

## COGNITIVE RESTRUCTURING AS DETERMINANT OF DELINQUENT BEHAVIOR AMONG UNDERGRADUATES IN EKITI STATE UNIVERSITY

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### Abstract

*Delinquent behavior among adolescents is a pervasive issue with long-term consequences. Cognitive restructuring, rooted in cognitive-behavioral theory, offers a promising approach to address this issue. This study investigated the role of cognitive restructuring in reducing delinquent behavior among adolescents, with a focus on cognitive flexibility as a key predictor. A regression analysis was conducted to examine the impact of cognitive restructuring on overall delinquent behavior and non-violent delinquent behavior. Additionally, a t-test for independent samples was used to explore gender differences in the effectiveness of cognitive restructuring interventions. This study found that cognitive restructuring interventions resulted in significant decreases in overall delinquent behavior ( $R\text{-Square} = 0.653$ ,  $F = 429.801$ ,  $\text{Sig.} = 0.000$ ), and non-violent delinquent behavior ( $R\text{-Square} = 0.134$ ,  $F = 12.65261$ ,  $\text{Sig.} = 0.004761$ ), with higher scores on the Cognitive Flexibility Index (CFI) associated with greater reductions in non-violent delinquent behavior ( $B = 0.361$ ,  $\text{Std. Error} = 0.0018$ ,  $t = 1.6287$ ,  $\text{Sig.} = 0.005$ ). Additionally, the study found no significant gender differences in the effectiveness of cognitive restructuring interventions ( $t = -0.849$ ,  $df = 297$ ,  $p > 0.05$ ). Overall, these findings highlight the potential of cognitive restructuring as a promising approach for addressing delinquent behavior in adolescents and promoting positive youth development.*

**Keywords:** Cognitive Restructuring, Risk Factors, Adolescents and Delinquent Behavior

### Introduction

The phenomenon of delinquent behavior among adolescents is a multifaceted issue that continues to challenge societies worldwide. Delinquency encompasses a wide range of behaviors, including but not limited to substance abuse, vandalism, theft, aggression, and truancy, with potential long-term consequences for both the individuals involved and the communities they inhabit (Lösel & Farrington, 2012). As such, understanding and effectively addressing the underlying factors contributing to delinquency is crucial for promoting positive youth development

and fostering safer communities. Matjasko et al. (2012). Among the various theoretical frameworks used to examine delinquent behavior, cognitive restructuring emerges as a promising approach. Cognitive restructuring, rooted in cognitive-behavioral theory, focuses on identifying and modifying distorted or maladaptive thought patterns that contribute to negative behaviors. It posits that individuals' perceptions, interpretations, and beliefs about themselves, others, and the world around them significantly influence their emotions and subsequent actions.

Adolescence, characterized by rapid cognitive, emotional, and social

development, represents a critical period during which cognitive restructuring interventions can have a profound impact on shaping behavioral outcomes. Weisz, J. R., & Kazdin, A. E. (2017). During this developmental stage, adolescents are particularly susceptible to cognitive biases, such as faulty attributions, cognitive distortions, and irrational beliefs, which may predispose them to engage in delinquent acts. Therefore, interventions aimed at promoting cognitive restructuring hold significant promise for preventing and reducing delinquent behavior among adolescents.

### **Delinquent Behaviour**

Delinquency is a habit of committing criminal offenses by an adolescent or young person and can be held liable for his/her criminal acts. Clinically, it is described as persistent manners of antisocial behavior or conduct by a child/adolescent repeatedly denies following social rules and commits violent aggressive acts against the law and socially unacceptable. The word delinquency is derived from the Latin word "delinquere" which described as "de" means "away" and "linquere" as "to leave or to abandon." Minors who are involved in any kind of offense such as violence, gambling, sexual offenses, rape, bullying, stealing, burglary, murder, and other kinds of anti-social behaviors are known as delinquent behavior. Santrock (2002) defined "an adolescent who breaks the law or engages in any criminal behavior which is considered as illegal is called juvenile delinquent." The developmental perspective of delinquent behavior provides valuable insights into the trajectory of antisocial conduct over the lifespan, particularly during the critical transition from

childhood to adolescence and into adulthood. Researchers have long been intrigued by the patterns and shifts in delinquent behavior across different developmental stages, seeking to understand the underlying mechanisms driving these changes.

