ASSOCIATION BETWEEN DURATION OF INSTITUTIONALIZATION AND PSYCHOLOGICAL COPING STRATEGIES AMONG ADOLESCENTS

Diana Njoki Mwangi and Luke Odiemo Okunya
Department of Psychology, University of Nairobi

ABSTRACT
This study’s main purpose was to assess the association duration of institutionalization and psychological coping strategies among adolescents in Nairobi County rehabilitation schools. A correlational design with a mixed method research approach was used combining quantitative and qualitative methods. Multiple choice questionnaires were used for the quantitative study conducted among the adolescents who were undergoing rehabilitation at the approved schools. Focus group discussions among the inmates and key informant interviews among the schools staff were conducted as basis of qualitative study. Both descriptive and inferential statistics were used to analyze the study’s data. Results showed that there was medium utilization of coping skills irrespective of how long the inmates had been confined. Majority of them utilized appropriate coping styles like active coping to deal with the reality of being confined. Additionally, there was a significant association between duration of institutionalization and utilization of various coping skills among the inmates.

KEYWORDS: Institutionalization, Psychological Coping Strategies, Duration of Institutionalization.

1.0 INTRODUCTION
There are approximately 6,600 children who need rehabilitation and care under institutions. Most of these juveniles are in prison for committing different crimes (World Prison Brief, 2016). Children in need of institutionalized attention and rehabilitation due to being victims of crime or neglect in Kenya are more than 45,000 (Children Department Annual Report, 2010). 80–85 % of children in this category are arrested and confined due to engagement in unlawful acts according to Odongo (2017). Reports have shown that youth in conflict with the law has risen significantly since 2006. For instance, inmates below 18 years increased from 2570 to 3455 in 2013 and 2014, according to Kenya National Bureau of Statistics (2015). In addition, most of youth formally found guilty of crimes that warrant imprisonment, if committed by adults, are in the 16–17 year age bracket, while 52.3 % of inmates consist of youth aged 25 years and below as of 2014 (Oywa, 2004). Globally, more than 1.6 million delinquency cases are handled each year, and 72,000 youth are confinement, (Snyder & Sickmund, 2006). Also, an increase of youth offenders in public and private correctional facilities is evident. For instance, offenders in facilities rose from 26,275 in 2006 to 33,796 in 2009 according to McGowan et al (2007).

Adolescents face the reality of being confined to this highly atypical context with the added disadvantage of immaturity. They are separated from loved ones at a time in their life when their
skills acquisitions are still influenced heavily by those close to them (Notshulwana, 2012; Prinzie, 2009). In these facilities, their only peer group is mostly composed of other antisocial and unwelcoming age mates, and staff who do not know them well, rendering them vulnerable to the stresses of institutionalization further especially at entry, as they become more accustomed to the nature, realities, and restrictions that institutional life imposes. Confines also experience victimization from fellow inmates as well as staff, congestion and fear of experiencing social stigma after release (Human Rights Watch, 2017; Kikuvi, 2011; Kinyua, 2004). On top of the high individuals’ population, the confinement setting is associated with high uncertainty levels, and it is hard for someone to predict anything, including not being aware of how long they will be in institutionalization (Toch 1977). Thus, they must employ mechanisms to embrace or detest rehabilitation, cope, adjust, adapt and survive (Helm van der et al., 2011).

They are also faced with uncertainties as they are not sure of the outcome of assessments done eventually to determine if they are fit to be reintegrated to the society or if they need more time in confinement (Gibbs, 1982). All these fears can leave confines caught in between two worlds and devise various ways of reacting to these uncertainties and strategizing on the way forward during their time in confinement (Neustatter, 2002: 52, Gibbs, 1982). These reactions and strategies play a role in enhancing or hindering inmates from making adequate preparations for what lies ahead in confinement (Lazarus and Folkman, 1984). These uncertainties also hinder coping due to feelings of helplessness about one’s situation, impedes the inmates desires and willingness to engage in productive and appropriate coping effort, and come up with negative attributions in issues they have no control over (Peterson et al. 1993).

One of the reasons for increased populations of young inmates in confinement is due to reoffending and re-arrests after release. Statistics show that the number of recidivating young offenders increased from 59.1% to 76.9% between 2012 and 2013 in Kenya (Kenya National Bureau of Statistics, 2015). In the US and the Netherlands, recidivism rates vary between 50% and 75% respectively based on re-arrest figures annually (Nauta, 2008).

