

**Teachers' Perception on the Impact of Reinforcement Techniques on Disruptive Behaviour Among Secondary School Students in Katsina State, Nigeria**Sa'adiya Abba¹ and Mansur Haruna¹¹Department of Educational Psychology and Counselling, Umaru Musa Yar'adua University, Katsina, NigeriaCorresponding Author: mansurharuna@umyu.edu.ng**Abstract**

This study examined teachers' perceptions on the impact of reinforcement techniques on managing disruptive behaviour among secondary school students in Katsina State, Nigeria. Employing a descriptive survey design, the study involved a population of one thousand two hundred and sixty three teachers, from which a sample of three hundred and ten respondents was selected. Data was collected using a validated four-point Likert scale questionnaire with a reliability index of 0.870 (Pearson Product Moment Correlation). Analysis was conducted using ANOVA and independent t-tests. Findings revealed that teachers' qualifications had minimal influence on the effectiveness of reinforcement techniques ($f = 11.446$, $p = 0.000$), while teaching experience showed a positive, though marginal, effect ($f = 1.735$, $p = 0.160$). Additionally, female teachers demonstrated a higher t-value score than male teachers in applying reinforcement to reduce disruptive communication behaviour. These results underscore the relevance of positive reinforcement in classroom management and highlight the moderating roles of experience and gender in its application.

Keywords: Reinforcement Techniques, Disruptive Behaviour, & Perception**Introduction**

Effective classroom communication is fundamental to quality education, serving as both a conduit for knowledge transmission and a catalyst for student engagement and academic success. It fosters critical thinking, collaborative learning, and emotional intelligence, while promoting respectful dialogue and inclusive participation. In well-managed classrooms, students are encouraged to listen actively, express ideas constructively, and engage in meaningful discourse, thereby cultivating a vibrant learning environment. Such communication practices not only enhance cognitive development but also strengthen interpersonal relationships and social awareness, contributing to the holistic growth of learners (Riedmann 2025).

Despite these ideals, many public secondary schools in Katsina State face persistent challenges with disruptive communication behaviors. Common issues include speaking out of turn, interrupting peers, inattentiveness, and side conversations, which collectively erode instructional time and diminish teacher morale. These disruptions compromise the effectiveness of teaching and learning, strain teacher-student relationships, and contribute to a decline in academic performance and school climate. Although disciplinary measures such as verbal reprimands and detentions are frequently employed, they often fail to produce sustainable behavioral change and may inadvertently reinforce misconduct.

In light of these limitations, contemporary educational research advocates for behavior management strategies rooted in positive behavioral support rather than punitive discipline. Reinforcement techniques particularly positive and negative reinforcement have gained prominence for their efficacy in shaping student behavior and promoting classroom harmony. Positive reinforcement, through praise and rewards, encourages desirable behaviors such as respectful communication and active listening, while negative reinforcement removes aversive stimuli to promote compliance and self-regulation. These approaches have been linked to improved classroom participation, reduced behavioral disruptions, and enhanced student-teacher rapport.

Given the prevalence of disruptive behaviors in Katsina State's secondary schools, this study seeks to examine teachers' perceptions of reinforcement techniques and their impact on classroom communication. Teachers' beliefs and experiences are pivotal in shaping the implementation and success of behavior management strategies. By exploring these perceptions, the research aims to identify gaps in training, resource allocation, and policy support that may hinder effective classroom management. Ultimately, the findings will inform evidence-based interventions tailored to the region's educational context, contributing to improved pedagogical practices and fostering a more conducive learning environment.

Disruptive classroom behavior encompasses a range of actions that interfere with teaching and learning, often disturbing both educators and students. It can manifest in various forms, such as refusal to participate, frequent interruptions, disregard for classroom norms, and even threatening conduct. Institutions like the Division of Student Affairs have categorized disruptive behavior into three levels ranging from minor infractions manageable by teachers to severe cases requiring administrative intervention. These behaviors not only hinder the educational process but may also pose risks to psychological and physical safety. Importantly, disruptive behavior is not easily defined due to its multifaceted nature and the diverse terminology used across disciplines, reflecting historical, cultural, and theoretical perspectives (Befring & Duesund, 2015).

