



Effect of behaviour modification strategy (positive reinforcement) in reducing truancy among public senior secondary school students in federal capital territory, Abuja

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Abstract

The study examined the effect of behaviour modification strategy (positive reinforcement) in reducing truancy among public senior secondary school students in Gwagwalada Area Council, FCT-Abuja. The study adopted the use of quasi-experimental research design. The population of the study comprised of 83,647 SS II students in Gwagwalada Area Council. Simple random sampling technique was used in selecting 261 students. Findings showed that there was significant effect of positive reinforcement in the rate of truancy reduction of the experimental group exposed to the treatment ($t = 2.781, p = .000$); there was no significant effect of positive reinforcement in the rate of truancy reduction of male and female experimental group exposed to the treatment ($t = 2.442, p = .741$); and there was significant difference in effect of positive reinforcement in the rate of truancy reduction of rural and urban experimental group exposed to the treatment ($t = 1.108, p = .000$). Based on the finding the study recommended that teachers, school principals and counselors should be train and retrain on positive reinforcement technique in order to address the problem of truant behaviour among secondary school students in Gwagwalada Area Council, FCT-Abuja.

Keywords: behaviour modification, positive reinforcement, truancy

1. Introduction

Attending school regularly is the initial requirement for obtaining a quality education and attaining high academic standards. However, despite the legal obligation for kids to attend school daily, many choose to be absent from formal educational activities, thus indulging in truancy. According to Sambo (2005) [36], truancy is defined as an unexcused absence from school that has not been allowed or approved. Truancy refers to the act of pupils being absent from school without the knowledge or approval of their parents. Truancy refers to the unauthorized absence of kids from school without a valid excuse. He asserted that numerous pupils frequently absent themselves from classrooms during their academic journey. This is due to their desire to participate in exclusive occasions. This isolated incident of truancy is a common occurrence and has the potential to cause a range of problems that can result in various unpleasant and perhaps hazardous outcomes. Behaviour modification is a method of altering behaviour by employing several approaches to substitute undesired actions with desirable ones. Behaviour modification approaches have been employed to address a range of issues in both adults and children, including enuresis (bedwetting), separation and general anxiety, various phobias, and obsessive-compulsive disorder. The techniques employed differ, but typically entail the utilisation of both positive and negative reinforcement. According to Omabie (2015), behaviour modification approaches are effective in many circumstances. Child behaviour modification approaches encompass the utilisation of both positive and negative reinforcements, as well as positive and negative penalties. Parents can employ a

behaviour modification strategy to instruct their children in cultivating positive habits and conduct. Nevertheless, each child possesses unique characteristics, and the strategies that effectively alter the behaviour of one child may not yield the same results for another. For instance, isolating a youngster who derives pleasure from solitude in their designated room for the purpose of behaviour control may provide minimal or negligible results. Depriving your youngster of video game time will not alter their behaviour if they do not derive pleasure from utilizing electronic devices. Various methodologies and treatments can be employed to tackle the issue of truancy. One strategy that can be used is positive reinforcement, which involves providing rewards for desired action in order to increase the likelihood of that behaviour being repeated in the future. Hummel (2017) [17] defines positive reinforcement as a form of reinforcement that involves providing desirable consequences or effects for a behaviour, with the aim of increasing the likelihood of that behaviour being repeated in the future. Positive reinforcement utilises techniques such as a reward system, including encouragement, praise, and token gifts.

Reinforcement refers to the process of promoting a desired behaviour or increasing the likelihood of its occurrence in the future. Positive reinforcement, as defined by Shertzer and Stone (2008) [38], refers to the act of providing desired consequences in order to strengthen or facilitate specific behaviours. Examples of positive reinforcement include gestures such as patting someone's back or smiling, as well as the provision of material tokens like chocolate or sweets. This type of reinforcement is employed when an individual behaves

appropriately. If a student continues to exhibit the same behaviour despite the implementation of preventive, instructional, and positive reinforcement techniques, it may be necessary to employ negative reinforcement measures. Instances of negative reinforcement tactics encompass the implementation of a time out, placement of the student in a separate seating arrangement from the rest of the class, revocation of playtime privileges, referral to the principle, communication of a note to parents, or the delivery of an oral reprimand (Okeke, 2016) [33]. Positive reinforcement is an effective method for maintaining desirable conduct. Having created timetables for classroom use. It aids in generating favorable outcomes that will enhance or enable specific behaviour. He emphasizes that the use of reinforcement behaviour should assist us in implementing reinforcement techniques effectively in the classroom. This is because it is widely known that reinforcement plays a significant role in determining an individual's actual performance (Stone, 2008) [38].