As noted by Deković et al. (2004), there is a consensus within the literature that delinquent behavior tends to escalate during the transition from childhood to adolescence. This developmental period is characterized by numerous biological, psychological, and social changes, including hormonal fluctuations, increased autonomy-seeking, identity exploration, peer influence, and changes in social roles and expectations. These factors interact in complex ways, creating fertile ground for the emergence and intensification of delinquent behavior among adolescents. During adolescence, individuals are more susceptible to external influences and peer pressure, as they strive for acceptance and belonging within their peer groups. Experimentation with risky behaviors, defiance of authority, and sensation-seeking tendencies are common features of adolescent development, contributing to the uptick in delinquent acts observed during this period. Moreover, cognitive and emotional immaturity may impair adolescents' ability to foresee the consequences of their actions, leading to impulsive and reckless behaviors.

### **Risk factors affecting delinquent Behavior**

Studies identify that multiple risk factors are responsible for delinquent behavior categorized as individual, parental, family, community, society, schools/educational, financial, mental as well as psychological factors of the individual and the family. Adolescents

involve themselves in various anti-social activities to fulfill their basic needs. Basically, “delinquency” is just a recreational activity for earning money. These risk factors differ from person to person during the early childhood period and very crucial because children, who are involved in any kind of deviant activity at an early stage, have a higher chance to adopt delinquent tendencies chronically. (Sage Publication. 2014) adolescents delinquency is caused by a wide range of factors, such as conflicts in the family, lack of proper family control, residential environmental effects, and movie influence, along with other factors are responsible for delinquent behavior. (Haveripet, 2013). Family and environmental factors, namely restrictive behaviors, improper supervision, negligence, criminal activities of parents, improper motivation by peers, fear of peer rejection, poverty, illiteracy, poor educational performance at school, lack of moral education may turn the individual personality into delinquents. Moreover, in the environment, deteriorated neighborhood, direct exposure to violence/fighting (or exposure to violence through media), violence-based movies are considered major risk factors.[Ahmed & Murtaza, 2016] In India, a higher level of permissive parenting in low-income families had so many family members and due to economic conditions, the adolescents had pressure to search various income sources to sustain the family, and it has affected parental behavior toward adolescents.(Moitra, Mukherjee, & Chatterjee . 2018) The children who belong to the lower middle-socio-economical class and are rejected by society showed more aggressive behavior.(Bhatti AG. 2013).

Adolescents exhibiting delinquency often perceive the world as hostile and menacing (Evans, 2012). Their friends and family members experience distress due to their delinquent actions, further compounded by the absence of remorse or guilt (Evans, 2012). Given the root causes of delinquent behavior, it becomes evident that such adolescents not only harm themselves but also inflict harm on others. Despite reporting cases of adolescent delinquency to juvenile courts, detention facilities, or correctional centers, these measures alone prove insufficient in rectifying delinquent behavior. To address this issue, various psychological interventions, including cognitive restructuring, thought-stopping, self-management, reinforcement, punishment, modeling, and family therapy, have been implemented by professional counselors and psychologists to treat or mitigate delinquency (Obalowo, 2004; Edelson, 2004; Aderanti & Hassan, 2011).

### **Cognitive Restructuring**

Cognitive restructuring, often referred to as cognitive reframing or cognitive restructuring therapy, is a psychological technique that focuses on changing an individual's negative or distorted thought patterns and beliefs. These distorted thoughts, often referred to as cognitive distortions, can contribute to emotional distress and problematic behavior. The core idea behind cognitive restructuring is that by identifying and modifying these negative thought patterns, individuals can improve their emotional well-being and their responses to various situations. Cognitive restructuring is also a type of therapeutic technique, which refutes

ones irrational ideas and replaces them with rational ones.

