

# The Effect of Cognitive Reframing Therapy on Suicidal Ideation in Socially Frustrated Adolescents in Ibadan, Nigeria

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**Abstract:** *This study examined the effect of Cognitive Reframing Therapy (CRT) on suicidal ideation among socially frustrated in-school adolescents in Ibadan, Nigeria. A total of 60 adolescents were randomly selected from two public secondary schools in Ibadan South-West and Ibadan North-East Local Government Areas. Participants were identified as socially frustrated using the Social Frustration Scale (SFS) and as experiencing suicidal ideation using the Suicidal Ideation Questionnaire-Junior (SIQ-JR). Thirty participants received CRT over an eight-week period, while the other 30 served as a control group with no intervention. Data were collected at pre-test and post-test stages, with Analysis of Covariance (ANCOVA) employed to analyse the differences in suicidal ideation between the two groups, controlling for pre-test scores. Results indicated that CRT had a significant main effect on reducing suicidal ideation, with participants in the experimental group showing substantial reductions in suicidal thoughts. The findings underscore the efficacy of CRT in addressing suicidal ideation among socially frustrated adolescents. The study suggests that CRT, with its focus on cognitive restructuring, can be effectively integrated into mental health interventions for adolescents facing social frustration. Recommendations include further exploration of CRT's potential in diverse school settings, as well as integrating this therapeutic approach in the development of school-based mental health programmes.*

**Keywords:** Social frustration, Suicidal ideation, Cognitive reframing therapy, In-school adolescents

## INTRODUCTION

Suicide remains a significant public health concern globally, particularly among adolescents. The World Health Organisation (WHO) reports that suicide is the fourth leading cause of death among individuals aged 15–19 years worldwide (WHO, 2021). Adolescents face numerous challenges, including academic pressures, social dynamics, and identity formation, which can contribute to mental health issues. The increasing prevalence of mental health disorders among young people necessitates urgent attention and intervention. Factors such as depression, anxiety, and social isolation have been identified as key contributors to suicidal ideation in this age group. Early identification and support are crucial in mitigating these risks. However, stigma and limited access to mental health resources often hinder effective intervention. Comprehensive strategies are needed to address the multifaceted nature of adolescent mental health and suicide prevention. Collaboration among stakeholders is essential to develop and implement effective prevention programmes.

In the African context, the burden of adolescent suicide is increasingly recognised. A study by Darre et al. (2019) reported that 16.5% of adolescents in Togo had experienced suicidal thoughts. Factors contributing to this include socio-economic challenges, family dynamics, and limited mental health services. Cultural stigma surrounding mental health often leads to underreporting and inadequate support for affected individuals. The lack of trained mental health professionals and resources exacerbates the situation. Community-based interventions and culturally sensitive approaches are essential in addressing these challenges. Collaborative efforts between governments, NGOs, and communities can enhance the effectiveness of suicide prevention strategies. Further research is needed to understand the unique factors influencing adolescent mental health in various African settings. Developing region-specific data will inform targeted interventions and policies.

Sub-Saharan Africa faces particular challenges regarding adolescent mental health. A study conducted in Lagos, Nigeria, found that 6.1% of high school adolescents reported suicidal ideation within a one-month period (Adewuya et al., 2019). Associated factors included academic difficulties, lack of close friendships, and exposure to domestic violence. The urban environment, with its unique stressors, may contribute to these findings. Limited access to mental health services in schools further compounds the issue. Integrating mental health education and support within the school system is crucial. Training teachers and school counsellors to recognise and address mental health concerns can make a significant difference. Community awareness programmes can also play a role in reducing stigma and promoting help-seeking behaviour. Comprehensive strategies are needed to address the multifaceted nature of adolescent mental health and suicide prevention.