Truancy in secondary school refers to the occurrence when students exhibit negative attitudes and behaviours towards education. They intentionally skip lessons by providing false reasons such as feigning illness, fabricating suspensions by the teacher or school administration, or participating in sports activities. Truancy can occur in both uninteresting and monotonous classes, as well as in situations where professors are unapproachable and the school environment is not favourable (Osarenren, 2019) [35]. Occasionally, individuals avoid attending lessons by providing superfluous justifications, such as feigning illness, falsely claiming to be suspended by the teacher or school administration, or participating in sporting events. Truancy can also arise when students perceive lessons as tedious or when teachers exhibit strict and unapproachable behaviour. Truancy can also arise when pupils are in an unfavourable educational environment (Osarenren, 2009) [34]. In addition to the aforementioned perspectives, Obe (2018) observed that truancy among secondary school students can be ascribed to a shortage of essential writing supplies, including pens, pencils, exercise books, suggested textbooks, school uniforms, and midday meals. Truancy is a form of juvenile delinquency frequently observed among Nigerian youths, which has the potential to escalate into other undesirable behaviours. Truancy refers to the act of deliberately avoiding school without obtaining permission. In Shyaman's study (2016), it was found that a significant number of secondary school students prioritize visiting internet cafes over attending their lessons. Unfortunately, they tend to spend a considerable amount of their time and resources on accessing pornographic and other sexually explicit websites. This behaviour has detrimental consequences on their lives and contributes to the growing prevalence of immoral conduct among young people in our society. Truancy is more prevalent among secondary school students hailing from rural areas as compared to those from urban ones. Truancy among students in rural areas encompasses many behaviours such as arriving late to school or class, leaving school before the designated closing time, lingering about without purpose, avoiding

lessons, and being missing from school (Bala, 2010) [5]. Absenteeism refers to the significant frequency of kids from rural areas being away from school when regular attendance is required. The domestic circumstances may involve a deficient parent-child interaction resulting from a dearth of affection. Furthermore, the failure of parents to instill positive moral principles and the absence of government dedication and financial support have a detrimental impact on the educational development of their children. Mbaekwe (2007) [23] asserts that education authorities must choose the appropriate location for specific types of schools and ensure the provision of sufficient facilities to promote student enrollment. To aid the young students with their difficulties, an efficient method of positive reinforcement could be utilized. Reinforcement, in the context of behavioural psychology, refers to a consequence that enhances an organism's future behaviour when that activity is preceded by a certain antecedent stimulus. Positive reinforcement is used to modify a learner's behaviour or adjust the behaviour they have acquired from their surroundings. Truancy, a behaviour that is learnt from the learner's physical and social surroundings, can be altered by the implementation of a positive reinforcement method, provided that it receives adequate attention.

Problem of the statement

Behaviour is the result of the interplay between genetic factors and environmental influences. It is important to highlight that conduct can be changed by effectively manipulating the learning process. Enhancing conduct leads to increased efficacy in learning. Learned behaviours refer to patterns of behaviour that are acquired within a specific contextual context. Behaviour can be regarded as either commendable or objectionable. Behaviour modification strategies are highly influential and potent instruments for eliciting positive change in human behaviour and fostering a favourable and conducive learning environment in the classroom. There is currently a rise in disruptive behaviours among the kids. Instances include students engaging in disruptive noise, certain students expressing audible sighs in the classroom, students now answering phone calls during class, students engaging in conversations while teaching and learning is taking place, certain students arriving late to school, and some students participating in test malpractice during exams. These habits can create issues in the classroom and, if not adequately supervised, may have a detrimental impact on teaching and learning. Despite the implementation of disciplinary measures such as corporal punishment, temporary exclusion, and other forms of capital punishment, the incidence of truancy has persistently increased. Some stakeholders have linked the increase in absenteeism to the inconsistent presence of teachers during classroom teaching, while others have attributed it to factors such as an unfavorable learning environment and pupils' lack of desire towards learning. It is crucial to acknowledge that optimal learning may not flourish in a school setting characterized by strict and negligent teachers. For learners to remain in school, it is essential to employ strategies that can effectively alter their conduct and facilitate their adaptation to

the school setting.

