Efficacy of Token Economy -Technique in Reducing Lateness Behaviour among Primary School Pupils in Kaduna Metropolis, Nigeria

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Yunusa Umaru

ABSTRACT
This research is carried out using quasi-experimental research design involving pretest-posttest method. It investigates the effect of token economy on lateness among primary school pupils in Kaduna Metropolis, Kaduna State, Nigeria. The population of the study involves all the primary school pupils in the 282 private primary schools in Kaduna metropolis. The sample of this study consists of 30 primary school pupils of Damtek International School U/Baro, Kaduna. Purposive sampling technique is used in the selection of those with the highest number of lateness from the class attendance register. The participants are both male and female pupils. The 30 pupils were exposed to the experiment. Simple percentage, mean and standard deviation and t-test were used to analyse the data. Findings reveal among others that total days present has significantly increased as a result of the application of the effect of token economy technique on school lateness. Their mean total days present were 23.03 and 14.73 in their after and before being exposed to the token economy technique. Based on this and many more, it is recommended that school psychologist, counsellors, teachers, and head teachers should be exposed to training in the use of token economy technique in reducing lateness among primary school pupils irrespective of age and gender differences.

Keywords: Token economy, lateness, age, gender, primary school pupils

INTRODUCTION
In this present dispensation, any nation that does not give priority to education is doomed most especially the developing nations. World Bank as cited in Canfield (2011), maintains that “Education is one of the most powerful instrument for reducing poverty and inequality”. In the same vein, Olsen (2014) opines that secondary school is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development in a country. It is rather unfortunate that these educational objectives are hardly achieved as indicated by WAEC, Chief examiner Report (2014) when analyzing student performance across the nations. There are many factors that have been attributed to the downward trend of academic achievement which include: corruption, examination malpractice, lack of adequate funding, poor management of resources, poor study behaviour, lateness to school and emotional problems. Of all these factors, lateness

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has been generally recognized as one of the important factors related to the downward trend of academic achievement; thus, the better the punctuality, the higher the academic achievement and vice versa. Lateness is coming or happening after the usual, expected or proper time. Weade (2004) defines lateness as being late for any measurable length of time past the stated or scheduled start time for work or school. In considering when students are late to school, Weade (2004) states that students will be considered late if they are not in the room when the bell starts to ring. The above definition gives a clear picture of what lateness is, it can be said to be the inability of a student to be present at the beginning of the first activity of the school. This habit of lateness by students is becoming a source of concern to teachers, parents and the society as a whole. Thomson (2006) opines that one of the most frustrating problems in today’s classroom is lateness to school which suggests that school is not important and valuable to them. He also stresses that school lateness is a form of behaviour where students are late, slow and inactive in whatever they are doing. It brings about many problems like getting lower grades which lead to failure, it increases the chances of drop out, suspension and other disciplinary charges, affects their job performance as they will always be fired from work and also has greater negative effects to teachers and fellow students (Scott and Potter, 2007).

Evidence has shown the efficacy of the use of token economy counselling technique in reducing abnormal behaviour, several studies exist which show the effectiveness of this type of behaviour management tool. One of these studies employed a free time reward when five tokens had been earned (Ruesch and McLaughlin, 1981). A clear increase in student assignment completion took place when token economies were used to decrease inappropriate behaviour (Coupland, McGregor and McLaughlin, 1981). Kazdin and Bootzin (1972) employ token reinforcement indicated a sudden improvement in behaviour of the pupils. Education is generally regarded as one of the major factors that influences one’s life in terms of social and economic aspect. Pupils go to school to learn and when such learning does not take place as a result of lateness to school, the aim of education is defeated. Hence, school plays an important role in the development of an individual, thus any attempt by any pupil not to be punctual to school regularly poses a serious problem that has the tendency to generate other problems.

