Using Contingency Management Technique in the Reduction of Truancy among Secondary School Students

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Abstract
The study investigated the effect of contingency management techniques in reducing truancy among secondary school students. Four (4) null hypotheses guided the research. The hypotheses were tested at 0.05 level of significance. The sample consisted of 50 truants aged 12 - 18 years old selected purposively from four senior secondary schools in Benin metropolis in Edo state, Nigeria. The design was experimental pre-test post-test control group. Data were collected using students’ truancy behaviour (STBS) and introversion extroversion scale (IF.S). The data were analyzed using a t-test statistics. Results indicated that contingency management techniques led to significant reduction of truancy in students; treatment was effective for both male and female irrespective of home structure and personality. Based on the findings, a major recommendation in this study is that counsellors and teachers should be trained to use contingency management techniques in reducing truancy among students.

Keywords: contingency management, truancy, family structure, students, Personality.

1. Introduction
Education in most parts of the world is ranked high and given topmost priority as agent of change and human development. In Nigeria, like any other developing nation, education is regarded as the route that leads to vocational development, job opportunities, wealth and prestige. It is a primary obligation in the educational industry for learners to attend school regularly and punctually too. This would not only enable the learners to keep abreast of educational development in the school but also make them to mature and progress in other areas (e.g. affective and cognitive) that are associated with academic development in schools.

The school is universally acknowledged as critical in preparing the individuals for life challenges. Apart from providing opportunities for individuals to acquire needed competences for various vocations; it functions as a major agent of socialisation outside the home, since almost every child is formally introduced to the world of schooling. An effective educational structure, according to Makinde (2001), is one in which a child will be educated with a view to developing the ability to think effectively, communicate thought clearly and make relevant judgements. Regular school attendance is an essential prerequisite for achievement and overall development of learners while non-school attendance behaviour has been described as one of the issues that have bedeviled schools from the inception of schooling (Coleman, 1986). Students who are frequently absent may be putting their futures in jeopardy because regular attendance is essential for success in school.

Chronic absenteeism is a behaviour that is highly associated with dropping out of school. In fact, non-school attendance (also referred to as truancy) by learners most especially among adolescents, has become common occurrence in educational settings. Truancy among students has been defined as the act of absenting oneself from school without a legitimate reason and without the permission of one's parents or the school authorities (Herbert, 2005). This definition at best describes the truancy behavior among students. This is because; truant behaviour is a deviant behaviour. It continues to be one of the growing problems that educators identify amongst learners (Kwon Hoo, 2003). It has attracted interest in public discussion as well as in educational research. Since school attendance is of necessity and very important for academic success and moral development of learners. Truancy on the other hand, can mar the potential educational attainment of learners as well as other benefits of educational setting.

Globally, countries recognize that the education of their youth is vital to their future sustainability and critical to the process of achieving educational goals. One of the problems militating against the realisation of these objectives is truancy. In order to guard against acts that would undermine the realisation of national goals in schools, rules and regulations governing students' activities are mandatory. Attendance in schools goes beyond the school rules in most developed nations of the world. It is a legal requirement to curb truancy in schools. Learners who play truancy defeat the aim of the constitution and the vision of the education system. Truancy is affecting learning and production of disciplined manpower.

Notably, Fogelman and Hibbet (1990) contend that any absence from school without an acceptable reason could
behaviours are modifiable. This posture moreover, corroborates Herbert's (2005) position of the truants opposing school regulation about school attendance. Hersov and Berg (1990) describe the clinical picture of truancy as that of staying off school as only one of the several kinds of anti-social behaviour such as stealing, lying, destructiveness and excessive fighting. Some truant students may come to school but they avoid participating in school activities such as lessons, assemblies and other co-curricular activities. At such times, the student may be found hiding away in another part of the school, either idling or engaging in some illegitimate activities. From the foregoing, truancy being one of the major school problems is associated with adolescents. It may be one of the highly ranked deviant behaviours manifested by Nigerian school adolescents.