Objectives of the study

The main objective of this study is to examine the effect of behavioural modification strategy (positive reinforcement) in reducing truancy among secondary school students in Gwagwalada Area Council, FCT-Abuja. The specific objectives are:

1. To find out the effect of positive reinforcement technique in the rate of truancy reduction of students in experimental group and control group.
2. To find out the effect of positive reinforcement technique in the rate of truancy reduction of male and female students exposed to experimental group exposed to the treatment.
3. To find out the effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment.

Research questions

The following research questions are generated to guide the study;

1. What is the effect of positive reinforcement technique in the rate of truancy reduction of students in experimental group and control group?
2. What is the effect of positive reinforcement technique in the rate of truancy reduction of male and female students exposed to experimental group exposed to the treatment?
3. What is the effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment?

Hypotheses

The following hypotheses guided the study:

H₀₁: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of students in experimental group and control group.

H₀₂: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of male and female students exposed to experimental group exposed to the treatment.

H₀₃: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment.

2. Literature review

Behaviour modification

Behaviour modification refers to any process that is drawn from learning theory. The objective is to modify an individual's behaviour or their manner of engaging with the world (Onwuasoanya, 2016). In order to comprehend behaviour modification, it is essential to know the two fundamental notions upon which it is founded: classical and operant conditioning. Ivan Pavlov is credited with the development of classical conditioning. The phenomenon occurs through the consistent association of two stimuli, one of which elicits an involuntary response. Akinade (2019) ^[3] suggested that in the process of learning, a natural reaction (unconditioned response

- UR) that is first triggered by an unconditioned stimulus (US) might be triggered by a different and previously neutral stimulus (NS), which then becomes a conditioned stimulus (CS). Operant conditioning refers to the mechanism through which the strength or weakness of an operant response is determined by the consequences that ensure.

Adeleke (2012) ^[1] defines behaviour modification as a method in behavioural science that applies concepts drawn from experimental psychology research to reduce human suffering and enhance human performance. Behaviour modification, also known as behaviour therapy, refers to the application of scientifically proven techniques to enhance one's behaviour. This involves modifying an individual's responses to stimuli by reinforcing desirable behaviours through positive and negative reinforcement, while also reducing undesirable behaviours through punishment. Pear and Martin (2017) propose that behaviour modification is predominantly employed in the fields of clinical and educational psychology, specifically for those with learning disabilities. In everyday life, this is primarily employed in educational settings, when teachers utilise various strategies to modify a child's behaviour.

According to Uba (2016), behaviour modification involves applying principles of human behaviour to many situations, including child rearing. Education, psychology, vocational technology, business, and social movements contribute to the modification of our pupils' behaviour. Okwuasoanya and Enwuezor (2017), behaviour modification is a practical implementation of psychological principles, particularly those related to learning. It is a methodical and empirical approach to transforming an undesired conduct into a desirable one. Recently, the term "behaviour modification" has mostly been used to describe strategies that aim to enhance adaptive conduct through reinforcement and reduce maladaptive behaviour through punishment. Behaviours that can be observed and measured are ideal for targeting change. All behaviours adhere to a set of consistent principles. According to Skinner (2013), behaviour modification refers to the utilisation of operant conditioning techniques to alter behaviour. Behaviour modification, behaviour therapy, and behaviour counselling are frequently used synonymously within the field of counselling. Sprinthall and Sprinthall (2016) propose that behaviour modification is a distinct form of behaviour influence that applies the theories and principles of learning from experimental psychology to effectively change conduct.

Truancy

The term truancy has been defined by numerous individuals and groups of professionals, including counsellors, psychologists, sociologists, welfare authorities, and educators. According to Stoll (2012) ^[37], truancy can be defined as the act of being absent from school without a valid or justifiable excuse. He further asserted that a significant number of students inevitably miss classes at least once during their academic tenure. This isolated instance of truancy is highly representative and prone to generate a range of issues that can result in diverse and potentially perilous outcomes. According

to Arudo (2016) ^[4], truancy refers to the persistent absence of a child from school for an extended period of time, which can range from days to weeks or even months. Truancy, as he elaborates, refers to a purposeful absence from school without any valid or justified reason, whether or not parents are aware of it. Peninsky's explanation of truancy aligns well with the definition provided in Collin's English dictionary, which defines truancy as the act of being absent from one's obligations without permission, particularly referring to youngsters who deliberately skip school. Similarly, Barlett (2010) ^[6] defined truancy as the deliberate act of being absent from school without permission, leaving without authority, and avoiding specified class periods. Carter (2012) ^[8] defines truancy as a purposeful absence from school by students without parental knowledge or consent. It also encompasses situations where students are absent from school without providing a valid excuse, thus expanding the definition and making it equivalent to unexcused absence. According to Adeyemo (2019) ^[2], truancy is defined as a delinquent behaviour in which a child frequently and without valid justification, absents themselves from school. In order to fully comprehend the notion of truancy, it is crucial to emphasize specific features highlighted in these definitions. Carter's definition implies that truancy is a purposeful act, and that the reasons for being absent are considered invalid by parents and school authorities, but not by the truant themselves.