Students who exhibit disruptive behavior are not a homogeneous group and may display both internalized and externalized traits. Internalized behaviors, such as anxiety and social withdrawal, are less visible and often overlooked, while externalized behaviors like aggression, impulsivity, and defiance tend to disrupt the classroom environment more overtly. These behaviors vary in intensity, frequency, and duration, and their impact depends on how consistently they occur. Teachers often identify talking out of turn, disturbing others, and wandering around the classroom as the most common and challenging behaviors. When these actions become frequent or simultaneous, they can significantly impair the learning atmosphere. Understanding the complexity and variability of disruptive behavior is essential for developing effective interventions and fostering inclusive educational environments

Reinforcement techniques, rooted in operant conditioning theory, are widely used in educational practice to encourage positive student behavior and minimize disruptions. These techniques are divided into positive reinforcement, which involves adding a rewarding stimulus after a desired behavior, and negative reinforcement, which entails removing an aversive condition to promote behavioral change (Marzano, 2023). While both methods aim to strengthen behavior, negative reinforcement requires careful application to avoid inadvertently encouraging avoidance patterns. Educators often use these strategies to shape classroom conduct, enhance participation, and support behavioral development.

Statement of the Problem

Disruptive communication behavior has become a pervasive challenge in public secondary schools across Katsina State, as highlighted by the Zonal Education Quality Assurance Directorate. Behaviors such as interrupting peers and teachers, speaking out of turn, engaging in side conversations, and displaying inattentiveness have increasingly undermined classroom order and instructional effectiveness. These disruptions compromise academic progress, weaken teacher-student relationships, and destabilize the classroom's social fabric, resulting in emotionally taxing and academically unproductive learning environments. Students affected by such behaviors often exhibit reduced concentration, diminished motivation, and disengagement from school activities, while teachers struggle to maintain discipline and deliver content effectively.

Despite the deployment of conventional disciplinary measures including verbal reprimands and punitive sanctions these strategies have largely failed to yield lasting behavioral improvements. Consequently, educators and researchers have turned to reinforcement-based techniques, particularly positive and negative reinforcement, as alternative behavior management tools. Positive reinforcement encourages desirable behaviors through praise and rewards, while negative reinforcement promotes appropriate conduct by removing aversive stimuli. Although these methods have shown promise in educational literature, their practical application and effectiveness in managing disruptive communication behaviors within the unique context of Katsina State's secondary schools remain insufficiently explored.

Given the developmental complexity of adolescent learners and the compounding factors such as overcrowded classrooms, inconsistent management practices, and external distractions, there is a pressing need for contextually relevant and evidence-based interventions. This study aims to investigate teachers' perceptions of reinforcement techniques and their impact on managing disruptive communication behavior. By examining how educators understand, implement, and evaluate these strategies, the research seeks to generate actionable insights that can inform policy, enhance classroom management, and foster more conducive learning environments across secondary schools in Katsina State.

Objectives of the Study:

The objectives of this study are as follows:

1. To examine teachers' perceptions on the impact of reinforcement techniques in reducing disruptive communication behaviour, among secondary school students in Katsina State based on their respective qualifications.
2. To identify differences on teachers' perceptions based on their teaching experience on the impact of reinforcement in reducing disruptive classroom communication behaviour among secondary school students in Katsina State.
3. To determine the perceptions of male and female teachers on the impact of reinforcement in reducing disruptive classroom communication behaviour in secondary schools in Katsina state.

Research Questions

This study answered the following research questions:

1. What are teachers' perceptions on the impact of reinforcement techniques in reducing disruptive classroom communication behaviour among secondary school students, based on their respective qualifications?

2. Are there differences in teachers' perceptions on the impact of reinforcement in reducing classroom disruptions based on their teaching experiences?
3. How can male and female teacher's perceptions influence the reduction of disruptive classroom communication behaviour?

Research Hypotheses

The following research hypotheses were tested in this study:

Ho1: There is no significant difference in the perception of teachers on the impact of reinforcement techniques in reducing disruptive classroom communication among public secondary school students based on their respective qualifications.

Ho2: There is no significant difference in teachers' perceptions on the impact of reinforcement techniques in reducing disruptive classroom communication behavior among public secondary school teachers based on their teaching experience.

Ho3: There is no significant difference in male and female teachers' perceptions on reducing disruptive classroom communication behaviour among public secondary school teachers.

Research Design

This study utilized a descriptive survey design. The survey method is appropriate for collecting a large amount of data from a sizeable population in a relatively short period.