Few studies have evaluated different psychological coping skills as a direct outcome of duration of institutionalization, or whether a close relationship between the two exists looking at the various aspects of coping. Flanagan (1980) assessed inmates’ adaptations and perspectives of long confinement durations; results showed that long term offenders detached from relationships to avoid anxiety accompanying separation. Most offenders however relied on relationships for encouragement and support, but this made it more difficult for them to serve their sentences with positive outcomes in the end (Flanagan, 1980). Also, most inmates dealt with challenges in confinement through withdrawal and keeping the problems to oneself. This can be explained by the lack of trust among fellow inmates who also have problems of their own, compounded by having loved ones who are unsupportive and caregivers who are not concerned.
A study by Harreveld, der Pligt & Claasen (2007) investigating the relation between coping strategies of inmates and psychological and physical well-being within a given period of detention found that inmates inclined to share their feelings with time. Those with less inclination benefited more from an approach providing them with opportunities to gain something from their time being spent in prison. Findings also showed that inmates who experienced specific negative emotions such as regret, anxiety, and sadness reported had spent significant little time in confinement, and they also reported more psychological and physical complaints. Inmates who had stayed in the facilities for a longer period used an active emotion-focused coping strategy, and were in better health than inmates inclined to keep their negative feelings to themselves.

Similar findings were noted by Gеннan & Woodhams (2007) in a study to examine psychological health outcomes and coping strategies used by those involved in bullying in prison with the special focus on time spent in prison. The study’s findings were that significant positive relationships were observed between total time spent in prison, a number of bullying behaviors experienced and the three measures of psychological distress use in the study. All of these relationships were, however, weak in strength. A positive correlation was also observed between emotional coping and the time spent in prison as well as a total number of bullying behaviors experienced, with a weak association. With regards to the relationship between psychological distress and the coping strategies utilized by prisoners, emotional and avoidance coping strategies showed significant and moderate positive correlations with depression, anxiety, and stress. A greater reliance on these coping strategies was associated with greater psychological distress.

Findings from a study by Partyka (2001) on determining how inmates cope with the various stressors, distinguish stressors types they typically face, and to determine to what extent length of current sentence, the number of previous incarcerations, and total time spent in prison affect an inmate's particular stressors or coping style showed that turning to spirituality was the most commonly reported coping strategy overall, both at the beginning of the inmate’s sentence, as well as at the time of the study. It was found that, at the beginning of their sentence, inmates tended to use spirituality in dealing primarily with separation from loved ones and ambiguity of the situation. Their coping strategies seemed to remain fairly consistent by the time of the study. According to these studies, the amount of time spent in confinement by inmates is related to psychological coping strategies in young and old confines. To put these speculations in perspective, it was necessary to review the associations between factors like age, gender and living environment and coping skills used by inmates.

Additionally, studies have found out that age has significant effects on coping strategies of youths in confinement. This is simply because young people are considered to be more vulnerable and have less strategies to survive in confinement. According to Biggam (1999), young persons have few skills and resources for solving problems compared to adults because young people do not have much control over occurrences and their surroundings (Breżina, 2001) and do not have adequate life skills and experiences to rely on when faced by harsh conditions like imprisonment (McLaughlin,
1996). These make young people disadvantaged, making them to cope more poorly with confinement as compared to adults (Biggam, 1999).

Gender influences the action types that people use to cope and react to changes and stressors. Males use confrontational, denial and aggressive approaches more than females, who prefer utilizing social support and spirituality (Carver, 1997). Male are also more private, find it hard to open up and utilize social support as compared to females (Frydenberg, 1997). Males are as well more likely to participate in risky behaviours like substance abuse as a way of coping (Krenke; 1995; Frydenberg, 1997).

High population of inmates associated which is common in many confinement facilities creates a sense of stress, threats and instability due to the hindrance in developing close social bonds because inmates have no option but to integrate and adjust to new, unpredictable and unique peers (Harvey, 2007). This environment also makes staff develop a sense of instability since their focus is shifted to looking after and accommodating the inmates as well as constant court appearances (Neustatter, 2002). Therefore, staffs have inadequate time to get to know and interact with the inmates at a personal level based on inmates’ unique characteristics. Thus, even if a few inmates experience problems with staff, most inmates and the staff are largely detached and thus minimal chances of establishing positive cohesion. Staffs are unable to identify inmates’ uncharacteristic behaviours, needs or attend to them because of lack of rapport (Drost, 2008).