Types of truancy

There are three types of truancy which are as follows:

- a) Habitual Truancy
- b) Occasional Truancy
- c) Casual Truancy

Habitual truancy

This refers to chronic truancy, which is when a pupil consistently and persistently skips school without the knowledge or permission of their parents and school authorities. Habitual truants are primarily students who frequently and consistently miss entire days of academic activity at school. Their frequency of absenteeism has developed a consistent pattern or routine. It is crucial to acknowledge that children who frequently skip school have a significant likelihood of lagging behind in their academic tasks, experiencing a drop in their academic achievements, and perhaps losing their connection or positive outlook towards school (Ezeani, 2016) ^[10].

Infrequent absence from school

This form of truancy refers to a situation where a pupil is not consistently and persistently absenting from school. This sort of truancy refers to the student's irregular or inconsistent absence from school without the consent of parents or school authorities. Examples of occasional truancy include a child whose mother refuses to send them to school and instead keeps them at home to help care for siblings, or a child who is taken out of school for a family holiday that occurs outside of the regular school vacation period (Ezeani, 2012).

Informal absenteeism

This is an instance of incidental truancy, where a student's absence from school is unintentional. This form of truancy or unexcused absence from school is sporadic and unpredictable. For example, there were students that stayed close to the school bell in order to attend the courses that they found interesting (Ezeani, 2011).

Causes of truancy among secondary school students

Poor home upbringing

Examining the origins of absenteeism in relation to parental upbringing Ezekwugo (2015) ^[12] stated that the root cause of truancy may be traced back to the home environment. Inadequate parental nurturing might be shown at school through the occurrence of truancy. They stressed the importance of establishing a strong collaboration between the household and the educational institution in order to effectively and successfully address the issue of truancy. Students may have familial health or financial burdens that compel them to assume caregiving responsibilities or seek employment during school hours. Additionally, there is the unfortunate possibility of a child becoming a victim of abuse or neglect. Challenges stemming from adolescent pregnancy or parenthood and concerns over safety, such as proximity to violence in the vicinity of one's residence or along the route between home and school. Parental drunkenness or drug misuse, as well as poor role models like as peers who engage in truancy or delinquency. Parents or guardians that do not prioritise education and are actively involved in their student's absences. School factors Ogunwe (2013) ^[29] identified the potential influence of school-related issues on the issue of truancy. According to him, certain teachers have exhibited a significant level of hostility towards the children entrusted to their supervision. Some individuals have been discovered to lack interest in pursuing a career in teaching, while others have been observed to have irregular attendance, which allows children to skip classes and develop a habit of truancy. Additionally, certain teachers have been found to excessively punish students for any wrongdoing, which in turn deters some students from attending school regularly. According to Essuman (2009) ^[11] in their study titled "Perception of Classroom Teachers on Causes of Truancy and Control Among Secondary School Children," the researchers identified the following conclusions regarding the role of school variables in causing truancy:

The presence of educational issues contributes to absenteeism in secondary school students. These issues might vary from inadequate reading, writing, and spelling skills to difficulties in comprehending and assimilating information.

Disinterest in specific academic disciplines as a catalyst for truancy

Students' aversion towards particular educators might contribute to truancy, as this aversion may arise from the dynamics between students and teachers within the classroom. Furthermore, a class that lacks stimulation or fails to capture interest can lead to absenteeism. Distance from school and travel issues are additional factors contributing to truancy

among school pupils. Continuing the discussion on the relationship between school circumstances and truancy.

