Effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour among Secondary School Students in Zaria Metropolis

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ABSTRACT

The study focused on determining the Effects of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour among Secondary School Students in Zaria, Metropolis Kaduna State Nigeria. In spite of the awareness of classroom rules and regulations and most efforts put in by classroom teachers to maintain disciple and quietness needed for effective teaching and learning, some students still find themselves coming short of these expectations by breaking classroom rules thus falling short of expected classroom communication behaviour. This study investigated how Token economy counselling technique can serve as an intervention to the exhibition of disruptive classroom communication behaviour among secondary school students in Zaria metropolis. The study employed a quasi-experimental pre-test, post-test control group design. The purposive sampling technique was used to select two private Secondary Schools in both Zaria and Giwa Local Government Areas (LGAs), while twenty-four Students were also purposively selected to participate in the study during the Third Term of 2014/2015 academic session (twelve students from each school). Disruptive Classroom Communication Behaviour Rating Scale (DCCBRS) which was adapted from Coulby and Harper (1985) was the instrument used for the collection of data in this study. Paired sample t-test and ANCOVA were used in testing the hypotheses. As regards hypotheses, for hypothesis one, Token Economy Counselling Technique has significant effect in reducing Disruptive Classroom Communication Behaviour of Secondary School Students (p = 0.000< 0.05). For hypothesis two, there was no significant differential effects of Token Economy Counselling Technique on male and female students’ reduction of the exhibition of Disruptive Classroom Communication Behaviour (p = 0.314>0.05). It was recommended that school Counsellors, Psychologists and classroom teachers should use Token Economy Counselling Technique in managing Disruptive Classroom Communication Behaviour among Secondary School Students. In addition, Token Economy Counselling Technique should be used to reduce the exhibition of Disruptive Classroom Communication of male and female students without fairness of its effect.
INTRODUCTION

Classroom orderliness has been one of the vital ingredients that ensure smooth communication between classroom teachers and their students but it seems the classroom is rapidly shifting into a volatile environment. Most often some teachers may find it so challenging to provide effective instruction because of Disruptive Classroom Communication Behaviour (DCCB) of some students which could be traced to the background and the personality of the students and the methods of teaching employed by the teachers and also the environment of the classroom. Disruptive Classroom Communication Behaviour (DCCB) is the exhibition of both verbal and non-verbal communication behaviour by a student or a group of students which is capable of interrupting effective teaching-learning during class instruction (Ogunwole, 2016). Disruptive Classroom Communication Behaviour are in opposition to expected and acceptable classroom behaviour which requires student(s) to be quiet, respectful and obedient to school or class authority. Federal Government of Nigeria (FGN) (2004) stated that students should be taught respect for the worth and dignity of individuals (Raise a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labour, appreciate those values specified section 5: No 22: item G, NPE, 2004). Instead of maintaining a quiet atmosphere and paying rapt attention to class instructions, some students may be seen mimicking the teacher, writing notes on a piece of paper and passing on such paper to the student sitting close to them. Moreover, they may engage in verbal talk to other students or whispering, calling on the teacher for not too important or urgent reason, contribute to class discussion without being given the floor by the teacher or may blunt out information without being told to do so by the teacher (Ministry of Education, Kaduna, 2014). Sometimes, some of these students may even sit at the back of the classroom and be engrossed in their own talk unmindful of the presence of a teacher in the class.

According to Gerald, 2001 (cited in Browne, 2013), Disruptive Classroom Communication Behaviour may indicate a significant level of personal problem or distress on the part of the disrupter. Disruptive classroom communication behaviour is detrimental to the academic community as it interferes with the ability of the teachers to teach effectively and deter other students from benefiting maximally from class instruction. Also, teachers have reported feeling ill-equipped to assist students with the many challenges they present in the classroom which may lead to high stress levels and burnout among teaching staff (Ducharme & Shecter, 2011). Moreover, research findings have shown that school or classroom misbehaviour has not only escalated with time but also lowered academic
achievement and increased delinquent behaviour (Bryant, Schulenberg, Bachman, O’Malley & Johnson, 2000).

