

**ASSESSMENT OF EFFECTIVENESS OF “INCREDIBLE YEARS  
PROGRAM” COMPARED TO THE TRADITIONAL PROGRAM IN  
BEHAVIOUR MODIFICATION AMONG JUVENILE  
REHABILITEES IN NAIROBI, KENYA**

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THE SCHOOL OF EDUCATION OF KENYATTA UNIVERSITY**

**OCTOBER, 2012**

## DECLARATION

**This Thesis is my original work and has not been presented for a degree in any other university.**

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**DEDICATION**

This thesis is dedicated to my son Neville Ng'ang'a for his inspiration during my study and for the temporary emotional negligence he suffered during my absence from home to conduct this study, which needed very close monitoring.

To my late Dad Jackson Cheseto and my late Mum Roseline Cheseto for the legacy they left behind by urging their children to work hard and the sound upbringing of their children both morally and academically.

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## **ABSTRACT**

The purpose of this study was to investigate the effectiveness of the 'Incredible Years Program' (IYP) in reducing juvenile delinquency in Kenya. Juvenile delinquency in Kenya is on the increase. The number of children in conflict with law has risen significantly from 483 in 2006 to 927 in 2010. This necessitated the assessment of the effectiveness of this program. There was therefore need to conduct a research to determine whether the 'Incredible Years' Program training for house-parents and teachers is effective in the rehabilitation of juveniles in Kenya. It is for this reason that the current research embarked on trying out the 'Incredible Years Program' with a hope that it will improve juvenile rehabilitation services in Kenya and reduce the tendency of children falling back into crime. The design in this study was Quasi-Experimental research design. The target population in the study composed of all the children, house-masters/mistresses and teachers of Kenyan Rehabilitation Schools. Purposive sampling design was used in sampling procedure. A sample of hundred and fifty (150) children from two (2) Rehabilitation Schools took part in the study. Seventy five (75) from Dagoretti Girls' Rehabilitation School and seventy five (75) from Kabete Boys' Rehabilitation School. Both Rehabilitation Schools are in Nairobi. The two Rehabilitation Schools cater for medium-risk children. Medium-risk offences include being in bad company, being in possession of drugs and stealing. Low-risk offences are non-criminogenic in nature like dropping out of school. High-risk child offenders come in with murder, robbery with violence, arson and drug trafficking. Four House-parents and four teachers were also part of the sample, to make a total of 158. Two instruments were used to collect data. They included an adapted Strengths and Difficulties Questionnaire (Goodman, 1999) which was filled by house-parents and teachers and an Observation Schedule filled by the researcher. A pilot study was also conducted in order to validate the research instruments. Data was analyzed using frequencies, percentages, mean and standard deviations. The study findings indicated that there was a significant relationship between the 'Incredible Years Program' and behaviour change among the rehabilitees. There were significant differences between 'Incredible Years Program' and the Traditional Rehabilitation Methods and there was no significant relationship between effect of 'Incredible Years Program' and gender of the rehabilitees. Conclusively, results show that the 'Incredible Years Program' is effective in the rehabilitation of juvenile delinquents which was also indicated by other studies cited. This study has revealed salient features influencing rehabilitation outcomes that are amenable to change in terms of rehabilitation policy. If 'Incredible Year's Program' is introduced in Kenya, the policy makers should ensure that it is implemented fully. The researcher recommends the following for further research: study on the behavior of children in the Juvenile Remand Homes, The role of the family in influencing conduct problems and the type of learning climate and its impact on offending.

**ABBREVIATIONS AND ACRONYMS**

<b>CD</b>	Conduct Disorder
<b>CLAN</b>	Child Legal Action Network
<b>CRADLE</b>	Child Rights Advisory, Documentation and Legal Center
<b>CRC</b>	Convention on the Rights of the Child
<b>DCS</b>	Director Children Services
<b>DUI</b>	Driving Under the Influence
<b>IYP</b>	Incredible Years Program
<b>MOEST</b>	Ministry of Education Science and Technology
<b>ODD</b>	Oppositional Defiant Disorder
<b>TRP</b>	Traditional Rehabilitation Program
<b>UNCRC</b>	United Nations Convention on the Rights of the Child

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## **CHAPTER I: INTRODUCTION**

### **1.1 Background to the Study**

Juvenile delinquency in Kenya is on the increase. The number of children in conflict with law has risen significantly since 2006 (Department of Children's Services Database, 2010). The wave of unrest in Kenyan secondary schools in early 2000 is an indication of a serious problem of juvenile delinquency that is, children in conflict with law. Juvenile delinquents are children who commit crime (Children Act, 2001). The word 'criminal' is not used on children but on adults who commit crimes. Children commit astonishing crimes ranging from petty theft, drug abuse and trafficking, robbery with violence, arson and even murder. Urgent action needs to be taken to address this problem.

The Government spends huge amounts of money in taking care of juveniles in our correctional facilities yet its effectiveness is minimal due to lack of adequate personnel with superior skills in handling juvenile delinquents. When juvenile delinquents are arrested by the police, they are charged in the Children's Courts, whereas those who commit murder are charged in High Court. They are represented in court by the Director Children Services (DCS). They are also represented by Non-governmental organizations like The Child Rights Advisory Documentation and Legal Center (CRADLE) and The Child Legal Action Network (CLAN). According to the Children Act (2001), a child is anyone below the age of 18 years. Children cannot be sentenced to

death even if they have committed murder; this is stipulated in The Convention on the Rights of the Child (CRC) Treaty of 1989 of which Kenya is a signatory.

Juvenile delinquents are committed to Rehabilitation Schools for a minimum of six months and a maximum of three years depending on the type of crime committed. Rehabilitation Schools are the former Approved Schools; the later name was changed in 1999 because of the stigma attached to it (Ndunda, 1978). The society resented these children causing them more psychological harm hence the change of name to a child-friendly one so as to increase the acceptability of these juveniles. The first juvenile correctional institution in Kenya was the Kabete Approved School now the Kabete Rehabilitation School opened in 1910 to cater for youth who had been imprisoned for failure to register themselves for identity cards and those who did not carry the cards, (Mugo, Musembi & Kange'the 2006). After Kabete, many other schools were established for example, Dagoretti Approved School (1945), Wamumu Approved School (1958), (The Colony and Protectorate of Kenya: Approved School Annual report 1958). Thereafter, the rehabilitation schools served the purpose of behavior modification of juvenile delinquents. There are only nine Juvenile Rehabilitation Schools in Kenya.

The government in partnership with non-governmental organizations uses several programs for rehabilitation of child-offenders. These programs include; guidance and counseling, games and sports, education programs and

vocational training. These programs have achieved some success like a few children being reintegrated well back into the society; however, most of the rehabilitated children experience recidivism that is, committing the same or another crime after their release. Some of the causes of recidivism include lack of professional staff with skills in juvenile rehabilitation and use of coercive strategy in the daily management of the juvenile delinquents, which make them more defiant.

The ‘Incredible parent, child and teacher training program’ also referred to as ‘Incredible Years Program’ has successfully been used in the rehabilitation of juvenile delinquents in the USA, Europe and Asia with extra ordinary results.

The word ‘Incredible’ simply means extra ordinary. This means that this program has produced extra ordinary results in the rehabilitation of Juvenile delinquents. The program has however not been used in Africa probably due to lack of knowledge of its existence.

The ‘Incredible Years Program’, developed by a psychologist Dr. Carolyn Webster-Stratton in the USA in 1980 is an evidence-based program that has been shown in over nine randomized control group trials to prevent, reduce, and treat conduct problems of children (Webster-Stratton & Reid, 2003). ‘Incredible Years Program’ is a set of comprehensive, multifaceted, and developmentally based program targeting children between ages two and seventeen together with their parents or teachers. Specifically ‘Incredible Years Program’ involve, parents limiting their use of coercive child



management strategies (like, yelling, hitting, and verbal aggression) and increasing their use of positive, supportive responses (for example, encouragement, praise, and physically positive behaviours).

Kazdin (1995) has shown that, 'Incredible Years Program' can significantly reduce the development and persistence of conduct problems and improve the quality of parent-child relationships. He notes that, people exposed to harsh parenting beginning in childhood are more likely than others to be violent, commit murder, rape, robbery and arson.

The goals of the 'Incredible Years Program' are among others to:

1. Reduce conduct problems in children by decreasing negative behaviours.
2. Promote social, emotional, and academic competence in children.
3. Increase children's conflict management skills and decrease negative attributions.
4. Increase academic engagement, school readiness, and cooperation with teachers.
5. Increase parents' positive communication skills, such as the use of praise and positive feedback to children, and reduce the use of criticism and unnecessary commands.

Parent training programs are thus very important in raising up well adjusted children. Positive parenting promotes child adjustment in terms of their being able to make good relationships with adults, siblings and friends, concentrate better and be less aggressive (Gardner, 1987). Adults dealing with children should praise the children for any positive behaviour and encourage them to keep up the good behaviour. In moment-to-moment daily living, encouragement includes paying attention to a child and praising them for their day-to-day achievements and for trying. The promotion of this style of parenting is a major component of the 'Incredible Years parent program' to be used in this study. The Traditional Rehabilitation Method (TRM) uses group counseling as a way of rehabilitating juveniles. This method is the one currently used in Kenyan Rehabilitation Schools and does not take care of individual differences.

### **1.2 Statement of the Problem**

Studies in Kenya (Wakanyua, 1995; Maru, 1998; Lavera, 2002 & Kinyua, 2004) have shown that the rehabilitation methods used in Kenya provide temporary solution to juvenile delinquency leading to recidivism, which is a research gap. These studies also show that staffs in Kenyan rehabilitation schools lack the necessary skills and training to effectively rehabilitate juvenile delinquents.

The traditional methods of rehabilitation of juvenile delinquents have proved to have many gaps resulting to children committing crime again. Incredible

Years Program has shown to be very successful worldwide compared to the other rehabilitation methods. However, it has been noted that some of these children only become hardened and even pick up other deviant behaviours from these rehabilitation schools. This therefore called for the need to assess the effectiveness of the 'Incredible Years Training Program in Rehabilitating Juvenile Rehabilitates in Kenya. Since no study on 'Incredible Years Program has been done in Africa, this study in Kenya was the first one of its kind in the assessment of whether the IYP program is effective in reducing juvenile delinquency in the country.

Violence in secondary schools has taken a tragic turn whereby students burn their schools, even killing their colleagues in dormitory fire, (Wanjiku, 2008). The number of new cases of juveniles coming into the rehabilitation schools is also on the increase, from 927 during the year 2010 to 1800 children in 2011.

Lipsey (1992) who examined 443 different research studies, focusing on interventions or treatments designed to reduce, prevent, or treat delinquency found that those programs do not provide evidence that they are effective in reducing future criminal behaviour.(Gendreau & Ross 1987) also concurs with Lipsey.

Kazdin (1995), Webster-Stratton, (1981), Woolfenden, Williams, & Peat (2002), Hosford & de Visser (1994) have cited 'Incredible Years Program' as

an effective tool to prevent recidivism. This program may then be the ideal solution to the problem of recidivism in Kenya.

Rehabilitation schools are expected to rehabilitate children into respectable members of the society who are able to be re-integrated back to the society. However, it has been noted that some of these children only become hardened and even pick up other deviant behaviours from these schools. This therefore called for the need to assess the effectiveness of the ‘Incredible Years Training Program’ in rehabilitating juvenile rehabilitees. This program has been successful in many countries worldwide for example, U.S.A, Russia, Australia and Canada (Scott, 2002) in preventing children from going back into crime, however, its effectiveness is not known in Kenya.

There was therefore need to conduct a research to determine whether the ‘Incredible Years’ training conducted for house-parents and teachers was effective in improving rehabilitation services in Kenya. It is for this reason that the current research embarked on trying out the ‘Incredible Years Program’ and recommend the use of the same with a hope that it would improve juvenile rehabilitation services in Kenya and reduce the tendency of children falling back into crime.

### **1.3 Purpose of the Study**

The purpose of this study was to find out the effectiveness of the ‘Incredible Years Program’ in the rehabilitation of juvenile delinquents in Kenya.

### **1.4 Objectives of the Study**

This study was based on the following objectives:

- (i) To identify the types of conduct behaviour problems presented by children admitted in rehabilitation schools.
- (ii) To find out the teachers' and house-parents' practices towards juvenile rehabilitees.
- (iii) To establish the behaviour change of children.
- (iv) To compare the behaviour of children in the 'Incredible Years Program' and those in Traditional Rehabilitation Method Program.
- (v) To find out if there are sex differences in response to Incredible Years Program.

### **1.5 Research Questions**

- (i) What conduct behaviour problems do the children in the study have?
- (ii) Is 'Incredible Years Program' effective on teachers' and house-parents' practices towards juvenile rehabilitees.
- (ii) Is 'The Incredible Years Program' effective on behaviour change of children?
- (iii) Is there comparison in behaviour of children in the 'Incredible Years Program' and those in Traditional Rehabilitation Program?
- (iv) Are there sex differences in children's behaviour response to the 'Incredible Years Program'?