Youths have a strong inclination to seek the company of peers who are of the same age. This urge is driven by the adolescent's longing for social acceptance, which often emerges throughout the teenage years. During this stage of development, the youngster begins to align themselves with a certain group that shares similar interests. He endeavours to embrace the attitudes that are deemed acceptable by his social group. The group with whom teenagers attach themselves is referred to as a peer group. According to Nigerian Teachers (2014), individuals in peer groups often prioritize their personal emotions and conform to the expectations of their peers in order to maintain their membership within the group. Because of this intense emotion and connection, the peer group is commonly seen as the means by which pupils learn to engage in truant behaviour. According to Odunze (2011) ^[28], the desire for a student to conform and resemble their peers might lead to a clash with their own family. This emotionally responsive individual is eager to satisfy his loved ones and uphold his reputation among his peers. This frequently results in pupils forsaking their responsibilities, such as attending classes, and instead aimlessly wandering from one location to another in pursuit of financial means to emulate their peers. In such instances, the student's consistent absence from school hinders their comprehension of class proceedings.

Socio-economic factors of class proceedings

The issue of poor attendance is one of the most longstanding difficulties in educational institutions. In Nigeria, a significant number of children persist in abstaining from attending school or prematurely discontinuing their education during the initial stages. The issue of school attendance and dropouts, particularly in poor nations, may lack a viable solution. The primary motivation for Nigerian families who withdraw their children from school is to engage them in labour activities that can financially support their families. In rural places, students are regarded as members of the labour force within their families. Thus, priority is given to doing homework over classroom assignments. In order to minimize the problem, parents should be enlightened about the value and significance of education.

Adeyemo (2009) ^[2] highlighted that the absence of essential educational resources compels students to avoid attending school. Additionally, he states that if a youngster lacks an exercise book, pen, and reading materials, they would prefer to avoid punishment from the teacher, leading them to flee from school. The economic condition of the parents may be a contributing factor to truancy. If parents are unable to furnish pupils with essential school supplies, the students may be compelled to seek for these necessities outside of school. Furthermore, the examined research revealed that even pupils who have an excess of money still engage in truancy.

Psychological and personality factors

Adolescents who struggle to adapt to their home, school, or peer environments tend to engage in more delinquent

behaviour compared to those who are more well-adjusted. This phenomenon is observed in cases of truancy, where truants experience personality disorders as a consequence of unfavorable home conditions. These individuals exhibit inadequate work habits in school and are intellectually challenged, which leads them to avoid attending classes where they find themselves in an unsatisfying environment with younger peers who they share little in common with (Okono, 2018). The correlation between psychological and personality qualities aligns closely with the dictionary definition of the term. Hurlock's mention of frustration and diminished self-confidence could potentially result in absenteeism. Furthermore, self-assertion may be associated with truancy. In addition, inadequate and unsuitable adaptation to both home and school environments might lead to absenteeism.

Consequences of absenteeism among secondary school students

The subsequent focus in this literature review is to examine the consequences of truancy on secondary school pupils, following the identification and explanation of some of its causes. Students pose a significant threat to social order and disrupt the balance of the state. These individuals are the central group of dissatisfied individuals in politics who are becoming unruly and aggressive in their response to authorities and their peers who have accomplished certain things (Mester, 2011). In his analysis of the consequences of truancy, Dittimiya (2011) ^[9] argues that the absence of pupils from school has had a significant impact on the cultivation of the human resources necessary for the societal and economic advancement. Truancy is a detrimental and unwarranted aspect of advancement, education, or way of life, as it hinders national development. Truancy enables students to subvert the fundamental purpose of education, examination, and public morals. Instead of fostering growth, it impedes the advancement of both the school and the entire society.

Kindiki (2019) ^[21] asserts that truancy serves as a pathway to both severe violent and non-violent criminal activities. In his perspective, students' truant behaviour results in theft, violence, substance abuse, property damage, sexual misconduct, and armed robbery. Therefore, when a student consistently misses classes or is missing from the school environment, negative thoughts may arise in their mind. He strategizes methods for destruction, devises tactics for rapid wealth accumulation, and ultimately achieves millionaire status. Their degree of attainment is typically subpar due to their lack of focus on academic pursuits. They perceive school as a type of retribution and regard it as a task undertaken solely to appease their parents and guardians. Overall, the negative consequences of truancy become evident when individuals ultimately leave school, resulting in their becoming a social nuisance. Males may turn to armed robbery, while females may engage in prostitution. Consequently, this is a significant problem for society.

3. Methodology

This study adopted a quasi-experimental design to carry out an

investigation on effects of positive reinforcement in reducing truancy in senior secondary school students in Gwagwalada Area Council, Abuja. The design involves pre -test and post-test. Sambo (2005) [36] noted that quasi-experimental design can be adopted where the design lacks the full laboratory control and laboratory isolation. The design involves the manipulation of independent variables (positive reinforcement strategy) and dependent variable (truancy). Experimental group is assigned to independent variable, while the control group is assigned to dependent variable. Before selecting the experimental and control groups, a pre-test was administered on the two groups. This was done to control extraneous or intervening variables that are likely to affect the result of the study. The experimental group receive treatment (positive reinforcement) while the control group did not receive treatment.

