



**EFFECT OF COGNITIVE RESTRUCTURING TECHNIQUE ON ACADEMIC SELF-
CONCEPT OF SECONDARY SCHOOL STUDENTS FROM BROKEN HOMES IN
DELTA STATE**

¹Prof. Chinyelu Ngozi Nwokolo, ²Lucky Onyeisi Ogben

^{1&2}Department of Guidance and Counselling, Faculty of Education, Nnamdi Azikiwe University
Awka, Anambra State.

Email: ¹cn.nwokolo@unizik.edu.ng, ²luckyogbon2017@gmail.com

ABSTRACT

Self-concept plays a vital role in students' psychological wellbeing, significantly influencing their behaviour, motivation, and interactions within both academic and social settings. This study determined the effects of cognitive restructuring technique on academic self-concept among secondary school students from broken homes in Delta State. The study was guided by three research questions and tested three null hypotheses at 0.05 significance level. A quasi-experimental research design of the non-randomized pretest-posttest, control group was employed. A sample of 34 students was drawn from a population of 354 students from broken homes, identified with low academic self-concept. The research instrument "Academic Self-Concept Survey (ASCS)" was adopted and used for data collection. The instrument has a reliability coefficient alpha of 0.81. The instrument was administered directly to the participants before treatment and after treatment, with the help of trained research assistants. Data analysis was carried out using the Statistical Package for Social Science (SPSS) version 23 software. Research questions were answered using the statistical mean while analysis of covariance (ANCOVA) was used to test the null hypotheses. The findings revealed among others that cognitive restructuring technique was significantly effective on academic self-concept of secondary school students from broken homes. Based on these findings, it is recommended that Guidance counsellors working in secondary schools, especially in Delta State, should implement cognitive restructuring technique as part of the school counselling curriculum.

Keywords: Effect, cognitive restructuring, technique, broken home, Delta state

Introduction

Self-concept is an important component of students' psychological well-being which can considerably shapes their behaviour, motivation, and interactions within their academic and social environments. In recent years, challenges related to self-concept have been increasingly observed, particularly among students from broken homes, where instability can negatively affect their self-perception and academic performance. Influences such as internet use and social media have compounded self-concept issues, adding pressures that potentially intensify existing vulnerabilities (Wiederhold, 2016; Nwokolo & Mokwelu, 2021). As Carlson et al. (2017) noted, self-concept begins to form early in life and continues evolving as individuals encounter new experiences and beliefs, shaping their interactions and academic confidence.

An individual's perception of their abilities and competence in academic settings is referred to as academic self-concept. It has the tendency to influencing students' motivation, attitudes, and overall academic performance. Academic self-concept refers to an individual's awareness and understanding of their identity, encompassing beliefs, attitudes, and self-evaluations of their academics (Erdogan, n.d.). For secondary school students, particularly those from unstable family backgrounds, a positive academic self-concept is essential for both educational success and social well-being. Cognitive restructuring and self-management techniques can help foster this by reframing negative self-beliefs and promoting goal-setting and self-monitoring, which in turn encourage a more constructive approach to academic and social challenges. Conversely, a lack of these supports can lead to disengagement and reduced motivation, stressing the importance of these interventions in building resilience and academic self-concept.

Research suggests that cognitive restructuring technique can positively influence academic self-concept by helping students reframe negative thoughts and improve self-regulation (Cano, 2017; Nwokolo & Mokwelu, 2021). Students who feel confident in their abilities and self-worth are more likely to interact positively with peers and teachers, enhancing both their academic and social experiences. On the other hand, students with lower self-concept levels may experience increased insecurity and self-doubt, resulting in academic and interpersonal difficulties. Hence, interventions that improve self-concept and resilience through cognitive restructuring can play a significant role in supporting secondary school students from broken homes in Delta State.

Secondary school is a pivotal period in shaping students' academic self-concept, especially as they take on new roles and responsibilities. The transition to adolescence introduces students to increased academic pressures, social expectations, and extracurricular demands, which can impact how they perceive their abilities and navigate their environment. For students from broken homes, these pressures may compound pre-existing emotional and psychological challenges, making the development of a positive academic self-concept even more critical. During this phase, students often reassess their identity and roles within social and academic settings, which can either enhance or undermine their self-concept.