### **1.6 Significance of the Study**

The findings of the study may assist staff working in the Department of Children Services to rehabilitate child offenders effectively. For policy makers, the study will link policy decisions to key performance indicators at the implementation level. It is expected that the findings of this study will improve rehabilitation services in Kenyan Rehabilitation Schools and also enable follow-up studies to be carried out by other researchers. The findings may strengthen parents' involvement in children's school experiences to promote their academic and social skills and reduce delinquent behaviours. The findings may also strengthen children's social and emotional competencies, such as understanding and communicating feelings, using effective problem-solving strategies, managing anger, practicing friendship and conventional skills, and behaving appropriately in the classroom. The findings may strengthen teachers' classroom management strategies, promoting children's pro-social behavior and school readiness, and reducing children's classroom aggression and non-cooperation with peers and teachers.

### **1.7 Assumption of the Study**

- (i) That all medium- risk child offenders would easily be rehabilitated by the Incredible Years Program.
- (ii) That the information given in the questionnaire was true. This assumed maximum validity of the given information.

- (iii) That the house-parents would put into practice the new parenting skills of Incredible Years Program.

### **1.8 Delimitation and Limitation of the Study**

Limitation of the study included money and time required for the study. The IYP Training kit is very expensive. The program also required ample time in order to record the desired behaviour accurately and consistently, including specific time interval and duration of the behaviour. The Inability to prevent children from the experimental and the control group from meeting in class and social places was another limitation of the study.

Delimitation of the study included: delinquency is a multifaceted concept that keeps changing. Though efforts were made to validate the instruments, there remained a degree to which one could not guarantee that only the targeted behaviour and exact aspect of delinquency was measured, and that all was captured. The study was done in Nairobi province only excluding other provinces.

### **1.9 Theoretical Framework**

This section comprises of the theoretical framework. William Glasser's Psychological Reality Theory on maladaptive Behaviour and the second theory is Merton's Functional Theory of Juvenile Delinquency.

### **1.9.1 William Glasser's Psychological Reality Theory on Maladaptive Behaviour**

William Glasser (1957) developed the reality therapy theory because he became convinced that psychiatry was based on mistaken assumptions. He believed that when people behave in an inappropriate manner (maladaptive behavior), they were doing so because they were unable to satisfy their needs. He believes that all human behaviour is motivated by people, regardless of their culture or location striving to meet their basic psychological needs. There are two basic psychological needs according to this theory thus; the need to love and be loved and the need to feel that one is worthy of esteem to himself and to others. These two psychological needs have been incorporated into one, which Glasser calls 'identity.' Reality therapy is based primarily on this one psychological need of 'identity', which is present throughout one's lifetime. Glasser considers identity in terms of "success identity versus failure identity." In the development of one's identity, other people, parents and siblings play an important role in helping one to see him/her as a success or failure. Glasser sees personal suffering (abnormal or maladaptive behaviours) as responding to change in one's identity. This happens when an individual effects a change on how he feels, lives and behaves; for example if a person feels others esteem him, he/she gains confidence. If there is a feeling of being unwanted by the society, an individual may become aggressive in order to be noticed. We conclude that, a person can be what he decides to become because he is a self-determining creature.



This theory is related to the present study in that juvenile delinquents have a number of unmet needs. The need to love and to be loved is crucial. If they feel that this need is not met by teachers, parents and the society, their maladaptive behaviour will show this. It is therefore, important to pay special attention to the psychological needs of the children. The Incredible Years Program takes care of this need by encouraging positive parenting. Parents should make their children feel appreciated and wanted because a vast majority of young people move through the adolescent years without experiencing major difficulties but some encounter serious psychological and behavioural problems that disrupt not only their lives but also the lives of those around them. Ignoring the children and being harsh to them may cause problems such as drug abuse, depression, suicide, crime, and delinquency.

The parent, child, and teacher training interventions that comprise ‘Incredible Years Program’ are guided by developmental theory on the role of multiple interacting risk and protective factors in the development of conduct problems. The IYP program components are designed to work jointly to promote emotional and social competence and to prevent, reduce, and treat behavioural and emotional problems in young children and adolescents as advocated by William Glasser.

### **1.9.2 Functional Theory of Juvenile Delinquency**

Oliver William (2000) built on Merton’s (1957) theory and describes this theory as the consequences of a faulty relationship between goals and the

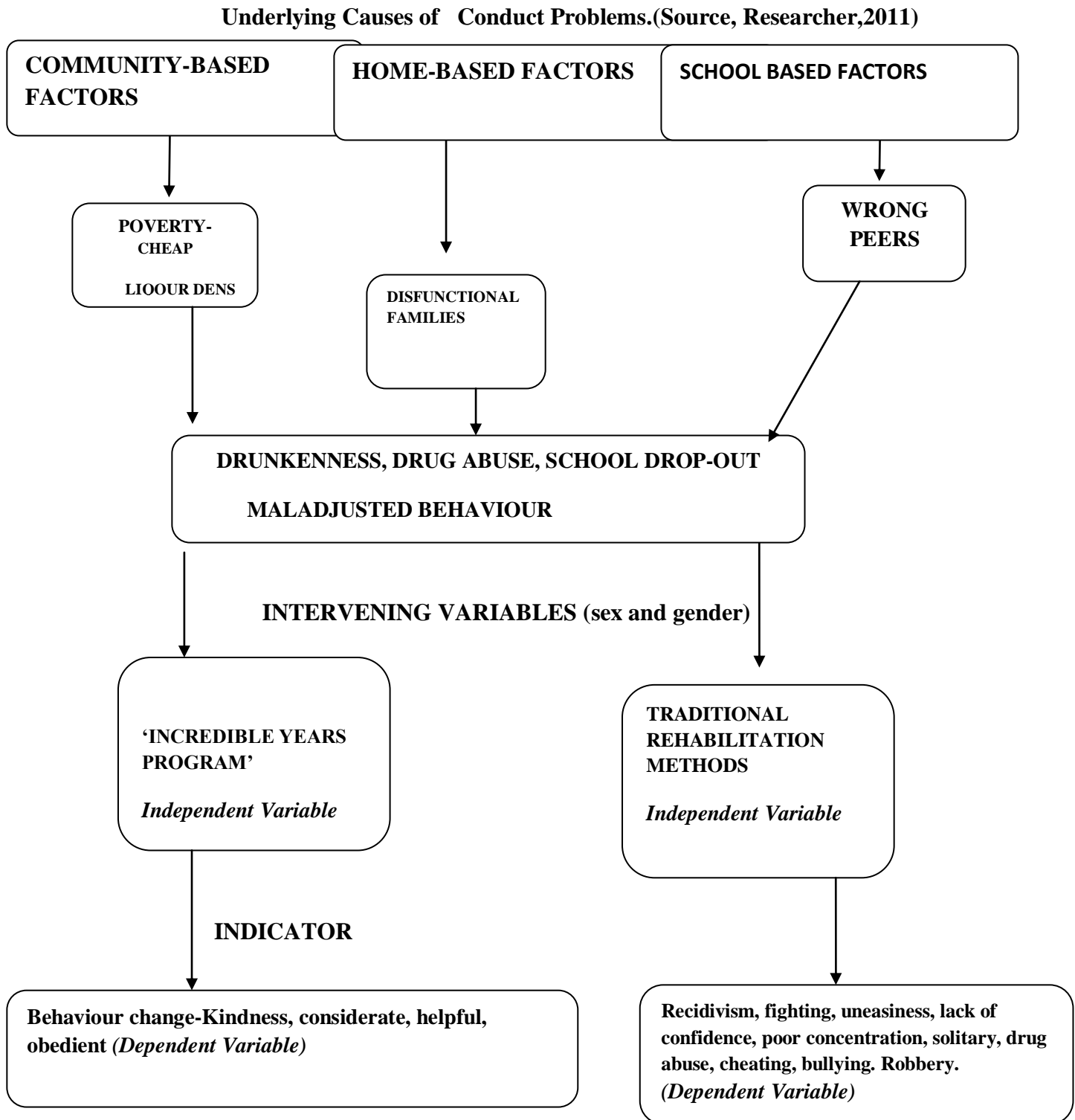
legitimate means of attaining them. Merton emphasized two features of social and cultural structure: culturally defined goals (such as monetary success) and the acceptable means (such as education) to their achievement. Merton argued that in our society success goals are widely shared, while the means of or opportunities for attaining them are not. Merton's theory is used to explain not only why individual adolescents become delinquents but also why some social classes are characterized by more delinquency than others. Since members of the lower class are assumed to be most affected by the disparity between the goals and the means of attaining success, this class is expected to have a higher rate of delinquent behavior than the upper and middle classes. The upper and middle classes also experience delinquency but to a lesser extent compared to the lower class. Merton outlined a number of ways individuals adapt when faced with inadequate means of attaining their goals. Among these, innovation revolves substituting illegitimate for legitimate means to goal attainment; it is the resort to this adaptation that is thought to account for much theft and delinquency among adolescents from the underclass.

This theory is relevant to the present study in that most juvenile delinquents in the rehabilitation schools are from the lower economic strata of society (Oliver,2000).The lower class is characterized by extreme poverty, most families living in abject poverty. Most children are neglected by their parents because they cannot afford to feed them. As a result, children resort to illegal

means like stealing to satisfy their hunger drive. However, it is worth noting that the children of the middle class and upper class are also delinquents but their delinquency is covered as their parents use their resources to bail them out. 'Incredible Years Program' fits into this theory in that, improving parent-child efficacy reduces delinquency. Children are sensitized on the need to respect other people thus disengaging from wrong behaviour like stealing or fighting and channel their energy to productive activities.

### **1.10 Conceptual Framework**

The juvenile delinquents targeted for rehabilitation are children from age 10 to 17 years who are in conflict with the law and present deviant behaviour. The children come from the community, families and streets. When the police arrest the children in conflict with law, they are remanded in children remand homes before being taken to court. These children are committed to the Rehabilitation Schools by courts for a minimum period of six months and a maximum period not exceeding 3 years according to section 53 of the Children Act (2001). Rehabilitation period depends on the frequency and intensity of the offence. The children are then reintegrated back into the society after behaviour modification as illustrated in Figure 1.1.



**Figure 1.1: Conceptual Framework on Juvenile Rehabilitation**

### 1.11 Operational Definition of Terms

**Conduct disorder:** Antisocial behaviour of high rate annoying behaviour like aggressiveness towards others, (hitting, kicking, fighting), disobedience to adult authorities and temper tantrums.

**Delinquency:** Criminal behaviour, wrongdoing by children under the age of eighteen years committing crime repeatedly.

**House-parents:** Staff responsible for children in the Rehabilitation Schools dormitories.

**Incredible Years Program:** Method of juvenile rehabilitation that limits the use of coercive child management strategies like yelling, hitting and verbal aggression and instead use positive child-supportive measures like praise, hugging or sitting next to the child.

**IYP kit:** The training manual and video tapes used in the IYP training.

**Juveniles:** Children under the age of eighteen years having behavioural criminal tendencies like stealing, using drugs and lying.

**Oppositional defiant disorder:** Tendency by children to disobey continuously, judged by the number of times the child disobeys authority figures.

**Recidivism:** A tendency of rehabilitated children falling back into criminal behavior by recommitting the same or different crime. Judged by number of times the rehabilitated child goes back to the rehabilitation school.

**Teachers:** Teaching staff in the rehabilitation school.

**Traditional Rehabilitation Method:** Method of rehabilitation using mainly group counseling.

## **CHAPTER II: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter comprises a review of the researches done internationally, regionally and related studies done in Kenya. Studies showing how ‘Incredible Years Program’ has successfully been used in the rehabilitation of juvenile delinquents have been discussed. This program has however not been used in Kenya or anywhere in Africa. Various thematic areas related to rehabilitation of juvenile delinquents have also been reviewed.

### **2.1 Juvenile Crime**

Juvenile crime is often serious and may represent a significant proportion of the total criminal activity in a community. Children need to be handled in a special way because they are in a formative period and criminal behavior at this stage of life will not necessarily be continued into adulthood. Therefore, an effective rehabilitation program has particular appeal for use with juveniles. Theoretically, rehabilitation is the focus of corrections programs for juveniles. In practice, however, as occurs with adult programs, juvenile rehabilitation programs may be poorly implemented. Strengthening implementation of existing rehabilitation and delinquency prevention programs could substantially reduce future criminality.

## **2.2 Conduct Disorders: Prevalence and Causes**

Individual psychological or behavioural risk factors that may make offending more likely include; intelligence, impulsiveness or the inability to delay gratification, aggression, empathy, and restlessness (Farrington, 2002). Children with low intelligence are likely to do worse in school. This may increase the chances of children offending because low educational attainment, a low attachment to school, and low educational aspirations are all risk factors for offending in themselves (Walklate, 2003). Children who perform poorly at school are also more likely to truant, which is also linked to offending (Farrington, 2002).

