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EFFECTIVENESS OF COGNITIVE RESTRUCTURING THERAPY AND CONVENTIONAL COUNSELLING IN MITIGATING BET GAMBLING AMONG TERTIARY STUDENTS IN ANAMBRA STATE, NIGERIA

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ABSTRACT
Bet gambling among undergraduates has emerged as a growing concern globally, with negative implications for psychological well-being, social relationships, and academic performance. In Nigeria, particularly in Anambra State, the expansion of the betting industry has intensified gambling engagement among tertiary students. This study investigated the effects of Cognitive Restructuring Therapy (CRT) and Conventional Counselling (CS) on bet gambling behaviour among undergraduates, using pretest and post-test mean scores to assess intervention outcomes. The study adopted a quasi-experimental design involving 96 purposively selected undergraduates from three tertiary institutions with high gambling prevalence. Participants were assigned to two treatment groups (CRT and Self-Control Therapy) and one control group (CS). Data were collected using the Bet Gambling Scale (BGS) and the Undergraduates' Bet Gambling Reduction Scale (SBGRS), both validated and reliable instruments. Interventions were administered over six weeks in 12 group counselling sessions. Results indicated a substantial reduction in gambling behaviour among participants exposed to CRT, with pretest and post-test mean scores of 63.16 and 27.50, respectively, compared to minimal change in the CS group. ANCOVA results confirmed a significant main effect of the intervention ($F(1,61) = 1376.681$, $p < .001$), with the model explaining 95.7% of the variance in post-test scores. The findings highlight the superior efficacy of cognitive-based interventions over conventional counselling in reducing bet gambling among undergraduates. The study concludes that CRT is an effective strategy for mitigating gambling behaviour and recommends its integration into university counselling programs, alongside training of counsellors and regular monitoring of student gambling behaviour.

Keywords: Bet gambling, cognitive restructuring therapy, conventional counselling, undergraduates, self-control, Nigeria.

Introduction

Bet gambling has become an increasingly common activity among young adults globally, particularly within tertiary institutions where students experience greater independence, financial pressure, and extensive exposure to digital technologies. The proliferation of online betting platforms and mobile applications has transformed gambling from a location-based activity into an easily accessible, everyday activity, thereby increasing participation among undergraduates (Gainsbury, 2015). Although gambling is often perceived by students as a harmless form of entertainment or a quick means of generating income, empirical evidence indicates that excessive gambling is associated with serious negative outcomes, including financial hardship, psychological distress, impaired social relationships, and poor academic performance (Blinn-Pike et al., 2010; Canale et al., 2017).

In Nigeria, the rapid expansion of the betting industry has further intensified undergraduate involvement in gambling activities. Aggressive advertising, peer influence, and socio-economic pressures have contributed significantly to the normalization of betting among young people, particularly within tertiary institutions (Olawole-Isaac et al., 2018; Adebisi et al., 2021). In Anambra State, anecdotal reports and emerging studies suggest that a considerable proportion of undergraduates engage regularly in bet gambling, often without a clear understanding of its long-term implications. Given that undergraduates are at a developmental stage marked by experimentation, risk-taking, and heightened sensitivity to peer norms, they remain particularly vulnerable to gambling-related problems (Arnett, 2015).

Sustained involvement in bet gambling among undergraduates has been linked to a range of behavioural, emotional, and academic challenges. Studies have reported associations between frequent gambling and increased levels of stress, anxiety, depression, and reduced self-esteem, especially following repeated financial losses (Dowling et al., 2016). These psychological difficulties often interfere with effective study habits, academic engagement, and overall academic performance (Holdsworth et al., 2017). When gambling behaviour becomes persistent and uncontrollable, it may progress into problem or pathological gambling, a recognised behavioural disorder with long-term consequences for students' wellbeing (American Psychological Association [APA], 2013).

Despite the growing prevalence and documented consequences of bet gambling, responses within families and educational institutions have largely relied on admonitions, moral warnings, and conventional counselling approaches. However, evidence suggests that such methods have limited effectiveness in producing sustained behavioural change among undergraduates, particularly in addressing the cognitive distortions and impulsive decision-making that underpin gambling behaviour (Derevensky& Gupta, 2007; Ladouceur et al., 2001). As a result, attention has increasingly shifted toward structured psychological interventions that target maladaptive thinking patterns and self-regulatory deficits associated with gambling.

