentence compared to what similar offenses would receive today. His case later inspired the movie *Sneakers* (Moga, Salihu, & Abdulkarim, 2021).

In Nigeria, cybercrime is a daily occurrence such as piracy, hacking, phishing, spamming, and the dissemination of false information. Many of these cases involve sending fraudulent financial proposals to unsuspecting internet users. The threat of cybercrime also has a tendency to tarnish the country's reputation and consequently deny innocent Nigerians legitimate opportunities abroad (Akogwu in Ewhe, 2021). To fight this threat, internet users need to constantly update their knowledge on the ever-evolving ICT (Information and Communication Technology). Cybercrime prevention and awareness is a critical issue that requires everyone's attention. Given that information technology has interconnected the world into a global village, people need to be security conscious and vigilant. The world economy has become deeply interdependent and accessible through the internet, enabling everyone to tap into the global market from their electronic devices.

However, it comes with a threat of fraudsters and impostors. The technological revolution (internet) has a double effect: it is a great facilitator of communication, development and innovation, but also a new threat to social order because it gives rise to new types of crime. The awareness that some people profit from cybercrime has made undergraduates particularly vulnerable. Undergraduate students are particularly vulnerable to cybercrime because of several factors related to their digital habits, financial status, and social life.

First, students use the internet more frequently than other population groups to access information for their studies, interact with friends and carry out other activities. Due to financial constraints, they may resort to using pirated or free software, which is often embedded with malware, or even engage in cybercrime for monetary gain. According to cybersecurity experts and academic researchers, there is a need for universities to implement programs that will help students understand the risks and how to use the internet safely. Apart from the demographic and social factors such as, location, family and friends, and others, there is a possibility that they may affect undergraduates' susceptibility to cybercrime. Both genders participate in these activities. Olaide and Adewole, as cited in Ewhe (2021), noted that the majority of cybercriminals in Nigeria are young people, regardless of gender. A good number of them are tertiary students who use the internet for illicit purposes. Family is another factor that can influence the behaviour of a person. Maliki and Inokoba as cited in Ojiyi (2021) asserted that low parental socio-economic status may lead students to the use of social vices which include cybercrime. The deteriorating economic conditions in Nigeria have put immense pressure on families, and this has been cited as the main reason why some students engage in such illegal activities.

To address this issue, the Rational Emotive Behavioural Therapy (REBT) approach presents a suitable reorientation strategy. REBT posits that the three major components of a human being, namely, thoughts, emotions, and behaviours, are interrelated. The theory seeks to resolve the emotional and behavioural challenges by targeting the irrational beliefs that prevent a person from achieving their full potential. The REBT framework follows the ABCDE model. In this model, A stands for the activating event, B for the belief about the event, C for the consequence of the belief, D for disputing irrational beliefs, and E for adopting effective new beliefs. According to Ekechukwu in Ojiyi (2021), REBT can help to reduce the aggressive behaviours among the adolescents.

Due to its effectiveness, this study adopts the use of REBT as a theoretical framework to develop an intervention program for undergraduates in University of Abuja who are highly susceptible to cybercrime. The findings will also help to formulate strategies to curb this menace. As counselors, we have witnessed the destructive effects of cybercrime on Nigeria and the global community over the last five years. As a result, it has caused the collapse of businesses and institutions of higher learning, as well as a decline in academic performance among students who engage in it. It is still a major concern because it threatens the academic performance of students and the quality of graduates that universities produce.

Despite the fact that cybercrime is a global issue, it is particularly rampant in Nigeria due to the low level of cybersecurity awareness and poor reporting mechanisms. As far as students are concerned, the internet is synonymous with chatting and browsing. In Nigerian universities, the following deviant behaviours can be identified: examination malpractices, falsification of admission, theft, robbery, harassment, and cultism. Cyberattacks can be launched from anywhere in the world and target victims across borders. Technology has made these crimes faster, easier, and more damaging. While the efficacy of REBT in modifying irrational beliefs and risky

behaviours is well established, there is scant research on its application to reduce undergraduates' susceptibility to cybercrime in University of Abuja.

This study therefore set out to investigate the need for reorientation and support through therapy for the students who are highly susceptible to such negative thoughts. Additionally, the combination of variables in this study has not been applied to investigate the effect of REBT on the cybercrime vulnerability among Nigerian undergraduates.

Purpose of the Study

The purpose of this research is to investigate the Rational Emotive Behavioural Therapy and its effect on undergraduates' susceptibility to cybercrime in University of Abuja. The objectives of this study are to:

- i. identify the difference in the pre-test and post-test mean scores of the experimental group for undergraduates' susceptibility to cybercrime.
- ii. ascertain the interaction effect of treatment by residence in mean scores of undergraduates' susceptibility to cybercrime.

Research Questions

In line with the problem under study, the following research questions were raised:

- 1 What is the difference in the pre-test and post-test mean scores of the experimental group for undergraduates' susceptibility to cybercrime?
- 2 What is the effect of treatment by residence in mean scores of undergraduates' susceptibility to cybercrime?