If strain theory or sub cultural theory is valid, poor educational attainment could lead to crime, as children are unable to attain wealth and status legally. However, it must be born in mind that defining and measuring intelligence is troublesome.

Young males are especially likely to be impulsive which could mean they disregard the long-term consequences of their actions, have a lack of self-control, and are unable to postpone immediate gratification. This may explain why children disproportionately offend. (Farrington, 2002 &Walklate, 2003). Impulsiveness is seen by some as the key aspect of a child's personality that predicts offending (Farrington, 2002). However, it is not clear whether these



aspects of personality are a result of “deficits in the executive functions of the brain”, or a result of parental influences or other social factors (Brown, 1998).

### **2.3 Family Environment and Offending**

Family factors which may have an influence on offending include; the level of parental supervision, the way parents discipline a child, parental conflict or separation, criminal parents or siblings, parental abuse or neglect, and the quality of the parent-child relationship (Graham & Bowling, 1995). Children brought up by single parents are more likely to start offending than those who live with two natural parents, however once the attachment a child feels towards their parent(s) and the level of parental supervision are taken into account, children in single parent families are no more likely to offend than others (Graham & Bowling, 1995). Conflict between a child's parents is also much more closely linked to offending than being raised by a single parent (Walklate, 2003).

If a child has low parental supervision they are much more likely to offend (Graham & Bowling, 1995). Studies have found a strong correlation between a lack of supervision and offending, and it appears to be the most important family influence on offending (Farrington, 2002; Graham & Bowling, 1995). When parents commonly do not know where their children are, what their activities are, or who their friends are, children are more likely to truant from school and have delinquent friends, each of which are linked to offending

(Graham & Bowling, 1995). A lack of supervision is connected to poor relationships between children and parents, as children who are often in conflict with their parents may be less willing to discuss their activities with them (Graham & Bowling, 1995). Children with a weak attachment to their parents are more likely to offend (Graham & Bowling, 1995).

Family background has an important influence on adolescent development and adjustment and hence on social conduct. Broken homes and strained family relationships have even been associated with delinquent behaviour (Rice, 1987). Other sociological factors that may generate problems to children include socio-economic status, affluence, cultural values; peer group involvement and influences; neighborhood and community influences; social and cultural changes, disorganization, and unrest; and school performance (Rice, 1987).

In a study by Kinyua (2004) to compare the self-esteem of children in Kenyan Rehabilitation schools thus, Kirigiti Girls and Kabete Rehabilitation Schools, the study utilized two instruments, the self-esteem inventory and an interview schedule. The results of the study showed that there was no significant difference between the self-esteem of children. It was noted that there was a slightly higher mean score for girls than for boys. Age, level of education and time spent in the rehabilitation schools were found to have no statistical

significant effect on the self-esteem. Children with low self-esteem are more likely to engage in antisocial behavior ( Kinyua, 2004).

### **2.3 Types of Conduct Disorders and Delinquency**

Delinquency is a legal term, which refers to acts committed by individuals under the age of 16, 17 or 18 which varies from state to state. A Juvenile Delinquent is one who repeatedly commits crime. Delinquency is generally regarded as calling for some punishment or corrective behaviour action. Delinquent behaviour is manifested in such actions as destruction of property, violence against other people, and other behaviors contrary to the needs and rights of others and in violation of the society's laws, including running away from home (Coleman, 1984).

Conduct disorders on the other hand refer to misdeeds involving violations by minors, but may or may not be against the law. Examples of conduct behaviours are; Aggressiveness towards others, (hitting, kicking, fighting), disobedience to adult authorities, temper tantrums, high rate annoying behaviour like yelling, whining, high activity level and threatening others, and to a lesser extent, community rule violations such as stealing or fire setting (Mabe, Turner, & Josephson, 2005).

Coleman (1984) asserts that delinquent behaviour is the most troublesome and extensive in childhood and adolescence. Juvenile delinquents sometimes have

mental disorders/behavioral issues such as post traumatic stress disorder or bipolar disorder, and are sometimes diagnosed with conduct disorder (Walklate, 2003) partially as a result of their delinquent behaviors like truancy thus, deliberate absenteeism by a student from school and home and loitering without a good reason and permission (Durojaiye, 1972). This leads to losing valuable learning time and may lead to drop-out. Children with the problem of truancy exhibit deviant characteristics and are often violent (Were, 2003).

The Education Minister in Australia said in July, 2009 that the rising levels of violence in schools were "totally unacceptable" and admitted that not enough had been done to combat violent behaviour. 55,000 students had been suspended in the state's schools in 2008, nearly a third of which were for "physical misconduct". In South Australia, 175 violent attacks against students or staff were recorded in 2008 (Chilcott & Odgers, 2009). A recent study found that violence experienced by teachers in francophone Belgium was a significant factor in decisions to leave the teaching profession (Galand, Lecocq & Philipott, 2007).

Following numerous reports over the past decade about school violence in Poland, the Education Minister in 2009 introduced stricter regulations about student behaviour, including inappropriate dress, being drunk and carrying mobile phones. Teachers were to be given new powers to punish disruptive students (Kostadinov, 2009). The French Education Minister claimed in 2000

that 39 out of 75,000 state schools were "seriously violent" and 300 were "somewhat violent" (Litchfield, 2000).

A survey by the Education Ministry in Japan showed that students at public schools were involved in a record number of delinquent incidents in 2007—52,756 cases, an increase of some 8,000 on the previous year. (Osaka, 2008).

In 2006, in response to the suicide of a girl after she was sexually molested in school, the Polish Minister of Education, launched a "zero tolerance" school reform. Under this plan, teachers would have the legal status of civil servants, making violent crimes against them punishable with higher penalties. Head teachers will be, in theory, able to send aggressive pupils to perform community service and these students' parents may also be fined. Teachers who fail to report violent acts in school could face a prison sentence (Easton, 2006).

The South African Human Rights Commission (2008) has found that 40% of children interviewed said they had been the victims of crime at school. More than a fifth of sexual assaults on South African children were found to have taken place in schools. Exposures to domestic violence, gangsterism, and drugs have had a substantial impact on student performance (BBC News, 2008).

Juvenile delinquency in Kenya is becoming worse. Juvenile delinquency is on the increase. The number of children found guilty of robbery with violence,

drug trafficking and abuse, rape, arson and other crimes is on the increase (Ndirangu, 2000). The most reported child offences in Kenya include; alcohol and drug abuse, rudeness/disobedience, fighting, harassment and bullying, cheating, theft, robbery and murder (Ndiragu, 2000).

#### **2.4 Teachers' and House-Parents Practices**

The primary goals of the IYP program are to improve the parent's skill and confidence at managing their child's aggression and problem behaviour and to improve the parent-child relationship. The following is a selection of curriculum topics:

- Parent-child play skills
- Praise
- Limit setting
- Ignoring
- Reward systems
- Effective consequences

The Incredible Years Parenting Program has outcome research to indicate the following benefits of participation:

- Reduced child aggression and disruptive behaviour
- Reduced parent stress
- Increased child positive behaviours and social skills

- Increased parent confidence in parenting
- Increased parent effectiveness in managing behaviour

The training program for teachers emphasizes classroom management skills, such as the effective use of praise and encouragement, proactive teaching strategies, and ways to manage inappropriate classroom behavior and build positive relationships with students. Training can be provided through either four to six full-day workshops or 14 to 20 two-hour sessions.

The BASIC Parent-Training Program—Early Childhood component and the small-group Dinosaur Child-Training program have been rigorously evaluated, and the remainder of this description of the Incredible Years series focuses on these two components. The ADVANCE, BASIC—School Age, Supporting Child’s Education, and school readiness parent-training components, the Teacher-Training program, and the Dina Dinosaur classroom curriculum currently do not have sufficiently rigorous research evidence that clearly assesses impacts on child outcomes.

Teachers in Incredible Years Teacher Training classrooms reported that children showed higher levels of social competence than children did in classrooms without teacher training. (Webster-Stratton et al., 2004).

Parent involvement in school and parental bonding with teachers was higher in Incredible Years Teacher Training classrooms than in classrooms without teacher training according to teacher report (Webster-Stratton & Reid, 2003).

4-8 year old children diagnosed with conduct problems whose parents received The Incredible Years BASIC with and without the ADVANCE Parenting Program showed reduction in aggressive and destructive behavior compared to a waiting list control group on report and observational measures. (Reid, et al., 2003); (Webster-Stratton, et al., 2004); (Webster-Stratton, 1984).

Rates of child noncompliance and aggression were lower in Incredible Years Teacher Training classrooms than in classrooms without teacher training as measured by independent observations.

## **2.5 History of Rehabilitation Schools**

Rehabilitation of children takes place all over the world. A brief look at rehabilitation of children in Lebanon in the Middle East and Morocco in Africa gives a good point of reference. In Lebanon, European Christian missionaries began it. The institutions demonstrated philanthropy and provided a means to influence the social, cultural and economic life of poor groups. In Morocco, benevolent societies affiliated to different religions set up the first residential institutions in the early 20<sup>th</sup> Century (Save the children-UK, 2005). In Lebanon, the rehabilitation programs are doing fairly well due



to the great investment that the state has put in the programs, and fully support the NGOs (Save the children-UK, 2005).

The earliest attempt to rehabilitate children in Kenya was in 1909 when a reformatory institution for children found loitering in the streets as well as others found guilty of crime was established. These institutions were expected to re-socialize young offenders, build their self-esteem and fit them back to the society, but turned out to be punitive-oriented prisons for young offenders (Ndunda, 1978). This explains why the rehabilitation schools are largely made up of street children. In 1930, the then government appointed a committee, which reported the unsatisfactory atmosphere of the institution, and some changes in the training and handling of boys began to be made. This institute was renamed approved school in line with the British system under the newly introduced Juvenile Ordinance Act of 1934 in Kenya. The Second World War in 1940's and the later state of emergency in Kenya in 1952 created more problems and more children got into trouble with the law. This resulted into the starting of more approved schools and in addition, juvenile remand homes for children awaiting court decisions on the nature of their treatment.

The Juvenile Ordinance of 1934, the Prevention of Cruelty and Neglect of Children Ordinance of 1955, as well as vagrancy and parts of Courts Acts conferred more and new functions to the Department of Children Services in the ministry of Home Affairs. Such functions as protection and discipline, care and protection of neglected or abandoned children, cruelly treated and vagrant

children in the country were later added to the department's responsibility. The above ordinances and acts were consolidated into the Children and Young Person's Act (CAP 141) of the laws of Kenya in 1963, and revised in 1964 (Kinyua, 2000).

Koech (1999) recommended that the approved schools discard the image of jail schools and embrace the special education approach, by referring to them as special rehabilitation centres. This meant that the curriculum for these institutions be standardized and follow the special education model of adopted, adapted specialized curriculum to suit the needs of learners with emotional and behavioral problems. The name therefore changed from approved schools to rehabilitation schools.

## **2.6 Behaviour Modification Methods**

Harvard psychologist B.F. Skinner was a behaviouralist. Starting in the 1940s he wrote that human behavior was naturally controlled by whether it was rewarded. In other words, people do what they do because it works for them. This is true, Skinner taught, for both desirable behaviors and those we wish to extinguish. Skinner advocated positive reinforcement over methods of punishment, both because he proved it to be more effective and because he believed it to be more humane, according to the B.F. Skinner Foundation, and his approaches are still used in 21st century psychology, education and coaching.

### **2.6.1 Positive Reinforcement**

Behavioural modification techniques include positive reinforcement, extinction and punishment. In positive reinforcement performance of a desired behavior is rewarded. Extinction uses withholding of an anticipated reward if a negative behaviour is demonstrated or if a positive behaviour is not performed. In a punishment system a negative behaviour or the failure to meet behavioral expectations is met with an aversive stimulus, something the person will want to avoid in the future. Positive reinforcement is most effective, according to University of Georgia Professor Melissa Standridge (2008), when the expectations are well known and very specific and when the reward is something very much desired. Telling a child "You will get to play outside for an hour right after all of your math homework and all of your corrections are complete" is more effective on a sunny afternoon than during a rain storm. Consistency is also important in helping to internalize positive behaviors and make them habits.

### **2.6.2 Extinguishment: Natural Loss of a Desired Reward**

Extinguishing is effective when the reward has already been experienced and is very much desired. It is also more likely to produce consistently positive behaviour when there is a natural connection between the thing the person is doing and the natural loss of the intended reward. For example, a 2-year-old child enjoys a piece of fruit at the end of his lunch each day. When he throws his plate on the floor one afternoon, his dad calmly says that this has ended the

meal and he won't be able to have his fruit. It's a natural consequence of throwing your plate, purposefully, to the floor. Tomorrow, if dad sets the desired fruit off to the side, but in eye's view, his son is not likely to let the same loss reoccur. He did not have to punish. If consistency is practiced in the home the child simply learns that the natural consequence of negative behaviour is the loss of a desired reward.