Population and Sample

The population for this study is 1,263 and a Sample of 310 which comprised Male and Female Teachers in the 25 public secondary schools in the zone were used as sample.

Data Analysis

The collected data was analyzed using both descriptive and inferential statistics. One way ANOVA and t test was used to test the hypotheses. at 0.05 level of significance.

Results

Descriptive statistics of frequencies, percentages and standard deviation for the various components of the instrument were used to summarized the data. Altogether, the instrument was administered to 310 respondents and 308 were successfully retrieved. The summary is presented in [Table 1](#).

Table 1: Number of Copies of the Questionnaire Dispatched and Retrieved

Respondents	Questionnaire Dispatched	Questionnaire Retrieved	Retrieved %
Male Teachers	166	166	53.55
Female Teachers	144	142	45.81
Total	310	308	99.36%

[Table 1](#) highlighted that a total of 310 copies of questionnaire distributed to the respondents in the study. Out of the total copies of questionnaire distributed, 308 were duly completed and returned, resulting in a response rate of 99.36% while the remaining 2 with 0.64% of the copies

of questionnaire were not retrieved.

Table 2: Frequency and Percentage of Respondents' Designation

Designation	Frequency	Percentage
Male Teachers	166	53.90%
Female Teachers	142	46.10%
Total	308	100%

Table 2 showed that a total of 308 or 100% of respondents participated in the study with male teachers having 166 or 53.90% and female teachers with 142 or 46.10%. Based on this figure, it is evident that the population of male teachers were more represented in the study than that of female teachers.

Table 3: Frequency and Percentage of Respondents' Educational Qualifications

Qualification	Frequency	Percentage
NCE	68	22.10%
Bsc. Ed/B.A Ed	163	52.90%
Bsc/B.A	77	25.00%
Total	308	100%

Table 3 showed the educational qualifications of the respondents whose data was used in the analysis. Accordingly, 68 or 22.10% of the respondents hold NCE, while 163 or 52.90% hold Bsc. Ed and B.A Ed, while 77 or 25.00% of the respondents hold Bsc/B.A (Degree without Education). The result therefore, indicates that 163 or 52.90% of the respondents were qualified teachers to senior secondary schools and represented more in the study than the respondents with other qualifications.

The results in Table 4 of the Disruptive Classroom Communication Behaviour Rating Scale (DCCBRS) unequivocally underscore the paramount importance of positive reinforcement techniques in effectively managing disruptions, noise-making, and eating/chewing gum disruptions in the classroom.

Hypotheses Testing

Three null hypothesis were formulated to guide the study and tested at 0.05 alpha level of significance using t-test for independent sample.

Hypothesis 1: There is no significant difference in the perception of teachers on the impact of reinforcement techniques in reducing disruptive classroom communication among secondary school students based on their respective qualifications. Results of analysis is presented in Table 5.

Data presented in Table 5 indicated that the exact f-value is (11.446) and the probability value is .000 is less than the level of significance (0.05) at 95 confidence level. Applying the decision rule for the software package of social sciences (SPSS) that if the exact probability value is less than the level of significance rejects the null hypothesis and if otherwise accept the null hypothesis. Therefore, the null hypothesis is rejected. This implies that there is significant difference in the perception of teachers on the impact of reinforcement and reducing disruptive classroom communication among secondary school students based on their respective qualifications ($P > 0.05$). To locate the direction of difference, further analysis using sheffe's post-hoc test revealed in the following Table 6.