Truancy is noted to be one of the early warning signs of delinquency, social isolation, school suspension and academic failure (Loeber & Farrington, 2001). Arenu (1999) stresses that academic failure is not only frustrating to the students and the parents, its effect are equally grave on the society in terms of dearth of human power in all spheres of the economy and politics. Truancy may be a gateway to crime. The reason may be that high rates of truancy are linked to daytime burglary rates and high vandalism, which are ominous phenomena among adolescents (Loeber & Farrington, 2001). Truancy can also be an indicator of future failure. Those students who drop out of school are two and half times more likely to be unemployed than a secondary school graduate (United States Department of Education & Department of Justice, 1996). Students who drop out of school are also twice as likely to be unemployed than a high school graduate. In addition, students who drop out of school but find employment, tend to have jobs with lower paying salaries than their classmates who graduate.

Truancy has also been identified as a risk factor in the likelihood of students dropping out of school. The students who drop out of school often demonstrate a pattern of increased absences from school over a period of time (Epstein & Scheldon, 2002). The students who eventually drop out are three and a half times more likely to be convicted of a crime later in life than an individual who graduates from high school (Gullant & Lemonic, 1997). Truancy has also been identified as an indicator of future drug use (Hallfors, Vevea, Iritaini, Cho, Khatapoush, & Saxe 2002) and as an indicator of the probability a student may run away from home (Man, 2000). Since truancy has been identified and regarded as a serious problem with socio-economic implications, some intervention programmes have been used to address the problem among adolescents. Most available studies on truancy behaviour in Nigeria are survey studies. For instance, Falaye and Gesinde (2003) contended that the child is majorly responsible for the non-school attendance behaviour especially the chronic school absentee. Gesinde (2004) addresses the multi-etiological predictors of non-school attendance, Igborgbor (1984) explores values clarification approach and management techniques to address the issue of truancy.

Contingency management is resorted to in cases where students cannot adjust to their social environment or who find learning difficult. It is believed that these behavioural excesses inappropriateness amongst the students can be modified. Contingency management as an alternative for the treatment of behaviour problems, aimed at finding a psychological solution for schools, as against the commonly used strategies by school administrations.

Contingency management is the systematic reinforcement of desired behaviours and the withholding of reinforcement or punishment of undesired behaviour as a means for treating problem behaviour. It uses the processes of reinforcement and punishment to effect behaviour change. Contingency management techniques focus on changing the contingencies surrounding behaviour of interest. In contingency management, the person learns that certain behaviours will be followed by strict consequences (Higgins, William, & Mclaughlin, 2001). For example, a child who is oppositional and defiant can be presented with a menu of "good behaviours" and "bad behaviours", with an associated reward and penalty for each. Since, the much utilized aversive methods by the teachers and school heads have not been effective. This study aims at ways in which undesirable behaviour can be changed to desirable behaviour effectively. It is founded on the argument that, human and animal behaviours are modifiable.

1.2. Statement of the problem

Truancy has long been identified as one of the most common school offences in Nigeria. It hampers students’ academic growth, poses discipline problem and is an indicator of future maladaptive behaviour by the students. Research shows that students who are chronically truant are more likely to drop out of school, become a gang member and can be unemployed later in life. Students who chose to skip school may be avoiding a potential dangerous or difficult situation, perhaps they may be struggling with their school work and in turn overwhelmed with the academic demands of school. A lack of commitment to school is a risk factor for multiple problems such as substance abuse, teen pregnancy and dropping out of school.

One worrying recent trend has been the growth of male and female gangs, often composed of truant from school, some of the gangs have been associated with violence, harassment, extortion, smoking of Indian hemp and intimidation against their fellow students. Truancy is creating an obvious threat to students' academic progress. Truant behaviour also serves as a strong indicator of the function in many other domain of a young person's life. Truancy is a problem that affects all areas of the school. However, research has found that students are more
likely to skip a class such as English or mathematics, although they agree that these are the most important subjects for school success (Reid 1999). Since truancy has been identified and regarded as a serious problem with socio-economic implications, some intervention programmes have been used to address the problem.