### **2.6.3 Punishment**

Punishment especially that, which causes shame or fear, may cause behaviour to change for the moment but does not promote a desire to grow or to become better behaved. It may destroy the relationship that could create a desire within the person for positive change. For example, many students become motivated to do their work with greater diligence because they admire and want to please a kind and supportive teacher. If this teacher then shames them in front of the class the catalyst for positive change can be lost. It is for this reason that the United Nations Educational, Scientific and Cultural Organization, UNESCO (2001), called for an end to corporal punishment and other forms of punitive child discipline in schools and in family life, through legislation and programs of education.

Business environments often punished employees for things outside their own control, by firing, demotion or reprimand commonly for failed financial results. This is counterproductive because employee engagement, which is associated with increased company profits across industries, is promoted by

positive reinforcement, team goal setting and rewarding the mastery of new skills, according to Robert Vance, an industrial and organizational psychologist writing for the Society for Human Resource Management.

## **2.7 Types of Programs used with Delinquent Children**

There are several programs that are used in the rehabilitation of juvenile delinquents as discussed below.

### **2.7.1 Behavioral Engineering**

In the rehabilitation school system behavioural engineering (Walker & Buckley, 1972) has inspired two programs of behavior management based on the principles of applied behavior analysis in a social learning format. Programs were successful in reducing disruption in children with conduct disorders, as well as improving their academic achievement. The programs show good maintenance and generalization of treatment effects when the child was returned to the natural classroom. In addition, the programs were successfully replicated in normal schools and were partially successful in rehabilitation schools thus; this is a gap because of recidivism experienced. However, behavior analytic programs continued to function to control truancy and reduce delinquency (Walker & Buckley, 1972).

### **2.7.2 Wilderness/challenge-Type Programs and Community Supervision. The Maryland Report (1980)**

The Maryland Report reviewed two types of juvenile programs: wilderness/challenge-type programs and community supervision. The wilderness or Outward Bound-type programs were particularly popular for juveniles during the late 1970's and early 1980's. These programs emphasized physical challenge and required participants to do more than what they believed they could do. Assessment of these programs is relevant to conclusions about the effectiveness of aftercare because most of the programs included some type of aftercare. Outcome evaluations of these programs have been extremely rare (Gendreau & Ross, 1987).

Thus, from the perspective of The Maryland Report (1980), studies of the wilderness and challenge programs do not provide evidence that they are effective in reducing future criminal behavior. These programs attempted to provide reintegration services to the participants. As a result, the mixed aftercare findings were disappointing. The Maryland Report's review of the juvenile wilderness and challenge programs concluded that these programs were not effective in reducing the recidivism of juveniles. The Gottfredson & Barton (1993) study showing that juveniles who spent time in an institution had lower recidivism than those released to the community suggests that the quality and amount of treatment the juveniles receive may be the important factor in reducing recidivism.

### **2.7.3 Other Methods of Juvenile Rehabilitation**

The two primary methods for delivering behavior analytic services in juvenile rehabilitation are consultation and/or therapy; the former involves three parties - consultant, consultee, and a client whose behavior is changed. Consultation Downing (1968) can involve working with the consultee (a parent or teacher) to build a plan around the behavior of a client (a child or student), or training the consultees themselves to modify the behavior of the client. Within the domain of parent-child consultation, standard intervention includes teaching parents skills such as basic reinforcement, time-out and how to manipulate different factors to modify behaviour (Tharp & Wetzel, 1969). Direct therapy involves the relationship of behaviour analyst and client, usually one-on-one, in which the analyst is responsible for directly modifying the behaviour of their client. Direct therapy is also used in schools, but can also be found in group homes, in a behavior modification facility and in behavior therapy (where the focus may be on tasks such as quitting stealing, modifying behaviors for sex offenders or other types of offenders, or modifying behaviors related to disorders. This approach is different from IYP in that it is a more formal approach and experiences recidivism (Tharp & Wetzel, 1969).

### **2.7.4 Behavioural Counseling in Juvenile Rehabilitation**

Behavioral counseling was very popular throughout the 1970s and at least into the early 1980s (Couch & Allen, 1983). Behavioral counseling is an active action oriented approach that works with the typically developing population

also, but also assists children with specific/discrete problems such as rehabilitation of child offenders (Hosford & de Visser, 1974). Downing (1968) condenses the varied statements of many authorities regarding guidance services into six categories; pupil inventory, appraisal, counseling services, vocational, placement educational and follow-up.

In Kenya, Oketch & Ngumba (1991) outlines that guidance is for all children. If the program focuses on problematic children only, then the vast majority of the children will be ignored. In Kenyan rehabilitation schools, group counseling is mostly used and has not proved to be very effective. Individual Treatment Plan for rehabilitating each child is often not reviewed thus a hindrance to the successful rehabilitation of child-offenders resulting to recidivism.

In a study by Maru (1998) to establish the socio-demographic characteristics and level of recidivism of children appearing in the Nairobi juvenile court, a sample of 90 children aged 8-18 were used. A socio-demographic questionnaire for children was used. Findings of high prevalence of morbidity were attributed to low socio-economic status, poor family support systems, low education levels and substance use among children. There were 15 different types of deviant behaviours and these children needed urgent psychological management. The deviant behaviours included: dropping out of school, stealing, fighting, aggressive behavior, drug abuse, name-calling among others.



### **2.7.5 Social and Vocational Skills Training**

In a study by Hoagwood & Erwin (1997) in Britain to establish the effectiveness of social skills training and recidivism, it was found that on the school-based programs, social skills' training was effective in preventing aggression and alcohol abuse and enhancing peer acceptance and locus of control. Teacher consultation was effective in facilitating referral for special education. Analysis of programs for aggressive behavior yielded a beneficial effect on aggression behaviour in all age groups, children at risk showing larger effect. This was a case study at Southampton Juvenile Correctional Center with a random sample of 60 juveniles aged between 11-17 years. Questionnaire and interview methods were used. On recidivism, 96% felt that they were not likely to fall victims of crime, while 4% felt they could be victims again.

In a study by Wakanyua (1995) to find out the effectiveness and relevance of the rehabilitation programs offered in selected rehabilitation schools in Kenya namely; Kabete, Likoni, Othaya and Kirigiti, specific attention was paid to the program goals and design, factors contributing to juvenile delinquency and the effectiveness of institutional confinement in rehabilitation of juvenile delinquents. The study was conducted within the selected rehabilitation schools in different parts of Kenya. Respondents were inmates and ex-inmates of rehabilitation schools in Kenya. Included in the experiment sample were delinquent children who had spent more than one year at the institutions, and

selected former juvenile offenders discharged from rehabilitation schools between January 1987 and December 1988 after a satisfactory completion of their committal period. The study entailed a questionnaire, structured and unstructured interviews, observation and examination of secondary data.

A control group of non-delinquent children from two regular primary schools in Mathare and Ngecha were used. These children shared almost typically similar home environments (socio-economic status as those in the rehabilitation schools, before their committal. Other key informants included officials from the Department of Children Services and staff working in the rehabilitation schools. Main findings included; there was a high rate of absconding at Kabete rehabilitation school. The boys claimed the conditions at the school were not conducive for effective learning. The school lacked most facilities and the few available were dilapidated. Most vocational training programs were at a stand still due to financial constraints thus this was a major setback to the vocational skills training. Both staff and students claimed lack of motivation due to lack of support from the respective ministry. At Likoni, physical facilities especially buildings were relatively better though not well maintained. Some vocational programs were not offered due to lack of or shortage of technical instructors. Observations at Othaya revealed that the school had very limited facilities badly in need of repair. Most of the boys at the school did not like the school and reported mistreatment by the teachers.

On the profile of inmates, 63% in the above study had both parents with the rest being brought up by single parents (32.2%) or had no parents (2.5%). The majority 50% were from broken homes, implying that they had limited opportunities for being brought up in normal families. 64% came from urban areas while only 34% were from rural areas. 59.2% of those from urban areas were from Nairobi, while out of those from rural areas, 15.4% came from Kiambu and 9.7% from Murang'a. For those who lived in Nairobi, 62% lived in slums such as Mathare, Kibera, Korogocho and Kawangware. Majority of juvenile delinquents were children of poor parents, with no gainful employment. Most parents were peasant farmers, hawkers and casual workers. Most of the respondents' parents (65.4% fathers and 67.8 mothers) had attained formal education only up to primary level or none at all. Prior to joining the institution, 65% of respondents were living at their places of origin with only 24.2% staying with both parents, and 10.8% alone. 60.4% of the respondents were attending school but had dropped out due to lack of school fees, lack of uniforms, teacher beating, sickness, and bad company. The children suffered lack of food, money, clothing, shelter and not being in school prior to committal.

In a study by Lavera (2002) to establish the extent to which rehabilitation schools were achieving objectives of rehabilitation of juvenile delinquents, she focused on all Kenyan Rehabilitation Schools. The main methods were the questionnaire, qualitative interview, observations and document analysis.

Findings indicated that there were inadequate academic facilities, lack of vocational facilities, deplorable living conditions, inadequate health care facilities, shortage of qualified staff and lack of special rehabilitation skills to handle delinquents.

### **2.7.6 ‘Incredible Years Program’**

Despite their diversity, parenting programs have proven effective for behaviour problems and are the treatment of choice for conduct disorders (Barlow, 2005; Mabe, Turner, & Josephson, 2005). In a study of 26 controlled studies in the UK to determine the effectiveness of parent training programs, parent training yielded an effect size of 0.86 for child behaviour improvement and an effect size of 0.44 for parental adjustment. This was a cross-sectional descriptive study. cluster sampling was used with children aged below 18 years.

A study in Holland of eight random controlled trials of parenting intervention found that children subsequently spent less time in institutions and were less often re-arrested (Woolfenden, Williams, & Peat, 2002). Interview method was used with a random sample of 70 juveniles.

‘The Incredible Years Parent Training Program’, targeted for low income families has produced improvement in child behavior, related the level of parental involvement and the initial problem of the child (Reid, 2004). This was a longitudinal study done in Britain with a sample of 90 juveniles aged between 10-17 years. Findings indicated that the ‘Incredible Years Program’

produced behavior change in children with difficult behavior. 93% of staff said the program made the juveniles better people. The ‘Incredible Years Program’ aimed to help teachers provide praise and encouragement, manage inappropriate classroom behavior and build a good relationship with students. After this intervention, children were less disobedient and aggressive, compared to the controlled.

In a study in USA, 35 families were randomly assigned to group therapy parent training or to a waiting-list control group. Results indicated that the ‘Incredible Years Program’ caused a highly significant attitudinal and behavioral changes in participating middle-class, mothers and children (ages 3 to 6) compared with control groups. Nearly all the changes were maintained at the 1-year follow-up, thus this was a longitudinal study. (Webster-Stratton, 1981; 1982, 1985).

A study in USA by (Turner, 1981), randomly assigned 35 clinic families (with children having conduct problems) to one of these three groups:

1. One-on-one personalized parent therapy
2. Watching incredible years video tape
3. Waiting-list control group.

These families were at high risk because of the large number of single parents, low socio-economic status, low mean education level, high prevalence of child abuse, and the deviant nature of the children. The video training was as

effective as high-cost, one-on-one therapy, and both treatments were superior to the control group in regard to attitudinal and behavioral changes. Moreover, at the 1-year follow-up longitudinal study, no differences were noted between the two treatment groups, and most of the children continued to improve.' Incredible Video training' was five times more cost effective than one-on-one therapy, using 48 hours of therapist time versus 251 hours of therapist time. Approximately 70 percent of both treatment groups maintained significant positive behavioural changes at the 1-year follow-up.

A similar study was conducted in Russia to ascertain the most efficient and effective component of videotape training by (Serketich & Dumas, 1996). Parents of 114 conduct-problem children, ages 3 to 8, were randomly assigned to one of these groups: Individually (or self-) administered;

1. Videotape-based group therapy
2. Group therapy alone
3. Waiting-list control group.

Compared with the control group, mothers in treatment groups reported significantly fewer child behaviour problems, more pro-social behaviours, and less use of spanking following treatment. Fathers in the videotape-based group therapy groups and teachers of children whose parents were in the videotape-based group therapy and group therapy alone groups also reported significant reductions in behaviour problems compared with control subjects. Data collected from home visits indicated that, for treatment groups, mothers, fathers, and children exhibited significant behavioral changes.

In a study conducted in Australia by Wentyman & McFall (1975) to determine how to enhance the effectiveness of the self-administered videotape therapy while maintaining its cost effectiveness, Parents of 43 conduct-problem children were assigned to one of these groups:

1. Individually administered videotape program.
2. Waiting-list control group.

In comparison with the control group, mothers receiving treatment reported significantly fewer child behavior problems, reduced stress levels, and less use of spanking after intervention. Data from home visits indicated that treatment group exhibited significant behavioral changes and children were significantly less deviant.