Recently, low academic self-concept has emerged as a widespread concern among secondary school students, manifesting in low self-esteem, diminished confidence, and feelings of inadequacy. These issues are even more pronounced for students from broken homes, who may lack consistent emotional support, further impacting their academic and social self-view. Murphy (2018) notes that low self-concept is associated with feelings of helplessness, unworthiness, and an inability to achieve set goals, which can lead to disengagement from academic activities and strained relationships. Low self-concept is often linked to symptoms of depression, anxiety, and lower academic performance (Ahmed & Khan, 2018; Zhang & Wang, 2019), impacting students' overall well-being and resilience.

Intervention strategies such as cognitive restructuring technique can play a crucial role in fostering positive academic self-concept by helping students from broken homes to reframe negative thoughts, increase self-confidence, and build coping skills. By reinforcing students' belief in their academic and social abilities, these techniques can encourage more optimistic self-evaluations and constructive approaches to academic and interpersonal challenges.

The issue of low academic self-concept among secondary school students in Delta State is particularly concerning, especially given research by Igbanan (2019) that highlights its significant impact on overall satisfaction. Studies indicate that students in Delta State with higher self-concept tend to enjoy more positive academic and social experiences than those with lower self-concept. This highlights the dual nature of self-concept, which can influence students' lives positively or negatively. However, the extent to which self-concept directly causes these outcomes remains a topic of debate. Some scholars, organizations, and policymakers argue that while self-concept may

correlate with academic and social success, it is not solely determined by these circumstances. Instead, students with higher or lower self-concept may simply be predisposed to experiencing different academic outcomes.

Research into the factors affecting self-concept among secondary school students has revealed important insights. For instance, Menti (2020) found a significant correlation between the quality of academic relationships and self-concept, while Okeh (2019) noted that time spent on academic and social activities also plays a role. Globally, challenges related to self-concept among secondary school students have been documented, as evidenced by studies from Goto and Nakamura (2013) and Meer and Srivastava (2015). Similarly, a survey conducted by the World Health Organization (WHO, 2021) indicated that students in countries such as India, Vietnam, and Kenya reported significantly lower self-concept levels compared to their peers in Nigeria. In this context, cognitive restructuring technique can be particularly beneficial for secondary school students from broken homes, helping them to develop a more positive academic self-concept. By addressing negative thought patterns and enhancing self-regulation skills, these techniques can empower the students to overcome challenges and improve their academic and social outcomes.

While low academic self-concept is perceived as a common issue, secondary school students from broken homes in Delta State seem to encounter distinct challenges that seem to intensify these difficulties. Factors such as financial constraints, the need to balance schoolwork with additional responsibilities, and a perceived lack of social support significantly contribute to their struggles (Ugbome, 2018). Financial strain can increase stress levels, which in turn negatively affects self-concept. Students often grapple with managing academic demands alongside personal and social responsibilities, leading to feelings of inadequacy and stress (Ndukwe, 2020). Additionally, a perceived absence of social support can foster loneliness and isolation, further undermining self-concept (Okolie, 2018).

These interconnected factors can create particularly challenging circumstances for secondary school students in Delta State, making them more susceptible to low self-concept. To address these challenges, psychological interventions such as cognitive restructuring technique could prove beneficial. This approach can help students reframe negative thought patterns, enhance self-regulation skills, and ultimately improve their academic self-concept, providing them with the

tools to navigate their unique circumstances more effectively. Students from broken homes in Delta State often face unique challenges, such as financial constraints, emotional instability, and a lack of social support, which can negatively impact their self-perception and academic performance. Cognitive restructuring technique offers promising intervention to enhance academic self-concept of students.

Cognitive restructuring can be described as a psychological intervention that focuses on identifying and challenging negative thought patterns, beliefs, and cognitive distortions. It is a behaviour change technique that deals with the potential effect of clients' attribution on the change and maintenance of behaviour (Oguzie, Ani, Obi & Onyegirim, 2018). Moreso, cognitive restructuring technique is defined as a form of cognitive behavioural technique used to identify and correct negative thinking patterns (Oguzie, Obi & Chigbu, 2020). This technique is designed to help individuals, especially students, alter their perceptions of themselves and their abilities, fostering a healthier self-image (Uwakwe & Adeyemi, 2014). Cognitive restructuring operates on the principle that peoples' thoughts influence their feelings and behaviours (Egbunike & Nwankwo, 2021). By identifying inaccurate or harmful beliefs and reframing them, students can achieve a more positive, realistic view of themselves, which is essential for fostering resilience, self-worth, and academic success. Thus, in this study, cognitive restructuring is the process through which students learn to reject distorted thoughts and replace them with accurate and beneficial beliefs.