There are many factors responsible for academic failure; among them is lateness to school. Lateness is the inability of a pupil to be in the school at the proper or expected time. Evidence has shown through class attendance registers that a lot of pupils come late to school, more so, that pupils do roam and play, on the street on their way to school which results to school lateness. Common entrance and primary school leaving certificate examinations had indicated poor academic performance. Lateness has become a major problem in effective classroom management. Pupils who are always late in class do not only lose valuable instruction for themselves, they also disturb class, interfere with lessons in progress and disrupt other pupil’s concentration. These consequently lead to lower grade, academic frustration, drop out and behaviour problems (Chang and Romero as cited in Farar, 2013). Therefore, lateness as an academic and social problem needs to be given a serious attention. It should be noted that token economy is a modality, technique
used by the teachers to encourage learners to be serious with their work as well as imbibe the culture of punctuality through the presentation of gift items to deserving learners. It is an act that motivates the learners or students to show concern and utmost commitment to their study starting from going early to school and attending classes on time. It is against this background that this research seeks to investigate the efficacy of token economy technique on reducing lateness behaviour among primary school pupils in Kaduna Metropolis, Kaduna State. Consequently, the following are the objectives of this work.

1. To determine the effect of token economy technique on lateness behaviour of those exposed to the experiment.
2. To find out the effect of token economy on lateness behaviour between male and female primary pupils exposed to the experiment.
3. To examine the effect of token economy on lateness behaviour on the ages of primary school pupils exposed to the treatment.

To further guide the study, the following hypotheses were formulated.

1. There is no significant difference of the effect of token economy counseling technique on lateness behaviour of those exposed to treatment.
2. There is no significant difference of the influence of gender on lateness to school of those exposed to treatment.
3. There is no significant difference of the influence of age on lateness to school of those exposed to treatment.

**Efficacy of Token Economy Technique on Reducing Lateness behaviours in School Pupils**

Klimas and McLaughlin (2007) study a female kindergarten student with a development disability who had difficulty completing assignments in the classroom. The student would engage in behaviours such as hitting or kicking, running around the classroom and not participating in classroom discussions or activities. An ABC, single- subject design was used in this study. The student was given instructions as to how to complete the task and then the duration for how long it took the student to complete the task was recorded. Additionally, the number of assignment the student completed as well as the number of inappropriate behaviours during the 30-minutes period was recorded. The student received token for each assignment she completed. During the B portion of the design the student was able to choose a preferred activity after receiving three tokens, and during the C portion she was able to choose activity after five tokens the amount of time it took to complete an assignment during the baseline conduction was 10-minutes during three token portion it was 4 minutes, and during the 5 token portion it was 4-minutes and 57 seconds.

The amount of inappropriate behaviours during the baseline period was an average of 3.33per 30 minutes, zero inappropriate behaviours were exhibited during the three token system and one inappropriate behaviour was done during the five token system. It appears that the three token system was the most effective, although the five token system was still a significant improvement over the baseline conditions. This study indicates that both academic task completion and inappropriate behaviours can be influenced in a positive
way by a token economy. The results of Shrogen, Lang, Machalicek, Rispoli and O’Rally (2011) study indicate that the students followed the rules significantly more in the token economy condition than in the baseline, and even more in the self-monitoring condition than both the baseline and token economy conditions. The return to baseline condition resulted in significantly decreased rule following behaviour, close to the behaviour in the original baseline condition and the classroom teacher requested the baselines be reduced as much as possible because of the disruption. This study, similar to Zlomke and Zlomke’s (2003) study, shows that a token economy can significantly improve behaviour but when paired with a self-monitoring aspect can even further increase appropriate behaviours in children with disabilities. This study focuses on children with Asperger’s but Zlomke and Zlomke’s (2003) study involves a child with E/BD showing that self-monitored token economies can be versatile programs. Luby (2011) affirms that the token economy was a promising intervention that may be utilized to assist teachers in managing the increased levels of disruptive behaviour demonstrated by children in preschool classroom.