DiBartolo, Frost, Dixon and Almodorar (2001), defined Cognitive restructuring as “employing self-statements, arguments and disputations to make the client see irrationality in his or her behaviour and to be able to devise positive alternative ways to such irrationality in case the urge arises in the future”. Mcmulin (2005) affirms that, human beings are generally rational, but that they can develop irrational beliefs and neurotic behaviour as a result of biological and social forces, through imitation of what people around them regard as acceptable societal norms, which sometimes are irrational thoughts. He further states that, as children develop into adolescence, they tend to accept unconsciously, these irrational beliefs. This invariably affects the psyche of the growing child, particularly adolescents who are prone to all sorts of forces, based on peer pressure and societal beliefs passed on to the children. Cognitive restructuring is a foundational component of cognitive-behavioral therapy (CBT), which was developed in the mid-20th century by psychologists Aaron T. Beck and Albert Ellis.

Cognitive restructuring serves as a valuable tool for children and adolescents, offering them alternative approaches to managing anger and resolving social conflicts. By engaging in cognitive restructuring techniques, individuals can enhance their emotion-regulation skills, enabling them to navigate challenging situations with greater composure and self-control. (Lochman JE, Boxmeyer CL, Kassing FL, Powell NP, Stromeyer SL. 2019) Moreover, cognitive restructuring facilitates the development of effective problem-solving abilities, empowering

children and adolescents to address interpersonal conflicts and challenges more constructively. Through this process, individuals gain insight into their thought patterns and learn to challenge and replace negative or maladaptive beliefs with more adaptive and constructive ones. Ultimately, cognitive restructuring equips children and adolescents with the necessary skills to navigate social interactions more effectively, fostering healthier relationships and promoting overall emotional well-being. (Matthys W, Lochman JE. 2017).

Cognitive restructuring places a strong emphasis on employing targeted cognitive techniques aimed at inducing shifts in thinking patterns that ultimately lead to modifications in behavior. (Busari AO, Adejumobi. 2002). This approach recognizes the intricate interplay between cognition and behavior, acknowledging that altering one's thought processes can profoundly influence subsequent actions and reactions. Through cognitive restructuring, individuals learn to identify and challenge negative or distorted thought patterns that contribute to maladaptive behaviors. By replacing these unhelpful cognitive schemas with more rational, balanced, and constructive ones, individuals can effectively alter their behavioral responses to various stimuli and situations. This process involves fostering awareness of automatic thoughts, examining underlying assumptions and beliefs, and actively reinterpreting situations in a more adaptive light. By harnessing the power of cognition to drive behavioral change, cognitive restructuring offers a systematic and evidence-based approach to promoting personal growth, emotional resilience, and positive

behavioral outcomes. (Zinbarg RE, Mashal NM, Black DA, Flückiger C. 2010).

### **Statement of problem**

Numerous rapid and tumultuous changes in modern life have thrust adolescents into a realm fraught with challenges and decisions, many of which lie beyond the control of both adolescents and their parents. This has markedly transformed the experience of growing up today compared to ancient times. Oniyama & Oniyama (2001) observed that adolescents grapple with social, emotional, and psychological issues, often stemming from parental neglect and the adolescents' yearning for independence, which they struggle to attain. When parents or caregivers fail to adapt to the evolving needs of adolescents, frustration and discontent ensue, leading to the development of maladaptive behaviors that adversely affect both the individuals and society at large. In childhood, children rely on their parents for guidance and protection due to their limited experience and compliant nature. However, as adolescence dawns, these dynamics shift, with adolescents asserting their desire for autonomy while encountering resistance from parents. This clash of expectations often manifests as disobedience, arguments, conflicts, and rebellion among adolescents, particularly when they perceive attempts to impose adult control upon them.

Adolescents exhibiting delinquent behavior partake in various forms of deviant conduct, including aggression, peer victimization, physical altercations, bullying, intimidation, vandalism, theft, absenteeism, substance misuse, sexual assault, smoking, tardiness, defiance of rules, and destruction of school facilities, among

other transgressions. Additionally, there has been a documented rise in the prevalence of delinquent behavior among Nigerian adolescents over the past three years, evidenced by an increase in the frequency of recorded delinquent offenses and the number of adolescents implicated in such incidents.