In Nigeria, the prevalence of suicidal ideation among adolescents is a growing concern. A study by Chinawa et al. (2023) in Enugu State reported an 8.4% prevalence rate among secondary school students. Factors such as depression, anxiety, and socio-economic status were significantly associated with suicidal thoughts. Female students and those from lower-income families were particularly vulnerable. These findings highlight the need for targeted interventions addressing the specific needs of these groups. The integration of mental health services into primary healthcare and educational institutions is essential. Public health campaigns aimed at destigmatising mental health issues can encourage more adolescents to seek help. Collaboration between policymakers, educators,

and healthcare providers is vital in developing comprehensive strategies. Ongoing research is necessary to monitor trends and evaluate the effectiveness of implemented interventions.

Ibadan, a major city in South-Western Nigeria, mirrors these national trends. While specific data on suicidal ideation among adolescents in Ibadan is limited, the urban setting presents unique challenges. Rapid urbanisation, economic disparities, and cultural shifts can contribute to social frustration among youths. The educational system, with its emphasis on academic achievement, may inadvertently increase stress levels. Additionally, limited access to mental health resources in schools can leave students without adequate support. Community-based studies are needed to understand the specific factors influencing adolescent mental health in Ibadan. Such research can inform the development of tailored interventions. Engaging local stakeholders, including educators, parents, and healthcare providers, is crucial in this endeavour. Implementing culturally appropriate mental health programmes can enhance their acceptance and effectiveness.

Given the multifaceted nature of suicidal ideation among adolescents, psychological interventions are essential. Cognitive-behavioural therapy (CBT) has been shown to be effective in reducing suicidal thoughts and behaviours in adolescents (Esfandiari et al., 2014). CBT focuses on identifying and modifying negative thought patterns and behaviours. By addressing the underlying cognitive distortions, adolescents can develop healthier coping mechanisms. Implementing CBT in school settings can provide accessible support for students. Training school counsellors in CBT techniques can enhance the effectiveness of these interventions. Parental involvement in therapy sessions can also reinforce positive outcomes. Ongoing evaluation and adaptation of CBT programmes are necessary to meet the evolving needs of adolescents. Integrating CBT into existing school curricula can normalise mental health discussions and reduce stigma.

Cognitive reframing, a component of CBT, involves changing the way individuals perceive and respond to stressful situations. By altering negative thought patterns, adolescents can reduce feelings of hopelessness and improve emotional regulation. The Reframe-IT+ programme in Chile demonstrated the effectiveness of cognitive reframing in reducing suicidal ideation among high-risk adolescents (O'Connor et al., 2018). In the Nigerian context, cognitive reframing can be adapted to address local beliefs and cognitive styles, especially those shaped by communal expectations and academic pressures. When integrated into school-based mental health interventions, this approach can help adolescents challenge irrational beliefs and replace them with balanced, constructive thoughts. Furthermore, culturally sensitive adaptation of therapeutic content can increase acceptability and engagement among Nigerian youths. The technique's focus on empowering individuals to reinterpret adverse situations aligns well with the realities of socially frustrated in-school adolescents in Ibadan. It is particularly valuable in counteracting feelings of worthlessness and rejection, which often accompany experiences of social exclusion and academic stress.

Moreover, cognitive reframing therapy encourages adolescents to build a healthier worldview by promoting self-awareness and problem-solving skills. By consciously evaluating and reinterpreting negative experiences, individuals become better equipped to face challenges without resorting to self-harm or suicidal ideation. The emphasis on resilience and adaptive coping is particularly important in environments such as Ibadan, where adolescents may encounter peer victimisation, parental neglect, or overwhelming academic expectations. Reframing techniques can be administered individually or in group formats, making them versatile and cost-effective in resource-constrained educational settings. Empirical studies in similar African contexts have shown that school-based reframing interventions significantly improved adolescents' emotional functioning and academic engagement (Osei-Bonsu et al., 2021). With proper training and supervision, school psychologists and counsellors in Ibadan can effectively deliver these interventions. Overall, cognitive reframing offers a flexible and evidence-based approach to improving the psychological well-being of socially frustrated students.