Tiano, Fortson, Meveil and Humphrey as cited in Luby (2011) also declare that research supported the effectiveness of the token economy in decreasing disruptive behaviour in academic settings. In support of the author’s conclusive findings, a study by Klimas and McLaughlin (as cited in Luby, 2011) examines the effects of an individual economy with a 6 year old diagnosed with severe behaviour disorder enrolled in a kindergarten-their grade classroom that served children with special needs. The token economy system was used to address the following behaviours: time of completion, the number of assignments completed, and the frequency of inappropriate behaviour. The results of this study indicate that the average time to complete an assignment decreased while the token economy was in place. In addition, the study suggests that the token economy serves as an effective intervention method to decrease the frequency of inappropriate behaviour and increase desirable behaviour.

Another research conducted by Tiano, Fortson McNeil and Humphreys as cited in Luby (2011) also has a comparable outcome, they examined the efficacy of three techniques used in a Head start classroom, which included: techniques used by the teacher currently “A”, response cost “B”, and the token economy “C”. The authors determined if less inappropriate behaviours are exhibited when the response cost “B” and token economy “C” were implemented, than when the teacher utilized the method “A” in the baseline. The results of this study indicate that a decrease in inappropriate behaviour accrues throughout the study for each child, and it did not return to baseline levels during the withdrawal conditions. In addition to this study, Koegel, Koegel and Dunlap as cited in Luby (2011) also determined that utilizing strategies/methods that included the token economy decreased participants’ disruptiveness behaviours occurred as a result of the method. In modifying some classroom behaviours, one of the earliest researches was conducted by Birnbrauer and Lawler as cited in Kazdin and Bootzin (1972) for severely retarded children (IQs below 40). Behaviours reinforced were entering the classroom quietly, hanging coats, sitting at desk attentively and working persistently on a task. Initially, candy was made contingent upon that performance of appropriate behaviours; subsequently, tokens were
Token reinforcement procedures were effective in improving 37 of 41 pupils on behavioural criteria. Walker and Buckley as cited in Kazdin and Bootzin (1972) used token reinforcement with a child who had particular difficulty in paying attention to classroom tasks. Academic skills and social responsiveness had been previously alerted with contingent social reinforcement but attending behaviours remained unaffected. A special treatment session was scheduled in an isolated room for 40 minutes daily during which the subject could earn points. The points could be exchanged for various tangible objects. The subject was rewarded for paying attention for increasing duration of time (to a maximum of 10 minutes). During a baseline period, the subject attended an average of 33% of the time. During contingent reinforcement, this increased to an average of 93%. Finally, when reinforcement was withdrawn, the average percentage of attending behaviour was maintained in the classroom at high level with token reinforcement delivered on a variable interval schedule. Scott and Porter (2007) conduct a study to ascertain the effectiveness of token economy system in a high school setting. The research used quantitative data and the application of token contingencies. The results indicate that token economy systems are indeed effective on a school – wide level in a high school setting.

There are some cases where token economy systems were used to modify behaviours and the results became ineffective. Luby (2011) examines the efficacy of token economy system in reducing physical aggression, property destruction, and disruptive talk in an adolescent diagnosed with autism spectrum disorder. The participant, age 15, met the enrollment criteria of a residential school designed to address the behavioural and academic needs of children with developmental disabilities. The study used quantitative, single subject treatment reversal design. The participant’s behaviour was observed and data was collected in phase I, Baseline, “A” (one week). Phase II, intervention: “B” (seven weeks, and Phase III, Return to Baseline, “A” the variability of the frequency of targeted behaviours included: physical aggression, 0 to 10, property destruction, 0 to 6, and disruptive talk, 0 to 7. In phase II, Intervention “B” the variability of the frequency of targeted behaviours including physical aggression was 0 to 8, property destruction was 0 to 5, and disruptive talk was 0 to 40. In phase III, Return to baseline, “A”, the variability of the frequency of targeted behaviour included: physical aggression, 0 to 9; property description, 0 to 2 and disruptive talk, 0 to 15. Interpretation of the results indicated instability in the variability of the frequency of all targeted behaviours, as the token economy did not serve as an effective method in modifying the behaviour of the participant.