Another study in Japan, Webster-Stratton examined the effectiveness of videotape program training as a universal prevention intervention with a sample of 362 Head Start mothers and their 4-year-old children (Webster-Stratton, 1998). Eight Head Start centers were randomly assigned to two groups:

1. An experimental group in which parents, teachers, and family service workers participated in the intervention.
2. A control group in which parents, teachers, and family service workers participated in the regular center-based Head Start program.

The results from observations at the post-intervention assessment indicated that mothers in the intervention group made significantly fewer critical

remarks and commands, used less harsh discipline, and were more nurturing, reinforcing, and competent in their parenting when compared with mothers in the control group. Intervention mothers reported that their discipline was more consistent and that they used fewer physically and verbally negative discipline techniques. They also used more appropriate limit-setting techniques. In turn, the children of mothers in the intervention group exhibited significantly less negative behaviour and conduct problems, less more positive effect, and more prosocial behaviors than children in the control group. This was a longitudinal study, one year later most of the improvements were noted in the intervention mothers' parenting skills and in their children's effect and behaviour were maintained, including increased contacts with new teachers, as compared with mothers in the control group. These results were in 2006 replicated in Wales in a study that offered a longer parent program spanning the Head Start and kindergarten years. (Webster Stratton, 1998).

To address the issue of whether parenting programs work in real-life UK settings, (Scott,2001b) conducted a controlled trial of 141 seriously antisocial three to eight year olds referred to regular National Health Service Child and Adolescent Mental Health Clinics. Parents were allocated to receive the Incredible Years program or to act as waiting list controls. They were seen in their local clinics and attended groups run by staff from a range of disciplines. Antisocial behaviour improved by 1.06 standard deviations (a large effect) on semi-structured interview, and direct observation confirmed a more positive



and effective parenting style. The comparison between 'Incredible Years Program and other rehabilitation programs is that these studies on IYP have consistently suggested that certain parenting programs can be highly effective under real-life clinical conditions and that a parenting style characterized by harsh, unpredictable discipline is strongly associated with defiant, antisocial behavior and, later, with criminal outcomes (Farrington, D.P., Lambert, S. & West, D.J. 1998) found four attributes that were significant in addition to harsh, inconsistent discipline- namely, high criticism, low warmth, low involvement and low encouragement. The IYP program used in this study teaches alternatives to this kind of parenting, other rehabilitation Programs don't. Researcher's observation is that most studies of parenting styles have been on western and American populations, so there was need to gather information on Kenyan sample.

Kazdin (1995) in a longitudinal study found that people with histories of Chronic aggression beginning in childhood are more likely than others to commit murder, rape, robbery, arson, and driving under the influence of alcohol (DUI) offences and to engage in substance abuse. He used a random sample of 40 which suffered attrition. The study applied quantitative and qualitative methods of data collection and analysis: standardized questionnaires, in-depth interviews and observations while secondary data was accessed through children's personal files. The problem of escalating aggression in young children is thus of global concern.

According to Maru (1998) the reason for focusing on parenting programs in Kenya is that studies on child and adolescent psychology morbidity in Kenya have consistently shown presence of conduct disorders Wakube, (1983); 2%. Mwita, (1985); 4%. Irungu, (1993); 2.4%. Mwangi, (1996); 2.6%. rural 7.5, urban- 7.4%. Kangethe, (1988); 13%. Syengo-Mutisya, (2005) 20% and Mulupi, (2006) 22 % with only a minority of the population practicing authoritative parenting.

## **2.8 Effectiveness of Treatment Programs for Juvenile Delinquents**

Broad assessments of the effectiveness of delinquency treatments have greatly benefited from the rise of meta-analysis, in which researchers aggregate the continuously growing research literature to examine and compare the effect sizes (magnitude of differences between groups) for comparisons of treatment and control groups. The most extensive meta-analysis examining the effectiveness of juvenile delinquency programs was conducted by Lipsey (1992) who examined 443 different research studies. Lipsey's analysis focused on interventions or treatments designed to reduce, prevent, or treat delinquency or antisocial behaviour problems similar to delinquency. In 64.3 percent of the studies he examined, the treatment group did better (in most cases this finding refers to a reduction in recidivism) than the control group.

Considering all treatment program studies combined, 45 percent of those who received treatment were expected to recidivate, in comparison with 50 percent

of the non-treated control group. In more detailed analyses, Lipsey worked to identify the characteristics that were most important in determining differences between treatment and control groups. The more effective programs were predicted to reduce recidivism substantially. For instance, as compared with a 50 percent recidivism rate for the control group, only 32 to 38 percent of the juveniles who were given employment and multimodal or behavioral programs were estimated to recidivate.

Overall, the results of Lipsey's meta-analysis indicated that more effective programs:

1. Provided larger amounts of meaningful contact (treatment integrity) and were longer in duration (more dosage).
2. Were designed by a researcher or had research as an influential component of the treatment setting.
3. Offered behavioural, skill-oriented, and multimodal treatment.

There was also evidence that more effective programs targeted higher risk juveniles, but this difference was small and non-significant. On the other hand, treatment in public facilities, custodial institutions, and the juvenile justice system was less effective than other alternatives, suggesting that treatment provided in community settings may be more effective. If this effectiveness is the result of increased linkages with agencies and individuals in the community, then Lipsey's work supports the proposed emphasis on reintegration. However, it is also possible that other factors may be important.

Lipsey himself cautions that the conclusion that treatment in community settings is more effective cannot be separated from the differences in the intensity (number of meetings, length of time in treatment) and needs a more refined breakdown before definite conclusions can be drawn. The programs that were effective were those that were either provided by the researcher or implemented in treatment settings where the researcher was influential. This may indicate that treatment delivered or administered by the researcher was better implemented than typical programs; supporting point that poor implementation of a sound theoretical model is unlikely to produce a positive outcome as is the case in Kenyan Rehabilitation schools where there has been poor implementation of rehabilitation programs. However, the 'Incredible Years Program' being an evidenced based program readily fills in the gaps in the other rehabilitation methods.

## **2.9 Delinquency Prevention**

Delinquency Prevention is the broad term for all efforts aimed at preventing youth from becoming involved in criminal, or other antisocial, activities (Gendreau & Ross, 1987). Increasingly, governments are recognizing the importance of allocating resources for the prevention of delinquency. Because it is often difficult for states to provide the fiscal resources necessary for good prevention, organizations, communities, and governments are working more in collaboration with each other to prevent juvenile delinquency. With the development of delinquency in youth being influenced by numerous factors,

prevention efforts are comprehensive in scope. Prevention services include activities such as substance abuse education and treatment, family counseling, youth mentoring, parenting education, educational support, and youth sheltering.

## **2.10 Summary of Reviewed Literature**

In this chapter, literature review has been done thematically internationally, regionally and locally.

- The causes and prevalence of juvenile delinquency has been tackled
- Family factors which may have an influence on offending include; the level of parental supervision, the way parents discipline a child, parental conflict or separation, criminal parents or siblings, parental abuse or neglect, and the quality of the parent-child relationship.
- Conduct disorders and delinquency, history of rehabilitation school, types of programs used with delinquent children and their successes and gaps have also been discussed and conclusion made that juveniles who spent time in an institution had lower recidivism than those released to the community suggests that the quality and amount of treatment the juveniles receive may be the important factor in reducing recidivism.
- Conduct disorders on the other hand refer to misdeeds involving violations by minors, but may or may not be against the law. Examples of conduct behaviours are; Aggressiveness towards others, (hitting,

kicking, fighting), disobedience to adult authorities, temper tantrums, high rate annoying behaviour like yelling, whining, high activity level truancy and threatening others, and to a lesser extent, community rule violations such as stealing or fire setting

Analysis indicated that more effective rehabilitation programs:

- Provided larger amounts of meaningful contact (treatment integrity) and were longer in duration (more dosage).
- Were designed by a researcher or had research as an influential component of the treatment setting.
- Offered behavioral, skill-oriented, and multimodal treatment.
- The Incredible Years Program has two long-range goals. The first goal is to develop comprehensive treatment programs for juvenile delinquents with early onset conduct problems. The second goal is the development of cost-effective, community-based, universal prevention programs that all families and teachers of young children and adolescents can use to promote social competence and to prevent children from developing conduct problems in the first place.
- The purpose of the 'Incredible Years Program' is to prevent, reduce and treat delinquency, drug abuse, and violence. 'Incredible Years Program' research staff has trained more than 10,000 professionals worldwide.

## **CHAPTER III: RESEARCH METHODOLOGY**

### **3.0 Introduction**

This chapter describes the procedures that were used to find answers to the research questions in chapter one. This description is undertaken under the following sections: research design, population, sampling techniques, sample, instrumentation, and pilot study. Validity and reliability of research instruments, data collection procedure, descriptive data analysis, hypothesis testing, logistical and ethical considerations have also been covered in the chapter.

### **3.1 Research Design**

The study adopted a Quasi Experimental design using a pre-test and post-test design and control/experimental group design. A quasi-experiment is a scientific research method primarily used in social sciences to explain relationships and/or clarify why certain events happen (MacDonald & O'Brien, 2008). Quasi-experimental means “as if or almost a true experiment”. The design however lacks absolute control of the experimental design including random assignment of subjects to the Control and Experimental groups (Dawson, 1997; Barry & Joan, 1997 & Trochim, 2006). The design also lacks absolute control of extraneous variables and the ability to manipulate the environment. This design was most appropriate for this study because it allowed the children to be observed in their natural settings.

Pre-test and post-test treatment provided a general overview of the behaviour of the children in the control and experimental groups. The 'Incredible Years Training Program' (IYP) guidelines also provided a more reliable picture of achievement and was likely to allow for follow-up to be made after this study by other researchers. In addition, the IYP has an inbuilt control system because it allowed for observation through experimentation. It was therefore possible to find out the impact of the 'Incredible Years Training Program' over time, by comparing the behaviour outcomes of children who underwent the Traditional Rehabilitation Program and those who underwent IYP.

The design involved two groups of rehabilitee children with their house-parents and teachers in their natural settings. One group of house-parents and teachers was shown a videotape on positive parenting style and trained on the same. The other group of house-parents and teachers were not shown any of these videos and they used the Traditional Rehabilitation Method. However after the research, house-parents and teachers in the Control Group were also trained.

'Incredible Years' videotape parenting program, addresses child behaviour and the parent-child relationship. Its focus is on "how parents could bring the best out of their children", rather than on "how they had got it wrong". The people depicted in the videotapes come from a variety of ethnic backgrounds, including Caucasian, African-Caribbean, Asian, Hispanic and African. This



makes the videos more or less culture free. The videotape scenes show parents and children in a variety of common situations like parents and children on a dining table, with the parents sometimes behaving in a way that leads to the child being calm and obedient, and sometimes in a way that leads the child to be miserable and to have tantrums. This training took six weeks after which with intervals of evaluation of child-behaviour was done after every two months after the initial six weeks training period.

The six weeks program concentrated on how to promote “desirable child behaviours in children and handling misbehavior”.

### **3.1.1 Variables of the Study**

The independent variable in this study was the type of rehabilitation program and it had two levels; Incredible Years Program and Traditional Rehabilitation Program. Components of the Incredible Years Program included; videotape viewing which helped the house-parents to specifically, limit their use of coercive child management strategies like (yelling, hitting, verbal aggression) and increase their use of positive, supportive responses like encouragement, praise, and physically positive behaviours like hugging or sitting next to the child. The emphasis is on one to one interaction with the child. The component of Traditional rehabilitation program in Kenya is group counseling.

The dependent variables were the behavioural outcomes of the children like obedience/disobedience, kindness/unkindness, considerate/inconsiderate helpfulness/unhelpfulness, poor concentration/good concentration or easily scared/courageous. These behavioural outcomes were observed intermittently during the six weeks of the experiment and two months interval later after the six weeks training to take care of the relapse. The observation commenced after the six weeks training on IYP.

### **3.2 Location of the Study**

The study was conducted in Nairobi City, in two Rehabilitation Schools specifically Dagoretti Girls and Kabete Boys Rehabilitation schools. Nairobi province was selected because it is the only province with two institutions one catering for boys and the other one for girls. The two institutions would enable the researcher do sex comparisons. It was hoped that boys and girls would behave differently to IYP treatment.

### **3.3 Population of the Study**

Study population constituted all the 492 children, and workers of medium-risk Rehabilitation Schools in Kenya. There are four medium-risk institutions in Kenya. Kabete and Dagoretti Rehabilitation Schools are located in Nairobi Province. Likoni Rehabilitation School is in Coast province whereas Kakamega Rehabilitation School is in Western province. Specifically, the study targeted all children, housekeepers, and teachers from the two medium-

risk institutions in Nairobi. The distribution of the study population is shown in Table 3: 1.

