The Influence of Affective Domain of Psycho-Education in Community Male-Circumcision Programmes (CMCPs) on Self-Study Habit of Boys in Public Mixed-Day Secondary Schools in Nyandarua County-Kenya

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Abstract: Instruction during male circumcision is thought to cause delinquent and anti-social behaviour among boys. The study examined influence of affective domain on their self-study habit. It was anchored on psycho-education, behaviour modification and rational choice theories. It applied mixed method concurrent-triangulation design. The sample comprised 144 boys derived from a target population of 1,262. Purposive, proportional and random sampling techniques were used. Questionnaires, interview schedules and focus-group discussion guides comprised research instruments. Reliability was $r_c = .622$ and item content index and piloting, assured for tools’ validity. Discussions and data-source triangulation enhanced instruments’ credibility and dependability. Computer application (SPSS v23) applied for data analysis. Pearson $r$, dependent $t$-test, and regression analysis sufficed for inferential statistics, while means, deviations and percentiles applied for descriptive statistics. Study used null hypothesis tested- $\alpha = .05$. Findings indicated weak but statistically significantly relationship between affective domain and self-study habit. Self-study habit of boys circumcised in CMCPs was different from that of boys initiated elsewhere. Affective domain was suitable predictor of self-study habit. Study recommended that parents take boys for initiation in CMCPs and schools establish psycho-educational programmes as means of empowering adolescents improve their self-study habits.

Keywords: Psycho-education, Affective domain, community male circumcision programmes, self-study habit

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I. INTRODUCTION

Male circumcision is viewed as an important rite of passage in the socio-cultural transition of boys from childhood to adulthood, among societies in many parts of the world. In these communities, male circumcision is both a personal, familial as well as a community affair (Bailey & Egesah, 2006). In addition to surgical operation during the rite, the initiates also undergo comprehensive affective domain teachings in order to coach and mentor them to integrate and function effectively both in school and in the wider community. However, in most cases the initiates are taught by unprofessional caregivers who impart the wrong values and behaviour leading to acquisition of delinquent and other anti-social behaviour (Chang’ach, 2013).

In addressing the problem, non-governmental organisations, community and faith-based groups organise every December school holiday, community male-circumcision programmes (CMCPs) for boys who completed primary schooling in the year, for the purpose of transiting them through the rite of passage in a safe and modern setting. These programmes have significant community participation, in that the it is required to provide mentors for the initiates, participate in their training and feeding. The community also participates in open days (after the first week of seclusion), age-set identification and graduation ceremony after 14 days of the boys’ seclusion. Affective domain instruction in CMCPs, is tailored to enable boys acquire and develop focus and commitment in future tasks and endeavours especially in self-study habits in secondary school.
II. OBJECTIVE OF THE STUDY
The objective of this mixed method study was:
To determine the influence of affective domain at community male circumcision programmes (CMCPs) on the self-study habit of boys in public mixed-day secondary schools in Nyandarua County.

III. RESEARCH QUESTIONS
The research question of the study was:
What is the influence of affective domain at community male circumcision programmes (CMCPs) on the self-study habit of boys in public mixed-day secondary schools in Nyandarua County?

IV. RESEARCH HYPOTHESES
The study adopted this null hypothesis;
H₀: There’s no statistically significant influence of affective domain at community male circumcision programmes (CMCPs) on the self-study habit of boys in public mixed-day secondary schools in Nyandarua County.

V. EMPIRICAL LITERATURE REVIEW
A study entitled “entry qualifications, study habit and self-concept as correlates of academic achievement among university undergraduates in South West, Nigeria” was done by Gbore (2004), investigating whether students’ study habits, self-concept and their entry behaviour were correlated. A sample of 750 students equally divided into men and women, was selected through stratified sampling procedures. Data was collected using semi-structured questionnaires and multiple regression was employed for the analysis.

The study found out that entry behaviour was a strong predictor of academic performance, while study-habit and self-concept training (affective domain in the current study) had little significance to academic achievement of students. The study however recommended implementation of sustained efforts by schools to inculcate a reading culture (self-study habit) and self-esteem enhancement programmes for students.