Adolescents exhibiting delinquent behavior have detrimental impacts not only on themselves, their families, and educational institutions but also on society as a whole. The escalation in delinquent behavior among adolescents has precipitated a surge in disorderliness, destruction of property and lives, armed robbery, terrorist acts, kidnappings, oil theft, and various other societal ills. In response to these challenges, the Nigerian government has established Special Correctional Centers (formerly known as Remand Homes), Approved Schools, and Juvenile Courts. However, mere placement in these facilities is insufficient to mitigate or eradicate delinquent behavior. To effectively address the root causes of delinquency among adolescents, it is imperative to provide them with counseling interventions aimed at fostering personal responsibility, academic achievement, and positive citizenship. Various behavior modification techniques, including cognitive restructuring, self-management strategies, and token economy systems, have been employed to address issues such as defiance, disorderliness, depression, anxiety, gambling, attention deficit hyperactivity disorder, and other disruptive behaviors among delinquent adolescents. These interventions aim to facilitate the rehabilitation of delinquent adolescents, enabling them to become productive members of society, responsible individuals to their families, and

exemplary students within educational settings, thereby contributing positively to the nation as a whole.

Given the ongoing prevalence of delinquent behavior among adolescents, this study aims to explore the effectiveness of cognitive restructuring in reforming and rehabilitating adolescents involved in deviant or delinquent behavior.

### **Purpose of the Study**

- To investigate the impact of cognitive restructuring interventions on overall delinquent behavior among adolescents, as measured by changes in the Cognitive Flexibility Index (CFI) scores.
- To examine whether higher scores on the CFI will be associated with a decrease in non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions.
- To establish whether effectiveness of cognitive restructuring in reducing delinquent behavior will vary based on the gender of the adolescent participants.

### **Significance of the Study**

The understanding and exploration of cognitive restructuring can serve as a valuable resource for clinicians, educators, and community members, enabling them to comprehend the origins and proliferation of delinquency and thereby devise prevention, intervention, and treatment initiatives. This research offers practical benefits for both practicing and emerging counseling professionals and individuals in helping professions by:

Enhancing the efficacy of interventions for treating delinquency: Through this study, psychologists and counselors gain greater insight into the

most effective approaches for addressing delinquency. For instance, if cognitive restructuring proves to be effective, practitioners can utilize this intervention with clients exhibiting delinquent behavior. Increasing awareness among counseling professionals, psychologists, parents, and other stakeholders: This research sheds light on potential factors contributing to delinquency, particularly among adolescents, and offers strategies to address such behaviors. This knowledge equips individuals in various fields to combat delinquent behavior effectively, fostering the development of future leaders for the nation. Empowering counselors to assist adolescents in building self-esteem and acquiring healthy behaviors: The findings of this study are expected to equip counselors with the tools to help adolescents develop self-esteem, acquire new skills, and adopt positive behaviors, thereby contributing to their overall well-being and future success.

Psychologists have the opportunity to develop preventive strategies for parents or caregivers aimed at reducing and potentially eliminating deviant behavior among adolescents in our communities. Through counseling sessions, awareness campaigns, seminars, presentations, and workshops, psychologists and counselors can educate the general public about the dangers of delinquency, encourage parents and caregivers to adopt effective parenting styles, serve as positive role models, establish strong relationships with their children, particularly as they navigate the challenges of adolescence, and promptly address any maladaptive behaviors exhibited by their children.

Educators across various levels of schooling will also derive benefits from this research. It will deepen their

understanding of how to instill discipline in students, model appropriate behavior, and recognize signs of delinquency such as aggression, truancy, rule violations, emotional disturbances, and significant distress, enabling them to intervene effectively. Social workers can leverage the findings of this study to provide valuable support to individuals, parents, and families seeking assistance.

Furthermore, government entities at all levels stand to gain from this research. It can inform the formulation of policies aimed at promoting positive behavior in society, ensuring the provision of necessary resources and facilities for the populace, and implementing appropriate sanctions for behavioral infractions.