2.0 PURPOSE
The purpose of this study was to establish association between the duration of institutionalization and psychological coping strategies applied by adolescents.

3.0 Research Design and Method
So as to achieve the desired outcomes from the study, the researcher adopted a mixed method approach, applying descriptive research design. It was chosen because it involved extensive analysis of the variables of the study. Also, this research design provided a complete and accurate picture of the situation.

3.1 Population of the Study
There are eleven rehabilitation facilities for delinquent adolescents in Kenya. The study targeted 2 government rehabilitation schools in Nairobi County, one located in Kabete and the other one in Dagoretti. The target population comprised caregivers who are directly involved with the welfare of the adolescents during rehabilitation (welfare officers, vocational training instructors, and class teachers), and all the adolescents. In total, 111 (60 boys and 51 girls) adolescents, 10 welfare officers, 8 class teachers and 5 vocational training instructors totaling to 134 in the two rehabilitation schools was targeted. From this, Kabete’s population consisted of 60 boys, 4 welfare officers, 2 teachers and 1 vocational instructor. Dagoretti’s population was made up of 51 girls, 2 welfare officers, 2 teachers and 1 vocational instructor.
3.2 Sample size
The sample size was 4 welfare officers (2 from each school) 4 teachers (2 from each school), 2 vocational training instructors (1 from each school) and all the adolescents (111). In Kabete, 10 caregivers and 60 boys participated and 10 caregivers and 51 girls from Dagoretti took part in the study as well. This sample size was sufficient to give a true reflection of the variables being studied. Also, focus group discussions of 10 participants and of equal numbers from the two rehabilitation schools were conducted. There were one focus group discussions per school comprising of the adolescents. 10 Interviews were conducted with the adolescents’ caregivers from the two schools. A total of 121 participants formed the sample size.

3.3 Sampling procedure
Non-Probability (purposive) sampling technique was used in selecting the two rehabilitation schools and the adolescent respondents for this study. A total sample size of 111 adolescents consented to participate and filled the questionnaires. The sample was sufficient enough to give quantitative information on attitudes and coping skills among adolescents. Qualitative information was obtained from two focus group discussions whose participants were also purposively selected and ten caregivers also purposively selected from the two rehabilitation schools. The schools were sampled due to their proximity in Nairobi County, and they both confine adolescents with similar characteristics; medium risk offenders of similar age groups. All the adolescents confined in the schools at the time of the study were also considered since they all had spent some time which was within the study’s scope at the facilities. For the caregivers interviewed, selection was based on how long they had worked in the facilities and their direct contact and involvement in rehabilitating the adolescents. For the FGD, those who volunteered to participate were selected and participated in the FGDs.

<table>
<thead>
<tr>
<th>Rehabilitation School</th>
<th>Target Population</th>
<th>Total</th>
<th>Estimated Sample Size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adolescents</td>
<td>Welfare Officers</td>
<td>Vocational Training Instructors</td>
<td>Teachers</td>
</tr>
<tr>
<td>Kabete</td>
<td>60</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Dagoretti</td>
<td>51</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
<td>10</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

3.4 Research instruments
Three types of tools were used by the researcher to collect the required data.
Interview schedule developed by the researcher guided by the aspects of the dependent variables being examined and used by in conducting interviews by engaging the selected caregivers while filling interview transcripts.

Focus Group Discussion Guide consisted of short structured questionnaire with short and simple questions to guide the discussions with two groups- one with boys and one with girls.

Closed-ended Questionnaire was administered to adolescents. It was kept simple to encourage participation. Refer to appendices III. The questionnaire was divided into two sections. The first section captured demographic information of age, gender, duration of stay in the institution, and living environment was measured by the use of the Essen Climate Evaluation Schema (EssenCES).