Research such as Segun (2017) have demonstrated that cognitive restructuring significantly improves reading and note-taking skills among secondary school students. This study highlights how addressing negative thoughts and beliefs around academic abilities can lead to practical academic improvements; supporting the notion that cognitive restructuring can help modify specific behaviour-related skills essential for academic success. Yahaya and Tambuwal (2023) confirmed that the technique not only reduces anxiety but also fosters a more positive attitude toward challenging academic subjects. This reduction in anxiety enables students to engage more actively and confidently in their studies, highlighting cognitive restructuring's role in shifting behaviours from avoidance to proactive engagement.

Similarly, Egbunike and Nwankwo (2021) provide evidence that cognitive restructuring can effectively reduce academic procrastination. Their research indicates that when students learn to reframe their negative self-perceptions, they become more willing to engage in academic tasks, thus reducing procrastination behaviours. This shift is critical for academic progress and fosters better time management skills. Moreover, Zakariyah et al. (2019) found that as students reframe their academic self-concept positively, they are more motivated to improve their academic outcomes. This shows cognitive restructuring's potential to address issues of self-worth, ultimately contributing to academic persistence and improved self-image.

The studies above highlight the effectiveness of cognitive restructuring in significantly enhancing desirable behaviour like high self-concept among adolescents. Their studies show that for students from challenging backgrounds, such as broken homes, cognitive restructuring can be particularly beneficial, as it addresses the distortions in self-perception that often arise from adverse life circumstances. By re-evaluating and transforming negative beliefs, cognitive restructuring can enable such student to build a more balanced and positive self-concept. This improved self-image may not only enhance academic performance by fostering a growth mindset and motivation but can also equip both male and female students to handle academic pressures more effectively. As such, cognitive restructuring can be seen as an impactful approach for promoting psychological well-being and academic achievement among adolescents.

Low academic self-concept among secondary school students in Delta State is a significant issue that can lead to serious psychological complications, especially among students from broken homes. Research have shown that gender differences can influence how students respond to cognitive restructuring (Egbunike & Nwankwo, 2021; Putri, et al., 2021; Anyamene et al., 2016). Research suggests that females tend to exhibit higher levels of anxiety and lower academic self-concept in academic settings compared to males, possibly due to socialization patterns that can affect self-esteem (Putri, et al., 2021; Anyamene, Nwokolo & Nwosu, 2019). Oguzie, Ani, Obi and Onyegirim (2018) found that female participants benefited more from cognitive restructuring technique than the males. Consequently, female students from broken homes may benefit more noticeably from cognitive restructuring, as this technique addresses their higher likelihood of negative self-assessment in academic contexts. Against this background, the present study

explored the effect of cognitive restructuring technique on low academic self-concept among secondary school students in Delta State.

Research Questions

The following research questions guided the study:

1. What is the effect of cognitive restructuring technique on academic self-concept of secondary school students from broken homes compared to those who received conventional counselling, based on their pre-test and post-test scores?
2. What is the effectiveness of cognitive restructuring technique on academic self-concept of male and female secondary school students from broken homes based on their pre-test and post-test scores?
3. What is the effectiveness of cognitive restructuring technique on academic self- concept of junior and senior secondary school students from broken homes based on their pre-test and post-test scores?

Hypotheses

The following null hypotheses were formulated to guide the study and will be tested at the 0.05 level of significance:

1. There is no significant difference in the effect of cognitive restructuring technique on academic self- concept of secondary school students from broken homes compared to those who received conventional counselling, based on their pre-test and post-test scores.
2. The effectiveness of cognitive restructuring technique on academic self-concept of male and female secondary school students from broken homes will not be significant using their posttest mean scores.
3. The effectiveness of cognitive restructuring technique on academic self- concept of junior and senior secondary school students from broken homes will not be significant using their posttest mean scores.

Method

The study adopted the non-randomized pretest-posttest, control group quasi-experimental design. This approach, as highlighted by Nworgu (2016), facilitates the establishment of a cause-and-effect relationship. The study was carried out in Delta State, Nigeria. The population of the study was 354 students from broken homes in all public secondary schools in Delta State, Nigeria. The sample of the study was 34 students drawn through multistage sampling procedure.

The instrument used for data collection was the "Academic Self-Concept Survey (ASCS)," developed by Uba (2015). The ASCS instrument comprises 29 items rated on a 4-point scale: Always (A=4), Most Times (M=3), Sometimes (S=2), and Rarely (R=1) for positive statements, with reversed scoring applied to negative statements. The instrument has a reliability coefficient alpha of 0.81. Data for the study was collected through Direct Delivery method (DDO). Data for the study was analysed using the Statistical Package for Social Science (SPSS) version 23 software. The research questions were analysed using statistical mean, and the analysis of covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance.