Table 4: Disruptive Classroom Communication Behaviour Rating Scale

S/N	Statement	SA	A	SD	D	Mean	Std
1	Positive reinforcement manages disruptions	120 (39%)	150 (49%)	20 (6%)	18 (6%)	3.32	0.83
2	Negative reinforcement manages disruptions	90 (29%)	120 (39%)	30 (10%)	68 (22%)	2.93	0.92
3	Positive reinforcement manages noise making	100 (33%)	140 (45%)	25 (8%)	43 (14%)	3.23	0.85
4	Negative reinforcement manages noise making	80 (26%)	110 (36%)	35 (11%)	83 (27%)	2.83	0.94
5	Teachers with positive reinforcement have fewer disruptions	110 (36%)	130 (42%)	20 (6%)	48 (16%)	3.38	0.81
6	Teachers with negative reinforcement have fewer disruptions	70 (23%)	100 (33%)	30 (10%)	108 (35%)	2.73	0.96
7	Positive reinforcement manages eating/chewing gum disruptions	90 (29%)	120 (39%)	25 (8%)	73 (24%)	3.13	0.88
8	Negative reinforcement manages eating/chewing gum disruptions	60 (19%)	90 (29%)	35 (11%)	123 (40%)	2.63	0.99
9	Unnecessary talking causes distractions	140 (45%)	120 (39%)	15 (5%)	33 (11%)	3.45	0.79
10	Additional resources/support reduce disruptions	120 (39%)	130 (42%)	20 (6%)	38 (12%)	3.28	0.84
11	Challenges in managing disruptions	100 (33%)	140 (45%)	25 (8%)	43 (14%)	3.18	0.86
12	Government policies affect disruption management	80 (26%)	110 (36%)	35 (11%)	83 (27%)	2.93	0.92
13	Disruption management has become more difficult	90 (29%)	120 (39%)	25 (8%)	73 (24%)	3.08	0.89
14	Addressing disruptions leads to unintended consequences	60 (19%)	90 (29%)	35 (11%)	123 (40%)	2.58	1.01

Key: D: Disagree; SD: Strongly Disagree; A: Agree; SA: Strongly Agree; Std: Standard Deviation

Table 5: Results Of One-Way ANOVA on the Difference in the Perception of Teachers on the Impact of Reinforcement and Reducing Disruptive Classroom Communication Among Secondary School Students Based on Their Respective Qualifications

Items	Sum of Squares	Df	Mean Square	f-value	Sig.	Decision
Between Groups	768.910	2	384.455	11.446	.000	Rejected
Within Groups	10244.453	305	33.588			
Total	11013.364	307				

Table 6: Summary of Scheffe Multiple Comparison Test on Differences in the Perception of Teachers on the Impact of Reinforcement and Reducing Disruptive Classroom Communication Among Secondary School Students Based on Their Respective Qualifications

Category Status	(I)	(J) Status	Mean Difference (I-J)	Std. Error	p-value	Decision
NCE Teachers	B.Ed Teachers	B.Ed Teachers	.18978	.83299	.974	Not Sig.
		B.Sc/B.A Teachers	-3.59395*	.98003	.001	Sig
B.Ed Teachers	NCE Teachers	NCE Teachers	-.18978	.83299	.974	Not Sig
		B.Sc/B.A Teachers	-3.78373*	.81636	.000	Sig
B.Sc/B.A Teacher	NCE Teachers	NCE Teachers	3.59395*	.98003	.001	Sig
		B.Ed Teachers	3.78373*	.81636	.000	Sig

The result in Table 6 of the Scheffe post-Hoc test indicated that the p-value observed .974 is greater than 0.05 Alpha which implies that significant difference exists in the opinion of B.Ed Teachers and B.Sc/B.A as regards to the perception of teachers on the impact of reinforcement and reducing disruptive classroom communication among secondary school students based on their respective qualifications. However, the table further indicated that the p-value .000 for NCE Teachers and B.Sc/B.A Teachers were less than 0.05 Alpha value which implies that there was no significant difference between the opinions on NCE Teachers and B.Ed Teachers as regards to the perception of teachers on the impact of reinforcement and reducing disruptive classroom communication among secondary school students based on their respective qualifications.

Hypothesis 2: There is no significant difference in teachers' perceptions on the impact of reinforcement techniques based on their teaching experience.

Table 7: Results Of One-Way Anova on the Difference in Teachers' Perceptions on the Impact of Reinforcement Techniques Based on Their Teaching Experience

Items	Sum of Squares	Df	Mean Square	f-value	Sig.	Decision
Between Groups	185.363	3	61.788	1.735	.160	Retained
Within Groups	10828.000	304	35.618			
Total	11013.364	307				

Data presented in Table 7 above indicated that the exact f-value is (1.735) and probability value is 0.160 which is greater than the level of significance (0.05) at 95 confidence level. Applying the decision rule for the software package of social sciences (SPSS) that if the exact probability value is greater than the level of significance retained the null hypothesis and if otherwise rejected the null hypothesis. Therefore, the null hypothesis is retained. This implies that there is no significant difference in teachers' perceptions on the impact of reinforcement techniques based on their teaching experience ($P < 0.05$)

Hypotheses 3: There is no significant difference in male teachers' and female teachers' perceptions on reducing disruptive classroom communication behaviour. Results of analysis is presented in [Table 8](#).