In a related development, Zimmerman, Zimmerman and Russell as cited in Kazdin and Bootzin (1972) report that three of seven retarded studies were unaffected by the token-reinforcement contingencies. Raya and Shelton in Kazdin and Bootzin (1972) also report that 13% of the disturbed adolescent retarded studies did not show significant reductions in inappropriate behaviours. It was noted that all of these subjects exhibited psychotic symptoms or complex behavioural problems. The researchers therefore, consolidate the effort of other researchers by bridging the gap and affirming the effectiveness of the use of token economy in reducing lateness behaviour among primary school pupils.
which will invariably add to the body of knowledge. Evidence has shown through extensive literature review that punishment has been used to change bad behaviour. However, some of these behaviour problems still persist. Therefore, the need for the use of token economy as a better alternative that is pupils friendly in resolving such issues has risen concerning the efficacy of using token economy in reducing abnormal behaviours.

**METHOD**

This research is quasi-experimental involving pretest-posttest design. This design involves the manipulation of one or more independent variables, but there is no random assignment of subjects to conditions (Kolo, 2003). This design was adopted because it has greater internal validity and yields more scientific results. Moreso, the study covered fewer participants under control condition. The population of the study involves 28,042 primary school pupils in 282 private primary schools in Kaduna metropolis. The choice of the subjects was guided by the fact that the pupils have attained the formal operational state of cognitive development. Hence they can be taught new kinds of thinking that are abstract, formal and logical.

**Table 1:** Population distribution of 2013 approved private primary schools and pupils in Kaduna Metropolis

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of Zones</th>
<th>No of Schools</th>
<th>No of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaduna Zone</td>
<td>135</td>
<td>11,441</td>
</tr>
<tr>
<td>2</td>
<td>Sabon Tasha Zone</td>
<td>147</td>
<td>16,601</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>282</strong></td>
<td><strong>28,042</strong></td>
</tr>
</tbody>
</table>

*Source:* Kaduna State Ministry of Education (2014)

The sample of this study consists of 30 primary school pupils of Damtek International School U/Baro, Kaduna. Purposive sampling technique was used in the selection of those with the highest number of lateness from the class attendance register of male and female pupils. The 30 pupils were exposed to the experiment.

**Table 2:** Distribution for the Study Sample

<table>
<thead>
<tr>
<th>Names of Schools</th>
<th>Total Lateness</th>
<th>Male Lateness</th>
<th>Female Lateness</th>
<th>Sample Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damtek International School</td>
<td>161</td>
<td>95</td>
<td>66</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td><strong>161</strong></td>
<td><strong>95</strong></td>
<td><strong>66</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

*Source:* Class attendance registers of the schools (2014).

Data for this study were collected using the class attendance register. The class attendance register for each pupil on lateness level was taken for six (6) weeks before and during the treatment. The researcher collected data in three stages through the pupils class attendance register. At the first stage, the total pupils’ attendance of those that were exposed to treatment was gathered for six (6) weeks before the treatment. At the second stage, the total pupils’ attendance was collected during the six (6) weeks treatment of the token economy counseling technique. Thirdly, punctuality attendance of pupils was collected for three weeks after the end of six (6) weeks of treatment sessions. All these data were collected by checking the class attendance register to see each pupils attendance before, during and post-treatment sessions. The data were collected and analyzed using simple
percentage, mean, standard deviation and t-test statistics. Percentage was used to determine the number of times each pupil came to school late before and after treatment. Also, the presentations of data in tables are better understood than numerical form. The hypotheses were tested using student t-test at 0.05 level of significance. The study was carry out in three phases as follows:

Pre-Treatment Session: The researcher visited the sampled school a week before the commencement of the treatment sessions for a formal introduction of the researcher to the administrator, teachers, counselor(s), and the pupils. This has helped the researcher to familiarize himself with school environment and for a smooth kick off of the treatment sessions.