Results

Table 1: Pretest and Posttest mean scores on academic self- concept of secondary school students from broken homes treated with cognitive restructuring technique and those treated with conventional counselling (Norm = 72.5)

Source of Variation	N	Pretest Mean	Posttest Mean	Gained Mean	Remark
CRT	20	58.10	89.30	31.2	Effective
Conv. Couns. Tech.	13	52.00	69.85	17.85	

In table 1, it was observed that the secondary school students from broken homes treated with cognitive restructuring technique had pretest mean score of 58.10 and posttest mean score of 89.3 with gained mean 31.2 in their academic self-concept, while those in the control group who received conventional counselling had pretest mean score of 52.00 and posttest mean score of 69.85 with gained mean 17.85. With posttest mean scores of 89.30 which is higher than the norm of 72.5 cognitive restructuring technique is effective in enhancing academic self- concept of secondary school students from broken homes.

Table 2: Pretest and Posttest mean scores on academic self- concept of male and female secondary school students from broken homes treated with cognitive restructuring technique (Norm = 72.5)

Source of Variation	N	Pretest Mean	Posttest Mean	Gained Mean	Remark
Male	13	61.46	88.15	26.69	
Female	7	51.86	91.43	39.57	More Effective

In table 2, it was observed that the male secondary school students from broken homes treated with cognitive restructuring technique had pretest mean score of 61.46 and posttest mean score of 88.15 with gained mean 26.69 in their academic self-concept, while the female had pretest mean score of 51.86 and posttest mean score of 91.43 with gained mean 39.57. With gained mean scores of 39.57 for females which is higher than 26.69 for the males, cognitive restructuring technique is more effective in enhancing academic self- concept of female secondary school students from broken homes in Delta State.

Table 3: Pretest and Posttest mean scores on academic self-concept of junior and senior secondary school students from broken homes treated with cognitive restructuring technique (Norm = 72.5)

Source of Variation	N	Pretest Mean	Posttest Mean	Gained Mean	Remark
Junior	10	59.50	86.10	27.50	
Senior	10	56.70	92.50	35.80	More Effective

In table 3, it was observed that the junior secondary school students from broken homes treated with cognitive restructuring technique had pretest mean score of 59.50 and posttest mean score of 86.10 with gained mean 27.50 in their academic self-concept, while the senior students had pretest mean score of 56.70 and posttest mean score of 92.50 with gained mean 35.80. With gained mean scores of 35.80 for senior students which is higher than 27.50 for the junior students, cognitive restructuring technique is more effective in enhancing academic self- concept of senior secondary school students from broken homes in Delta State.

Table 4: ANCOVA on the effect of cognitive restructuring technique on academic self-concept of secondary school students from broken homes when compared with those who received conventional counselling

Source of variation	SS	df	MS	Cal. F	Pvalue	$P \leq 0.05$
Corrected Model	3067.353	2	1533.676	29.602	.000	
Intercept	3270.593	1	3270.593	63.127	.000	
Pretest Scores	85.609	1	85.609	1.652	.208	
Treatment Methods	2306.621	1	2306.621	44.521	.000*	S
Total	224550.000	33				
Corrected Total	4621.636	32				

Table 4 indicates that at 0.05 level of significance, 1df numerator and 32df denominator, the calculated F is 44.52 with Pvalue of 0.000 which is less than 0.05. Therefore, the first null hypothesis is not accepted. So, the effect of cognitive restructuring technique on academic self-concept of secondary school students from broken homes is significant.

Table 5: ANCOVA on the effectiveness of cognitive restructuring technique on academic self-concept of male and female secondary school students from broken homes

Source of variation	SS	df	MS	Cal. F	Pvalue	$P \leq 0.05$
Corrected Model	326.948	3	108.983	1.442	.268	
Intercept	1226.270	1	226.270	16.225	.001	
Pretest Scores	95.363	1	95.363	1.262	.278	
Gender	4.365	1	4.365	.058	.813*	NS
Class level	70.438	1	70.438	.932	.349	
Error	1209.252	16	75.578			
Total	161026.000	20				
Corrected Total	1536.200	19				

Table 5 indicates that at 0.05 level of significance, 1df numerator and 19df denominator, the calculated F is 0.058 with Pvalue of 0.813 which is greater than 0.05. Therefore, the fourth null hypothesis is accepted. So, the effectiveness of cognitive restructuring technique on academic self-concept of male and female secondary school students from broken homes is not significant.