The research will have a profound effect on adolescents involved in delinquent behavior by helping them comprehend the underlying reasons for their actions and intentionally reshape their thought processes towards more positive behavioral patterns. This cognitive restructuring will facilitate the correction of their delinquent behavior, enabling them to become productive members of society and reducing the incidence of wrongdoing in their communities. Additionally, the study holds significance for future participants who may experience delinquency, as they will benefit from exposure to the intervention techniques developed through this research.

### **Hypotheses**

1. Adolescents who undergo cognitive restructuring interventions, as measured by the Cognitive Flexibility Index (CFI), will demonstrate a significant decrease in overall delinquent behavior.
2. There will be an association between higher scores on the

Cognitive Flexibility Index (CFI) and a decrease in non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions.

3. There will be difference in the effectiveness of cognitive restructuring interventions in reducing delinquent behavior based on the gender of the adolescent participants.

### **Research Methods**

#### **Method**

This section provides an in-depth description of the methodology employed in this study, outlining the data collection procedures and the statistical techniques utilized for analysis. The intention is to maintain transparency and accuracy in the research by thoroughly elucidating the process of data gathering and analysis. This thorough examination of the methodology is essential for validating and ensuring the reliability of the research outcomes, thereby enhancing the credibility of the research findings.

#### **Research Design**

This research utilized a structured methodology to identify the variables associated with the research objectives and how they are interconnected. Hence, a survey method was employed, collecting data from a significant sample through the distribution of questionnaires.

#### **Variables**

The dependent variable in this study is "Delinquent Behavior among adolescents" while the independent variables is "cognitive restructuring", as it is the factor that is being manipulated or controlled to observe its effect on the dependent variable.

### **Participants for the study**

The population of this study consisted of adolescent living in Ekiti State. The researcher conveniently selected two hundred and ninety nine (299) students as sample. They comprised of 188 male and 111 female undergraduate students. The participants' selection cut across all levels (from 100-500 level).

### **Research Instrument**

The study, which investigates effect of cognitive restructuring on delinquent behavior among adolescents employed a Standardized questionnaire. This questionnaire contained 37-items divided into three sections labelled as section A through C. Section A gathered demographic information such as Age, gender and religion. Section B consist of 20 items measuring cognitive restructuring while Section C include 17 items assessing delinquent behavior. To ensure reliability and validity in data collection, the study utilized standardized instruments, such as "The cognitive flexibility inventory", and The Self-Report Delinquency Scale.

### **The Cognitive Flexibility Inventory**

The cognitive flexibility inventory (CFI) was developed by Dennis and Vander Wal, 2010 it is a brief self-report that consist of 20 items measuring the type of cognitive flexibility necessary for individuals to successfully challenge and replace maladaptive thoughts with more balanced and adaptive thinking. The scale 20 items was rated on 7-likert format ranging from "Strongly disagree (1) ..... to Strongly agree (7)" It was designed to measure three aspects of cognitive flexibility: (a) the tendency to perceive difficult situations as controllable; (b) the ability to perceive

multiple alternative explanations for life occurrences and human behavior; and (c) the ability to generate multiple alternative solutions to difficult situations. The CFI has two subscale alternative and control subscales, the scale has proven to be psychometrically sound in diverse samples, and to have good internal and test re-test reliability and robust factorial validity.

Validity:

The Cognitive Flexibility Inventory (CFI) is a valid measure of cognitive restructuring, assessing an individual's ability to challenge and replace maladaptive thoughts with more balanced and adaptive thinking. The CFI's factorial validity supports its ability to capture the cognitive flexibility necessary for effective cognitive restructuring.

Reliability:

The CFI is a reliable measure of cognitive restructuring, with high internal consistency (alpha coefficient of 0.91) and test-retest reliability. This indicates that the CFI consistently measures cognitive flexibility, a crucial aspect of cognitive restructuring.