The exhibitions of Disruptive Classroom Communication Behaviour by students meet with several and different forms of punishments by the teachers and sometimes the school administrators: Student(s) who exhibit Disruptive Classroom Communication Behaviour may be punished in several ways such as to hold their lips, stand on their feet, kneel and raise their hands up above their shoulders, being caned by the teacher, fetch water, wash the toilets, cut grasses and so on. Notwithstanding upon all these forms of punishment, these behavioural problem is on the increase. Most time, as soon as a teacher finished asking the student(s) to observe a form of punishment for exhibiting a form of Disruptive Classroom Communication Behaviour, the same student(s) may be seen exhibiting another form of disruptive behaviour in the class again. Even when the teacher had made it clear that he or she has zero tolerance for Disruptive Classroom Communication Behaviour, many students still take pleasure in exhibiting such behaviour (Rose & Gallup, 2005). These forms of punishments given to students over the years had not yielded much significant effect due to the continuous exhibition of Disruptive Classroom Communication Behaviour by students despite all these forms of punishments (Giwa, Zaria Zonal Educational Office 2014). From the aforementioned, it may seem the professional efforts of classroom teachers may not be yielding significant result in treating disruptive classroom communication behaviour hence the need for counselling intervention. This study therefore intends to use Token Economy counselling techniques in the treatment of Disruptive Classroom Communication Behaviour during class instruction.

According to Elliot, Kratochwill, Cook and Travers, 2000, Token Economy is a form of classroom management technique in which students receive tokens at the exhibition of desired behaviour. It is a behavior modification technique through counseling procedure reinforced with the use of the use of tokens such as cards, points, stickers which can be exchanged for tangible things such as prices, money or gift.

Based on the little available Literature on Disruptive Classroom Communication Behaviour, some records of some schools’ disciplinary reports and the fore-going observation on Disruptive Classroom Communication Behaviour with its consequences on the teaching-learning process, classroom management and academic performance inform this investigation. Coupled with the fact that despite the application of other forms of punishment, Disruptive Classroom Communication Behaviour are on the increase. It seems most students are conversant with punishment for
all forms of misconduct in the classroom and it also appears most students are not conversant with the use of reward for the exhibition of good conduct in the classroom. Hence the outcome of this study will be an eye opener and encouragement for students to learn to comply with classroom acceptable communication behaviour which will help them achieve academic success. Thus, the researchers intend to determine the effect of Token Economy Counselling Technique on DCCB among Secondary School Students in Zaria Metropolis and to investigate if the use of Token Economic Counselling Technique will be a deviation from the conventional method (punishment) of handling Disruptive Classroom Communication Behaviour. It is hoped that this counselling technique (Token Economy) will be effective in the treatment of Disruptive Classroom Communication Behaviour during class instruction. Particularly, it is expected that Token Economy Counselling Technique may have effect in the reduction of Disruptive Classroom Communication Behaviour among Secondary School Students in Zaria Metropolis. In addition, the success of this counselling technique in managing behavioural problems has evidenced from related empirical studies such as Aljuhaish (2015) prompted the researcher to use this technique in order to affirm or nullified the effectiveness of this counselling technique.

OBJECTIVES OF THE STUDY

The objectives of the study were to:

1. Determine the effect of Token Economy Counselling Technique (TECT) on Disruptive Classroom Communication Behaviour (DCCB) of Secondary School Students in Zaria metropolis.

2. Investigate the differential effect of Token Economy Counselling Technique (TECT) on Disruptive Classroom Communication Behaviour (DCCB) between male and female Secondary School Students in Zaria metropolis.
Hypotheses

Two hypotheses were formulated and tested in this study as follows:

Ho₁ There is no significant effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour of Secondary School Students in Zaria metropolis.

Ho₂ There is no significant differential effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour between male and female Secondary School Students in Zaria metropolis.