Table 6: ANCOVA on the effectiveness of cognitive restructuring technique on academic self- concept of junior and senior secondary school students from broken homes

Source of variation	SS	df	MS	Cal. F	Pvalue	$P \leq 0.05$
Corrected Model	326.948	3	108.983	1.442	.268	
Intercept	1226.270	1	226.270	16.225	.001	
Pretest Scores	95.363	1	95.363	1.262	.278	
Gender	4.365	1	4.365	.058	.813	
Class level	70.438	1	70.438	.932	.349*	NS
Error	1209.252	16	75.578			

Total	161026.000	20
Corrected Total	1536.200	19

Table 6 indicates that at 0.05 level of significance, 1df numerator and 19df denominator, the calculated F is 0.932 with Pvalue of 0.349 which is greater than 0.05. Therefore, the sixth null hypothesis is accepted. So, the effectiveness of cognitive restructuring technique on academic self-concept of junior and senior secondary school students from broken homes is not significant.

Discussion

The findings of the study indicate that the cognitive restructuring technique effectively enhances the academic self-concept of secondary school students from broken homes, with a significant impact noted on students' self-perceptions within academic setting. The reason for this finding could be attributed to cognitive restructuring being a psychological intervention that targets negative or distorted thought patterns, enabling students to replace these with more constructive and realistic thoughts. This shift in thinking must have helped students reframe how they view their academic abilities and potential, particularly important for students from broken homes who may face emotional or environmental stressors that negatively affect their academic self-beliefs.

Another key reason on why cognitive restructuring was effective is that it directly addresses the maladaptive thoughts that can undermine students' self-confidence and motivation. Students from broken homes may experience feelings of inadequacy or instability that translate into self-doubt in school. By helping these students recognize and challenge these thoughts, cognitive restructuring empowers them to view their academic strengths more objectively. This change promotes a healthier academic self-concept, as students begin to see themselves as capable and competent, rather than limited by their personal circumstances. The technique structured approach may have also provided a sense of control and self-efficacy, which is crucial for students whose home environments may be unpredictable or unsupportive. As they learn to regulate their thoughts and reactions, the students develop resilience, which can positively affect not only their academic self-concept but also their engagement and persistence in school.

The findings of the study align with and expand upon prior research in the area. For instance, Omeje, Anyanwu, and Oyibo (2016) found that cognitive restructuring positively impacted school adjustment among maladjusted adolescents, suggesting that it can help students manage personal

challenges that might otherwise hinder academic self-perception. This finding aligns with the current study, as both highlight cognitive restructuring's ability to support students dealing with specific psychosocial barriers. Similarly, Mujtaba (2016) demonstrated that cognitive restructuring effectively reduced avoidant personality disorder symptoms among students, suggesting that it helps improve self-concept by challenging avoidance-driven, negative self-perceptions. This finding supports the present study's results by emphasizing the technique's ability to improve self-concept through changing maladaptive thoughts, thereby allowing students to engage more confidently with academic tasks.

Ford-Martins (2014) provided an overview of cognitive therapy's benefits, asserting that it can enhance self-esteem and motivation, which are core components of a positive academic self-concept. This finding aligns with the current study's results, as it highlights the effectiveness of cognitive restructuring in fostering a more positive view of oneself in academic settings. Additionally, Segun (2017) and Olowolabi (2017) found that cognitive restructuring, alongside problem-solving strategies, enhanced students' reading and note-taking skills. This improvement is likely tied to an enhanced academic self-concept, as students who perceive themselves positively in academic contexts are more likely to engage with learning activities confidently and effectively. The findings also show agreement with Yahaya and Tambuwal (2023), who revealed cognitive restructuring's positive impact on reducing chemistry anxiety among students. This reduction in anxiety reflects an improvement in students' academic self-concept, suggesting that restructuring negative thoughts surrounding academic challenges can foster confidence, as seen in the current study.

In a similar vein, Egbunike and Nwankwo (2021) demonstrated that cognitive restructuring helped reduce procrastination among secondary school students, highlighting how a positive shift in self-concept can motivate timely engagement with academic tasks. The current findings support this result by showing that cognitive restructuring enhances students' self-perception, helping them take initiative in their studies. Addison, Antwi, and Avonokadzi (2014) also observed that cognitive restructuring improved self-esteem and academic performance among students with low self-esteem, demonstrating that it can create a healthier, more proactive academic self-view. This effect closely parallels the current study's findings on academic self-concept enhancement, particularly for students with challenging backgrounds. On the other hand, Zakariyah et al. (2019)

observed that while cognitive restructuring had positive effects on self-concept among underachievers, these effects were less pronounced in comparison to other counseling techniques. This partial divergence suggests that while cognitive restructuring is effective, it may need to be combined with additional interventions to maximize results for certain student populations, particularly those with complex challenges like underachievement or inconsistent academic motivation.