Thompson, (2002) from Tennessee State University also did a study entitled “The effects of character education on student behavior”, to investigate the effects of character education (similar in form and content to affective domain instruction in CMCPs) on school children. Character education programmes were introduced in American schools since 1990, in order to address high prevalence of violent and truant behaviour among public school students. Study methods comprised of direct observation of student behaviour, interviews of students, teachers and parents; on their perceptions of the effects of character education on student behaviour. The current study adopted a similar approach; where boys self-reported on the influence of affective domain instruction in CMCPs had on their self-study habit in public mixed secondary schools.

Results in the Tennessee study indicated that character education programmes had positive effect on students’ behaviour. The study recommended implementation of character education (affective domain instruction) in elementary schools. It also recommended that character education be integrated in school curriculum, to be taught as part of all subjects so as to give learners self-management skills.

Egbo, (2015) in a study entitled ‘the effect of study habits counselling on academic achievement of probated boys of Enugu State Technical College of Education, Enugu State Nigeria’, found out that there was little significant effect of study habits’ counselling (affective domain instruction) on boys’ academic achievement. The lack of effect between the variables was reported to have been due to some intervening variables in the study like; examination phobia, ill-health and other social and personal problems. Although the study found an insignificant effect of study habits counselling on student behaviour, it did not nonetheless rule out such relationship. In the current study examination phobia and ill-health was addressed by carrying out the study-post, long after male circumcision had already taken place.

The assumption that boys’ self-study habit could be enhanced through affective domain instruction is also supported by Awai, (2015) where a study entitled ‘Influence of achievement motivation and study habits on boys’ academic achievement in mathematics,’ found out that the more motivated boys were the higher their academic achievement became. The current study aimed at finding out if boys empowered in the affective domain would perform better in self-study habits at secondary school.

VI. THEORETICAL LITERATURE REVIEW
Psycho-educational theory is derived from theories of learning, psychotherapy and counselling. Its potency for behaviour change comes from its eclectic nature or ability to integrate a buffet of different and related techniques, procedures and learning constructs in order to allow for more comprehensive and efficient therapy (Corey, 2006). Psycho-education empowers the individual with knowledge, skills and the capacity to make rational and appropriate decisions when faced with problems in life (McFarlane & Lukens, 2004). The theory was suitable for the study because affective domain is an integral part of psycho-education, which consequently would empower boys to develop positive self-study habit.

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Behaviour modification theory is a psychological theory and process of analysing and modifying behaviour. It involves analysis of events in the environment for the purpose of understanding the reasons behind it or the reasons why it is displayed. Behavior modification is based on behaviorist principles namely that; antecedents or events that happen prior to exhibition of behaviour, consequences or events that follow its occurrence and its antecedents and consequences can be changed or modified, strengthening or weakening its recurrence (O’Leary & O’Leary, 1977).

Behavior modification in the study, was indicated by the availability of personal timetable, evidence of organised study notes, knowledge of story books and evidence in performance of homework. The theory was suitable for the study because it advanced the assumption that self-study habit of boys could have been influenced by affective domain instruction in CMCPs. The boys at CMCPs, were trained in time management, focus in school work, motivation to excel and commitment to perform well in positive tasks and endeavours.

Rational choice theory postulates that individuals predict the outcomes of behaviour alternatives and chooses what offers them the best and greatest satisfaction (Becker, 2012). This means that the aims and goals of the person presenting the options play a critical role in the choice making process (Shafto, Goodman & Frank, 2012) and hence the aims of affective domain instruction in CMCPs. Rational choice theory informed the boys ability to make logical decisions concerning their study.

Boys had to independently consider the benefits and reward of self-study and allocate time, solely out of self-interest, intrinsic motivation, and individual choice. That was assumedly as a result of affective domain that they had received during circumcision in CMCPs. The boys consequently would make decisions on self-study habit, irrespective of awareness of the consequences of not applying effort and focus in their studies.

6.1 Theoretical Framework

The study was grounded on three theories of behaviour change and development that is; psycho-educational theory, theory of behavior-modification (TBM) and rational choice theory as shown in figure one.