Hypotheses

The following null hypotheses were formulated and tested at a 0.05 level of significance.

- H0₁** There is no significant difference in the pre-test and post-test mean scores of the experimental group for undergraduates' susceptibility to cybercrime.
- H0₂** There is no significant effect of treatment by residence in mean scores of undergraduates' susceptibility to cybercrime.

METHODOLOGY

The design for the study is quasi-experimental design. Specifically, the study applied a pre-test, post-test, and non-randomized control group. The pre-test was used to establish the equivalence of the two groups. The post-test test was used to determine the effect of independent variables. The population consisted of all the full-time 100 and 200-level students of the ten faculties in the

University of Abuja, comprising six thousand four hundred and sixteen (6416). Out of this population a sample of three hundred and sixty-one (361) full-time 100 and 200-level students of the University of Abuja using multi-stage sampling technique, who were susceptible to cybercrime as ascertained by pre-test experimental group irrespective of faculties. Data collected using Undergraduates' Susceptibility to Cybercrime Questionnaire (USCQ). A benchmark of 39 score was set, consequently, any student that scored 39 and above was considered to be susceptible to cybercrime. 53 Susceptible students were identified and 28 who were among the faculties of science (16) and engineering (12) made up the treatment group. The 28 susceptible respondents were trained using Rational Emotive Behavioural Therapy (REBT) for a period of six weeks afterwards was a post-test to ascertain the efficacy of the treatment plan. The validity and reliability of the instrument was tested which yielded a reliability index of 0.65. Data collected was analyzed using mean score, standard deviation, t-test statistical tool. Mean and standard deviation was used to answer research questions while t-test was used for testing hypotheses at 0.05 level of significance ($p < 0.05$). The decision rule, was any mean score below 2.50 was disagreed, while any mean score between 2.50 and above was adjudged agree.

Presentation of Research Results

Research Question One: What is the difference in the pre-test and post-test mean scores of experimental group for undergraduates' susceptibility to cybercrime?

Table 1: Differences in the pre-test and post-test mean scores of experimental group

Groups	N	Mean	Std.Dev	Mean Diff
Pre-test	28	44.60	4.53	41.24
Post- test	28	3.36	.92	
Total	28	68.96	10.48	

Table 1 showed the mean score and standard deviations with mean difference between pre-test and post-test of the experimental group to answer research question two. The table further revealed mean scores of 44.60 and 3.36 for pre-test and post-test of the experimental group respectively with a mean difference of 41.24. This clearly shows that participants' pre-test mean score is higher compared to their post-test indicating high susceptibility to cybercrime before treatment which implies a reduction in susceptibility to cybercrime after treatment.

Research Question Two: What is the effect of treatment by residence in mean scores of undergraduates' susceptibility to cybercrime?

Table 2: Mean score and standard deviation on the interaction effect of REBT by Residence

Students' Residence	N	Mean	Std. Dev	Mean Diff.
On-Campus	13	1.00	.00	.00
Off-Campus	15	1.00	.00	
Total	28	2.00		

Table 2 showed the mean scores and standard deviations with mean difference between on-campus and off-campus respondents to answer research question four. The table further revealed mean scores of 1.00 for both on-campus and off-campus student with a mean difference of .00. This clearly shows that the interactive effect of the treatment plan has no regard for students' residence. The implementation of REBT treatment plan resulted in reforming all susceptible students irrespective of their residence.

Hypotheses One: There is no significant difference in the pre-test and post-test mean scores of the experimental group for undergraduates' susceptibility to cybercrime

Table 3: One-Sample t-test on the difference in the Pre-Test and Post-Test Mean Scores of Susceptibilities to Cybercrime for Experimental Group.

Group	N	Mean	Std. Dev.	Df	t-value	Sig.
Pre-Test	28	44.60	4.53	72	21.769	
Post-Test	28	3.36	.92	24	49.252	.001

Table 3 revealed the t-test analysis on the difference in the pre-test and post-test mean scores of susceptibilities to cybercrime for experimental group. The table further revealed a significant value of .001 which is less than alpha value of 0.05. This means that there is a significant difference in the pre-test and post-test mean scores for undergraduates' susceptibility to cybercrime in the experimental group. Therefore, the null hypothesis was rejected.

Hypotheses Two: There is no significant effect of treatment by residence in mean scores of undergraduates' susceptibility to cybercrime.

Table 4: One-Sample t-test on the effect of treatment by Residence.

	Students' residence	N	Mean	Std. Dev	t-value	df	Sig. (2-tailed)
REBT	On-campus	16	1.000	.00000 ^a	27.610	91	.000
	Off-campus	12	1.000	.00000 ^a			
Total		28					

Table 8 revealed a one-sample t-test analysis on the effect of treatments by students' residence in mean scores of undergraduates' susceptibility to cybercrime. The table further revealed a significant value of .000 which is less than decision rule of 0.05. This means that there is a significant interaction effect of treatment plan on all participants irrespective of residence. That is, undergraduate students of the University of Abuja who participated in the treatment package administered responded positively both on and off campus. Therefore, the null hypothesis was rejected.