The population for the study consists of all the eight (8) public senior secondary schools in Gwagwalada. The population of SS II are table 1 contains a comprehensive distribution of the population of two schools based on their gender.

Table 1: Population of the school, students and gender

Name of Schools	Groups	Male	Female	Total
GSS, Gwagwalada	A(Exp.)	42	37	79
	B(Cont.)	38	29	67
GSS, Dobi	A(Exp.)	36	32	68
	B(Cont.)	24	23	47
Total		140	121	261

In order to ascertain the reliability of the instrument designed (questionnaire) it was subjected to pilot test. In other words, the questionnaires were administered to a sample of 30 respondents (students) in two schools outside the sampled areas for the study, but within the same population. The instrument was then retrieved and scored. To determine the reliability coefficients of the instrument. The Kr12 was used to determine dichotomous of the instrument. The reliability of the coefficient was determined using Kuder-Richardson 21 (Kr21) coefficients of reliability test, reliability index of 0.88.

The data collected from the study was analyzed using mean score, and standard deviation to answer the research questions, while t-test statistic at 0.05 level of significance was used to test the null hypotheses.

4. Data presentation and analysis results

Data collected through research instrument were organized in tabular for ease of understanding. Statistical Package for Social Sciences version 20 was used to compute the data at both descriptive and inferential levels. Mean and Standard Deviation were used for descriptive analysis and t-test for inferential analysis.

Table 2: Experimental and control groups

Groups	Frequency	Percentage
Experimental	147	56
Control	114	44
Total	261	100

Table 2 shows the distribution of respondents in experimental and control groups. 147(56%) respondents were used for the experimental group while 114(44%) respondents were used for the control group. This implies that majority of the respondents in experimental group are more than control group.

Table 3: Distribution of respondents by gender

Gender	Frequency	Percentage
Male	172	66
Female	89	34
Total	261	100

Table 3 shows the distribution of respondents by gender in the study. 172(66%) respondents were male while 89(34%) respondents were female. The table shows that the male respondents are more than female respondents in the study.

Table 4: Distribution of respondents by location

Location	Frequency	Percentage
Urban	159	61
Rural	102	39
Total	261	100

Table 4 shows the distribution of respondents by school location in the study. 159(61%) respondents were urban while 102(39%) respondents were rural. The table shows that majority of the respondents are from urban area more than respondents from rural area.

Analysis of research questions

Research question one: What is the effect of positive reinforcement technique in the rate of truancy reduction of students exposed to experimental group exposed to the treatment?

Table 5: Analysis of pre and post-test positive reinforcement technique in the rate of truancy reduction of students in experimental group exposed to the treatment

Group	N	Pre-test		Post-test	
		\bar{X}	SD	\bar{X}	SD
Experimental	147	21.47	1.16	37.13	0.34
Control	114	25.73	0.32	32.22	0.17
Mean Difference		4.26		4.91	

Source: Generated by the researcher using SPSS 7.0 version

Table 5 presented data on the mean score of effect of positive reinforcement in the rate of truancy reduction of students in experimental group exposed to the treatment not exposed to treatment has pre-test mean score is (mean = 21.47 SD = 1.16) while the control group pre-test is (mean = 25.73 SD = 0.32). From the result, post test students exposed to the treatment have a mean score of (mean = 37.32 SD = 0.32) and control group is (mean = 32.22 SD = 0.17). However, the overall mean difference between the groups for pre-test 4.26 and post-test 4.91 which favored students in experimental group exposed to the treatment and the control group not exposed to treatment. This implies that students exposed to the treatment have high mean score shows that the truancy rate of the experimental

group has been reduced compared with that of the control group.

Research question two: What is the effect of positive reinforcement technique in the rate of truancy reduction of male and female students in experimental group exposed to the treatment?