![Figure 1: Theoretical framework indicating how theories informed the study](image)

The independent variable (affective domain in CMCPs) was anchored in psycho-educational theory, which informed the instruction given to boys in the circumcision programmes. Behaviour modification theory informed the dependent variable and was indicated by the boys’ self-study habit. Rational choice theory informed the moderating variable and was indicated by logical reasoning, individual choice, intentionality, decision making and self-interest (fig. 1).

VII. RESEARCH METHOD AND DESIGN

The study applied mixed methodology (QUAN-QUAL) concurrent triangulation design, which comprised both qualitative and quantitative techniques in data collection, analysis, interpretation and making of suitable inferences. Figure two shows how the QUAN-QUAL model worked for the present study.
The Influence of Affective Domain of Psycho-Education in Community Male-Circumcision.

The technique comprised of concurrent collection of both types of data, equal weighing, separate analysis, but merging it at discussion and interpretation stage (Creswell, 2009; Gay et al. 2006; Onwuegbuzie & Johnson, 2004). This was for the purpose of having a wider and deeper understanding of the issue under study (Creswell, 2009; Gay et al. 2006). This model enabled the researcher to not only present quantitative facts, but also explain them further in the perspectives of the boys’ views and opinions. The approach helped to enhance the dependability and credibility of the study (Gay et al. 2006; Onwuegbuzie & Johnson, 2004). This was a suitable model for the study because it provided both factual and objective information concerning the boys’ self-study habit and also their subjective perspectives on the issue as a result of the affective domain instruction, they had got in CMCPs thereby enhancing the study’s reliability, validity and trustworthiness.

7.1 Population and Sample
Accessible population was 1,242 boys in public mixed-day secondary schools in Nyandarua County.
Cluster, proportional, random, and non-random sampling techniques were used. The sample comprised of 102 boys, 13 form two class teachers, 13 counsellors, 8 psycho-education service providers and 8 parents; making a total of 144 respondents. Boys circumcised in CMCPs were named X, while Y denoted those initiated elsewhere.

7.2 Research Instruments
The study used student attitude inventory (SAI) by Entwistle, Entwistle and Wilson (1974), a modified version of self-study habit and attitude inventory (SSHA) by Brown and Holtzman (1967). The SAI inventory comprised of 14 true or false study methods questions (Thomson, 1976). The inventory was customised to reflect the cultural orientation of secondary school boys in Nyandarua County. The reliability of the modified instrument was $r_s = .626$, comparing favourably with the original inventory which had a reliability $r = 0.77$. Structured questionnaires and focus interview guides were also applied for data collection true or false.

7.3 Data Analysis
Data collected from the respondents were sorted, coded and keyed into spreadsheets before analysis with aid of computer application SPSS v23. Descriptive statistics used comprised of means, deviations and percentages, while the paired samples t-test, Pearson r and regression analysis made up the inferential statistics applied. All hypotheses were tested at a significance level of $p = .05$. Hypotheses turning $p \leq .05$ were rejected and the alternative accepted, while $p \geq .51$ were retained. Qualitative data were presented through thematic analysis comprising of textual narrations, descriptions and explanations.

7.4 Ethical Considerations
The researcher was aware of significance of sensitivity to respondents’ rights and respect for their dignity, as he sought to solicit from them accurate, objective and honest information for the study (Cavan, 1977). Consequently, he obtained informed consent from the respondents through dialogue, in which participants were assured of confidentiality of personal information and anonymity of their identities. They were also informed of the purpose, advantages and disadvantages of being subjects in the study (Henning, Rensburg & Smit, 2004).
The Influence of Affective Domain of Psycho-Education in Community Male-Circumcision.

Intellectual property (IP) rights fully applied to this work and participants were informed on this important aspect which might bring conflicts later on if not adequately addressed at this stage. The researcher informed the respondents that the study and subsequent report arising therefrom, would remain the sole property of the researcher and Mount Kenya University and may therefore not be used for gain, except with the express permission of the researcher or Mount Kenya University on behalf or for the wider public good as allowed in law (WIPO, 2004).

The researcher also conducted debriefing sessions with boys after every administration of a research tool. This was for the purpose of providing them with the opportunity of revisiting themes, which they might have had issues or reservations with and to clear any misunderstandings they may have formed as a result of participating in the study. Debriefing was necessary after the study as it aimed at mitigating any harm inadvertently visited on the subjects.