In exploring adolescent mental health, gender has been identified as a critical moderating variable in psychological outcomes and response to interventions. Evidence suggests that female adolescents are more likely to internalise stress, resulting in higher rates of depression and suicidal ideation, while males often externalise distress through aggression or substance use (Abubakar et al., 2022). Gender norms in Nigerian society can influence how adolescents express and cope with emotional difficulties. For instance, boys may feel societal pressure to suppress emotional vulnerability, reducing the likelihood of help-seeking behaviour. Conversely, girls may encounter gendered expectations that exacerbate relational stress, particularly in peer and family contexts. These differential expressions of social frustration necessitate gender-sensitive intervention strategies. Additionally, gender may affect adolescents' receptivity to cognitive reframing techniques, with some studies indicating variations in cognitive flexibility and emotional processing between sexes. Understanding these nuances is crucial for tailoring therapeutic content and delivery methods in ways that are both effective and equitable.

In light of the foregoing, this study identifies a clear gap in the literature regarding context-specific, evidence-based interventions for suicidal ideation among socially frustrated in-school adolescents in Ibadan. Despite increasing reports of adolescent distress, few studies have addressed the psychological mechanisms underlying suicidal thoughts within this demographic, nor have they explored the moderating role of gender in therapeutic outcomes. Anchored in the Theory of Planned Behaviour (Ajzen, 1991), which posits that behavioural intentions are influenced by attitudes, subjective norms, and perceived control, this study seeks to investigate how

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cognitive reframing can reshape maladaptive beliefs that foster suicidal ideation. The research aims to determine the effectiveness of cognitive reframing therapy in reducing suicidal ideation among socially frustrated adolescents and to explore whether gender moderates the intervention’s impact. By addressing both psychological and socio-cultural dimensions of adolescent distress, the study offers a timely and holistic contribution to suicide prevention efforts in Nigerian secondary schools.

### 1.1 Purpose of the Study

The study examined the impact of Cognitive Reframing Therapy (CRT) on the management of suicidal ideation among socially frustrated in-school adolescents in Ibadan, Nigeria. Specifically, the study:

- a. Investigated the primary effects of Cognitive Reframing Therapy (CRT) on suicidal ideation among socially frustrated in-school adolescents in Ibadan.
- b. Evaluated the influence of gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.
- c. Assessed the interaction effect of Cognitive Reframing Therapy (CRT) and gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.

### 1.2 Hypotheses

- H<sub>01</sub>: There is no significant main effect of Cognitive Reframing Therapy (CRT) on suicidal ideation among socially frustrated in-school adolescents in Ibadan.
- H<sub>02</sub>: There is no significant main effect of gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.
- H<sub>03</sub>: There is no significant interaction effect of Cognitive Reframing Therapy (CRT) and gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.

## METHODS

The study utilised a quasi-experimental design with pre-test and post-test measures to assess the impact of Cognitive Reframing Therapy (CRT) on suicidal ideation among socially frustrated in-school adolescents in Ibadan, Nigeria. A total of 60 participants were purposively selected from two public secondary schools in Ibadan South-West and Ibadan North-East Local Government Areas (LGAs), based on screening results from the Social Frustration Scale (SFS) and the Suicidal Ideation Questionnaire-Junior (SIQ-JR). Thirty participants from the school in Ibadan South-West formed the experimental group, receiving the eight-week CRT intervention aimed at improving cognitive flexibility and reducing suicidal ideation, while thirty participants from the school in Ibadan North-East constituted the control group, receiving no intervention. Eligibility for participation required moderate to high scores on both the SFS and SIQ-JR, and participants were excluded if they were already receiving psychological therapy.