Table 6: Analysis of pre and post-test positive reinforcement technique in the rate of truancy reduction of male and female students in experimental group exposed to the treatment

Gender	N	Pre-test		Post-test	
		\bar{X}	SD	\bar{X}	SD
Male	172	19.32	0.47	28.46	0.72
Female	89	9.84	0.28	17.32	0.83
Mean difference		9.48		11.14	

Source: Generated by the researcher using SPSS 7.0 version

Table 6 presented data on the mean score of effect of positive reinforcement in the rate of truancy reduction of male and female in experimental group exposed to the treatment has pre-test mean score is (mean = 19.32 SD = 0.47) while the control group pre-test is (mean = 28.46 SD = 0.72) From the result, post test students exposed to the treatment have a mean score of (mean = 9.84 SD = 0.28) and control group is (mean = 17.32 SD = 0.83). Similarly, the overall mean difference between the groups for pre-test 9.48 and post-test 11.14 which favoured male students in experimental group exposed to the treatment. This disclosed that there is a gender difference between the male and female students exposed to treatment in experimental group.

Research question three: What is the effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment?

Table 7: Analysis of pre and post-test effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment

Location	N	Pre-test		Post-test	
		\bar{X}	SD	\bar{X}	SD
Urban	159	27.93	0.16	34.34	0.11
Rural	102	22.73	0.32	30.81	0.17
Mean Difference		5.20		3.53	

Source: Generated by the researcher using SPSS 7.0 version

Table 7 presented data on the mean score of effect of positive reinforcement in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment has pre-test mean score is (mean = 27.93 SD = 0.16) while the control group pre-test is (mean = 34.34 SD = 0.11). From the result, post test students exposed to the treatment have a mean score of (mean = 22.73 SD = 0.32) and control group is (mean = 30.81 SD = 0.17). Similarly, the overall mean difference between the groups for pre-test 5.20 and post-test 3.53 which favoured students from urban students in experimental group exposed to the treatment. This disclosed that urban students

respond positive to positive reinforcement technique.

Testing of hypotheses

The following hypotheses were tested at 0.05 level of significant.

Hypothesis one

H₀₁: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of students in experimental group and control group.

Table 8: t-test analysis on there is no significant effect of positive reinforcement technique in the rate of truancy reduction of students in experimental group and control group

Group	N	Mean	Std. Dev.	t-value	df	p-value	Remark
Experimental	147	37.13	0.34	2.781	241	.000	Rejected
Group	114	32.22	0.17				

Source: Generated by the researcher using SPSS 7.0 version

Table 8 shows the t-test result on effect of behaviour modification strategy in the rate of truancy reduction of students experimental group exposed to the treatment. Data revealed that the t-value is 2.781 is greater than p-value value which is 0.000 at $P \leq 0.05$ with $df = 241$. The null hypothesis which states that there is no significant effect of behaviour modification strategy in the rate of truancy reduction of students experimental group exposed to the treatment was rejected. Hence, there is significant effect of behaviour modification strategy in the rate of truancy reduction of students experimental group exposed to the treatment.

Hypothesis two

H₀₂: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of male and female students in experimental group exposed to the treatment

Table 9: t-test analysis on significant effect of positive reinforcement technique in the rate of truancy reduction of male and female students in experimental group exposed to the treatment

Gender	N	Mean	Std. Dev.	t-value	df	p value	Remark
Male	172	28.46	0.72	2.442	122	0.741	Accepted
Female	89	17.32	0.28				

Source: Generated by the researcher using SPSS 7.0 version

Table 9 shows the t-test result on effect of behaviour modification strategy in the rate of truancy reduction of male and female students in experimental group exposed to the treatment. Data revealed that the t-value is 2.442 is greater than p-value which at $0.741 p \leq 0.05$ with $df = 122$. The null hypothesis which states that there is no significant effect of behaviour modification strategy in the rate of truancy reduction of male and female students in experimental group exposed to the treatment was accepted and retained. Therefore, there is no significant effect of positive reinforcement in the rate of truancy reduction of male and female students in experimental group exposed to the treatment.

Hypothesis three

H₀₃: There is no significant effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students exposed to experimental group exposed to the treatment.

Table 10: t-test analysis on effect of positive reinforcement technique in the rate of truancy reduction of urban and rural students in experimental group exposed to the treatment

Location	N	Mean	Std. Dev.	t-value	df	p-value	Remark
Urban	146	34.34	0.11	1.108	257	.000	Rejected
Rural	115	30.81	0.17				

Source: Generated by the researcher using SPSS 7.0 version

Table 10 shows the t-test result on effect of behaviour modification strategy in the rate of truancy reduction of the urban and rural students in experimental group exposed to the treatment. Data revealed that the t-value is 1.108 is greater than p-value which is 0.000 at $p \leq 0.05$ with $df = 257$. The null hypothesis which states that there is no significant effect of behaviour modification strategy in the rate of truancy reduction of the urban and rural students experimental group exposed to the treatment was rejected. Hence, there is significant effect of behaviour modification strategy in the rate of truancy reduction of the urban and rural students in experimental group exposed to the treatment.