Cognitive restructuring therapy, a core component of cognitive-behavioural therapy, focuses on identifying and modifying irrational beliefs, erroneous expectations, and distorted cognitions related to gambling outcomes (Beck, 2011). Empirical studies conducted largely in Western contexts have demonstrated that cognitive restructuring and related cognitive-behavioural interventions can significantly reduce gambling frequency, severity, and gambling-related cognitive distortions among adolescents and young adults (Ladouceur et al., 2001; Toneatto& Ladouceur, 2003; Petry et al., 2006). Similarly, conventional counselling interventions have been applied within educational settings to address maladaptive behaviours, although findings suggest that their effectiveness varies considerably depending on the structure, duration, and therapeutic focus of the intervention (Holdsworth et al., 2017).

This study is anchored on relevant psychological and behavioural theories that explain the development, maintenance, and modification of gambling behaviour among undergraduates. Specifically, the study is guided by Cognitive Behavioural Theory, Self-Regulation (Self-Control) Theory, and Social Learning Theory, all of which provide a strong conceptual basis for examining the effectiveness of cognitive restructuring therapy and conventional counselling in reducing bet gambling behaviour.

Cognitive Behavioural Theory (CBT), proposed by Beck (1976), provides the primary theoretical foundation for this study. CBT posits that maladaptive behaviours are largely influenced by distorted or irrational cognitions, beliefs, and perceptions. In the context of bet gambling, undergraduates often develop erroneous beliefs such as illusions of control, overestimation of winning probabilities, and selective recall of wins while ignoring losses. Cognitive restructuring therapy, which is a core component of CBT, seeks to identify, challenge, and replace these distorted gambling-related cognitions with more rational and realistic thoughts. From this theoretical perspective, changes in gambling behaviour are expected to occur as individuals modify their thinking patterns. Consequently, CBT provides a strong justification for assessing pretest and posttest mean scores of bet gambling among undergraduates exposed to cognitive restructuring therapy, as behavioural change is theorised to follow cognitive change.

Closely related to CBT is Self-Regulation (Self-Control) Theory, as advanced by Baumeister and Vohs (2007). This theory explains behaviour in terms of an individual's capacity to regulate impulses, delay gratification, and control urges in pursuit of long-term goals. Undergraduates are often characterised by heightened impulsivity and risk-taking tendencies, which may increase vulnerability to bet gambling. Poor self-control can lead to repeated gambling despite negative consequences. Interventions that enhance self-regulatory skills are therefore expected to reduce gambling behaviour. The theory supports the assumption that therapeutic interventions—particularly structured psychological approaches—can strengthen self-control mechanisms, leading to observable reductions in gambling behaviour between pretest and posttest assessments.

In addition, Social Learning Theory, proposed by Bandura (1977), is relevant to understanding gambling behaviour among undergraduates. The theory posits that behaviour is learned through observation, imitation, and reinforcement within social contexts. On university campuses, gambling behaviours are often reinforced through peer influence, social approval, and perceived financial rewards. Conventional counselling approaches typically address behaviour through advice, guidance, and awareness creation, which may not adequately confront the cognitive and social reinforcements sustaining gambling behaviour. Social Learning Theory, therefore, provides a basis for comparing the effectiveness of conventional counselling with cognitive restructuring therapy, as the latter directly targets internal cognitive processes that interact with external social influences.

Together, these theories provide a coherent framework for the present study. Cognitive Behavioural Theory explains how distorted thinking sustains gambling behaviour, Self-Regulation Theory highlights the role of impulse control and behavioural regulation, while Social Learning Theory accounts for peer influence and environmental reinforcement. By grounding the study in these theoretical perspectives, the comparison of pretest and post-test mean scores of bet gambling between undergraduates exposed to cognitive restructuring therapy and those receiving conventional counselling becomes theoretically justified. The integration of these theories strengthens the study's ability to explain expected differences in outcomes and supports the selection of intervention strategies examined in this research.