Treatment Session (Token Economy): The treatment sessions involved 30 pupils that were exposed to the experiment for six weeks as highlighted below:

First Session (1st week)

i. **Introduction:** The researcher initiated a formal introduction between the researcher and the pupils. Thereafter solicited their co-operation and understanding during the period of treatment.

ii. **Confidentiality:** The researcher assured the pupils of strict confidentiality concerning whatever that was discussed during the treatment programme.

iii. **Time of meeting:** A suitable time of meeting was agreed upon for the sessions at least twice a week.

iv. **Pre-test:** The pretest was administered to the pupils to ascertain their readiness for the programme. The pupils were guided to fill the questionnaire that were given to them.

v. **Giving of Token:** At the end of the first week, the researcher gave tokens to pupils who had improved in their punctuality to school.

vi. **Appreciation:** The researcher appreciated the pupils for attending the session and also reminded them of the time, and venue of the next meeting.

Second Session (2nd week)

i. The researcher heartily welcomed pupils to the session.

ii. The researcher guided the pupils in discussing the causes of lateness to school.

iii. The researcher gave tokens to pupils who have shown commitment in coming to school on time.

iv. The researcher appreciated their effort and prepared them for the next session.

Third Session (3rd week)

i. The researcher proceeded to welcome the pupils to the session.

ii. The researcher introduced the session by asking questions based on the previous topic discussed.

iii. The researcher then guided them in discussing the disadvantages/dangers of lateness behaviour to school.
iv. Tokens such as pencil, pen, biscuits, exercise books and mathematical set, were given depending on individual efforts put in by the pupils.

v. The researcher appreciated their effort and dismissed them.

**Fourth Session (4th week)**

i. The researcher gave the pupils a warm welcome to the session.

ii. Previous activities were reviewed by asking relevant questions.

iii. The researcher gave a pathetic story of a 12 year old boy who finished his primary school with poor results that hindered his advancement to secondary school. Narrating the story further, the researcher, he (this boy) met a man, 20 years later in a hospital, who introduced himself as Dr. Umar and paid his hospital bill due to the fact that he could not afford to pay because of joblessness. The Doctor happened to be his classmate in primary school. The young boy’s sad event began when he started going to school late, it developed into frequent absenteeism. The Doctor advises him to go back to school and repeat primary six. That young man regretted his abnormal behaviour of lateness.

iv. The researcher guided the pupils in discussing the lesson derived from the story.

v. The researcher distributed tokens to deserving pupils.

vi. The researcher encouraged the pupils to put in their very best in coming to school early, so as to earn more tokens and improve their punctuality.

**Fifth Session (5th week)**

i. The researcher as usual welcomed the pupils warmly.

ii. The researcher through these headings helps the pupils to discuss how pupils can achieve their goals in life.

* Punctuality to school.
* Attend school regularly.
* Work hard in your studies.
* Plan how well and best you can use your time.
* Keep off from bad company.
* Be obedient to the school rules and regulations and to your parents.

iii. The researcher distributed tokens to the pupils based on their individual efforts.

iv. The researcher appreciates them and encourages them to continue with their cooperation.

**Sixth Session (6th week)**

i. The researcher welcomed the pupils and appreciates them for their support, time sacrifice and for coming for the programme.

ii. He emphasizes the need for punctuality and its sustainability.

iii. He gives tokens to deserving pupils as reward for their effort in coming to school early.

iv. The researcher appreciates and dismisses them.
v. The researcher collects the records of class attendance register of the pupils during the treatment period for analysis.

**Post – Treatment Session:** The researcher returned to the school after three weeks to find out how the treatment session has affected the pupils with lateness behaviour. Pupil’s punctuality attendance for three weeks, were collected for comparison with the data collected after treatment for six weeks.