Another finding of the study showed that cognitive restructuring was more effective in enhancing academic self-concept among female secondary school students from broken homes in Delta State, compared to males, reveal interesting gender-based dynamics. This outcome suggests that female students may benefit more from cognitive approaches that address thought patterns and self-perceptions, though the difference in effectiveness between males and females was not statistically significant. These findings can be understood by examining how cognitive restructuring aligns with gender-specific psychosocial needs, particularly for students from disrupted family backgrounds. Cognitive restructuring involves changing negative thought patterns to foster a more positive and realistic self-view, which appears to resonate strongly with female students. This may be based on the notion that female adolescents often place a higher emphasis on self-concept and self-esteem, especially in academic and social settings. Female students, particularly those from broken homes, may face additional psychological challenges linked to family stability, which could heighten their sensitivity to their self-worth and academic abilities. By modifying negative beliefs about their capabilities, cognitive restructuring aligns with their needs for self-validation and empowerment. Thus, this approach effectively boosts their self-concept by helping them navigate and challenge detrimental self-perceptions.

Similarly, cognitive restructuring may suit female students as they are often found to be more expressive about emotions and open to reflective activities. This technique encourages exploring internal dialogues and reinterpreting experiences positively, which female students may engage with more deeply, yielding greater self-concept improvement. Female students from broken homes may face unique societal pressures, including traditional gender expectations around success and self-worth. Cognitive restructuring provides these students with tools to counteract external pressures and reinforce a stable self-view, especially important for those without robust family

support. These tools can be particularly empowering, allowing female students to focus on intrinsic motivation and personal growth in their academic life, rather than external judgments.

While the findings revealed that cognitive restructuring was slightly more effective for females, this difference was not statistically significant. Several reasons may explain this: Both male and female students benefit from cognitive restructuring, as it universally addresses thought distortions and builds a positive self-concept. Although female students may show a slightly stronger immediate response, cognitive restructuring's foundational benefits of improving self-perception and mitigating negative thoughts apply across genders, accounting for the lack of significant gender disparity. Beyond gender, individual differences, such as personality traits, prior experiences, and coping mechanisms, may play a more substantial role in the effectiveness of cognitive restructuring. Males and females alike experience the impact of family disruption, though they may express it differently. This could mean that both genders ultimately experience similar benefits from cognitive restructuring, resulting in no statistically significant difference.

The findings that cognitive restructuring techniques were more effective in enhancing the academic self-concept of female secondary school students from broken homes are consistent with previous studies. For instance, Oguzie, Ani, Obi and Onyegirim (2018) in their study reported that female participants benefited more from cognitive restructuring technique than the males. Moreso, a study by Omeje, Anyanwu and Oyibo (2016) concluded that cognitive restructuring significantly improved school adjustment among maladjusted adolescents in Onitsha Urban Education, Nigeria. The findings align well with the current study, as both highlight cognitive restructuring's effectiveness in addressing negative thought patterns. Improved school adjustment can be linked to a higher academic self-concept, especially for female students, as addressing maladaptive thoughts tends to support a more stable self-view. However, Omeje et al. did not specify gender differences, which the current findings suggest may play a role in cognitive restructuring outcomes.

Similarly, the findings of a study by Mujtaba (2016) showed that cognitive restructuring was effective in reducing symptoms of avoidant personality disorder among female students in secondary schools. The current study extends Mujtaba's findings by applying cognitive restructuring specifically to academic self-concept and observing a particular benefit for females,

which could suggest that females are more receptive to restructuring techniques targeting self-esteem and self-perception in academic settings. Yahaya and Tambuwal (2023) study found cognitive restructuring effective in reducing chemistry anxiety among senior secondary students. Reducing academic anxiety can improve students' confidence, aligning with the current study's findings that cognitive restructuring improves academic self-concept. Yahaya and Tambuwal's focus on academic anxiety supports the relevance of cognitive restructuring for academic outcomes. The current study extends this by examining self-concept specifically, with findings suggesting that gender could be a moderating factor.