**Table 3.1: Population of Children, Teachers, and House-Parents in Kenyan Medium-Risk Level Rehabilitation Schools**

<b>Institution</b>	<b>Risk Level</b>	<b>County</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>	<b>Teachers</b>	<b>House-keepers</b>	<b>Total</b>
Kabete	Medium	Nairobi	113	-	113	6	4	10
Dagoretti	Medium	Nairobi	-	107	107	5	3	8
Kakamega	Medium	Kakamega	122	-	122	3	4	7
Likoni	Medium	Mombasa	120	-	120	2	3	5
			<b>355</b>	<b>107</b>	<b>462</b>	<b>16</b>	<b>14</b>	<b>30</b>

**Source: Department of Children Services (2011)**

### **3.4 Sampling Procedure and Sample Size**

#### **3.4.1 Sampling Procedure**

Purposive sampling was used to sample two institutions in Nairobi Province. Only two Rehabilitation Schools out of four were sampled because the study was very rigorous and needed ample time and closer supervision by the researcher to collect accurate data. Both institutions sampled were in Nairobi

in order to control for the environment. Two dormitories out of four in each institution were selected for the study. In each institution, one dormitory served as the Experimental and the other one as the Control. All the children and all house-parents in the selected dormitories were included in the study. Four teachers were also included in the study.

The researcher determined the sample size of the children through sampling and decided the figure 75 for research purpose. The excess children were moved to the other two dormitories not participating in the study. The criterion used to select children was decided by the period of stay of the children in the institution. All the children who had spent a period of six months and above were selected. The sample size was assumed to be representative (Researcher, 2011).

Four house- parents (two male and two female) and four teachers (two male and two female) were also included from each school in the sample making 158 participants.

The criteria for teacher selection was based on those who had served for a period of three years and above in the Rehabilitation School, whereas the criteria for house-keepers' selection was based on the dormitory masters and mistresses of the respective dormitories taking part in the study. There were only four dormitories.

### 3.4.2 Sample Size

A sample size of 150 children aged between eleven and seventeen years from two Rehabilitation schools took part in the study. Seventy five (75) from Dagoretti Girls' Rehabilitation school and Seventy five (75) from Kabete Boys Rehabilitation School.

**Table 3.2: Sampling Frame**

Institution	Population for Children	Sample Size for Children	Population for Teachers & House-Keepers		Sample Size for Teachers & House-Keepers	
Dagoretti Girls Rehabilitation School	107	75	4	4	2	2
Kabete Boys Rehabilitation School	113	75	10		4	
TOTAL	220	150	18		8	
Grand Total Sample Size	158					

**Source: Department of Children Services Database (2011)**

### 3.5 Instrumentation

Data for this research was collected by two instruments. An adopted “Strengths and Difficulties Questionnaire” by Goodman, 1999 which is part of the IYP completed by house-parents and teachers to rate the children's behaviour and an observation schedule constructed by the researcher for

recording the children's and house-parents' behaviour at specific time intervals.

### **3.5.1 The Strengths and Difficulties Questionnaire (SDQ)**

Goodman first developed this instrument in 1999. 'The Strengths and Difficulties Questionnaire' is a widely used behavioural screening instrument used for example in Britain, Russia, Canada, Australia, Latin America, USA and Africa. The instrument comprises of 25 structured items completed by the house-parents and teachers to measure the effectiveness of IYP Program.

The perception of house-parents and teachers on the effectiveness of the program was sought using the Strengths and Difficulties Questionnaire. This instrument has been used in a study in Kenya to test the relationship between stresses and conduct disorders of children orphaned by HIV- AIDS in Nyanza by (Ondalo, 2000).

The SDQ is used for assessing child positive and negative attributes across five scales. The components (scales) of the instrument include; Emotional Symptoms, Conduct Problems, Hyperactivity/ Inattention, Peer Problems and Prosocial Behaviour (positive behaviour).

This instrument is part of the I Y P, which was constructed by Robert Goodman in 1999 specifically to identify children with conduct disorder for delinquency prevention and treatment program in Rehabilitation Schools.

The instrument was administered after exposure of the house- parents to the program for a period of six weeks. The children's behaviour problems and progress made after intervention at different intervals were recorded by housekeepers and teachers. This instrument was administered to children in both Experimental and Control Group.

The measure yields a Total Difficulties Score from a 3-point Likert scale for example: Not True = 0    Somewhat true = 1    Certainly True = 2.

	<b>Not True</b>	<b>Somewhat True</b>	<b>Certainly True</b>
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(See Appendix 1 for the whole instrument).

Scoring is done by adding up all the negative attributes like; often fights with other children or bullies them, restless, overactive, cannot stay still for long among other attributes across four out of the five scales: emotional symptoms, conduct problems, hyperactivity/ inattention and peer problems excluding prosocial behaviour. The measure has a maximum score of 30, which is a total standard score according to Goodman (1999). A score of 9-11 is normal, 12-14 is borderline behavior and a score of 15 and above is problematic. The children's conduct problems and progress made after intervention are presented in chapter four.

### 3.5.2 Observation Schedule on House-Parents and Children

The researcher carried out a non-participant observation. House-parents were observed to see how they interacted with the children and how they reacted to misbehaviour. To control for the Hawthorne Effect, the subjects of the study did not know that they were being observed. This was possible because of the availability of different dormitories one for Experimental Group and the other for Control Group. Effort was made not to make the subjects aware that they were being observed. The children's behaviour were also observed under two different observation outcomes, on a 15 minutes time interval, duration of observed behaviour and frequency of the observations recorded according to outcomes 1, 2, 3, 4 and 5. Outcomes 1, 2 and 3 entailed parenting behaviour observation whereas outcomes 4 and 5 entailed observation of child's positive and negative behaviours.

House-parent's and teacher's behaviour included outcomes 1, 2 and 3 thus;

**Outcome 1:** Positive and nurturing parenting. This included; praise, holding hands and affectionate look.

**Outcome 2:** Harsh, coercive, and negative parenting. This included; yelling, hitting, name-calling, verbal aggression, slapping, caning, pinching and frowning.

**Outcome 3:** House-Parent bonding and involvement. This included; sitting next to the child, putting the younger children to bed, sharing house-work with the children and talking to the child at dining table or field of play.



Child's behaviour included outcomes 4 and 5 thus;

**Outcome 4:** Child behaviour problems. This included; uneasiness, fighting, poor concentration, being solitary and lying.

**Outcome 5:** Child positive behaviours and social competence. This included; volunteerism, kindness, helpfulness, obedience, and good attention span.

Scoring of the observation schedule was done using the duration of time of a given behaviour and how many times a given behaviour occurred (frequency). Some behaviours were observed in terms of duration of time for example child positive behaviours and social competence. Other behaviours were observed in terms of frequency for example, Child behaviour problems and house-parent's and teacher's behaviour.

### **3.6 Pilot Study**

A pilot study was conducted to pretest the research instruments and procedures. This was done on fifteen (15) children from a medium-risk level rehabilitation school away from Nairobi specifically in Kakamega. It was necessary to do the pilot study this far to avoid contamination. The pilot study gave pointers on how to improve the validity and reliability of 'the strengths and difficulties questionnaire' and the observation schedule by identifying items in the questionnaire that were ambiguous or unclear to the respondents. Validity was also improved by the researcher talking to the respondents to

clarify ambiguous questions. The pilot study also ascertained that the anticipated analytical techniques were appropriate.

### **3.6.1 Validity of the Study Instruments**

Mugenda and Mugenda (1999) describe validity of a research instrument as the degree to which it accurately measures what it purports to measure.

To establish validity of the instruments used, items in the questionnaire and observation schedule were reviewed against the study objectives to ascertain their accuracy. In this connection, the researcher sought expertee guidance from her university supervisors and assistance of other experts in the same field.

### **3.6.2 Reliability of the Study Instruments**

The strengths and difficulties questionnaire' has good reliability and validity and is considered the best assessment tool for 'Incredible Years program'.

Knapp, Scott & Davis (1999) established test- retest reliabilities within groups with stable scores ranging from 0.73 to 0.89 being maintained over time. The researcher carried out a pilot study to establish reliability of the instrument using correlation coefficient which yielded a measure of 0.89 which is a very strong correlation.

Reliability estimates evaluate the stability of measures and internal consistency of measurement instruments. Reliability of the instruments was established by two methods across time interval of two weeks.

The split-half reliability (Ettinger, 2006) method was used to determine the internal consistency of the strength's and difficulties questionnaire. The reliability of the observation schedule was established using the inter-rater method by the research assistants during the pilot study.

### **3.7 Data Collection Techniques**

Baseline study had been done earlier before the training of the house-parents to collect Pre-test data. This was important to compare with post-program intervention. The period of training for the house-parents and teachers on 'Incredible Years Program' lasted for six weeks after which the post-test data was collected during phase one of the study. Phase two and phase three post-test data collection was done at two months intervals later respectively after the six weeks training. Phase two and phase three post-test data collection was important to see whether the effect of the IYP faded out.

Data for both the experimental and control group were collected in the two Rehabilitation Schools.

The teachers and house-parents rated the children by filling questionnaires rating each child under their care. The researcher also did a non-participant observation of the children while children were in the dormitory, playing field and dining hall. Observation was done on both the experimental group and the control group.

### 3.8 Data Analysis

Both quantitative and qualitative data were collected from children, teachers and house-parents of the two Rehabilitation Schools. The strength's and difficulties questionnaire (SDQ) was used to collect quantitative data. The observation schedule was used to collect qualitative data. Descriptive statistics was used to describe and summarize the data with regard to the variables of the study, including demographic information. Inferential statistics were used to test the hypotheses at alpha,  $\alpha = 0.05$ .

The test hypotheses in the study were:

**H<sub>01</sub>:** There is no difference in behaviour change between children in the 'Incredible Years Program' and those in the Traditional Rehabilitation Program. Test statistic-**t-test**.

**H<sub>02</sub> :** There are no significant sex differences in behaviour change among the children in the Incredible Years Program' . Test statistic-**t- test**.

### 3.9 Logistical and Ethical Considerations

Logistics included obtaining research clearance from the university, provincial office and then clearance from the Department of Children Services to get to the Rehabilitation Schools. The managers of the two rehabilitation schools were requested to facilitate the smooth running of the research program.

Ethical Considerations included consent from the participating Rehabilitation Schools. Written consent was also obtained from the teachers and house - parents who took part in the study. Respondents were protected by keeping the information given confidential. Rehabilitation schools are a special category of schools and the information obtained about the children was kept confidential in accordance with provision in the Children Act (2001). Orodho (2005) asserts that ethical guidelines need to be taken into consideration when covert observation is being carried out. Children's privacy was therefore respected and observation made kept confidential. The researcher also went back to train the house-parents of the Control Group children after the research.

### **3.10 Summary of Methodology**

This chapter has described the methods that were used in this research. Thus, describing the following:

- Research design employed was Quasi Experimental using pre-test post-test design.
- Population of the study specifically, included all children, house-keepers and teachers from two medium-risk institutions in Nairobi Province.
- Purposive sampling was used in sampling procedure.
- Strength and difficulties questionnaire (SDQ), and an observation schedule were used in instrumentation.

- A pilot study was done to establish validity and reliability of research instruments.
- Quantitative and qualitative data were collected and data analysis done.
- Hypotheses testing was done using a **t-test**.

## **CHAPTER IV: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.0 Introduction**

In this chapter, the results of the study are presented and discussed. The chapter is divided into two main sections. The first section describes the findings. The second section consists of inferential analysis whereby hypotheses are tested for significance.

### **4.1 Demographic Information of Participants**

The participants in this study included four house- parents (two males and two females) and four teachers (two male and two female) from Dagoretti Girls and Kabete boys' Rehabilitation Schools respectively. The respondents made observations on children's behaviour. All the children were aged between 10-17 years old with an average age of 11 years. The researcher also undertook a non participant observation on the children and the house-parents and teachers.

**Table 4.1: Gender of Students of House-keepers and Teachers in the Rehabilitation Schools**

SCHOOL	GENDER	NUMBER
Dagoretti Rehabilitation	Female	75
Kabete Rehabilitation	Male	75
<b>CHILDREN GRAND TOTAL</b>		<b>150</b>
House-keepers	Female	2
	Male	2
Teachers	Female	2
	Male	2
<b>TOTAL</b>		<b>8</b>

**Source: Researcher (2011)**

Four house- parents (two male and two female) and four teachers (two male and two female) were also included from each school in the sample making 158 participants.

#### **4.2 Descriptive Analysis**

The descriptive analyses are presented according to the study objectives, which included:

- (a) To identify the types of behaviours presented by children admitted in rehabilitation schools.
- (b) To find out the teachers' and house-parents' practices towards juvenile rehabilitees.



- (c) To establish the effect of IYP on behaviour change of children.
- (d) To compare the means of behaviour of children in the ‘Incredible Years Program’ and those in Traditional Rehabilitation method Program.
- (e) To find out if there are sex differences towards response to ‘Incredible Years Program’.