**RESULTS AND DISCUSSION**

According to data contained on table 3, 50.0% of the respondents were males and females respectively. This shows that equal number of males and females were used in this study. Table 4 shows the age range of the pupils. A total of 13.3% are from 7 years to 8 years 6 months, while 57% are between the age of 9 years to 9 years 8 months and the remaining 30% are aged between 10 years 1 month to 10 years 9 months. This shows that majority of the sampled pupils are aged between 9 years to 9 years 8 months. According to the paired sample statistics on table 5, significant difference exist between the total days present and the total days present in the before and after being exposed to the token economy treatment of primary school pupils in Kaduna metropolis. This is due to the fact that the calculated p value of 0.000 is less than the 0.05 alpha level of significance and the calculated t value of 13.39 is higher than the t critical value of 1.96 at 29df. Their mean total days present were 23.0333 and 14.7333 in their after and before being exposed to the token economy treatment respectively. This implies that their total days present has significantly increased as a result of the effect of token economy treatment. Therefore the null hypothesis which states that there is no significant effect of token economy on lateness behaviour on school pupils after exposure to treatment is hereby rejected.

Results of the independent t-test statistics on table 6 show that there is no significant differences between male and female pupils in their total days present after both were exposed to the token economy treatment. Reason being the fact that the calculated p -value of 0.268 is higher than the 0.05 level of significance while the calculated t value of 1.123 is lower than the 1.96 critical t value at 28df. Their calculated mean total days present were 23.6000 and 22.4667 by male and female respectively. The mean difference was just 1.1333. Therefore, the null hypothesis which states that there is no significant effect of token economy on lateness behaviour of school pupils after exposure to treatment, on the basis of gender, is hereby accepted and retained. Results of the analysis of variance statistics shows that there is no significant difference in the total days present of primary school pupils on account of their age groups. This is because the calculated p value of 0.588 is greater than, the 0.05 alpha level of significance while the calculated t value of 0.542 is lower than the 2.60 F critical value.

The descriptive statistics show that their computed mean total days present in school were 23.5000, 23.3529 and 22.2222 for ages 7 – 8.6 years, 93.000 – 9.8 years and 10 – 10.9 years respectively. This shows that age does not significantly affect their
present rate in school. Consequently, the null hypothesis which states that there is no significant effect of token economy on lateness behaviour of school pupils after exposure to treatment, on the basis of their ages, is hereby accepted and retained. Findings reveal the mean total days present of primary school pupils before and after being exposed to the token economy treatment. Their mean total days present were 23.03 and 14.73 after and before being exposed to the token economy treatment respectively. The mean difference was 8.30. This clearly shows that there is a positive effect of token economy on reducing lateness behaviour among primary school pupils. This finding collaborate with the early findings of Waede (2004), Lucy (2011), Olsen (2014) and Strogen et al (2011) they maintain that token economy technique was effective in reducing school lateness, laziness, school refusal and enhances school performance. The result shows that there was no differences between male and female pupils in their total days present after both were exposed to the treatment. Their calculated mean total days present were 23.60 and 22.46 by male and female respectively. The mean difference was just 1.13, hence, the result showed that both male and female primary school pupils engaged in lateness behaviour, however, when it comes to the use of token economy, the technique proved to be effective to both sexes. This study, similar to Zlomke and Zlomke’s (2003), shows that a token economy can significantly improve behaviour but when paired with a self-monitoring aspect can even further increase appropriate behaviours in children with disabilities. This study focuses on children with Asperger’s but Zlomke and Zlomke’s (2003) study involves a child with E/BD showing that self-monitored token economies can be versatile programs. 

Finally, the findings of this study revealed that lateness to school is not related to the age groups of the primary school pupils. The descriptive statistics proved that the mean total days present by the primary school pupils are 23.50, 23.35 and 22.22 by ages 7-8.6 years, 9.0 – 9.8 years and 10.1 – 10.9 years respectively. This shows that age was not a significant factor as a result of pupils’ exposure to token economy on reducing lateness in school. This finding is in line with the early findings of Coupland et al (1981), Kazdin and Bostzn (1972) and Scott et al (2007) who find that, token economy systems are indeed effective on a school – wide level in a high school setting.