1.3 Purpose of the study
The purpose of this study therefore, is to explore the effect of contingency management techniques in modifying truant behavior of adolescent in secondary schools.

1.4 Significance the study
This study is of significance to students who play truancy, counsellors, teachers, school administrators, parents and society. The resultant effect of the counselling technique will promote effective handling of students who exhibit or play truancy. It will equally form the basis for better management of truancy among students.

1.5 Hypotheses
The following null hypotheses were formulated for the study and tested at 0.05 level:

- **Ho₁**: There is no significant difference between the treated truant and the non treated truant.
- **Ho₂**: There is no significant difference in the mean attendance of male and female truant students exposed to contingency management.
- **Ho₃**: There is no significant difference in the mean attendance of truant students from single-parent home and intact- home exposed to contingency management.

2. Methodology
This study adopted experimental pre-test post-test control group design. Fifty (50) students were randomly assigned to two groups of twenty-five (25) students in each group. The two groups consisted of one experimental group contingency management (CM) and control group. The pre-test scores were used as the basis for equivalence, since only fifty students who manifested truant behavior were short listed from a total of one hundred initially presented.

The treatment programme consisted of twelve sessions of one hour each, spread over six weeks of two sessions per week. The summary of the content of the treatment, programme is presented in sessions below:

**Session One**
**Topic: Introduction and explanation of treatment programme.**
Introductions were made and rapport was established between the participants and the facilitators. Co-operation and confidentiality of treatment materials were solicited. Students were encouraged to be punctual, time and days of treatment were agreed upon. The pre-test was taken and the contract was signed.

**Session Two**
**Topic: The purpose of counseling treatment and its relevance in improving students school attendance.**
The facilitators explained contingency management and the importance of the counseling technique to school attendance. The group was intimated with the purpose of contingency management and its relevance in the attempt to improve school attendance on areas they show relative deficiency. The facilitators then explained truancy, the causes, and the characteristic of playing truancy. The students were given assignment/homework which will be discussed during next session.

**Session Three - Five**
**Topic: Identifying and improving on some defective behaviour that could lead to truancy.**
The group discussed the problems encountered by the students in the area of regular school attendance. The facilitators outlined behavior that could improve their school attendance, such as goal setting, study habit, note taking and examination. The modified study behavior and time management inventory by Egbochuku (2004) was used to discuss the problem the students encounter in their studies. The students were guided in their discussions. Students were given assignment to prepare a timetable following the facilitators’ guideline.

**Session Six – Nine**
**Topic: Effective personal Skill**
The group discussed the problems they encountered in attending school regularly. The facilitators discuss skills that will help the students to be more punctual and attentive in class. The facilitators explained how self-esteem, friendship, value clarification influence school attendance. The facilitators led students to discuss how to build self-esteem, make friends and have good value for school. The students who met the set goals in the assignment were rewarded.

**Session Ten-Eleven**
**Topic: School rules and Career choosing**
The facilitators explained the importance of obeying school rules and how it facilitates good attendance. The facilitators and students discuss the various career, the subject that are needed and the job opportunities available.
Session Twelve

**Topic: Administration of Student Truancy Behaviour Scale to obtain post-test score.**

The questionnaires were collected after the students filled them, the facilitators expressed gratitude to the members of the group for their co-operation.

**Data Analysis:** The data were analyzed using t-test statistics.

### 3. Results

#### Hypothesis One

To test the null hypothesis that there is no significant difference between experimental group and the control group at post-test for independent measures t-test was used to analyze the data.

Table One: t-test analysis for independent measures of contingency management of truant behavior both the control and experimental groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Df</th>
<th>t</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>26</td>
<td>130.60</td>
<td>3.93</td>
<td>50</td>
<td>44.34</td>
<td>.000</td>
</tr>
<tr>
<td>Experimental</td>
<td>26</td>
<td>59.50</td>
<td>5.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

α = .05 p < .05

Table 1. The first hypothesis asserting no significant difference between the experimental group and the control group at post-test was rejected because the calculated t value of 44.34 at df [50] p > .05. The basis of the rejection was that significant evidence of reduction in truancy subsisted only within treated group. It therefore shows that there is a difference between experimental group and the control group. It means that contingency management is effective in modifying truant behavior.