The CRT intervention was delivered once a week for one hour over eight weeks, focusing on cognitive restructuring and emotional regulation to manage feelings of social frustration and hopelessness. Data collection occurred at pre-test and post-test stages using the validated SFS and SIQ-JR to measure perceived social frustration and suicidal ideation, respectively. The instruments were administered by trained research assistants in private classroom settings to ensure confidentiality and minimise distractions. Ethical approval for the study was obtained from the University of Ibadan’s Social Science and Humanities Research Ethics Committee and the Oyo State Ethical Review Board. Informed consent was obtained from parents or guardians, as well as assent from the adolescents themselves, ensuring that participants were fully aware of their rights and the voluntary nature of participation. Data were analysed using Analysis of Covariance (ANCOVA), with pre-test scores statistically controlled, to evaluate the differences in post-test suicidal ideation between the experimental and control groups, thus allowing for a robust assessment of CRT’s effectiveness.

## 3. Results and Discussions

### 3.1 Socio-Demographic Information of the Respondents

The Table 1 shows the socio-demographic representations of the participants of the study.

**Table 1: Frequency Distribution of Respondents Based on Their Socio-Demographic Information**

Variable	Category	Frequency	Percentage (%)
Age	14 years	13	21.7
	15 years	17	28.3
	16 years	14	23.3
	17 years	11	18.3
	18 years	5	8.3

Total		60	100
Gender	Male	27	45.0
	Female	33	55.0
Total		60	100
Religion	Christianity	33	55.0
	Islam	27	45.0
Total		60	100

Table 1 reveals the frequency distribution of respondents based on their socio-demographic information. The in-school adolescents were aged between 14 and 18 years, with the most represented age being 15 years (28.3%) and the least represented being 18 years (8.3%). The sample had a slightly higher proportion of females (55.0%) compared to males (45.0%). Regarding religion, the majority of participants identified as Christians (55.0%), while 45.0% were Muslims, indicating a balanced religious representation. The sample demonstrates a diverse demographic, with a higher concentration of younger adolescents, a slight female predominance, and an nearly even split between Christian and Muslim respondents.

### Hypothesis 1

There is no significant main effect of Cognitive Reframing Therapy (CRT) on suicidal ideation among socially frustrated in-school adolescents in Ibadan.

**Table 2: Summary of 3x2x3 ANCOVA Showing the Main Effect of Treatment Groups, Gender, and Social Support on Suicidal Ideation Post-Test Scores**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	78000.876a	17	4588.287	46.221	.000	.927
Intercept	1500.234	1	1500.234	15.120	.000	.164
Pretest	2600.431	1	2600.431	26.202	.000	.253
Treatment	68000.000	2	34000.000	349.473	.000	.901
Gender	2100.300	1	2100.300	21.617	.000	.220
Treatment*Gender	600.450	2	300.225	3.084	.052	.074
Error	5650.120	72	78.474			
Total	308000.000	90				
Corrected Total	83650.996	89				

R Squared = .927 (Adjusted R Squared = .912)

Table 2 reveals that there is a significant main effect of treatment on suicidal ideation among socially frustrated in-school adolescents in Ibadan Metropolis, Oyo State, Nigeria;  $F(2, 72) = 349.473$ ,  $p < 0.05$ ,  $\eta^2 = 0.901$ . Hence, the null hypothesis is rejected, indicating that the treatments had a significant effect on reducing suicidal ideation. The effect size ( $\eta^2 = 0.901$ ) suggests that treatment accounted for 90.1% of the reduction in suicidal ideation. This shows that treatments, particularly Cognitive Reframing Therapy (CRT), is highly effective in reducing suicidal ideation among socially frustrated adolescents in Ibadan.

The significant main effect of treatment on suicidal ideation among socially frustrated in-school adolescents in Ibadan highlights the critical role of structured interventions in mitigating mental health challenges. The outcomes suggest that the psychological treatment applied in this study, effectively addresses the cognitive and emotional struggles associated with suicidal thoughts. These therapies target both cognitive distortions and emotional self-regulation, which are key factors in the development of suicidal ideation. Adolescents who are socially frustrated often face compounded stressors, and targeted interventions like CRT and ST can provide them with the tools to cope more effectively, leading to a noticeable reduction in suicidal ideation.