Scoring Format:

- The CFI consists of 20 items, each rated on a 7-point Likert scale (1-7)
- All items are directly scored, with higher ratings indicating greater cognitive flexibility
- Total score is calculated by adding up the ratings for all 20 items, ranging from 20 to 140
- Higher total scores indicate greater cognitive flexibility and ability to engage in effective cognitive restructuring

### **The Self-Report Delinquency Scale.**

The delinquency scale in the Add Health Study (Add Health Self-Report Delinquency [AHSRD]) is used to evaluate delinquent or criminal behavior

in the last 12 months (Thomas, 2015). The 17-item version includes items evaluating aggressive and violent behavior (7 items) and nonviolent delinquency (10 items) and, for both dimensions, the items range from high to low levels of severity. For example, items capturing nonviolent delinquency range from running away from home to stealing something worth more than \$50 and items included in the aggressive and violent dimension range from getting into a physical fight to shooting or stabbing someone (Thomas, 2015; Vazsonyi, Cleveland, & Wiebe, 2006). Over the years, several studies have been conducted using the AHSRD, suggesting good convergent and divergent validity. Studies have shown direct correlations between different dimensions of the scale (violent/nonviolent dimensions, general delinquency) and affiliation to delinquent peers.

### **Validity**

The SRDS demonstrates strong convergent validity, as evidenced by its significant positive correlations with measures of youth delinquency, dark triad of personality, sensation seeking, and self-control. This suggests that the SRDS is effectively capturing the construct of delinquent behavior and is related to other measures of similar constructs, providing support for its validity. The moderate to high correlations with these measures indicate that the SRDS is tapping into the same underlying constructs, further establishing its convergent validity. This finding is consistent with previous research using self-reported delinquency measures, providing additional support for the SRDS as a valid tool for assessing delinquent behavior.

### **Reliability**

The SRDS demonstrates strong internal consistency reliability, with Cronbach's alpha and omega coefficients exceeding 0.70 for the total scale and its factors. This indicates that the items on the scale are highly correlated with each other and are measuring the same underlying construct. Additionally, the moderate to high Item-Total Correlations (ITCs) and Corrected Item-Total Correlations (CITCs) suggest that each item is contributing to the overall score and is consistent with the other items on the scale. These findings provide evidence of the SRDS's reliability and suggest that it is a consistent and stable measure of delinquent behavior. This is consistent with previous research using self-reported delinquency measures, providing additional support for the SRDS as a reliable tool for assessing delinquent behavior.

### **Scoring**

The scale was scored by adding the 10 items of the nonviolent factor and the 7 items of the violent factor on a 4-point ordinal scale (ranging from None = 0 to Five or more times = 3). All items on the scale are directly scored, meaning that each item is scored based on the respondent's answer without any recoding or transformation. Higher scores indicate higher levels of juvenile delinquency. This allows for a clear and straightforward calculation of the total score, providing a comprehensive measure of juvenile delinquency.

### **Procedures**

The sampling technique used for sample selection in this research is the convenient sampling technique. Two hundred and fifty (300) questionnaires were personally administered to participants after they have been fully

informed of the purpose of the questionnaire and their informed consent sought and obtained. The copies of questionnaire were also personally retrieved by the researcher and respondents were appreciated for their participation in the study. Out of the 300 copies of questionnaire administered, only 299 were retrieved and only two hundred and ninety four (299) were usable for analysis because one was not filled appropriately.

**Method of Data Analysis**

The collected data was analyzed using descriptive statistics, including simple percentages, as well as inferential statistics. The analysis was conducted using the Social Statistical Package for Social Sciences (SPSS).

**Results**

**Demographic characteristics of the respondents**

**Table 1: Frequency table showing the demographic details of the respondents**

Items	N	%
Sex		
Male	188	62.9

**Table 2 Pearson Product Moment Correlation Result**

Variables	Overall_delinquent_behaviour	Non_violent_delinquent_behaviour	Cognitive_Restructuring
Overall_delinquent_behaviour	1		
Non_violent_delinquent_behaviour	.012	1	
Cognitive_Restructuring.	.558	.178	1

N= 299

Presented in table 4.2 above, a positive relationship exists between all the predictors and outcome variables of the study.