#### **4.3 Behaviour Presented by Children in Rehabilitation Schools at Baseline**

The researcher prior to the research sought to find out the types of behaviour shown by the children and the percentage of children exhibiting these behaviours. Results are shown in Table 4.2.

**Table 4.2: Average of Behaviour Presented by Children in Rehabilitation at Baseline**

<b>Behaviour Presented by Children</b>	<b>FREQUENCY</b>	<b>%</b>
Helpful if someone is hurt, upset or feeling ill	05	08
Constantly uneasy	08	12
Has at least one good friend	02	03
Often fights with other children or bullies them	09	14
Often unhappy or tearful	07	13
Easily loses confidence	09	14
Generally liked by other children	01	02
Has poor concentration	23	34
<b>TOTAL</b>	<b>64</b>	<b>100</b>

**N=150**

As indicated in Table 4.2 the researcher found out that at baseline, more children in the Rehabilitation schools showed less pro-social or positive behaviours. The children exhibited more negative behaviours, ‘Poor concentration’ rated highest with 34% of the children. ‘Generally liked by other children’ as a pro-social behavior ranked least with only 02% of the children showing this behaviour. Kazdin (1997) notes that, people exposed to harsh parenting beginning in childhood are more likely than others to be aggressive, commit murder, rape, robbery and arson.

#### **4.4 Behaviour Presented by Children in Rehabilitation Schools at Baseline Study**

The researcher set out to identify behaviours presented by the juvenile rehabilitees in Rehabilitation Schools based on the first study objective that stated:

**“To identify the types of behaviours presented by children admitted in rehabilitation school.”** To do this a questionnaire was posed to the house-parents. Responses as given by house-parents are presented in Tables 4.3 and 4.4.

**Table 4.3: Behaviours Presented by Girls in the Rehabilitation School as Rated by the House-Keepers**

Behaviour Presented by Children	Baseline Study					
	Exp. Group			Control Group		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
Considerate of other people's feelings	15 (41.6%)	5 (14%)	16 (44.4%)	11 (30.5%)	1 (3%)	13 (36.1%)
Shares readily with other children (treats, toys, pencils etc)	12 (33.3%)	11 (30.5%)	13 (36.1%)	16 (44.4%)	3 (8.3%)	14 (38.8%)
Generally obedient, usually does what adults request	14 (38.8%)	2 (5.5%)	20 (55.5%)	20 (55.5%)	1 (3%)	12 (33.3%)
Restless, overactive, cannot stay for long	12 (33.3%)	0 (0%)	12 (33.3%)	11 (30.5%)	0 (0%)	12 (33.3%)
Often complains of headaches, stomach-aches or sickness	19 (52.7%)	1 (3%)	16 (44.4%)	15 (41.6%)	0 (0%)	16 (44.4%)
Often has temper tantrums or hot tempers	15 (41.6%)	0 (0%)	15 (41.6%)	16 (44.4%)	0 (0%)	20 (55.5%)
Rather solitary, tends to play alone	15 (41.6%)	1 (3%)	20 (55.5%)	11 (30.5%)	12 (33.3%)	12 (33.3%)
Many worries, often seems worries	4 (11.1%)	2 (5.5%)	31 (86.1%)	16 (44.4%)	0 (0%)	20 (55.5%)

**N=150**

**Table 4.4: Behaviours Presented by Boys in the Rehabilitation School as Rated by the House-Keepers**

Behaviour Presented by Children	Baseline Study					
	Exp. Group			Control Group		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
Considerate of other people's feelings	10 (27 %)	17 (45.9%)	9 (24.3%)	15 (40.5%)	1 (29.7%)	12 (32.4%)
Restless, overactive, cannot stay for long	12 (32.4%)	10 (2.7%)	15 (40.5%)	14 (37.8%)	5 (13.5%)	18 (94.4%)
Often complains of headaches, stomach-aches or sickness	15 (40.5%)	7 (18.9%)	15 (40.5%)	14 (37.8 %)	3 (8.1%)	17 (45.9 %)
Shares readily with other children (treats, toys, pencils etc)	15 (40.5%)	7 (18.9%)	15 (40.5%)	20 (54.0%)	17 (45.9%)	7 (18.9%)
Often has temper tantrums or hot tempers	15 (40.5%)	10 (2.7 %)	11 (29.7%)	15 (40.5%)	5 (13.5 %)	17 (45.9%)
Rather solitary, tends to play alone	15 (40.5 %)	10 (27%)	12 (32.4%)	9 (24.3%)	2 (5.4 %)	26 (70.2%)
Generally obedient, usually does what adults request	17 (45.9%)	5 (13.5%)	15 (40.5%)	29 (78.3%)	2 (5.4%)	6 (16.2)
Many worries, often seems worried	15 (40.5%)	7 (18.9%)	15 (40.5%)	0 (0%)	7 (18.9%)	28 (75.6%)

**N=150**

Results in Tables 4.3 and 4.4 indicate that there was no much difference in behaviour between the experimental and the control group. Sex differences in behaviour problems between the two groups were minimal.

The researcher also sought to find out the behaviours of boys and girls after the introduction of the 'Incredible Years Program'. Results are presented in Tables 4.5 and 4.6.

**Table 4.5: Behaviours Presented by Girls in the Rehabilitation School as rated by House-Keepers**

Behaviour Presented by Children	After IYP Intervention					
	Exp. Group			Control Group		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
Considerate of other people's feelings	2 (5.5%)	2 (5.5%)	32 (88.9%)	34 (94.4%)	1 (2.7%)	1 (2.7%)
Restless, overactive, cannot stay for long	18 (50%)	16 (44.4%)	2 (5.5%)	7 (19.4%)	2 (5.5%)	27 (75.0%)
Often complains of headaches, stomach-aches or sickness	28 (77.8%)	1 (2.8%)	7 (19.4%)	34 (94.4%)	1 (2.8%)	1 (2.78)
Shares readily with other children (treats, toys, pencils etc)	33 (91.6%)	1 (2.7%)	2 (5.5%)	34 (94.4%)	1 (2.8%)	1 (2.8%)
Often has temper tantrums or hot tempers	28 (77.7%)	1 (2.8%)	7 (19.4%)	1 (2.8%)	1 (2.8%)	34 (94.4%)
Rather solitary, tends to play alone	8 (22.2%)	1 (2.8%)	27 (75.0%)	2 (5.5%)	16 (44.4%)	18 (50%)
Generally obedient, usually does what adults request	7 (19.4%)	4 (11.1%)	25 (69.4%)	20 (55.5%)	12 (33.3%)	3 (8.3%)

N= 75

Table 4.5 indicated that types of behaviours presented by girls in the Rehabilitation School under Experimental Group included the following; on the conduct of being considerate of other people's feelings, majority 32 (88.9%) were perceived to be considerate and minority 2 (5.5%) were not very considerate which shows most of the children observed showed this behaviour. Types of conduct problems presented by girls in the Rehabilitation School under Control Group included the following; regarding the conduct of being considerate of other people's feelings majority 34 (94.4%) were not considerate. The mean was 1.08 which showed most of the children observed were not considerate of other people's feelings.

On the trait of being restless, overactive, cannot stay for long, majority 18 (50%) were perceived not to be restless and 2 (5.5%) was rated to be somehow restless under experimental group. On this behaviour under Control Group, majority 27 (75.0%) were rated certainly true and 2 (5.5%) were rated somewhat true.

Regarding the students complains of headaches, stomach-aches or sickness, majority 28 (77.8%) of the children in the experimental group did not complain.' This showed most of the observed children did not show this behaviour. On this behaviour under Control Group, majority 34 (94.4%) complained.

The study findings on the behaviour 'shares readily with other children (toys, pencils etc) majority 33 (91.6%) were generous, and only 1 (2.8%) was mean

under Experimental Group. This showed the children were generous. On this behaviour under Control Group, majority 34 (94.4%) were not generous. This showed most of the observed children were selfish.

The conduct problem on 'often has temper tantrums or hot tempers' under Experimental Group, majority 28 (77.8%) were rated not hot-tempered. On this behaviour under Control Group, majority 34 (94.4%) were hot-tempered. This showed most of the observed children had temper tantrums.

Table 4.6 shows behaviours presented by boys in the Rehabilitation School as rated by the house-keepers after the IYP intervention.

**Table 4.6: Behaviours Presented by Boys in the Rehabilitation School as Rated by the House-Keepers**

Behaviour Presented by Children	After IYP Intervention					
	Exp. Group			Control Group		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
Considerate of other people's feelings	3 (8.1%)	16 (43.2%)	18 (48.6%)	21 (56.7%)	10 (27%)	6 (16.2%)
Restless, overactive, cannot stay for long	25 (67.5%)	10 (27.0%)	2 (5.4%)	12 (32.4%)	8 (21.6%)	17 (45.9%)
Often complains of headaches, stomach-aches or sickness	23 (62.2%)	13 (35.1%)	1 (2.7%)	2 (5.4%)	6 (16.2%)	29 (78.3%)
Shares readily with other children (treats, toys, pencils etc)	4 (10.8%)	10 (27%)	23 (62.1%)	18 (48.6%)	16 (43.2%)	3 (8.1%)
Often has temper tantrums or hot tempers	18 (48.6%)	16 (43.2%)	3 (8.1%)	4 (10.8%)	1 (2.7%)	32 (86.4%)
Rather solitary, tends to play alone	25 (67.5%)	7 (18.9%)	5 (13.5%)	12 (32.4%)	1 (2.7%)	24 (64.8%)
Generally obedient, usually does what adults request	5 (13.5%)	6 (16.2%)	26 (70.3%)	27 (72.9%)	1 (2.7%)	9 (24.3%)
Many worries, often seems worried	20 (54.1%)	11 (29.7%)	6 (16.2%)	1 (2.7%)	10 (27%)	26 (70.2%)

**N=75**



Table 4.6 indicated that research on the boy child under the Experimental Group sought to find out how they fared regarding the trait of considerations of other people's feelings, majority 18(48.6%) were perceived to be considerate and only 3 (8.1 %) were perceived to be inconsiderate. Since the mean was 1.08, this implies that the majority of the children observed showed consideration of the other people's feelings. On this behaviour under Control Group, majority 21 (56.7%) were perceived to be inconsiderate and minority 6 (16.2 %) were perceived to be considerate. This meant that most children were inconsiderate.

The conduct of being restless, overactive under the Experimental Group, majority 25 (67.5%) were rated as not restless, and minority 2 (5.4%) were rated as being very restless which showed most of the children observed did not show this behaviour. On this behaviour under Control Group, majority 17 (45.9%) were rated as very restless whereas minority 8 (21.6%) were rated as restless.

Regarding the students complains of headaches, stomachaches or sickness, under the Experimental Group majority 23 (62.2%) did not complain of headaches. On this behaviour under Control Group, majority 17 (45.9%) complained of headaches whereas minority 8 (21.6%) complained of the same.

The study findings indicated the conduct on 'shares readily with other children (toys, pencils etc) in Experimental Group majority 23 (62.1%) were very

generous whereas minority 4 (10.8%) were mean. This showed most of the observed children were generous. On this behaviour under Control Group, 18 (48.6%) were not generous whereas minority 3 (8.1%) were mean. This showed most of the observed children were not generous in the Control Group.

The study findings on the conduct that 'often has temper tantrums or hot tempers' under Experimental Group, majority 18 (48.6%) of the children were found to be emotionally stable and only 3 (8.1%) were unstable emotionally. On this behaviour under Control Group, majority 32 (86.4%) were considered to be emotionally unstable and minority, only 1(2.7%) was found to be emotionally stable. This meant most children had emotional problems.

Pertaining to the conduct problem on rather solitary, tends to play alone under Experimental Group, majority 25 (67.5%) were found to be social and interacted freely with the other children and minority, 5 (13.5%) were found to be antisocial. On this behaviour under Control Group, majority 24 (64.8%) were found to be antisocial. This meant most children were lonely.