### Table 3: Distribution of respondents according to gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>15</td>
<td>50.0</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Quasi-experiment, 2014*

### Table 4: Age distribution of the respondents

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8.9</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>9-9.9</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>10-10.9</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Quasi-experiment, 2014*
Table 5: Paired Sample t-test statistics on difference in the mean total days present in school before exposed to token economy treatment and total days present after being exposed to token economy treatment

<table>
<thead>
<tr>
<th>Days Present</th>
<th>N</th>
<th>Mean scores</th>
<th>SD</th>
<th>Std. err</th>
<th>T cal</th>
<th>T-crt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Days Present After</td>
<td>30</td>
<td>23.0333</td>
<td>2.76035</td>
<td>.50397</td>
<td>13.39</td>
<td>1.96</td>
</tr>
<tr>
<td>Total Days Present Before</td>
<td>30</td>
<td>14.7333</td>
<td>2.67728</td>
<td>.48880</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( P \text{ (sig)} = 0.000; \ P_{cal} < 0.05; \ t_{cal} > 1.96 \) at \( df = 29 \).

Source: Quasi-experiment, 2014

Table 6: Independent 2 Sample t-test statistics on difference in the mean total days present in school after being exposed to token economy treatment between male and female primary school pupils

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>std.dev</th>
<th>std.err</th>
<th>Df</th>
<th>T-cal</th>
<th>t-crit</th>
<th>Sig (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total days present after exposure to its treatment</td>
<td>Male</td>
<td>15</td>
<td>23.6000</td>
<td>1.2421</td>
<td>.3207</td>
<td>28</td>
<td>1.123</td>
<td>1.96</td>
<td>0.268</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>22.4667</td>
<td>3.6813</td>
<td>.9505</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calculated \( p > 0.05 \), calculated \( t < 1.96 \) at \( df = 4.98 \).

Source: Quasi-experiment, 2014

Table 7: Descriptive mean statistics on primary school pupils total days present after exposed to on account of their age groups

<table>
<thead>
<tr>
<th>Age groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.00 -8.6</td>
<td>4</td>
<td>23.5000</td>
<td>2.38048</td>
<td>1.19024</td>
</tr>
<tr>
<td>9.0 - 9.8</td>
<td>17</td>
<td>23.3529</td>
<td>2.52342</td>
<td>1.6102</td>
</tr>
<tr>
<td>10.1-10.9</td>
<td>9</td>
<td>22.2222</td>
<td>3.41971</td>
<td>1.13990</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>23.0333</td>
<td>2.76035</td>
<td>0.50397</td>
</tr>
</tbody>
</table>

Source: Quasi-experiment, 2014

CONCLUSION AND RECOMMENDATIONS

The finding of this research has showed that token economy can effectively be used to remedy lateness behaviour in primary school pupils. It has also demonstrated that lateness is amenable to counseling therapy such as the use of token economy. Evidence has shown through class attendance registers that a lot of pupils come late to school. Moreover, pupils do roam and play on the street on their way to school which result to school lateness. Common entrance and primary school leaving certificate examinations had indicated poor academic performance. Lateness has become a major problem in effective classroom management. These consequently lead to lower grade, academic frustration, drop out and behaviour problems. Evidence has shown that punishment has been used to change bad behaviour. However, some of these behaviour problems still persist. The need for the use of token economy as a better alternative that is pupils friendly in resolving such issues has risen concern in the efficacy of using token economy in reducing abnormal behavior. Therefore, counselors, teachers, parents, school administrators and the community also have their roles in minimizing lateness. On the whole, the summary of the findings for this study are that the token economy treatment is very effective for the control of lateness to schools among school pupils. The token economy treatment is very good for both boys and girls. The token economy treatment is very good for all categories of pupils on the basis of their ages. Based on the above findings, it is conclusively recommended that school psychologist, counsellors, teachers, and head teachers should be exposed to training in the use of token economy technique in reducing lateness among primary school pupils
irrespective of age and gender bias. Class-wide systems do not seem to be reached thoroughly and since inclusive classrooms are now quite popular it may be useful to do further students on the effectiveness of different types of token economies for the whole class with children of varying intellectual levels and behaviour. Self-monitoring also seems to be highly effective for some students so further research about the practicality of self-monitoring for students who are lower-functioning may be useful because it can help increase independence and instill a sense of responsibility in students.

REFERENCES