Summary of Findings

The following are the findings of the study:

- The study revealed that there was significant effect of positive reinforcement in the rate of truancy reduction of the experimental group exposed to the treatment ($t = 2.781$, $p = .000$) and this implies that positive reinforcement is effective in reducing truancy among secondary school students.
- The study revealed that there was no significant effect of positive reinforcement in the rate of truancy reduction of male and female experimental group exposed to the treatment ($t = 2.442$, $p = .741$) and this indicates that positive reinforcement is not effective in reducing truancy problem among male and female secondary school students.
- The study revealed that there was significant difference in effect of positive reinforcement in the rate of truancy reduction of rural and urban experimental group exposed to the treatment ($t = 1.108$, $p = .000$) and this mean that positive reinforcement is effective in reducing truancy among rural and urban secondary school students.

5. Discussion of findings

Hypothesis one aimed to determine the impact of positive reinforcement on the rate of truancy reduction in the experimental group, which received the treatment, compared to the control group, which did not receive the treatment. The results revealed a significant effect of the positive reinforcement technique on reducing truancy rates in both the experimental and control groups. This finding aligns with the viewpoint expressed by Onyejiaku (2004), who asserted that www.dzarc.com/education

therapy can be employed to aid truants in relinquishing their truancy. In order to achieve this objective, after truants are found, school counsellors should make sure to provide counselling to the kids who have been recognized as truants. Parents should endeavour to furnish their children with essential school necessities, even with their limited finances. Okeke (2012) [32]. He stated that reinforcement refers to the methods used to encourage a desirable conduct or improve the likelihood of that behaviour occurring again in the future. Shetzer and Stone (2008) [38] corroborated the findings by noting that reinforcement involves providing desired consequences to enhance or assist specific behaviors, such as offering praise, smiling, or even providing tangible rewards like chocolate or sweets. Hypothesis two aimed to determine the impact of employing positive reinforcement techniques on reducing truancy rates among male and female students in the experimental group. The results revealed that there was no significant effect of the positive reinforcement technique on reducing truancy rates in the experimental group. This finding contradicts Lawal's (2015) finding, which emphasized that positive reinforcement did not have a significant impact on reducing truancy rates in the experimental group. Furthermore, there was no significant effect of positive reinforcement on truancy reduction in both male and female experimental groups, as well as in urban and rural experimental groups. Hypothesis three aimed to determine the impact of employing positive reinforcement techniques on reducing truancy rates among urban and rural students in the experimental group. The results revealed a significant effect of the positive reinforcement technique on reducing truancy rates among both urban and rural students in the experimental group. This conclusion aligns with the assertion made by Ezeani (2016) [10] that in order to lessen, if not eliminate, the issue of truancy in our schools, it is imperative that everyone actively contributes and there is a complete transformation in our lifestyles and moral principles. The families, school, and society should establish a strong connection by using a communicative method that primarily involves the active participation of parents, truants, and teachers. Furthermore, it is imperative for counsellors to exemplify appropriate behaviour and serve as positive role models. Certain professors have been discovered to be habitual individuals who consistently arrive late and are absent without permission. These counsellors serve as poor role models for the students they are responsible for, while adult members of society should strive to set a good example. Truants in the school should get comprehensive support to cultivate self-discipline rooted in rationality rather than coercion.

6. Conclusion and recommendations

Based on the findings of this study, the following conclusions were reached:

Based on the finding of the study, the following conclusions were made: Behaviour modification strategies are those ways aimed at enforcing behaviour when they are appropriately done by an individual. Therefore, the study concludes that positive reinforcement and punishment can be used in the reduction of

truant behaviour among secondary school students in Gwagwalada Area Council, FCT-Abuja.

Based on the findings the following recommendations were made from the findings of the research.

- Teachers, school principals and counselors should be train and retrain on positive reinforcement technique in order to address the problem of truant behaviour among secondary school students.
- Positive reinforcement should be introduced into the school curriculum in order to reduce truant behaviour among school students based on difference gender.
- The use of school seminar, workshop and symposium on positive reinforcement for school counselors in order to reduce the problems truancy among secondary school students based on location.

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