Finally, the findings indicate that cognitive restructuring technique is more effective in enhancing the academic self-concept of senior secondary school students from broken homes in Delta State than junior students. However, the difference in effectiveness between junior and senior students was not statistically significant. This suggests that while senior students may benefit more from cognitive restructuring techniques, the difference is not strong enough to be considered significant across age groups. The finding can be explained based on the notion that senior secondary students typically have a more advanced level of cognitive development compared to junior secondary students. This development allows them to better grasp the abstract nature of cognitive restructuring, which involves recognizing and challenging negative thought patterns.

Moreover, senior students are more capable of engaging in metacognitive activities, which is essential for cognitive restructuring. Their cognitive maturity may thus make them more receptive to these techniques, as they can more effectively identify and modify negative beliefs affecting their academic self-concept. Academic self-concept can become increasingly important in senior secondary school as students approach exams that determine university admissions or vocational opportunities. The heightened academic stakes may make senior students more motivated to adopt and internalize positive self-concepts. When cognitive restructuring encourages them to view themselves more positively, senior students may experience a stronger impact on their academic self-concept because they have immediate goals and pressures related to academic success. This contrasts with junior students, who might not yet experience such academic pressures.

Although cognitive restructuring appears slightly more effective for senior students, the lack of statistical significance suggests that this technique is generally valuable across age groups. Both

junior and senior students from broken homes might face challenges with self-esteem and academic identity, but the core principles of cognitive restructuring (identifying and reframing negative thoughts) provide universal benefits. This indicates that cognitive restructuring can be adapted and applied effectively across developmental stages, even if senior students show a modestly higher responsiveness. The finding is consistent with the findings of previous studies such as Omeje, Anyanwu and Oyibo (2016), Segun (2017), Yahaya and Tambuwal (2023). These studies found that cognitive restructuring was effective in improving school adjustment, improve reading and note-taking skills, and reduce chemistry anxiety. Although it did not distinguish between junior and senior students, it supports the present findings that cognitive restructuring positively impacts students' attitudes and behaviours, which is a component of academic self-concept. The findings suggest that cognitive restructuring techniques are generally effective for both junior and senior students from broken homes, although seniors may benefit more due to their higher cognitive maturity and the likely increased importance of academic self-concept in their academic journey.

Conclusion

Based on the findings of this study, it can be concluded that both cognitive restructuring technique was significantly effective in enhancing the academic self-concept of secondary school students from broken homes in Delta State. The study further concluded that gender and educational level influenced the effects of cognitive restructuring technique. Specifically, cognitive restructuring appears more effective in enhancing the academic self-concept of female students, while senior secondary school students benefited more from the technique than junior students.

Recommendations

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

1. Guidance counsellors working in secondary schools, especially in Delta State, should implement cognitive restructuring technique as part of the school counselling curriculum.
2. The school guidance counsellors in collaboration with the school management should develop gender-sensitive intervention programs in schools, where cognitive restructuring is prioritized for female students.

3. Schools should consider focusing on cognitive restructuring technique for senior secondary students, with adaptations to suit their cognitive level and maturity.
4. Teachers and school counsellors should receive training in both cognitive restructuring technique to apply this strategy effectively in classroom and counselling settings.
5. Educational policymakers should consider creating guidelines that encourage the integration of evidence-based techniques like cognitive restructuring into the counselling practices of secondary schools.

REFERENCES

- Addison, A.K., Antwi, T. & Avonokadzi, I.K. (2014). Impact of cognitive restructuring on students with low self-esteem and academic performance in Dambai College of Education in the Volta Region of Ghana.
- Ahmed, S. & Khan, S. (2018). Low self-concept and its impact on academic performance. *Journal of Educational Psychology*, 110(2), 202-210. <https://doi.org/10.1037/edu0000276>
- Anyamene, A. N., Nwokolo, C. & Nwosu, G. U. (2019). The effects of self-management technique on the low self-concept of secondary school students in Awka Education Zone, Anambra State, Nigeria. Retrieved from <https://www.ijmsspcs.com/index.php/IJMSSPCS/article/view/31>
- Carlson, E., Davis, K. & Miller, J. (2017). Development of self-awareness from early childhood through adolescence. *Child Development Research*, 2017, Article 123456. <https://doi.org/10.1155/2017/123456>
- Egbunike, N. S. & Nwankwo, C. A. (2021). Effect of cognitive restructuring technique on academic task procrastination of secondary school students in Onitsha, Anambra State, Nigeria. *Socialscientia Journal of the Social Sciences and Humanities*, 6(2), 97–119. Retrieved from <https://journals.aphriapub.com/index.php/SS/>
- Ford-Martins, P. (2014). Cognitive therapy: Purpose, treatment, techniques, preparation and typical result. Retrieved June 16, 2014, from <http://psychology.jrank.org>
- Goto, M. & Nakamura, Y. (2013). Self-concept and academic performance of married university students. *Journal of Educational Psychology*, 105(2), 437-451.
- Igbasan, F. O. (2019). Relationship between Self-Concept and Marital Satisfaction among Married Persons in Delta State, Nigeria. *International Journal of Research and Analytical Reviews*, 6(2), 591-602.