Professionalism of the researcher was also upheld by conducting the study under acceptable standards as guided by Mount Kenya University. The report was therefore subjected to Turnitin anti-plagiarism checker to ensure that, other authors’ work had been adequately acknowledged and that the report was the researcher’s own work. The work returned a similarity index of 6%, which was considered an acceptable measure of author originality as per the university’s research standards.

VIII. FINDINGS AND DISCUSSION

The study employed quantitative and qualitative analysis methods. Quantitative methods included both descriptive and inferential statistics comprising of Pearson correlation, the dependent t-test and linear regression analysis. Qualitative procedures included textual narration, explanations and descriptions of observed behaviour pertaining to boys’ self-study habit

8.1 Descriptive statistics

Descriptive analysis indicated that more than 50% of boys displayed high self-study habit, as shown by the high mean, although the scores indicated large variation as shown by the big standard deviation (\( M = 71.6, SD = 13.5, N = 102 \)). Table one is the descriptive statistics of boys’ self-study habit.

<table>
<thead>
<tr>
<th>Self-study habit</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>102</td>
<td>71.6</td>
<td>13.5</td>
</tr>
</tbody>
</table>

However, self-study habit of boys who had undergone the circumcision rite in CMCPs showed a significantly higher mean and lower standard deviation (\( M = 83.3, SD = 2.9, N = 26 \)), implying that affective domain instruction (\( M = 51.8, SD = 8.3, N = 102 \)), might have had significant influence on the boys’ self-study habit. Boys’ self-study scores also indicated a normal curve when plotted on a histogram, implying that self-study behaviour observed in the sample could most likely be reflected in the population.

8.2 Inferential statistics

The researcher proceeded to find out if there was association between affective domain and boys’ self-study habit. Consequently, a null hypothesis (there is no influence of affective domain in CMCPs on the self-study habit of boys in public mixed-day secondary schools in Nyandarua County) was formulated. Table two is a correlation matrix showing affective domain and boys’ self-study.

<table>
<thead>
<tr>
<th>Affective domain</th>
<th>Self-study habit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>.198</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.046</td>
</tr>
<tr>
<td>N</td>
<td>102</td>
</tr>
</tbody>
</table>

The findings indicated weak positive relationship between affective domain and boys’ self-study habit (Cohen, 1988). However, the correlation was statistically significant and as a consequence, the researcher rejected the null hypothesis and accepted the alternative, because the obtained correlation coefficient \( p = .046 \) was less than the prior criterion-\( \alpha = .05 \). This meant that an increase in affective domain could show similar increase in self-study habit, though marginally. It also implied that the weak Pearson correlation \( p = .198 \) between affective domain and self-study habit, would likely be found in the boys’ population.
The study proceeded to find out if there were statistically significant mean differences between self-study habit of boys circumcised in CMCPs and those initiated elsewhere. A null hypothesis (there is no statistically significant mean differences in the self-study habit of boys circumcised in CMCPs and those circumcised elsewhere) was formulated and the dependent t-test applied for the task. Self-study habit of 26 boys circumcised in the programmes and a similar number initiated elsewhere was compared using the test. Boys circumcised in CMCPs were named X, while those initiated elsewhere coded Y. Table three is a t-test matrix showing comparison between self-study habit of boys from the two groups.

Table 3: Self-Study Habit of Boys Circumcised in CMCPs and those Initiated Elsewhere

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td>X-Y</td>
<td>10.9</td>
<td>15.0</td>
<td>2.94</td>
</tr>
</tbody>
</table>

Table three shows the dependent t-test analysis descriptive statistics of X (M = 76.9, SD = 8.75) and Y (M = 66.1, SD = 14.6). It indicated p = .001, far less than the priori-criterion of α = .05. Consequently, the researcher rejected the null hypothesis and concluded that there were statistically significant mean differences between self-study habit of boys from the two groups (p = .001, α = .05). Any differences therefore, between the self-study habit of the two independent groups could most likely be real and not as a result of chance.