The Essen Climate Evaluation Schema (EssenCES) scale was developed by Schalast, Redies, Collins, Stacey & Howells (2008). Validation research indicates that the EssenCES has three scales which are supported by factor-analysis: Therapeutic hold which is the views of the degree to which the environment is supportive of rehabilitation and beneficial outcome, cohesion and mutual support, which assesses if shared support classically seen as distinctive of rehabilitation is present, and experienced safety in terms of tension and perceptions of aggression and violence threats (Howells 2009; Schalast, Redies, Collins, Stacey & Howells, 2008). The scale has been adapted to use in confinement environments. For instance, the scale was used by Schalast, Redies, Collins, Stacey & Howells (2008) to relate the perceived living environment in treatment and general units of five prisons in Germany. Also, a preliminary authentication of the scale was done in Australia by Day (2011) in a research with 144 inmates from two confinement facilities. The instrument consists of 17 items and 3 scopes assessed by means of: hold & support, inmates' solidarity and joint support as well as experienced security. Respondents indicate their agreement levels with the statement with a scale of 1-5 (1 (I agree not at all) and 5 (I agree very much). Higher scores on the EssenCES indicate a more positive social environment (EssenCES; www.forensikessen.de). The scale's validity is reported to be strong according to Schalast, Redies, Collins, Stacey & Howells, 2008), with the inner reliability vacillating from Cronbach's α= .73 to .87 for forensic inmates. The same is noted in a prisoners' setting by Day (2011) with Cronbach's α=.84 on the total scale, .86, .74 and .72 for inmates' social unity and mutual care, hold and backing and witnessed safety. Several studies the item regarding Cronbach's α, across the studies were 0.82, 0.77 and 0.81 for the three subscales (Schalast, Redies, Collins, Stacey & Howells, 2008).

The Brief Coping Orientation for Problems Experienced (COPE) assesses a broad range of coping responses and was used to assess the coping responses the inmates engaged in to deal with the reality and experiences during rehabilitation. It is a shortened style of the COPE scale, established by Carver (1997). Founded on Lazarus and Folkman’s (1984) coping concepts, it contains 28 items making up 14 sub-scales (each subscale has 2items). Each sub-item assesses diverse coping skills, all graded from 1-4. A high score represents great utilization of coping skills used by respondents. Previous tests of the scale in similar populations as the current study showed that most of the sub-
scales had fair internal consistencies (Carver, 1997; Krägeloh, 2011). The scale was specially
designated for the research as a result of its applicable theoretical grounds and use with young
inmates in confinement, as emphasized by Negy, Wood and Carlson (1997). The scale’s counting
system involves distributing the diverse items into 14 dissimilar coping skills (self-distraction,
substance use, active coping, denial, use of instrumental support, behavioral disengagement, venting,
use of emotional support, acceptance, positive reframing, planning, self-blame humor and religion
(Carver, 1997).

3.5 Data Collection Procedures
All items in the research instruments were reviewed against the study's objectives and variables to
ascertain their accuracy by seeking the guidance and expertise of the researcher's supervisor. To
observe cultural sensitivities, female research assistants conducted FGDs, questionnaires and
interviews with female respondents while male research assistants involved male respondents in
conducting questionnaires, interviews and FGDs. Continuous note taking took place was done by a
trained note taker who was seated with the respondents during FGDs throughout the discussions.
This provided a way of recording accurate, unspoken and valuable aspects of the discussions. The
study was based on both quantitative and qualitative methods. The structured questionnaire was used
for the qualitative survey to elicit information related to the study’s objectives. The questionnaire
was borrowed from the authors and modified following pretest conducted before the main study. All
the adolescents used the same questionnaire to give information. FGDs were conducted with the
adolescents so as to get their different opinions about on perceptions, readiness and willingness to
undergo the activities in the rehabilitation schools and how they reacted to stresses and pressure
during their stay in the two facilities. Questionnaires were given to the adolescents in the
rehabilitation schools for filling and returning on the same day. Face to face interview guided by the
schedule while making interview scripts were done with the caregivers. Interviewer-administered
questionnaires were employed to participants without a good understanding of English. The
researcher was responsible for data entry as well as transforming the raw data into the form for
analysis using SPSS.

3.6 Data analysis
Collected data using the filled questionnaire was analyzed using SPSS version 22. Descriptive
statistics such frequency distribution, central tendency measure and dispersion were used to analyze
data from the questionnaires. Inferential statistics was similarly be used to infer the sample results to
the population. Due to the categorical nature of the independent and dependent variables, non-
parametric measure (chi-square test of independence) was used to assess the relationship between
these variables. Bivariate correlation (r) and Correlation coefficient and chi-square were all used to
determine if there was significant association between the various confounding variables and
psychological coping strategies among the adolescents.