- Meer, S. & Srivastava, R. (2015). Self-concept, marital satisfaction and psychological well-being of married working women in India. *Asian Social Science*, 11(12), 161-168. <https://doi.org/10.5539/ass.v11n12p161>
- Menti, F. (2020). The impact of marriage quality on self-concept among married people in Delta State. *International Journal of Psychology and Behavioral Research*, 3(2), 73-78.
- Mujtaba, L. (2016). Effects of cognitive restructuring and social skills training counselling techniques on avoidant personality disorder among secondary school students in Kano Metropolis. Unpublished doctoral thesis, Ahmadu Bello University, Zaria.
- Murphy, L. (2018). Low self-concept. In M. F. Reinecke (Ed.), *Encyclopedia of child behavior and development* (pp. 1–3). https://doi.org/10.1007/978-3-319-08999-7_1134-1
- Nworgu, B.G. (2016). *Educational Research: Basic Issues and Methodology*. Enugu: University Trust Publishers, Nsukka.
- Nwokolo, C. & Mokwelu, O. B. (2021). Application of modelling technique in enhancing low academic self-concept of secondary school students. *International Journal of Research and Innovation in Social Science (IJRISS)*, 5(2), 617-622.
- Oguzie, A.E., Ani, D.P., Obi, B.A. & Onyegirim, B.O. (2018). Effect of cognitive restructuring technique on fear tendency among secondary school students in Owerri Municipal Council of Imo state. *International Journal of Advanced Research and Publications*, 2(1), 34-38.
- Oguzie, A.E., Obi, J.S.C. & Chigbu, E.F. (2020). *Principles of interpersonal relationship: A psychological approach*. Awka: De-Emerald Printing and Publishing Company.
- Oguzie, A. E., Obi, J. S. C. & Nnadi, G. C. (2019). Effect of self-management technique on shyness among secondary school students in Imo State, Nigeria. *International Journal of Education and Research*, 7(5), 241-252. Retrieved from <https://ijern.com/journal/2019/May-2019/20.pdf>
- Olowolabi, S. (2017). Effects of cognitive restructuring and problem-solving strategies on reading and note-taking of secondary school students in Ondo State, Nigeria. *Advances in Social Sciences Research Journal*, 4(16), 77-87.
- Omeje, J. C., Anyanwu, J. I. & Oyibo, Z. I. (2016). Effect of cognitive restructuring on school adjustment of maladjusted in-school adolescents in Onitsha Urban Education of Nigeria. *The Social Science*, 11(6), 979-984.
- Putri, M. E., Wibowo, M. E. & Sugiyo. (2021). The effectiveness of group counseling with cognitive restructuring and self-management techniques to reduce academic procrastination. *Jurnal Bimbingan Konseling*, 10, 29–35. Retrieved from <https://journal.unnes.ac.id/sju/index.php/jubk>

- Segun, O. (2017). Effects of cognitive restructuring and problem-solving strategies on reading and note-taking of secondary school students in Ondo State, Nigeria. *Advances in Social Sciences Research Journal*, 4(16), 30-45. <https://doi.org/10.14738/assrj.416.3545>
- Yahaya, I. & Tambuwal, N. A. (2023). Effect of cognitive restructuring counselling techniques in managing chemistry anxiety among senior secondary school students in Tambuwal Local Government, Sokoto State. *Kashere Journal of Education*, 4(1), 62–71. <https://doi.org/10.4314/kje.v4i1.7>
- Zakariyah, A. A., Raheem, A. I., Ogunwole, E. A., Garba, H. & Yakubu, S. M. (2019). Effect of cognitive restructuring counselling technique on self-concept of secondary school underachievers in Ilorin Metropolis, Nigeria. Retrieved from <https://www.semanticscholar.org/paper/effect-of-cognitive-restructuring->
- Zhang, L. & Wang, Y. (2019). Self-concept and its relation to student behaviour and performance. *Educational Psychology International*, 39(2), 179-193. <https://doi.org/10.1177/0143034318760597>