#### Hypothesis Two

There is no significant difference between the male and female truant treated with contingency management.

Table 2: t-test on contingency difference of truant behavior by sex.

<table>
<thead>
<tr>
<th>Sex</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Df</th>
<th>t</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14</td>
<td>40.65</td>
<td>4.56</td>
<td>23</td>
<td>-.447</td>
<td>.698</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>40.45</td>
<td>4.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

α = .05 p < .05

Table 2 shows a calculated t value of -.447 which is far lower than the critical t value of 2.145 at significant level of 0.05. The null hypothesis of no significant difference with a mean score of 40.65 for male and 40.45 for the female was accepted. It indicated that the treatment is equally effective for both male and female.

#### Hypothesis Three

There is no significant difference in the modification of truant behavior of students from intact parent home and those from single parent home.

Table 3: t test on contingency management of truant behaviour by home structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Df</th>
<th>t</th>
<th>p value sig, 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both parents</td>
<td>12</td>
<td>40.30</td>
<td>3.96</td>
<td>23</td>
<td>.467</td>
<td>.687</td>
</tr>
<tr>
<td>Single parent</td>
<td>13</td>
<td>40.77</td>
<td>4.48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows a calculated t value of .467 at a significant level of 0.05. The t value of .467 is less than the table t value of 2.145 at df [23] p > .05 consequently, the null hypothesis stated above was accepted. It was concluded that contingency management is equally effective in modifying truant behavior of students irrespective of the students’ home structure.

Table 4: t-test on contingency management of truant bahaviour by personality type

<table>
<thead>
<tr>
<th>Personality type</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Df</th>
<th>t</th>
<th>p value sig, 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert</td>
<td>11</td>
<td>41.30</td>
<td>2.93</td>
<td>23</td>
<td>.412</td>
<td>.687</td>
</tr>
<tr>
<td>Extrovert</td>
<td>14</td>
<td>40.17</td>
<td>4.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows a calculated t value of .412 at a significant level of 0.05. The t value of .412 is less than the table t value of 2.145 at df [23] p > .05 consequently the null hypothesis stated above was accepted. It was concluded that contingency management is equally effective in modifying truant behavior of student irrespective of the student’s personality type.

#### 4. Discussion

Information from table one revealed that contingency management technique led to significant effect in the management of truancy among adolescents in the secondary school. The findings of this study appear to be in harmony with the suggestions of Essuman (1988) and Okobia (1989) who stressed that undesirable behaviour through application of scientific management of behavior can be unlearnt. These findings corroborate the findings of Brook (2001), Igborbgor, (1984) and Adediran, (2009). They emphasized the effectiveness of
contingency management in managing behavior excess among secondary school adolescents. The other finding of the study reveals no significant difference in the mean difference of the subject from the different family structure and gender. That no significant difference was noticed does attest to the fact that the subjects responded equally and in the same way to the treatment.

5. Conclusion and Recommendations
In conclusion, the findings of this study revealed that contingency management techniques are effective in modifying students problem behaviour; both male and female students can benefit from it; also, this technique can be used to manage students’ truant behaviour irrespective of home structure and personality.

Based on the findings of this study, the researchers recommended that contingency management should be adopted as an effective strategy for reducing truancy among secondary school students. The application of contingency management strategy should be employed by teachers and school administrators for the treatment of truancy in school.

Therefore, it needs to be emphasized that counseling techniques are necessary for modifying truant behavior among secondary school students. In this regard, nongovernmental organizations, education planners and policy makers should provide avenues for training teachers and counsellors in contingency management so that they will be equipped and effective in correcting deviant behaviours among secondary school students.

References
Herbert, L.F, 2005. Applications of Research in Music Education, January 1, 2005
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