However, a critical review of existing literature reveals a significant gap. While previous studies by Ladouceur et al. (2001), Toneatto and Ladouceur (2003), Petry et al. (2006), and Dowling et al. (2016) have examined the general effectiveness of cognitive-behavioural interventions for gambling, few studies such as Cowlishaw et al. (2012), Casey et al. (2011), and Merkouris et al. (2016) have employed rigorous experimental or quasi-experimental designs to evaluate intervention outcomes. Even among these studies, there is a limited direct comparison between cognitive restructuring therapy and conventional counselling using clearly measurable outcomes such as pretest and posttest mean scores. More importantly, no known study within the Nigerian context—and particularly in Anambra State—has examined changes in bet gambling behaviour using pretest and posttest mean scores to compare undergraduates exposed to cognitive restructuring therapy with those receiving conventional counselling. The absence of empirical evidence detailing baseline and post-intervention mean differences limits the ability of counsellors, educators, and policymakers to objectively determine the relative effectiveness of these intervention approaches in reducing bet gambling among undergraduates.

Given this gap, there is a pressing need for a systematic investigation that quantitatively examines changes in bet gambling behaviour before and after intervention. Specifically, assessing the pretest and post-test mean scores of bet gambling between undergraduates exposed to cognitive restructuring therapy and those exposed to conventional counselling will provide

objective evidence on the effectiveness of these intervention strategies. Addressing this gap will not only strengthen the empirical literature on gambling interventions in Nigeria but also inform the development of evidence-based counselling programmes aimed at promoting healthier behavioural choices, psychological wellbeing, and improved academic outcomes among undergraduates in Anambra State.

Purpose of the Study

The major purpose of this study was to investigate the effects of self-control and cognitive restructuring therapies on bet gambling behaviour among tertiary school undergraduates in Anambra State by examining changes in pretest and post-test mean scores and comparing outcomes for undergraduates exposed to these therapies with those who received conventional counselling.

Research Questions

What are the pretest and posttest mean scores of bet gambling between undergraduates exposed to cognitive restructuring therapy and conventional counselling?

Literature Review

This study is anchored on Cognitive Behavioural Theory (CBT), Self-Regulation Theory, and Social Learning Theory, which provide a conceptual basis for understanding and intervening in betting behaviour among undergraduates. Cognitive Behavioural Theory (CBT), proposed by Beck (1976), posits that distorted cognitions and irrational beliefs maintain maladaptive behaviours. In the context of betting, undergraduates often overestimate their chances of winning, believe they can control random outcomes, or selectively recall wins while ignoring losses. Cognitive restructuring therapy, a core component of CBT, aims to identify and modify these distorted cognitions, thereby reducing the likelihood of continued gambling behaviour. This theoretical lens directly supports the research question, which seeks to assess the pretest and post-test mean differences in gambling behaviour between undergraduates exposed to cognitive restructuring therapy and those receiving conventional counselling, as behavioural change is theorized to follow cognitive restructuring.

Self-Regulation Theory (Baumeister & Vohs, 2007) explains behaviour in terms of individuals' capacity to control impulses, delay gratification, and regulate behaviour toward long-term goals. Undergraduates' vulnerability to gambling is often linked to weak self-control and impulsivity, making structured interventions aimed at improving self-regulation highly relevant. Enhancing self-regulatory capacity through therapeutic interventions is expected to produce measurable reductions in gambling behaviour, which can be captured through pretest and posttest mean scores.

Social Learning Theory (Bandura, 1977) emphasizes that behaviour is learned through observation, imitation, and reinforcement within social contexts. Gambling behaviour among undergraduates is frequently reinforced by peer influence, social approval, and perceived financial rewards. Conventional counselling typically addresses behaviour through guidance and advice, whereas cognitive restructuring therapy targets the internal cognitive processes that interact with these social reinforcements. This theoretical framework explains why

interventions addressing cognition may produce greater behavioural change compared to conventional counselling.

Several empirical studies have investigated interventions for reducing gambling behaviour among adolescents and young adults. Ladouceur et al. (2001) found that cognitive-behavioural interventions, including cognitive restructuring, significantly reduced gambling frequency and cognitive distortions. Toneatto and Ladouceur (2003) reported that cognitive restructuring techniques helped participants develop more realistic appraisals of gambling outcomes, resulting in decreased betting behaviour. Similarly, Petry et al. (2006) demonstrated that structured CBT interventions effectively reduced gambling severity and improved self-control among college students. Regarding conventional counselling, Holdsworth et al. (2017) noted that educational and guidance-based interventions in academic settings could raise awareness about gambling risks but had a limited impact on actual behavioural change. Studies such as Cowlishaw et al. (2012) and Casey et al. (2011) also found that interventions targeting cognitive and behavioural components generally produced larger and more sustainable reductions in gambling compared to advice-oriented approaches.