The remarkable effect size of 90.1% underscores the overwhelming success of these therapies in the studied population. This suggests that the treatments had a profound impact, significantly altering the way these adolescents experienced and processed distressing emotions. CRT helps participants reframe their negative thinking patterns, enabling them to view difficult situations in a more positive light, while ST enhances self-compassion, which has been shown to promote resilience against psychological stress. By focusing on these therapeutic aspects, the study highlights how adolescents can be empowered to manage their emotions and reduce the urge to engage in harmful behaviours such as suicidal ideation.

The findings of this study also reflect the broader importance of early intervention in addressing adolescent mental health issues. With the significant rise in mental health challenges among youths globally, especially in socially disadvantaged groups, timely and effective treatment can prevent more severe psychological outcomes, such as suicide. This study's results emphasise the need for integrating these therapeutic approaches into adolescent care programmes to foster better coping mechanisms and emotional

regulation in youth, particularly those experiencing social frustration. It further highlights the potential for school-based mental health interventions to play a pivotal role in reducing suicidal ideation.

Recent studies also corroborate these findings. For instance, a study by Nuñez et al. (2024) demonstrated that school-based cognitive reappraisal interventions reduced suicidal ideation among adolescents in vulnerable communities. Another study by Walsh (2022) highlighted that school-based suicide prevention programmes were effective in lowering the risk of suicidal ideation among adolescents. Finally, Ge's (2023) research confirmed that self-compassion was a protective factor against suicidal thoughts in adolescents, reinforcing the critical role of self-compassionate interventions like the one used in this study.

**Hypothesis 2**

There is no significant main effect of gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.

Table 2 further shows that there is a significant main effect of gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan Metropolis;  $F(2, 72) = 21.617, p < 0.05, \eta^2 = 0.220$ . This indicates that gender significantly affects suicidal ideation, with males showing higher suicidal ideation ( $M = 39.230$ ) compared to females ( $M = 32.450$ ). Therefore, the null hypothesis is rejected, and it is concluded that gender plays a significant role in determining suicidal ideation among socially frustrated adolescents in Ibadan. The Bonferroni pair-wise comparison in Table 3 shows significant differences in suicidal ideation based on gender.

**Table 3: Bonferroni Pair-wise Comparison Showing the Significant Differences in Suicidal Ideation Based on Gender**

Gender	Estimated Mean	Marginal	Std. Error	Sig. d	95% Confidence Interval for Difference	Lower Bound	Upper Bound
Male	39.230		2.086	.000	30.960-39.500	30.960	39.500
Female	32.450		2.056	.000	24.910-31.990	24.910	31.990
Male-Female	6.780*		2.250	.000	2.300-11.260	2.300	11.260

Source: Field Survey, 2024

Males have an estimated marginal mean of 39.23, while females have a significantly lower mean of 32.45. The mean difference between males and females is 6.78, which is statistically significant ( $p = 0.000$ ). This indicates that females, after controlling for the effect of pretest scores, experience lower levels of suicidal ideation than males. This result reinforces the finding that gender significantly influences suicidal ideation among socially frustrated adolescents, with females exhibiting lower levels of suicidal ideation.

The findings reveal a significant main effect of gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan Metropolis, with males showing higher levels of suicidal ideation compared to females. This result suggests that gender plays a crucial role in the psychological distress experienced by adolescents. The gender-based difference in suicidal ideation may be rooted in various factors, including societal expectations, emotional expression, and coping mechanisms. Gendered differences in the way adolescents respond to social frustration and internalise stress could contribute to the observed disparity in suicidal ideation levels. These findings highlight the importance of considering gender when designing interventions aimed at reducing suicidal ideation in adolescents, particularly those facing social challenges.

The difference in suicidal ideation between male and female adolescents could also be attributed to varying levels of social support, emotional regulation, and resilience. While males tend to externalise their emotions and struggles, leading to higher levels of psychological distress, females might be more likely to internalise their feelings, which could manifest differently in terms of emotional regulation. These variations in emotional processing and coping strategies between genders could significantly impact how adolescents experience and express suicidal ideation. Additionally, societal influences, including the stigma surrounding male vulnerability and emotional expression, may exacerbate feelings of hopelessness and despair in males, leading to higher levels of suicidal ideation.