The dependent t-test results had consequently confirmed what Pearson correlation and qualitative analysis had earlier on association between affective domain and boys’ self-study habit. Considering that both qualitative and quantitative data had consequently given support for rejection of the null hypotheses, then the researcher concluded that there was available evidence to suggest that affective domain in CMCPs, influenced the self-study habit of boys at public secondary schools. Regression analysis was subsequently performed with affective domain as the predictor and self-study habit as the outcome variable. It was necessary to find out if affective domain instruction in CMCPs would sufficiently explain variation in boys’ self-study habit and apply for its prediction. Table four is a model summary of the regression.

Table 4: Regression Model- Affective Domain and Behaviour Modification

<table>
<thead>
<tr>
<th>Self-study habit (outcome)</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-study habit</td>
<td>.461^a</td>
<td>.401</td>
<td>.377</td>
<td>8.56750</td>
</tr>
</tbody>
</table>

Table four indicates correlation between the predicted and observed self-study habit of boys and also shows the quality of the model. It shows that 40.1% of variation in self-study habit could be moderately accounted for by affective domain in CMCPs. When adjusted $R^2$ was subtracted from $R^2$ there was a very small shrinkage of .024, implying that if the model had been derived from the population and not the sample, only 2.4% less variance would be indicated in the outcome and consequently, the researcher considered the model fit. However, Cohen’s effect size measurement indicated a small margin ($f^2 = .192$), implying that affective domain may not have been a good contributor to the regression model after all.

The F-test was examined to determine whether the model was a good predictor of self-study habit than other statistics. The statistic would suitably measure the prediction improvement ratio resulting from fitting the regression model. Table five is the ANOVA test summary of the regression model.

Table 5: ANOVA Analysis for affective domain and self-study habit

<table>
<thead>
<tr>
<th>ANOVA^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study habit (outcome) variable</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1. Self-study habit</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: self-study habit
b. Predictors: (Constant), affective domain

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Table 5 shows ANOVA test [$F = (1, 96) = 2.997, p = .052^b, \alpha = .05$] of the overall significance of self-study habit as predicted by affective domain. The $p$-value obtained was less than the priori criterion and consequently, the null hypothesis was rejected and the alternative accepted. This implied that the model had statistically significant predictive capability for boys’ self-study habit. The model therefore, could sufficiently be used for estimating the self-study habit of boys when affective domain was the predictor variable. It was also necessary to examine how strongly the affective domain contributed to self-study habit. This was to confirm what the ANOVA test had submitted- that affective domain significantly predicted boys’ self-study habit. Table six shows the coefficients of the predictor parameter in the regression model.

**Table 6: Coefficient of Predictor Parameter in the Regression Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>54.953</td>
<td>8.257</td>
<td></td>
</tr>
<tr>
<td></td>
<td>affective domain</td>
<td>.319</td>
<td>.158</td>
<td>.298</td>
</tr>
</tbody>
</table>

a. Dependent variable: Boys’ self-study habit

About 31.9% of self-study habit variation may be explainable using affective domain as the predictor ($B = .319, \beta = .298, p = .031, \alpha = .05$). The model was again statistically significant ($p = .046, \alpha = .05$), implying that it could sufficiently be used for predicting self-study habit. However, the strength of the predictive capacity as indicated by the effect size ($f^2 = .192$) is low. All the same, the model could sufficiently apply for generalising from sample to population. The regression model equation was; $y = 54.953 + .319x_1 + 8.57e$.

**Conclusions of the Study**

Research findings showed existence of a significant relationship between affective domain and boys’ self-study habit in public mixed-day secondary schools in Nyandarua County. Self-study habit was found to have strongly correlated with the domain. The domain could also be applied for not only accounting for variation in boys’ self-study habit, but also for prediction of the outcome variable.

**Recommendations**

The study consequently recommended that parents take their boys for initiation in CMCPs, in order for them to undergo comprehensive and formal instruction (affective domain), that would enable them inculcate and develop self-study habit skills for application at secondary school. It also recommended that in addition to affective domain instruction, secondary schools establish other psycho-educational programmes so that all students benefited from formal and structured behaviour modification education and training.

**REFERENCES**

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