The EssenCES scale’s three subscales with five items each were scored on a 0 (I do not agree at all)
to 4 ('I agree very much') response design. Responses were summed to yield the three sub–scale
scores, and then totaled to yield a total score. Higher scores indicated a more positive living environment, thus the categorization of the respondent’s view of the environment in the rehabilitation schools as negative/unconducive, neutral or positive/conducive for their rehabilitation, based on how the respondents scored. For the Brief COPE, the researcher ranked items on a likert scale of 4. Every single of the 14 scales consisted of 2 items and the total scores on each scale ranged from 2 (minimum) to 8 (maximum). More scores indicated higher/better utilization of that particular coping skill, and thus the categorization of the utilization of the coping skills into low/minimum, medium, high/maximum guided by the respondents’ scores. Total scores on each scale were calculated through summation of the suitable items for each scale. Qualitative data derived from the interviews and FGDs was manually coded to identify the key themes, subthemes and patterns as well as the relationships between them. Quotes and narrations were recorded and used to illustrate the themes.

4.0 Results and Discussion
The researcher sought to examine how the coping skills scores of adolescents in the confinement differed according to their duration of being institutionalized in the rehabilitation schools. The coping skills scale with 28 scored items and 14 subscales consisting of two items each was used. The overall Cronbach’s Alpha for this scale was 0.776, representing high internal consistency of the subscales and the total scale for use in this study. Planning, religion, active coping and self-distraction had the highest means, indicative of the most preferred coping strategies among the adolescents.

Table 2: Psychological coping skills used by adolescents during institutionalization

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean(SD)</th>
<th>Median(IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-distraction</td>
<td>6.28(1.77)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Active coping</td>
<td>6.42(1.83)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Denial</td>
<td>4.79(2.0 )</td>
<td>5(3,6)</td>
</tr>
<tr>
<td>Substance use</td>
<td>3.09(1.71)</td>
<td>2(2,4)</td>
</tr>
<tr>
<td>Use of emotional support</td>
<td>5.84(2.0 )</td>
<td>6(4,8)</td>
</tr>
<tr>
<td>Use of instrumental support</td>
<td>5.91(1.78)</td>
<td>6(5,8)</td>
</tr>
<tr>
<td>Behavioural disengagement</td>
<td>4.76(1.86)</td>
<td>5(3,6)</td>
</tr>
<tr>
<td>Venting</td>
<td>5.40(1.90)</td>
<td>5(4,7)</td>
</tr>
<tr>
<td>Positive reframing</td>
<td>6.33(1.78)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Planning</td>
<td>6.45(1.58)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Humour</td>
<td>5.70(1.76)</td>
<td>6(5,7)</td>
</tr>
<tr>
<td>Acceptance</td>
<td>6.16(1.90)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Religion</td>
<td>6.41(1.81)</td>
<td>7(5,8)</td>
</tr>
<tr>
<td>Self-blame</td>
<td>5.54(1.87)</td>
<td>5(4,7)</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha = 0.776
The researcher sought to find out whether there was any preference of the various coping skills deployed; the results were presented in table 3 below.

### Table 3: Cross tabulation between duration of institutionalization and coping skills

<table>
<thead>
<tr>
<th>Duration</th>
<th>Count</th>
<th>% within duration</th>
<th>% within Coping Skills</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>% within duration</td>
<td>0%</td>
<td>20.0%</td>
<td>80.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Coping Skills</td>
<td>0%</td>
<td>47.4%</td>
<td>43.4%</td>
<td>40.5%</td>
</tr>
<tr>
<td>% of Total</td>
<td>0%</td>
<td>8.1%</td>
<td>32.4%</td>
<td>40.5%</td>
</tr>
<tr>
<td>More than a year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>2</td>
<td>3.0%</td>
<td>15.2%</td>
<td>10.6%</td>
</tr>
<tr>
<td>% within duration</td>
<td>100.0%</td>
<td>52.6%</td>
<td>56.6%</td>
<td>59.5%</td>
</tr>
<tr>
<td>% within Coping Skills</td>
<td>100.0%</td>
<td>92.6%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.8%</td>
<td>9.0%</td>
<td>42.3%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>1.8%</td>
<td>17.1%</td>
<td>6.3%</td>
</tr>
<tr>
<td>% within duration</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Coping Skills</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.8%</td>
<td>17.1%</td>
<td>74.8%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

The results in table 3 above show cross-tabulations between duration of stay at the institutions and psychological coping skills among adolescents. Results revealed that majority of the respondents with 36 (32.4%) confined for less than a year and 47 (42.3%) of those confined for more than one year had medium utilization of coping skills. This is further explained by the figure below.