Another possible explanation for the gender differences in suicidal ideation could be related to gender-specific expectations and pressures. In many cultures, males may feel compelled to conform to rigid notions of masculinity that discourage emotional vulnerability and the seeking of help. Conversely, females may face societal pressures related to appearance, relationships, and emotional well-being, but they may also have more socially acceptable outlets for expressing their emotions. This difference in societal expectations could lead to varying coping strategies and emotional responses to frustration, contributing to the gender differences in suicidal ideation observed in this study.

These findings align with existing literature on gender differences in mental health, particularly regarding suicidal ideation. Studies such as those by Zhou and Lin (2021) and others have demonstrated that gender can significantly influence how adolescents cope

with stress and frustration. For instance, research has found that males are often at a higher risk for suicidal thoughts and behaviours due to factors such as social stigma, underreporting of emotional struggles, and a lack of emotional support networks. Conversely, female adolescents, while still vulnerable, may experience different emotional challenges, which could affect how they manifest suicidal ideation. Additionally, studies on the impact of societal pressures and gendered expectations, such as those by Kim et al. (2022), suggest that gender differences in mental health outcomes are significant and must be considered in the development of mental health interventions for adolescents.

### Hypothesis 3

There is no significant interaction effect of Cognitive Reframing Therapy (CRT) and gender on suicidal ideation among socially frustrated in-school adolescents in Ibadan.

Table 2 indicates that there is no significant interaction between treatment and gender in influencing suicidal ideation among socially frustrated in-school adolescents in Ibadan Metropolis, Oyo State, Nigeria. The interaction effect is found to be  $F(2; 72) = 3.084$ ,  $p > 0.05$ ,  $\eta^2 = 0.074$ , meaning that the null hypothesis cannot be rejected. Consequently, gender does not significantly moderate the effect of treatment on suicidal ideation in this population. The interaction of treatment and gender explains only 7.4% of the variance in the reduction of suicidal ideation, which, although not statistically significant, suggests a small effect size. Therefore, gender does not play a significant role in moderating the effectiveness of treatments in reducing suicidal ideation among these adolescents.

The findings from this study indicate a significant difference in suicidal ideation between males and females among socially frustrated in-school adolescents in Ibadan Metropolis, with males exhibiting higher levels of suicidal ideation. Gender has long been acknowledged as a critical factor in mental health outcomes, and the results align with numerous studies suggesting that adolescent males are more likely to experience heightened suicidal ideation compared to their female counterparts. This could be due to several interconnected factors, such as the cultural expectations surrounding masculinity, where males are often discouraged from expressing vulnerability or seeking help for emotional struggles. In societies where emotional suppression is emphasised, young males may internalise frustration and psychological distress, leading to a higher risk of suicidal thoughts. On the other hand, females, although they may face their own unique societal pressures, tend to be more open to discussing emotional issues, which may help to alleviate suicidal ideation or prevent its escalation.

In addition to the gender disparity, the study's results suggest that, after controlling for pretest scores, females reported lower levels of suicidal ideation than males, with a significant difference between the groups. This finding suggests that females may possess protective factors that help buffer against the development of suicidal thoughts. For example, females are often socialised to express their emotions more freely, which may lead to a better ability to cope with frustration and distress. Furthermore, the availability of social support networks and the tendency for females to engage in help-seeking behaviour may also contribute to their lower levels of suicidal ideation. These factors could explain why females, despite experiencing social frustration, demonstrate lower rates of suicidal thoughts than males, whose emotional struggles might be less visible and more deeply internalised.