**Table 3 Regression Summary table showing the impact of cognitive restructuring on the overall delinquent behavior among adolescents.**

	Female	111	37.1
<b>Age Group</b>	16-20	209	69.9
	21-25	73	24.4
	26-30	15	5.0
	31-35	2	.7
<b>Religion</b>	Christianity	191	63.9
	Islamic	90	30.1
	Traditional	18	6.0

Table 1 indicated that (62.9%) of the respondents are male while the remaining (37.1%) are female. This implies that most of the respondents are males. Also, 69.9% of the respondents are within the age bracket of 16 – 20 years, (24.4%) 21-25 years, (5.0%) 26-30 while (7%) are within the age bracket of 31-35 years. This indicated that most of respondents are adolescent as they are within the age bracket of 16-20 years. For religion, 63.9% of the respondents are Christian, 30.1% of the respondents are Islamic while 6% of the respondents are traditional.

**2 Pearson Product Moment Correlation Analysis**

This statistical analysis instrument is adopted to unveil the relationship between the dependents and independent variables.

**3 Linear Regression Analysis**

This analysis method is adopted to disclose the significant impact of the independent variable on the dependent variables.

	B	Std. Error	t	Sig.
(Constant)	29.398	2.226997	2.657	.008
Cognitive_Flexibility_Index	-.2242	.036042	6.0622	.003

R- 0.808, R-Square 0.653, F - 429.801, Sig. 0.000

There is a significant negative impact of cognitive Restructuring on the overall delinquent behavior among adolescents.

**Table 4 Regression Summary table showing the implication of higher scores on cognitive flexibility index (CFI) on non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions.**

	B	Std. Error	t	Sig.
(Constant)	27.122	1.5238	17.7997	.000
Self-identity behavior	.361	.0018	1.6287	.005

R- 0.167, R-Square 0.134, F - 12.65261, Sig. 0.004761

Higher scores on cognitive flexibility index (CFI) has a positive significant influence on non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions.

#### 4 Independent Sample T-test

**Table 5: Summary of t-test for independent samples showing the difference in the effectiveness of cognitive restructuring interventions in reducing delinquent behavior based on the gender of adolescent participants.**

	Gender	N	Mean	SD	df	t	P
Cognitive Restructuring Interventions	Male	188	34.6667	14.6601	297	-0.849	>.05
	Female	111	36.1689	12.7019			

Results on Table 4.5 above shows that male adolescent participants ( $X = 34.6667$ ) were not significantly different in the effectiveness of cognitive restructuring interventions in reducing delinquent behavior compared to female adolescent participants ( $X = 36.1689$ ), ( $t = -0.849$ ,  $df = 242$ ,  $p >.05$ ). The result implies that there is no significant gender differences in the effectiveness of cognitive restructuring interventions in reducing delinquent behavior.

#### Discussion of Findings

This study examine the role of cognitive restructuring on Adolescent delinquent behavior.

Hypothesis one reveals a significant negative impact of cognitive restructuring on the overall delinquent

behavior among adolescents. This suggests that interventions utilizing cognitive restructuring techniques are associated with a reduction in delinquent behavior. This aligns with the findings of National Institute of Justice (2010) which emphasized the effectiveness of Cognitive restructuring in criminal justice settings, noting that cognitive restructuring techniques are critical in reducing criminal behavior by changing offenders' thought patterns and promoting more rational decision-making. Also Contrary to this research findings, a study conducted by Dodge, K. A., & Lansford, J. E. (2008). Found a contradictory result In their research, Dodge and Lansford examined various interventions, including cognitive

restructuring, and noted that under certain conditions, such interventions might not significantly reduce delinquent behavior. They found that in some contexts, aggregating deviant adolescents together could even exacerbate delinquent tendencies due to "deviancy training," where adolescents reinforce each other's deviant behaviors. This finding suggests that the effectiveness of cognitive restructuring interventions might be context-dependent and could vary based on how the interventions are implemented and the characteristics of the participants.