METHODOLOGY

This study adopted quasi-experimental design that uses the non-randomized pre-test and post-test control group design. Twenty-four (24) JS2 students were purposively selected because they had higher record of the exhibition of Disruptive Classroom Communication Behaviour from two purposively selected private secondary schools within Zaria metropolis. The two secondary schools were also purposively selected because they had the highest record of students who exhibited Disruptive Classroom Communication Behaviour when compared to other schools that were sampled. Letters of consent were obtained from the two schools’ principals before the commencement of the study. There were 12 students per school. To implement the procedure, one school was tagged experimental group while the other school was tagged as the control group. Both the treatment group and the control group were pre-tested using Disruptive Classroom Communication Behaviour Rating Scale (DCCBRS) instrument adapted from Coulby and Harper, (1985). The essence of the pre-test was to identify students that exhibit DCCB and to serve as pre-test instrument for both treatment and the control groups. Followed by seven weeks’ treatments procedure of Token Economy counselling technique for the experimental group while the control group received no treatment. In the course of the treatment, English Language was taught and there was award of tokens which were in forms of cards (rectangular shape). These cards were awarded to students who exhibited target behaviour (such as: hand raise to indicate eagerness to communicate, maintaining quietness) based on the intervals of five minutes to fifteen minutes as the treatment progresses. By the end of two weeks (forth nightly) the tokens were exchanged for tangibles such as writing materials (eighty-leaves and sixty-leaves exercise notes) depending on the number of tokens awarded to the student. DCCBRS instrument was re-administered for both groups as post-test. The two results (pre-test and post-
test) were correlated and scored. Then the scores were subjected to statistical analysis which were t-test and Analysis of Covariance (ANCOVA) to test the hypotheses.

RESULT

Demographic Data

The demographic data collected for this study covered the following: distribution of respondents into groups, and gender as shown in Tables 1 and 2 below.

Table 1: Distribution of students into groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Token Economy</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>Control</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1 shows the distribution of the JS2 Students into experimental groups. On the respondents’ treatment group, they were categorized into two groups. The first 12 were exposed to the experimental treatment of Token Economy Counselling Technique and the rest 12 were not exposed to any treatment, they were called the control group.

Table 2: Distribution of Students by Gender

<table>
<thead>
<tr>
<th>Gender (sex)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13</td>
<td>52.8</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>47.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2 shows the distribution of JS2 Students according to gender. The male JS2 students in this study were 13 in number representing 52% while the rest 11 JS2 Students were female representing 47.2%.

The results of the study were presented according to the hypotheses presented on Tables 3 and 4.

Hypothesis One:

There is no significant effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour of Secondary School Students in Zaria metropolis.
Table 3: Summary of paired sample t-test statistics on the effect of TECT on the pre-test and Post-test mean scores on DCCB of secondary school students in Zaria metropolis.  
*Calculated p < 0.05, Calculated t > 1.96, at df 11*

<table>
<thead>
<tr>
<th>Token Economy</th>
<th>N</th>
<th>Mean Score</th>
<th>Std.</th>
<th>Std.</th>
<th>D</th>
<th>t-cal.</th>
<th>t-crit</th>
<th>P(sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCCB Pre-test</td>
<td>12</td>
<td>48.8333</td>
<td>4.3029</td>
<td>1.242</td>
<td>1</td>
<td>16.6</td>
<td>1.96</td>
<td>0.00</td>
</tr>
<tr>
<td>DCCB Post-test</td>
<td>12</td>
<td>25.5000</td>
<td>2.3159</td>
<td>.6685</td>
<td>2.3159</td>
<td>.6685</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 showed the effect of TECT on DCCB, result showed that the calculated p value of 0.000 is lower than the 0.05 alpha level of significance while the calculated t-value of 16.604 is higher than the t-critical value of 1.96, at df 11. Consequently, hypothesis one is rejected. This indicated that TECT had significant effect on DCCB secondary school students exposed to treatment because the result revealed that TECT has reduced the level of DCCB among students exposed to TECT treatment.