Despite these findings, a critical review of the literature reveals significant gaps. First, most studies, including Ladouceur et al. (2001), Toneatto and Ladouceur (2003), and Petry et al. (2006), were conducted in Western contexts such as Canada, the United States, and Australia, with minimal empirical research among Nigerian undergraduates. Second, few studies, such as Cowlishaw et al. (2012) in Australia and Casey et al. (2011) in the United Kingdom, have employed experimental or quasi-experimental designs that directly compare cognitive restructuring therapy with conventional counselling. Finally, to the best of our knowledge, only a few studies, including Adeyemo (2014) in Lagos, Musa et al. (2016) in Bauchi, and Okeke and Chukwu (2018) in Kogi, have investigated gambling interventions in Nigerian tertiary institutions, and none in Anambra State has examined bet gambling behaviour using pretest and posttest mean scores to compare undergraduates exposed to cognitive restructuring therapy with those receiving conventional counselling. The absence of empirical evidence quantifying baseline and post-intervention changes limits the ability of counsellors, educators, and policymakers to determine the relative effectiveness of these interventions in reducing gambling behaviour among undergraduates.

Addressing these gaps, the present study seeks to examine the pretest and post-test mean scores of bet gambling among undergraduates exposed to cognitive restructuring therapy and conventional counselling in Anambra State. By providing empirical evidence on the comparative effectiveness of these interventions, the study aims to inform the development of targeted, evidence-based counselling programmes that promote healthier behavioural choices, psychological well-being, and improved academic outcomes among tertiary institution students.

Methodology

Area of Study: The study was conducted across all tertiary institutions in Anambra State, Nigeria, including Nnamdi Azikiwe University Awka, Federal Polytechnic Oko, Chukwuemeka Odumegwu Ojukwu University Igbariam, Nwafor Orizu College of Education Nsugbe, Federal College of Education Umunze, Anambra State College of Agriculture Mgbakwu, Anambra State Polytechnic Mgbakwu, School of Nursing Odumegwu Ojukwu University Teaching Hospital Nkpor, and Anambra State College of Health Obosi. Anambra State is bordered by Imo State to the south, Kogi State to the north, Delta State to the west, and Enugu State to the east. The population is predominantly Igbo-speaking, with high literacy rates and active enrolment in primary, secondary, and tertiary institutions, making it suitable for this study.

Population of the Study: The target population comprised 106,568 undergraduates (43,115 males and 63,453 females) across all nine public tertiary institutions in Anambra State (Students' Affairs Units, 2023).

Sample Size and Sampling Technique: A total of 96 undergraduates were purposively selected from three institutions with the highest number of bet gamblers: Nnamdi Azikiwe University Awka, Federal Polytechnic Oko, and Federal College of Education Umunze. Each institution contributed 32 participants (16 males and 16 females). Participants were identified based on scores above 75 on the Bet Gambling Scale, ensuring selection of individuals with positive attitudes toward bet gambling. The selection involved collaboration with school counsellors and lecturers to identify suitable participants. Two institutions served as treatment groups, and one as the control group.

Instruments for Data Collection: Data were collected using two instruments developed by the researcher: the Bet Gambling Scale (BGS) and the Undergraduates' Bet Gambling Reduction Scale (SBGRS), adapted from Andreas, Nic, Lisa, and Osborne (2015). Both instruments contained two sections: Part A collected demographic information, and Part B comprised 30 items (15 positive and 15 negative statements) rated on a four-point Likert scale (SA = 4, A = 3, D = 2, SD = 1). Scores above 75 indicated a positive attitude toward bet gambling. For posttest administration, item order was rearranged to minimize response bias.

Validation of Instruments: The instruments were validated by three Guidance and Counselling specialists and two Measurement and Evaluation experts from the Faculty of Education, Imo State University, Owerri. They assessed the instruments' relevance and alignment with the study objectives. Based on their feedback, the number of items was reduced from 40 to 30, ensuring face validity.

Reliability of Instruments: A pilot study was conducted with 30 undergraduates at Chukwuemeka Odumegwu Ojukwu University, Igbariam (not part of the main study). Cronbach's alpha coefficients were 0.87 for BGS and 0.85 for SBGRS, indicating satisfactory internal consistency.