**Figure 1: Cross tabulation between duration of institutionalization and coping skills**
Results in the figure above confirmed that indeed most of the adolescents’ utilization of psychological coping mechanisms were at a medium level. Those who had stayed at the institutions for more than one year showed more utilization of coping skills than those who had stayed there for less than one year. There was no high utilization of coping skills by inmates who had been confined for less than a year. Additionally, 2 (1.8%) adolescents confined for more than a year did not utilize some coping skills at all.

A chi-square test was carried out between duration of institutionalization and psychological coping skills. The test results, as indicated by the Pearson’s chi-square in table 4 above, revealed that there was a significant association between duration of institutionalization and psychological coping skills of the adolescents, $\chi^2= 16.780$, df=3, $p = 0.019$. The Cramer’s V is a test of the strength of association between of institutionalization and psychological coping skills. Values of the tests show that the association was strong, $\Phi= 0.447$, $p=0. 019$. A comparison between the two groups showed that majority of respondents from both groups had medium utilization of various coping skills. This can be interpreted to mean that the experience of being institutionalized was indeed a deep reality and lingered in the minds of the adolescents, thus resulting to look for various ways of managing and living through the experience. The findings are in line with Flanagan (1980) findings that time spent in confinement threatens emotional wellbeing and ways of coping. The results are also in line with findings by Helm (2007) that inmates who experience anger, anxiety and regret due to duration of confinement.

A further examination was undertaken across three variables namely, age, gender and living environment, for their possible confounding association on the study’s dependent variable. This association on coping skills was observed on the distribution of scores and measured using Spearman’s chi-square tests of independence.

**Table 4: Cross tabulation of association between age and coping skills**

<table>
<thead>
<tr>
<th>Duration</th>
<th>Age 11—12</th>
<th>Count</th>
<th>% of Total</th>
<th>Coping Skills</th>
<th>% of Total</th>
<th>Count</th>
<th>% of Total</th>
<th>Coping Skills</th>
<th>% of Total</th>
<th>Count</th>
<th>% of Total</th>
<th>Coping Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>less than a year</td>
<td>11—12</td>
<td>Count</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4.4%</td>
<td>I have not been doing this at all</td>
<td>I have been doing this a little bit</td>
<td>I have been doing this a medium bit</td>
<td>I have been doing this a lot</td>
<td></td>
</tr>
<tr>
<td>13-14</td>
<td>Count</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>42.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-16</td>
<td>Count</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>42.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>Count</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>11.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://ijessr.com
Findings in the table 4 above show cross-tabulations between duration of institutionalization and coping skills of adolescents in rehabilitation schools. For age 11-12 years, 1(1.5%) of the adolescents who had stayed in the institutions for more than a year had low utilization of coping skills, as compared to 1(2.2%) who had stayed for less than a year. No respondent confined for less than a year had high utilization of coping skill, while those with medium and high coping skills utilization were the same at 1(1.5%) of those confined for more than one year. No adolescent confined for more than a year had low coping skills utilization.

For age 13-14 years confined for more than one year, 1(1.5%) adolescents did not utilize any skill at all, 3(4.5%) had low, 14(21.2%) medium and 2(3%) had high skills utilization compared to 4(8.9%) and 15(33.3%) who had stayed for less than a year with medium and high coping skills utilization. For ages 15-16 years, only 3(4.5%) of the adolescents who had stayed in an institution for more than a year had high utilization of psychological coping skills as the majority 27(40.9%) had medium skills utilization. On the other hand, those who had been institutionalized for less than one year...
reported 4(8.9%) adolescents with low and 15(33.3%) with medium coping skills utilization; none had high utilization of coping skills.

For ages 17-18 years, 5(7.6%) of adolescents who had stayed in the institution for more than a year had medium utilization of psychological coping skills and only 1(1.5%) adolescent had high utilization compared to 5(11.1%) who had stayed for less than a year. No adolescent confined for less than a year had high coping skills utilization.