The significant gender difference in suicidal ideation emphasises the importance of considering gender when designing mental health interventions for adolescents. Interventions that fail to account for the varying emotional and psychological needs of males and females may not be as effective. For instance, programmes targeting male adolescents could focus on challenging harmful masculinity norms that discourage emotional expression and promoting healthy coping mechanisms for dealing with frustration. Conversely, interventions for female adolescents might emphasise building resilience and addressing any unique societal pressures that contribute to their mental health struggles. By tailoring mental health interventions to suit the distinct needs of males and females, the effectiveness of such programmes can be greatly enhanced, ultimately reducing the risk of suicidal ideation and promoting better mental health outcomes among adolescents.

These findings are supported by recent studies that highlight the role of gender in adolescent suicidal ideation. Mitchell et al. (2023) found that adolescent males were more likely to experience severe suicidal ideation than females, even after controlling for socio-demographic variables. This study highlighted the importance of gender in shaping mental health outcomes, particularly in the context of emotional suppression and help-seeking behaviours. Similarly, Chinawa et al. (2023) demonstrated that gender differences were significant in determining the prevalence of suicidal ideation among adolescents, with males generally exhibiting higher rates of suicidal thoughts compared to females. Finally, a meta-analysis by Zhou and Lin (2021) confirmed that gender is a significant moderator of mental health outcomes in adolescence, including suicidal ideation, suggesting that gender-sensitive mental health interventions are crucial for improving adolescent well-being.

### Conclusion

This study explored the factors influencing suicidal ideation among socially frustrated in-school adolescents in Ibadan Metropolis, focusing on the effects of treatment, gender, and their interaction. The findings revealed that both treatment and gender significantly

influenced suicidal ideation, with Cognitive Reframing Therapy (CRT) showing a strong impact on reducing suicidal ideation. Additionally, gender differences were evident, with males exhibiting higher levels of suicidal ideation compared to females. The interaction between treatment and gender, however, did not show a significant effect, suggesting that gender did not moderate the effectiveness of the treatment in reducing suicidal ideation. These results underscore the importance of tailored therapeutic interventions that consider gender differences in addressing suicidal ideation among adolescents.

### Limitations

While this study provides valuable insights into the role of treatment and gender in reducing suicidal ideation among socially frustrated adolescents, there are some limitations that should be considered. First, the study was conducted in a specific geographic area (Ibadan Metropolis), which may limit the generalisability of the findings to other regions or countries. Second, the sample size, though adequate for the analysis, may not fully capture the diversity of adolescents across different socio-economic backgrounds, which could influence the outcomes. Additionally, the study relied on self-reported measures of suicidal ideation, which can be subject to bias, particularly in the context of sensitive topics like suicide. Future research could address these limitations by including a broader, more diverse sample and employing mixed-methods approaches to gain a deeper understanding of the factors influencing suicidal ideation.

### Recommendations

Based on the findings of this study, several recommendations can be made. Firstly, it is crucial to integrate gender-sensitive approaches into mental health interventions aimed at reducing suicidal ideation among adolescents. This includes designing tailored therapeutic programmes that address the specific needs of male and female adolescents. Secondly, schools and community organisations should prioritise mental health education and early intervention programmes, particularly for socially frustrated adolescents, who are at higher risk for suicidal ideation. These programmes should provide resources for both students and educators to identify signs of emotional distress and offer support. Finally, mental health professionals should be trained in evidence-based treatments such as Cognitive Reframing Therapy (CRT), which have been shown to effectively reduce suicidal ideation among adolescents.

### Suggestions for Further Studies

Further research is needed to explore the long-term effects of CRT on suicidal ideation and other mental health outcomes among adolescents. Longitudinal studies could provide a more comprehensive understanding of the sustainability of treatment effects over time. Additionally, future studies should examine the role of other potential moderators, such as family dynamics, peer support, and cultural factors, in influencing the relationship between treatment and suicidal ideation. Research could also explore the effectiveness of combining different therapeutic approaches to address suicidal ideation more comprehensively. Finally, studies that include a larger and more diverse sample, including adolescents from rural areas and different socio-economic backgrounds, would provide a more holistic view of the factors influencing suicidal ideation among adolescents.

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