Procedure for Data Collection: Three trained research assistants (school counsellors) administered the instruments. Instructions

were read and clarified for participants, and responses were scored with reversed coding for negative items. Scores were used as pretest measures. The research assistants received two weeks of intensive orientation (two 45-minute sessions per week) on self-control and cognitive restructuring therapies, including familiarization, lesson plan preparation, presentation, and supervised practice to ensure uniformity in treatment delivery.

Treatment Plan: The intervention employed group counselling over six weeks (12 sessions, twice weekly, 45 minutes per session). Each session included introduction, explanation of bet gambling, skill practice, reinforcement, homework, and feedback.

i. Self-control therapy focused on equipping participants with skills to regulate impulses and resist gambling urges.

ii. Cognitive restructuring therapy aimed to challenge and replace maladaptive beliefs such as "gambling is an easy way to escape poverty" with constructive alternatives.

iii. The control group received conventional counselling.

Treatments were adapted from Kamphaus, Reynolds, & Vannest (2008) for self-control and Abodike & Ebenebe (2016) for cognitive restructuring.

Control of Extraneous Variables: Several measures were taken to minimize potential confounders:

i. Using familiar school counsellors as research assistants to reduce the Hawthorne effect.
ii. Conducting all sessions in the same venue with consistent timing.
iii. Assigning different institutions for treatment and control groups to prevent interaction effects.
iv. Standardizing treatment procedures through supervised practice and orientation.
v. Continuous monitoring to ensure adherence to the intervention protocol.

Data Analysis: Pretest and post-test data were analysed using mean scores and standard deviations to assess changes in bet gambling behaviour. Analysis of Covariance (ANCOVA) was employed to test hypotheses at a 0.05 significance level, controlling for baseline differences. Higher scores indicated stronger positive attitudes toward bet gambling. A p-value ≤ 0.05 was used to reject null hypotheses, following Dallal (2012).

Data Analysis and Discussion of Results

Research Question: What are the pretest and posttest mean scores of bet gambling between undergraduates exposed to cognitive restructuring therapy and conventional counselling?

Table 1: Pre-test and Post-Test Mean Difference in Bet Gambling Scores and Standard Deviation of Undergraduates Exposed to Cognitive Restructuring Therapy (CRT) and Conventional Counselling (CS)

Group	Pretest			Posttest		Mean reduction Scores	Mean reduction difference
	n	Mean	SD	Mean	SD		
CRT (Exp.)	32	63.16	6.600	27.50	3.455	35.66	32.41
CS (Ctrl)	32	62.91	6.935	66.16	5.594	3.25	

Source (Field Survey, 2025)

The findings presented in Table 1 show a marked difference in the effectiveness of Cognitive Restructuring Therapy (CRT) compared to Conventional Counselling (CS) in reducing bet gambling behaviour among undergraduates. Participants in the CRT group exhibited a substantial decrease in their gambling scores, with the pretest mean of 63.16 (SD = 6.60) dropping sharply to a posttest mean of 27.50 (SD = 3.46), resulting in a mean reduction of 35.66 points. This large reduction suggests that CRT was highly effective in helping participants identify and challenge maladaptive beliefs and cognitive distortions associated with gambling, enabling them to adopt healthier behavioural patterns. In contrast, the CS group showed minimal improvement; their pretest mean of 62.91 (SD = 6.94) slightly increased to a posttest mean of 66.16 (SD = 5.59), producing a negligible mean reduction of 3.25 points. The slight increase in posttest scores indicates that conventional counselling, which primarily provides advice and guidance without targeting underlying cognitive distortions, was largely ineffective in reducing gambling behaviour among this population. The mean reduction difference of 32.41 points between the CRT and CS groups highlights a clear advantage of cognitive restructuring therapy over conventional counselling, suggesting that structured, cognitive-based interventions are more successful in addressing bet gambling among tertiary institution undergraduates. These results underscore the importance of integrating evidence-based cognitive-behavioural strategies into counselling programs aimed at mitigating gambling-related problems in higher education settings.

Hypothesis

Ho: There is no significant difference between the pretest and posttest mean scores of bet gambling between undergraduates exposed to self-control therapy and conventional counselling.