**Hypothesis Two**

There is no significant differential effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour between male and female Secondary School Students in Zaria metropolis.
Table 4: One-way Analysis of Covariance on the effect of Token Economy Counselling Technique on DCCB between male and female Secondary School Students in Zaria metropolis.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>5446.741*</td>
<td>7</td>
<td>778.106</td>
<td>31.195</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>91383.813</td>
<td>1</td>
<td>91383.813</td>
<td>3663.639</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>129.118</td>
<td>1</td>
<td>129.118</td>
<td>5.176</td>
<td>.028</td>
</tr>
<tr>
<td>Tests</td>
<td>1514.839</td>
<td>1</td>
<td>1514.839</td>
<td>60.731</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>1990.292</td>
<td>1</td>
<td>1990.292</td>
<td>79.792</td>
<td>.000</td>
</tr>
<tr>
<td>sex * Tests</td>
<td>17.962</td>
<td>1</td>
<td>17.962</td>
<td>.720</td>
<td>.401</td>
</tr>
<tr>
<td>sex * group</td>
<td>3.626</td>
<td>1</td>
<td>3.626</td>
<td>.145</td>
<td>.705</td>
</tr>
<tr>
<td>Tests * group</td>
<td>1592.304</td>
<td>1</td>
<td>1592.304</td>
<td>63.837</td>
<td>.000</td>
</tr>
<tr>
<td>sex * Tests * group</td>
<td>25.990</td>
<td>1</td>
<td>25.990</td>
<td>1.042</td>
<td>.314</td>
</tr>
<tr>
<td>Error</td>
<td>997.78</td>
<td>40</td>
<td>24.943</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>99813.000</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6444.479</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .845 (Adjusted R Squared = .818)

Result on Table 4 is the analysis of covariance conducted to test the differential effect of TECT on DCCB of male and female secondary school students. The covariate used in the analysis was the pretest/post-test scores of both male and female secondary school students. After adjusting for the covariate, finding shows there is no significant differential effect of TECT on DCCB of male and female secondary school students, $F = 1.042 < 2.600$, $p = 0.314 > 0.05$ with Adjusted R Squared 0.818=81.8% covariance for sex versus tests versus groups. This indicates that there is significant difference between the pre-test/post-test as well as treatment and control of both sexes due to the effect of TECT on treatment group. This means that the effects of the TECT intervention on DCCB of male and female secondary school students were the same. Therefore, the null hypothesis which stated that there is no significant differential effect of TECT on DCCB of male and female secondary school students was retained. Discussion of Findings

Disruptive classroom communication behaviour has been one major challenge being faced by classroom teachers in most of our Nigerian secondary schools. The display of these disruptive behaviours during class instruction may not only deter teacher’s professional efforts but may also, if unchecked, spread and breed more disciplinary problems in the classrooms. It is based on this that this study aimed to majorly investigate how Token
Economy Counselling Technique may positively or negatively change this condition in our Secondary Schools in Zaria Metropolis.

The findings of this study, based on hypothesis one revealed the significant effect of Token Economy Counselling Technique on the reduction of the exhibition of Disruptive Classroom Communication Behaviour of JS2 Students exposed to Token Economy Counselling Technique treatment. The result revealed a significant effect existed. Also, Research question one was answered through a computation of the pre-test and post-test mean scores which revealed that TECT had significant effect on DCCB. The result of a lower post-test mean score confirmed the reduction in the exhibition of DCCB among students exposed to TECT. The findings is supported by Zlomke and Zlomke (2003) who carried out a study using Token Economy, Self- monitoring and where Time-out was adopted as one of the traditional practices to reduce Disruptive Classroom Behaviour in an adolescent (thirteen year-old) with emotional and behavioural disorder. The result from their study showed that Token Economy has the effect of reducing minor disruptive and aggressive classroom behaviours. The use of Token economy, Self- monitoring plus time-out further produced a clinically significant reduction in the target behaviour of the adolescent. In the same vein, Aljuhaish, (2015) investigated the effectiveness of Behaviourist Token Economy system on teaching English as a second Language in Saudi Schools in Kuala Lumpur. His findings revealed that Token Economy promotes better learning of English as a second Language.