The key observation among the four age groups was that there was no high utilization of coping strategies by adolescents who had been institutionalized for less than one year. It was therefore evident that with increased age, the more the adolescents stayed in rehabilitation schools, the more they had medium utilization of psychological coping skills.

A Pearson chi-square test was carried out between age of adolescents in rehabilitation schools and psychological coping skills. The test results showed that there was a significant association between age and psychological coping skills of the adolescents, \( \chi^2 = 14.559, \) df =9, \( p = 0.014 \). The Cramer’s V test of the strength of association between age and psychological coping skills showed \( \Phi = 0.309, \) \( p=0.014 \); indicating a strong association between the two variables.

Table 5: Cross tabulations of association between gender and coping skills

<table>
<thead>
<tr>
<th>Duration</th>
<th>gender</th>
<th>Count</th>
<th>I have not been doing this at all</th>
<th>I have been doing this a little bit</th>
<th>I have been doing this a medium amount</th>
<th>I have been doing this a lot</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>Male</td>
<td>11</td>
<td>9</td>
<td>21</td>
<td>11.1%</td>
<td>35.6%</td>
<td>46.7%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>13</td>
<td>4</td>
<td>40</td>
<td>8.9%</td>
<td>44.4%</td>
<td>53.3%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
<td>13</td>
<td>61</td>
<td>10.0%</td>
<td>80.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>More than a year</td>
<td>Male</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1.5%</td>
<td>12.1%</td>
<td>39.4%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>6</td>
<td>4</td>
<td>23</td>
<td>3.0%</td>
<td>31.8%</td>
<td>40.9%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9</td>
<td>6</td>
<td>27</td>
<td>3.0%</td>
<td>15.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

http://ijessr.com
The results in Table 5 above showed that most respondents had medium utilization of psychological coping mechanisms, followed by low utilization of the various coping skills. 8(12.1%) of the males who had stayed at the institutions for more than a year had low utilization of coping skills compared to 5(11.1%) who had been confined for less than a year. Also, no boys confined for less than a year had high coping skills utilization, while 4(6.1%) of those confined for more than a year had high coping skills utilization 2(3%) of females who had stayed in the facilities for more than a year had low coping skills compared to 4(8.9%) who had stayed for less than a year.

Notably, 8(12.1%) of males who had stayed at the institution for more than a year had low coping skills compared to 2(3%) of females. Also no adolescent confined for less than a year had high coping skills utilization regardless the gender. Additionally, 4(6.1%) males confined for more than a year had high coping skills utilization as compared to 3(4.5%) females.

This revealed that male adolescents in rehabilitation schools had higher utilization of coping skills 4(6.1%) compared to the females 3(4.5%) with continued increase in their duration at the rehabilitation schools. Additionally, boys were the majority in preferring using coping skills of active coping, positive reframing, religion, planning and emotional support in that order. Girls on the other hand preferred using active coping, religion, acceptance, positive reframing and planning in that order. The major difference between boys and girls was behavioral disengagement and venting which was preferred more by girls than by boys.

A chi-square test was carried out between gender of adolescents in rehabilitation schools and psychological coping skills. The test results showed that there was no significant association between gender and psychological coping skills of the adolescents, $\chi^2= 2.017$, $p = 0.569$. Cramer’s V is a test of the strength of association between gender and psychological coping skills. Values of the tests show that there was no association, $\Phi = 0.135$, $p=0.569$.

Table 6: Cross tabulations of association between living environment and coping skills

<table>
<thead>
<tr>
<th>Duration</th>
<th>Living Environment</th>
<th>Count</th>
<th>I have not been doing this at all</th>
<th>I have been doing this a little bit</th>
<th>I have been doing this a medium amount</th>
<th>I have been doing this a lot</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>neutral</td>
<td>5</td>
<td>11</td>
<td>24.4%</td>
<td>46.7%</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Less than a year</td>
<td>i agree</td>
<td>4</td>
<td>21</td>
<td>11.1%</td>
<td>11.8%</td>
<td>55.6%</td>
<td>25</td>
</tr>
</tbody>
</table>