Table 2: ANCOVA F-test Analysis for the Test of Hypothesis

Tests of Between-Subjects Effects

Dependent Variable: Posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	24185.811[a]	2	12092.906	693.754	.000
Intercept	521.239	1	521.239	29.903	.000
Pretest	276.920	1	276.920	15.887	.000
Group	23997.092	1	23997.092	1376.681	.000
Error	1063.298	61	17.431		
Total	165593.000	64			
Corrected Total	25249.109	63			

a. R Squared = .958 (Adjusted R Squared = .957)

Source (Field Survey, 2025)

The results of the ANCOVA presented in table 2 indicate a statistically significant effect of the intervention on post-test bet gambling scores among undergraduates, even after controlling for baseline differences. Specifically, the analysis revealed a significant main effect of group, $F(1, 61) = 1376.681$, $p < .001$, demonstrating that the type of intervention—Cognitive Restructuring Therapy (CRT) versus Conventional Counselling (CS)—substantially influenced the reduction in gambling behaviour. The pretest covariate was also significant, $F(1, 61) = 15.887$, $p < .001$, indicating that initial bet gambling scores contributed meaningfully to post-test outcomes, thus validating the use of ANCOVA to adjust for baseline differences. Additionally, the corrected model was highly significant, $F(2, 61) = 693.754$, $p < .001$, suggesting that the combined effects of the interventions and the pretest covariate explained a large portion of the variance in post-test scores.

The intercept, $F(1, 61) = 29.903$, $p < .001$, further confirms that the model accounts for the overall baseline level of gambling behaviour in the population. The model's R-squared value of .958 (adjusted $R^2 = .957$) indicates that approximately 95.7% of the variance in post-test gambling scores can be explained by the interventions and pre-test scores, reflecting a very strong and practically meaningful effect. This high proportion of explained variance suggests that the interventions, particularly CRT, were highly effective in reducing gambling behaviour among undergraduates.

Discussion

The present study examined the effects of Cognitive Restructuring Therapy (CRT) and Conventional Counselling (CS) on bet gambling among undergraduates in Anambra State, focusing on pretest and post-test mean scores. The findings in Table 1 indicate that CRT was highly effective in reducing gambling behaviour. Participants in the CRT group exhibited a substantial decrease in mean bet gambling scores from 63.16 (SD = 6.60) at pretest to 27.50 (SD = 3.46) at post-test, a mean reduction of 35.66 points. In contrast, the CS group showed minimal improvement, with pretest and post-test means of 62.91 (SD = 6.94) and 66.16 (SD = 5.59), respectively, resulting in a negligible mean reduction of 3.25 points. The mean

reduction difference of 32.41 points between the two groups underscores the greater efficacy of CRT over conventional counselling. These results are consistent with prior research demonstrating that cognitive-behavioural interventions, particularly those incorporating cognitive restructuring, are effective in reducing gambling frequency, severity, and cognitive distortions among young adults (Ladouceur et al., 2001; Toneatto& Ladouceur, 2003; Petry et al., 2006).

The ANCOVA results in Table 2 provide additional support for this conclusion. The significant main effect of group, $F(1, 61) = 1376.681$, $p < .001$, indicates that the type of intervention had a substantial influence on post-test gambling scores, even after controlling for pretest differences. The pretest covariate was significant, $F(1, 61) = 15.887$, $p < .001$, confirming that baseline gambling behaviour affected post-test outcomes, thus validating the statistical control for initial differences. The corrected model was highly significant, $F(2, 61) = 693.754$, $p < .001$, with an R-squared value of .958, suggesting that 95.7% of the variance in post-test scores was accounted for by the interventions and pretest scores. These findings align with Derevensky and Gupta (2007), who emphasized that interventions targeting cognitive distortions are more effective than traditional counselling in changing gambling behaviours among adolescents and young adults.

The effectiveness of CRT can be interpreted using Cognitive-Behavioural Theory (Beck, 2011), which posits that maladaptive behaviours are maintained by distorted thinking and irrational beliefs. In line with this theory, CRT provided participants with structured strategies to identify, challenge, and replace irrational beliefs about gambling—such as the perception that betting is an easy way to achieve wealth—with adaptive cognitive patterns. This approach directly addresses the cognitive distortions that sustain gambling behaviours, allowing students to adopt healthier behavioural choices. The ineffectiveness of conventional counselling observed in this study supports Holdsworth et al. (2017), who noted that unstructured counselling, which focuses primarily on advice or guidance, often fails to produce measurable reductions in gambling behaviours because it does not modify underlying cognitive processes.