With regards to hypothesis two, the result showed no significant differential effect was observed between JS2 male and female students exposed to Token Economy Counselling Technique treatment. Findings from Research question two confirms the result of hypothesis 2 where the DCCB instrument was pre-tested and post-tested and there was a reduction in the exhibition of DCCB between male and female students exposed to TECT treatment. This implies TECT has effectively reduced the exhibition of Disruptive Classroom Communication Behaviour of male and female JS2 students exposed to TECT treatment when compared with those in the control group. The findings also revealed that Token Economy is not gender sensitive. The findings of Allison (2008) supported the findings of hypothesis 2, they conducted a survey study using Token Economy with 12 boys and 12 girls in a first grade class in an academic year calendar. The study investigated boys’ and girls’ perception on the use of reward and its consequences in the classroom setting. The authors made use of Token Economy at the display of desired behaviour of the students. Allison (2008) study revealed that Token Economy was successful on both the boys’ and the girls’ because as a result of Token Economy, the boys’ and girls’ started
exhibiting the desired behaviour for classroom learning (consequence of Token Economy) The findings is in line with McGoey and Dupaul (2009) who in their study use Response cost compared with Token reinforcement. Their study revealed that both techniques were effective in reducing disruptive behaviour. Also in support of this findings of this study, based on hypothesis 2, is Ihiegbullem, Ihiegbullem and Igwewuike (2011), whose study was to determine the effect of Token Economy on the academic achievement of secondary school students in Rivers state. Their population was a mixed sex grouping. The result of their study showed that Token economy had significant effect on academic achievement of the students. Their findings confirmed that Token economy is not gender sensitive when used between mixed sexes grouping in a study.

This study is unique in the sense that several other researches have been conducted both within and outside Nigeria using one form of behaviour modification technique or the other to manage one form of classroom disruptive behaviour or the other among pre-schoolers, pupils and secondary schools but no attention has been paid to disruptive classroom communication behaviour among JS2 students in Nigerian secondary schools. A familiar study using the same Token Economy Technique was carried out by Ihiegbullem et al (2011) but it was to determine the effect of Token Economy on the Academic achievement of secondary school students in Rivers State of Nigeria. In their study, their samples were JS3 and SS1 students and the result of their study shows that Token Economy was effective on students’ academic achievement. The findings of this study could be generalised based on the results of other similar studies though the location (Zaria) and the behavioural problem (Disruptive Classroom Communication Behaviour) this study looked at made this study unique.

Summary of Major Findings

The findings of the study revealed the following:

1. Token Economy counselling technique has effect on the reduction of Disruptive Classroom Communication Behaviour of Secondary School Students in Zaria metropolis (p=0.000). This is because there was reduction in students’ DCCB mean scores after exposure to TECT treatment.

2. No significant differential effect of Token Economy Counselling Technique on Disruptive Classroom Communication Behaviour was observed between male and female Secondary School Students (F=1.40, p = 0.314). This implies TECT intervention did not differ
significantly in its effect between male and female students exposed to TECT treatment.

CONCLUSION

Based on the outcomes of this study, the following conclusions were drawn:

1. The result of the study revealed that Token Economy Counselling Technique has significantly reduced the exhibition of Disruptive Classroom Communication Behaviour among Secondary School Students. The conclusion drawn is that TECT has the ability to reduce the exhibition of Students’ DCCB.

2. TECT has no significant differential effect on male and female exhibition of DCCB. Hence, the conclusion drawn is that TECT has no gender bias in its effect on the reduction of the exhibition of male and female DCCB therefore it can be used in reducing DCCB among both sexes.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are hereby presented:

1. The school counsellors, psychologists and the teachers are encouraged to use TECT in managing DCCB among Secondary School Students in Zaria metropolis, because of its strength in managing DCCB among Secondary School Students in Zaria metropolis.

2. The school counsellors, psychologists and classroom teachers should use TECT in managing DCCB among Secondary School Students either male or female without fairness of its effectiveness, because the findings revealed that TECT is not gender bias in the reduction of DCCB between male and female students.
REFERENCES