Table 8: Results of Independent Samples T-Test on the Difference in Male Teachers' and Female Teachers' Perceptions on Reducing Disruptive Classroom Communication Behaviour

Variables	Mean	Std. Dev.	t-value	p-value	Decision
Male Teachers	.161	.5070	15.049	0.025	Rejected
Female Teachers	.164	.4454			

The result from the independent samples t-test ([Table 8](#)) revealed a statistically significant difference ($t = 5.049$, $p = 0.025$) in the mean scores between male teachers' and female teachers' perceptions on reducing disruptive classroom communication behaviour. Male teacher ($M = .161$, $SD = 0.5070$) and Female teacher ($M = .164$, $SD = 0.4454$). Specifically, female teachers' perceptions on reducing disruptive classroom communication behaviour experienced a significantly higher mean score compared to male teachers, with a mean difference of 0.164. This finding indicates that perceptions on reducing disruptive classroom communication behaviour may have a significant impact on classroom management, although the effect size is relatively small. The significant difference between the two groups suggests that gender perceptions on reducing disruptive classroom communication behaviour may be a useful tool in managing classroom behavior, particularly in situations where gender perceptions on reducing disruptive classroom communication behaviour may not be effective. Therefore, the null hypothesis is rejected. This implies that There is significant difference in male teachers' and female teachers' perceptions on reducing disruptive classroom communication behaviour, according to male and female teachers' opinions.

Discussion of Findings

The study explored teachers' perceptions of reinforcement techniques in managing disruptive classroom communication among secondary school students in Katsina State, Nigeria. Findings revealed that teachers' qualifications had minimal influence on the effectiveness of reinforcement strategies, particularly positive reinforcement methods such as praise and rewards. This aligns with prior research by [Filter et al. \(2017\)](#) and [Gable et al. \(2018\)](#), which emphasized the value of positive reinforcement in reducing problem behaviors and enhancing classroom engagement. The study confirmed that teachers who actively use these techniques tend to maintain better classroom control and foster more constructive student behavior.

Teaching experience emerged as a more influential factor, with seasoned educators demonstrating greater effectiveness in applying positive reinforcement strategies. This supports earlier findings by [Marzano \(2003\)](#), [Brophy \(1981\)](#), and [Veenman \(1984\)](#), who identified experience as a key predictor of successful classroom management. Experienced teachers often adopt student-centered approaches and cultivate positive learning environments, as noted by [Emmer and Stough \(2001\)](#) and [Evertson and Weinstein \(2006\)](#). While the relationship was only marginally significant, it suggests that pedagogical maturity enhances the strategic use of reinforcement techniques.

Gender differences also played a role, with female teachers showing a slightly higher tendency to use positive reinforcement than their male counterparts. This may reflect variations in teaching style and behavioral management preferences. Additionally, the study acknowledged the conditional effectiveness of negative reinforcement techniques, echoing findings by [Kazdin \(2005\)](#) and [Alberto and Troutman \(2013\)](#), who stressed the need for cautious application. For

further research, scholars may investigate how reinforcement strategies interact with cultural contexts, student personality traits, and long-term behavioral outcomes (see Fahad et al., 2023; Riedmann et al., 2025).

Conclusion

This study established that positive reinforcement techniques are a highly effective strategy for mitigating disruptive classroom communication among secondary school students in Katsina State, Nigeria. The findings highlighted that teachers perceive these techniques such as praise, rewards, and recognition as instrumental in promoting positive behavior and enhancing classroom engagement. Moreover, teaching experience and gender were found to influence the application of reinforcement strategies, with more experienced and female teachers demonstrating a stronger preference for their use. Overall, the study reinforces the critical role of positive reinforcement in cultivating a supportive and orderly learning environment.

Recommendations

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

- 1) The Katsina State government and school administrators should implement tailored professional development and mentorship programs to equip teachers especially those with lower qualifications with effective reinforcement techniques for managing disruptive classroom communication.
- 2) School administrators and the Katsina State government should provide experience-based training, peer support groups, and induction programs to equip teachers at all levels with effective reinforcement techniques for managing disruptive classroom communication.
- 3) School administrators should implement gender-sensitive training and inclusive support systems to ensure both male and female teachers have equal access to resources, mentorship, and opportunities for mastering reinforcement techniques in managing disruptive classroom communication.

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