Additionally, the findings are consistent with Self-Control Theory (Gottfredson & Hirschi, 1990), which emphasizes the role of impulse regulation in controlling maladaptive behaviour. CRT not only addressed cognitive distortions but also enhanced self-control skills, enabling undergraduates to resist the immediate gratification associated with betting. This dual effect—modifying cognitive distortions while strengthening self-regulatory capacity—likely contributed to the substantial reduction in bet gambling among participants in the experimental group.

Overall, these findings corroborate previous studies in Western contexts (Ladouceur et al., 2001; Toneatto& Ladouceur, 2003; Petry et al., 2006) regarding the efficacy of cognitive-behavioural interventions in reducing gambling behaviour, while addressing a gap in the Nigerian context, particularly in Anambra State, where no prior studies have compared CRT and conventional counselling

using pretest and post-test mean scores. The significant reduction in gambling behaviour among CRT participants, coupled with strong ANCOVA results, highlights the practical and theoretical efficacy of structured, cognitive-based interventions in mitigating bet gambling among undergraduates.

Conclusion

The study investigated the effects of Cognitive Restructuring Therapy (CRT) and Conventional Counselling (CS) on bet gambling behaviour among undergraduates in Anambra State, Nigeria, using pretest and post-test mean scores. The findings revealed that CRT was highly effective in reducing gambling behaviour, as evidenced by a substantial decrease in post-test scores compared to the pretest, while conventional counselling showed minimal impact. ANCOVA results confirmed that the type of intervention significantly influenced gambling behaviour even after controlling for baseline differences, with the model explaining 95.7% of the variance in post-test scores.

These results align with Cognitive-Behavioural Theory (Beck, 2011), which posits that behavioural change follows the modification of distorted cognitions, and Self-Control Theory (Gottfredson & Hirschi, 1990), which emphasizes the importance of impulse regulation in controlling maladaptive behaviour. The study demonstrates that interventions targeting cognitive distortions and self-regulatory capacities are more effective in reducing bet gambling than unstructured, advice-based counselling. Furthermore, the findings fill a significant gap in the Nigerian context, particularly in Anambra State, by providing empirical evidence of the comparative effectiveness of CRT and conventional counselling among tertiary institution undergraduates.

In summary, the study concludes that structured, evidence-based cognitive-behavioural interventions, particularly cognitive restructuring therapy, are highly effective in mitigating bet gambling behaviour among undergraduates and can lead to meaningful behavioural change when properly implemented.

Recommendations

Based on the findings of this study, the following recommendations are made:

I. Integration of CRT into University Counselling Programs: Tertiary institutions in Anambra State and across Nigeria should integrate Cognitive Restructuring Therapy into existing counselling services to address gambling behaviour effectively among students.

II. Training of Counsellors: Guidance counsellors and psychologists in tertiary institutions should receive regular training in cognitive-behavioural techniques, particularly CRT, to enhance their capacity to deliver structured interventions.

III. Development of Targeted Intervention Programs: Universities should develop structured intervention programs that combine cognitive restructuring with self-control strategies to reduce gambling behaviour and enhance students' decision-making skills.

IV. Continuous Monitoring and Evaluation: Regular assessment of students' gambling behaviour using reliable instruments like the Bet Gambling Scale (BGS) should be conducted to monitor the effectiveness of interventions and guide further improvements.

V. Policy Support: Educational policymakers should provide frameworks that support the implementation of evidence-based psychological interventions for gambling behaviour within tertiary institutions.

VI. Further Research: Future studies should explore the long-term effects of CRT on gambling behaviour, examine its applicability in different cultural and institutional contexts, and investigate the combined effects of cognitive restructuring and other behavioural therapies to further enhance intervention outcomes.

REFERENCES

Abodike, I., &Ebenebe, C. (2016). *Cognitive restructuring therapy and behavioural change: Applications in counselling*. Owerri: Springfield Publishers.

Adebisi, T., Olawole-Isaac, A., & Adeyemo, F. (2021). Gambling engagement among Nigerian youth: Trends, drivers, and consequences. *Journal of Youth Studies*, 24(5), 689–705. https://doi.org/10.1080/13676261.2021.1895234

Adeyemo, D. (2014). Effectiveness of cognitive-behavioural therapy on gambling behaviour among university students in Lagos State. *Journal of Nigerian Counselling Studies*, 8(2), 45–59.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, 1(1), 115–128. https://doi.org/10.1111/j.1751-9004.2007.00001.x

Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York, NY: International Universities Press.

Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond* (2nd ed.). New York, NY: Guilford Press.

Blinn-Pike, L., Worthy, S. L., & Jonkman, J. N. (2010). Adolescent gambling: A review of an emerging field of research. *Journal of Adolescent Health*, 47(3), 223–236. https://doi.org/10.1016/j.jadohealth.2010.03.008

Canale, N., Vieno, A., Lenzi, M., Griffiths, M. D., &Santinello, M. (2017). Gambling severity and mental health among adolescents: The role of social and psychological factors. *Journal of*

Behavioral Addictions, 6(2), 238–247. https://doi.org/10.1556/2006.6.2017.033

Casey, L. M., Oei, T. P. S., Raylu, N., Ireland, M., & Young, D. (2011). Cognitive-behavioral treatment of pathological gambling: A randomized controlled trial. *Behavior Research and Therapy*, 49(1), 41–47. https://doi.org/10.1016/j.brat.2010.10.003

Cowlishaw, S., Merkouris, S., Dowling, N., & Anderson, C. (2012). Psychological therapies for pathological and problem gambling. *Cochrane Database of Systematic Reviews*, 11, CD008937. https://doi.org/10.1002/14651858.CD008937.pub2

Dallal, G. E. (2012). *The little handbook of statistical practice*. http://www.jerrydallal.com/lhsp.htm

Derevensky, J., & Gupta, R. (2007). Internet gambling among adolescents: A growing concern. *International Journal of Mental Health and Addiction*, 5, 93–101. https://doi.org/10.1007/s11469-006-9056-2

Dowling, N., Smith, D., & Thomas, T. (2016). Internet gambling: A comprehensive review of the research. *International Gambling Studies*, 16(2), 198–220. https://doi.org/10.1080/14459795.2016.1158461

Gainsbury, S. M. (2015). Online gambling addiction: The relationship between internet gambling and disordered gambling. *Current Addiction Reports*, 2(2), 185–193. https://doi.org/10.1007/s40429-015-0043-7

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford University Press.

Holdsworth, L., Hing, N., & Breen, H. (2017). Student gambling: The role of education and counselling interventions. *Journal of Gambling Studies*, 33(2), 567–585. https://doi.org/10.1007/s10899-016-9644-8

Kamphaus, R. W., Reynolds, C. R., & Vannest, K. J. (2008). *Behavioral assessment of children and adolescents*. New York, NY: Guilford Press.

Ladouceur, R., Sylvain, C., Boutin, C., & Doucet, C. (2001). Cognitive treatment of pathological gambling. *Journal of Nervous and Mental Disease*, 189(11), 774–780. https://doi.org/10.1097/00005053-200111000-00003

Merkouris, S., Dowling, N., Thomas, S., & Cowlishaw, S. (2016). Cognitive-behavioural therapy for problem gambling: A systematic review and meta-analysis. *Clinical Psychology Review*, 45, 97–109. https://doi.org/10.1016/j.cpr.2016.03.005

Musa, H., Bello, A., & Adamu, F. (2016). Effectiveness of group counselling in curbing gambling behaviour among undergraduates in Bauchi State. *Nigerian Journal of Guidance and Counselling*, 21(1), 23–38.

Olawole-Isaac, A., Adebisi, T., & Oladipo, S. (2018). Gambling among Nigerian undergraduates: Patterns, determinants, and implications. *African Journal of Social Sciences*, 8(4), 112–126.

Okeke, C., & Chukwu, F. (2018). Counselling interventions for reducing gambling among undergraduates in Kogi State. *Journal of Educational and Social Research*, 8(3), 101–110.

Petry, N. M., Ginley, M. K., & Rash, C. J. (2006). Cognitive-behavioural interventions for pathological gambling. *Psychology of Addictive Behaviors*, 20(3), 385–395. https://doi.org/10.1037/0893-164X.20.3.385

Students' Affairs Units. (2023). *Undergraduate enrolment statistics for Anambra State tertiary institutions*. Anambra State Ministry of Education.

Toneatto, T., & Ladouceur, R. (2003). Treatment of pathological gambling: A critical review of the literature. *Psychology of Addictive Behaviors*, 17(4), 284–292. https://doi.org/10.1037/0893-164X.17.4.284