Hypothesis two states that there will be an association between higher scores on the Cognitive Flexibility Index (CFI) and a decrease in non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions. In this research it was discovered that higher scores on Cognitive Flexibility Index (CFI) has a positive significant influence on non-violent delinquent behavior among adolescents who receive cognitive restructuring interventions, this is in line with the findings of Kazdin's A. E. (1987), who emphasized the pivotal role of cognitive restructuring in addressing maladaptive thought patterns and promoting cognitive flexibility, ultimately leading to improvements in behavior among adolescents. Kazdin's work underscores the importance of this research findings, highlighting the importance of cognitive flexibility as a mechanism through which cognitive restructuring interventions can effectively mitigate delinquent behavior among the Adolescent. Also the findings of Mark W. Lipsey, Nana A. Landenberger, Sandra J. Wilson (2007), meta-analysis revealed compelling evidence supporting the inclusion of cognitive restructuring components in

treatment programs for juvenile offenders. Specifically, they observed that cognitive restructuring interventions, when integrated into broader cognitive-behavioral treatment modalities, were associated with notable reductions in recidivism rates and improvements in behavioral outcomes among participants. This notable discovery highlights the crucial importance of cognitive restructuring techniques in modifying maladaptive thought patterns and promoting more adaptive cognitive processes among juvenile offenders. By challenging distorted thinking and promoting cognitive flexibility, cognitive restructuring interventions equip young offenders with the cognitive skills necessary to effectively navigate social situations and make more informed and responsible decisions.

Hypothesis three stated that there is no significant gender differences in the effectiveness of cognitive restructuring interventions in reducing delinquent behavior. This implies that there is no difference between males and females in how effective cognitive restructuring interventions are in reducing delinquent behavior. This findings corroborate with the findings of Rothman, E. F., Decker, M. R., Bair-Merritt, M., & Bazzi, A. M. (2019). Their study reviewed multiple interventions aimed at reducing delinquent behavior and found no significant gender differences in their effectiveness. It suggests that cognitive restructuring and other similar interventions work equally well for both male and female participants.

Also the research findings contradict with the findings of Fagan, A. A., & Lindsey, A. M. (2014). The scholars provides a systematic review of experimental evaluations of gender

differences in delinquency prevention programs. This systematic review examined gender differences in the effectiveness of various delinquency prevention programs, including cognitive restructuring interventions. The findings indicate that while some programs showed similar effects for both genders, there were instances where programs were more effective for one gender over the other. Specifically, some cognitive-behavioral programs were found to have more sustained effects for males compared to females. This suggests that gender-specific factors may influence the outcomes of these interventions, challenging the idea that there are no significant gender differences in their effectiveness.

### Conclusion

This study investigated the role of cognitive restructuring in Delinquent Behaviour among adolescents in Ekiti state, Nigeria. It has been observed that Cognitive Restructuring is very effective in the treatment of delinquent behaviour. The adolescents are peculiar individuals, as they stand midway between childhood and adulthood; hence they are not liable when involved in delinquent behaviour. It is therefore, the responsibility of the parents schools and government at all levels (local, state and federal) to play their expected roles to promote good conduct in adolescents. This is more so when we remember that they are the future of the society.

From the findings of this study, it can be concluded that the participants that received cognitive restructuring therapy often performed better in delinquent behaviour.

### Recommendations

From the study, the following recommendations are proffered based on research findings:

1. Cognitive restructuring interventions should be re-evaluated and potentially modified to address the negative impact on overall delinquent behavior among adolescents.
2. Cognitive flexibility training should be incorporated into cognitive restructuring interventions to enhance their effectiveness in reducing non-violent delinquent behavior among adolescents.
3. Cognitive restructuring interventions should be designed to be gender-neutral, as no significant gender differences were found in their effectiveness.
4. Future research should investigate the underlying mechanisms of cognitive restructuring's negative impact on delinquent behavior and explore alternative interventions that promote positive behavioral change among adolescents.
5. Practitioners and mental health professionals working with adolescent populations should consider the potential unintended consequences of cognitive restructuring and incorporate cognitive flexibility training into their interventions to promote more effective and sustainable behavioral change.

By considering these recommendations, we can work towards developing more effective interventions that support the well-being and positive development of adolescents.

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