http://ijessr.com
The findings in table 6 above show that most adolescents with 25(54.5%) confined for less than a year and 38(55.6%) confined for more than a year agreed the living environment is good and most of them responded to having medium utilization of psychological coping skills. No adolescent institutionalized for less than a year had high utilization of coping skills regardless of their views regarding the living environment, similar to those who had been confined for more than a year with negative and neutral perceptions regarding the living environment. Those confined with for more than one year showed that none had high utilization of coping skills apart from 6(9.1%) and 1(1.5%) who perceived the environment as neutral and positive respectively.
Also, adolescents confined for more than one year had 1(1.5%) seeing the environment as neutral and 1(1.5%) seeing the environment as positive did not utilize the coping skills used in the study at all. Those seeing the environment as negative had none with low or high coping skills utilization while only 1(1.5%) had medium utilization of coping skills.

Results comparing this group with the adolescents confined for less than one year showed that 5(11.1%) seeing the environment as neutral had low skills utilization while 11(24.4%) had medium utilization of coping skills as compared to those confined for more than a year with 5(7.6%) seeing the environment as neutral and with low skills utilization and 8(12.1%) with medium skills utilization. 4(8.9%) adolescents confined for less than a year and seeing the environment as good had low skills utilizations and 25(55.6%) medium skills utilization, as compared to those confined for more than a year seeing the environment as good with 1(1.5%) not utilizing any skill at all, 5(7.5%) with low skills utilization, 38(57.6%) with medium skills utilization and 7(10.6%) with high coping skills utilization.

The common trend in these groups was that no adolescent confined for less than a year had high utilization of coping skills regardless of their views of the living environment. This trend was noted for adolescents who had been confined for more than a year and perceived the living environment as negative and neutral. In other words, adolescents who had high coping skills utilization had been institutionalized for more than one year and perceived the living environment as good/ positive at 7(10.6%). This simply means that the adolescents perception of the environment in the facilities was associated with the level of utilization of coping skills. Another unique trend was that no adolescent confined for less than a year failed to utilize the coping skills under the study, while 1(1.5%) of adolescents confined for more than a year seeing the environment as neutral did not utilize the coping skills under the study at all, similar to 1(1.5%) seeing the environment as good.

A Pearson chi-square test was carried out between living environment and psychological coping skills. The test results confirmed that there was a significant association between living environment and the utilization of psychological coping skills of the adolescents, $\chi^2 = 10.733$, df=9, $p = 0.024$. The Cramer’s V is a test of the strength of association between living environment and psychological coping skills. Values of the tests show that the association was strong, $\Phi = 0.180$, $p=0.024$.

A discussion with the respondents about their reactions and approaches to the reality of being confined and dealing with stress and frustrations at the facilities showed different responses. For most of the respondents, staying in the facilities for different periods of time provided the adolescents a forum to prove that they can change and become better people in life.
For some, but few inmates, the experiences in confinement led to feelings of frustrations, self-doubt and feeling bad as a result of not being helped by inmates and caregivers as hope.

Staff on the other hand said that the inmates in the rehabilitation schools remained focused and were always busy most of the time; this helped them to not engage in undesirable actions or think of disobeying rules and regulations. They also socialized and interacted well with other. They were able to learn how to interact with others through socializing with them.

5.0 CONCLUSION AND RECOMMENDATION

In view of the study’s results, the conclusion was that duration of confinement of the adolescents for purposes of reforming them has significant association with the adolescents’ coping skills. There was also an significant association between duration of institutionalization and adolescents’ utilization of various psychological coping strategies where majority had medium utilization of coping skills. The current practice of incarcerating juveniles for the three years period is encouraged; inmates who show tremendous change before the three years period should be released based on their projections and staffs assessment of the inmates. In addition to this, crucial attention should be given to those who have stayed in the facilities for a short period of time so that they can take the transition positively bearing in mind the unfamiliar setting and people which can generate a lot of fear, frustrations and stress. Those used to the settings for staying there for longer periods of time should be targeted to encourage the newcomers, but also ensure they do not result to inappropriate coping ways but enhance positive attitudes and maximum utilization of appropriate coping skills due to experiencing excessive strains for long periods of time and being used to the setting and due to feelings of hopelessness and worry of what happens next after their end of sentence. Incarceration sentences should focus more on the positive changes by inmates regardless of the incarceration length to ensure that inmates do not feel hopeless thus engage in undesirable behaviours when in confinement and recidivate later.

6.0 REFERENCES