Discussion of Findings

One of the findings of the study from research question one and the null hypothesis one respectively revealed that there is a significant difference in the pre-test and post-test mean scores of participants in the experimental group for undergraduates' susceptibility to cybercrime. That is, undergraduates in the experimental group had mean score difference between their pre-test and post-test results, which indicated that participants who didn't experienced the REBT treatment package maintained their level of susceptibility to cybercrime. This finding is in line with the findings of Abiogu, Ede, Amaeze, Nnamani, Agah, Ogheneakoke, Ugwuozor, Obiyo, Ezurike, Nwosu, Onyeausi, Nweke, Amoke, Asogwa, Obeagu and Ede, (2020) which indicated that there was a significant difference between the pre-test and post-test result of experimental group in their study of the impact of REBT in reducing negative personal value system of visually impaired people and Ogbuanya, Eseadi, Orji, Omeje, Anyanwu, Ugwoke and Edeh, (2019) which indicated that REBT had a significant effect on the symptoms of burnout syndrome among the electronics work students in the treatment group compared to their counterparts in the no-intervention group.

Result of analysis of research question two and null hypothesis two revealed that both participants who were on and off campus significant responded positively to the treatment plan. That is, the treatment package had no regard for students' residence. The finding is in agreement with Mutahir (2019). The analysed result is in disagreement with the perception of the researcher as it is his assumption that, undergraduates on campus are more susceptible to cybercrime compared to their

off campus counterparts. This should be so because, the hostels serves as a hideout to this perpetrators since the security agents don't raid student hostels as frequent as they do in off campus, so they feel more relaxed and their roommates seeing the flamboyant lifestyles will motivate the susceptible ones to join in the act.

Conclusion

Based on the findings of the study, it was concluded that REBT will make life on campus interesting; and motivate learners to lead to higher academic achievement in their respective field of study. The strategy will also assist undergraduates in University of Abuja and Nigeria at large to develop negative attitudes towards cybercrime.

Recommendations

Based on the findings of this study, it was recommended that:

1. Guidance Counsellors at the Universities should reinforce and consistently apply the effective treatment plan used in the study. This includes regular workshops and seminars that incorporate behavioural and cognitive interventions to reduce susceptibility to cybercrime, Encourage Gender-Inclusive Cybercrime Prevention Strategies.
2. Cybercrime prevention programs should be extended to all types of student accommodation, including on-campus hostels, off-campus housing as well as private residences. This will ensure comprehensive coverage and reduce susceptibility across all living situations.

REFERENCES

- Badejo, A.O. & Anyanwu, A. C. (2016). Comparative effect of rational emotive behaviour therapy and token economy on junior secondary school students' performance in basic science in Lagos state. *African journal online*. Retrieved 6/12/2022: <https://www.ajol.info/index.php/ife/article/view/152072>
- Eifediyi, G., Ojugo, A.I., & Aluede, O. (2017). Effectiveness of rational emotive behaviour therapy in the reduction of examination anxiety among secondary school students in Edo State, Nigeria. *Asia pacific journal of counselling and psychotherapy Volume 9, (2018)-Issue1*. Retrieved 6/12/2022: <https://www.tandfonline.com/doi/abs/10.1080/21507686.2017.1412329>
- Ewhe, P.O. (2021). Factors, consequence and control of cybercrime among university undergraduates in Nigeria. Unpublished Seminar paper presented in the department of Guidance and Counselling University of Abuja.

- Kara, K. (2008). *True crime: John Draper, the original whistle blower*. Retrieved 14/06/2023 from: <https://www.mentalfloss.com/article/19484/true-crime-john-draper-original-whistle-blower>
- Moga, E., Salihu, A. G. & Abdulkarim, R. (2021). A Historical Assessment of Cybercrime in Nigeria: Implication for Schools and National Development *Journal of Research in Humanities and Social Science Volume 9 ~ Issue 9* (2021) pp: 84-94 ISSN (Online):2321-9467 www.questjournals.org
- Mutahir, O. A. (2019). Awareness and impact of cybercrime among selected university undergraduates in Osun state, Nigeria. *SMCC business administration journal* ISSN Print: 2508-0512 ISSN Online: 2508-0520 Retrieved 6/12/2022: <https://www.researchgate.net/publication/335859749>
- [Ogbuanya](#), T. C., [Eseadi](#), C., [Orji](#), C. T., [Omeje](#), J. C., [Anyanwu](#), J. I., [Ugwoke](#), S. C. & [Edeh](#), N. C. (2019). Effect of rational-emotive behaviour therapy program on the symptoms of burnout syndrome among undergraduate electronics work students in Nigeria. *National library of medicine*. Retrieved 17th January, 2022 from: <https://pubmed.ncbi.nlm.nih.gov/29300142/>
- Ojiyi, C.P. (2021). Effect of reality and rational emotive behavioural therapies on undergraduates' susceptibility to secret cults in the University of Benin, Benin City. Unpublished Ph.D thesis submitted to the University of Benin City.