On the conduct of being generally obedient, and usually does what adults request, under Experimental Group, majority 26 (70.3%) of the children were found to be obedient and minority, 5 (13.5%) were disobedient. The mean was 1.04, which showed on average, the students were generally obedient, and usually did what they were requested to do. On this behaviour under Control

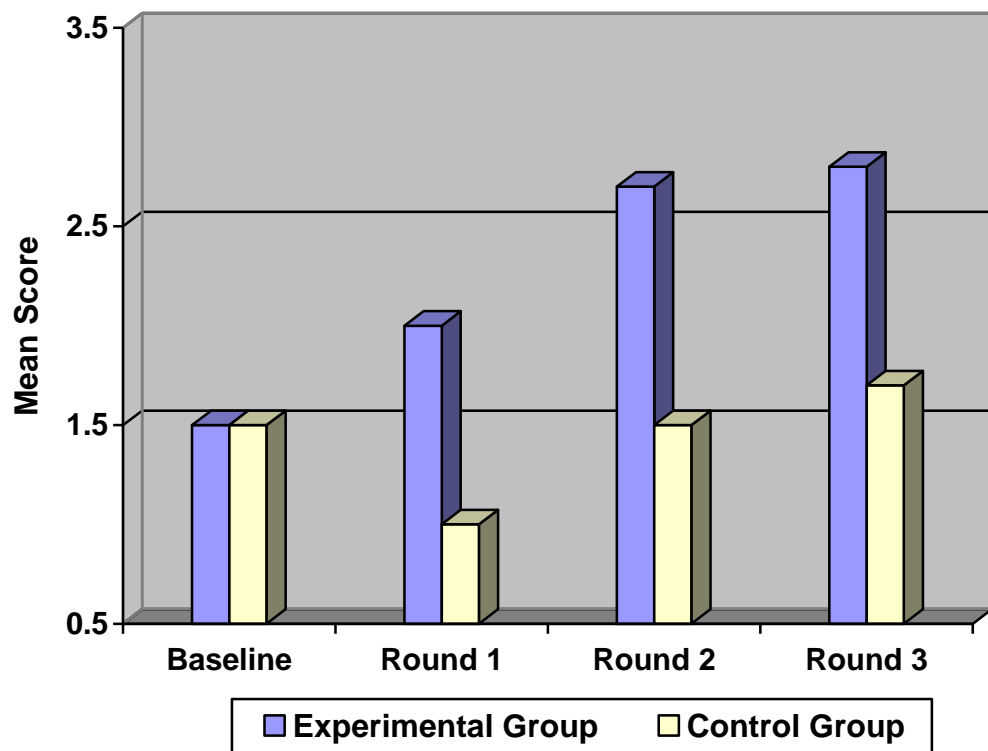
Group, majority 27 (72.9%) were disobedient. This showed most of the children were disobedient under Control Group.

On the conduct problem of having many worries and often seems worried, majority of the children under experimental group, 20 (54.1%) were not worried and only 6 (16.2%) were worried. This showed that most of the observed students did not have many worries. On this behaviour under Control Group, majority of the children 26 (70.2%) were worried and only 1 (2.7%) seemed not worried. This showed that the observed children had many worries.

These research findings concur with (Farrington, 2002 & Walklate, 2003) who found out that, young males are especially likely to disregard the long-term consequences of their actions, have a lack of self-control, and are unable to postpone immediate gratification. Impulsiveness is seen by some scholars as the key aspect of a child's personality that predicts development of offending behaviour (Farrington, 2002).

#### **4.4.1 Pro-Social Behaviours Presented by the Children**

Results pertaining to behaviours presented by children included pro-social and behaviour problems. Pro-social behaviour is first presented in figure 4.1 then behaviour problems presented by children.



**Fig. 4. 1: Average Means for Pro-social Behaviours Presented by Children in the Rehabilitation Schools**

The results in Fig.4.1 indicate that during the baseline study done two months before the main study, the Pro-social Behaviours of both Experimental and Control group had an average mean of 1.5 and 1.5 respectively.

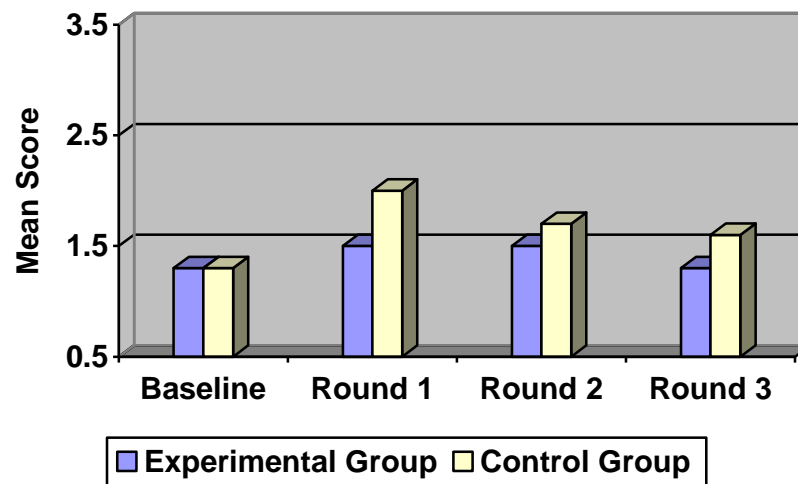
After the ‘Incredible Years Training for a period of six weeks, there was improvement in both Experimental and Control groups. However, the overall results show that the Experimental Group did much better in exhibiting pro-

social or positive behaviour with an average group mean of (2.2) which was higher than that of the Control Group (1.3).

This findings concurs with studies done by other scholars like (Webster-Stratton & Reid, 2003) who found out that ‘Incredible Years Program’ helps to prevent, reduce, and treat behaviour problems of children.

#### 4.4.1.2 Behaviour Problems Presented by the Children

The researcher also sought to find out the specific behaviour problems exhibited by the children in both experimental and control groups. Results are shown in figure 4.2.



**Fig 4.2: Means for Behaviour Problems Presented by Children**

From the figure 4.2 Experimental group did much better by having less behaviour problems with an average group mean of (1.3) compared to (2.1) of the control group which exhibited more behaviour problems. This shows that the IYP Program as (Barlow, 2005; Mabe, Turner, & Josephson, 2005) asserts, had positive effect on alleviating conduct problems of children.

#### **4.4. 2 Effect of the ‘Incredible Years Program’ on Teachers’ and House-Parents’ Practices towards Juvenile Rehabilitees.**

The researcher too sought to find out the effect of the ‘Incredible Years Program’ on teachers’ and house-parents’ practices towards juvenile in line with the 2<sup>nd</sup> objective which stated, “To find out the effect of the ‘Incredible Years Program’ on teachers’ and house-parents’ practices towards juvenile rehabilitees”. The researcher did a non-participant observation under the following outcomes: House-parent bonding and involvement, positive and nurturing house-parenting and harsh, coercive, and negative house-parenting.

##### **4.4.2.1 House-Parent Bonding and Involvement**

The researcher sought to find out the effect of ‘Incredible Years Program’ on the level of house-parent bonding and involvement. Bonding and involvement included; sitting next to the child, sharing house work with the children and talking to the child at dining table Results are shown in Table 4.7.

**Table 4.7: Overall Mean of House-Parents Bonding, Positive and Nurturing House-Parenting and Harsh, Coercive, and Negative House-Parenting**

Phase	House-parent bonding & Involvement		Positive and Nurturing House-Parenting		Harsh, Coercive, and Negative House-Parenting.	
	Exp.Grp	Contr Grp	Exp.Grp	Contr GP	Exp.Group	Contr GP
Baseline	2.59	2.59	2.47	2.53	2.51	2.53
Round 1	4.23	2.76	4.24	2.56	2.58	4.10
Round 2	4.73	2.96	4.69	2.56	2.72	4.47
Round 3	4.98	2.33	4.86	2.46	2.57	4.87
<b>Grand Mean</b>	<b>Grand Mean = 4.02</b>		<b>Grand Mean= 3.92</b>		<b>Grand Mean= 2.90</b>	

**N=4**

Table 4.7 shows that house-parent bonding and involvement had a Grand Mean of 4.02. The means for positive parental practices were higher in the Experimental Group as compared to the Control group. This means that the ‘Incredible Years Program had a positive behavioural effect on the behaviour of house-parent bonding and involvement.

Kazdin (1995) asserts that, parent bonding and involvement can prevent children from committing crime in the first place, and faster rehabilitation of those who have committed crime.

#### **4.4.2.2 Positive and Nurturing House-Parenting**

It was important to establish if positive and nurturing house-parenting practice had an effect on children's behaviour. The results are as shown Table 4.7.

Positive parenting which is a component of 'Incredible Years Program' included; praise, holding hands, affectionate look and close supervision of the children.

The analysis in Table 4.3 shows that the means of positive and nurturing house-parenting in experimental group was higher compared to the control group. These results concur with studies, which have found a strong correlation between a lack of supervision and offending, and it appears to be the most important family influence on offending (Farrington, 2002; Graham & Bowling, 1995).

(Webster-Stratton,1998) study found out that the results from observations at the post-intervention assessment indicated that mothers in the intervention group made significantly fewer critical remarks and commands, used less harsh discipline, and were more nurturing, reinforcing, and competent in their parenting when compared with mothers in the control group. Intervention mothers reported that their discipline was more consistent and that they used fewer physically and verbally negative discipline techniques.



#### **4.4.2.2 Harsh, Coercive, and Negative House-Parenting**

It was important to establish if harsh, coercive, and negative house-parenting had an effect on behaviour change among juveniles. Negative parenting include; yelling, hitting, name-calling, verbal aggression slapping, caning pinching and frowning at the children. The results in Table 4.7 Show that the means for harsh house-parenting were higher in the Control Group which led to slower rehabilitation of the juveniles compared to the Experimental Group.

Negative parenting has negative effect on children's behaviour and hence rehabilitation outcomes as Kazdin (1995) has shown that, 'Incredible Years Program' can significantly reduce the development and persistence of conduct problems and improve the quality of parent-child relationships. He noted that, people exposed to harsh parenting beginning in childhood are more likely than others to be aggressive, commit murder, rape, robbery and arson.

Wentyman & McFall (1975) found that in comparison with the control group, mothers receiving IYP treatment reported significantly fewer child behaviour problems, reduced stress levels, and less use of spanking after intervention. Data from home visits indicated that treatment group exhibited significant behavioural changes and children were significantly less deviant.

#### **4.4.3 House-Parents' and Teachers' Ratings of the Children's Behaviour after Incredible Years Program Intervention**

The researcher sought information on the opinion of the teachers and house-parents on the effects of Incredible Years on behaviour change of children as per the 3<sup>rd</sup> objective that stated, **“To establish the effect of the Incredible Years Program’ on behaviour change of children.”**

Strength and Difficulties Questionnaire was used by the teachers and house-parents to rate the children. The teachers' and house-parents' ratings are summarized as shown in Table 4.8 and 4.9.

**Table 4.8: Behaviour Change of Children after IYP as rated by Teachers and House-parents**

Variables	EXPERIMENTAL GROUPS					
	Teachers			House-parents		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
Helpful if someone is hurt, upset or feeling ill	5 (13.9%)	1 (2.8%)	3 (83.3%)	5 (13.5%)	12 (32.4%)	20 (54.1%)
Has at least one good friend	8 (22.2%)	15 (41.5%)	13 (36.1%)	6 (16.2%)	9 (24.3%)	22 (59.5%)
Generally liked by other children	5 (13.5%)	19 (51.4%)	13 (35.1%)	4 (10.8%)	11 (29.7%)	22 (59.5%)
Constantly uneasy	26 (72.2%)	7 (19.4%)	3 (8.3%)	18 (48.6%)	4 (10.8%)	15 (40.5%)
Often fights with other children or bullies them	33 (91.7%)	1 (2.8%)	2 (5.6%)	18 (48.6%)	14 (37.8%)	5 (13.5%)
Often unhappy or tearful	28 (77.8%)	2 (5.6%)	6 (16.7%)	24 (64.8%)	10 (27%)	3 (8.1%)
Easily loses confidence	7 (18.9%)	18 (48.6%)	11 (30.5%)	17 (45.9%)	11 (29.7%)	9 (24.3%)
Has poor concentration	5 (13.5%)	19 (51.4%)	13 (35.1%)	18 (48.6%)	14 (37.8%)	5 (13.5%)

**N=150**

Table 4.8 indicate that teachers under experimental group indicated that majority of the children, 30 (83.3%) were rated on a large scale to be helpful if someone is hurt, upset or feeling. The study findings for Control Group children as rated by teachers indicated that majority 31 (86.1%) were rated as not being 'helpful if someone is hurt, upset or feeling ill'.

Pertaining to being constantly uneasy, majority 26 (72.2%) were not uneasy and only 3 (8.3%) were uneasy under experimental group. on the same trait under Control Group majority 23 (63.8%) were rated to show this behaviour on a large scale and only 5(13.8) did not show this behaviour.'the average mean showed the Incredible Years Program effect differed less.

On the Incredible Program effect on having at least one good friend, under experimental group, majority 15 (41.5%) were rated averagely on this behaviour and only 8 (22.2%) exhibited this behaviour. The mean was 1.27 and standard deviation was .745, this showed the IYP had a somewhat true effect on having at least one true friend. On the same trait under Control Group, majority 19 (52.7%) were considered to show this behaviour averagely, 13 (35.1%) showed this trait on a large scale and only 4 (11.1%) did not show this behaviour.

Concerning the Incredible Years effects on 'often fights with other children or bullies them' majority 33 (91.7%) did not fight with other children under experimental group. The mean was .88 and standard deviation .815, this showed that the respondents fought less. On the same trait under control group, majority 16 (44.4%) fought much and only 8 (22.2%) did not fight. The mean was .76 and standard deviation .715, this show that majority of the children under Traditional Rehabilitation Method fought.

Pertaining to the Incredible Years effects on 'often unhappy and tearful' under Experimental Group, majority 28 (77.8%) were considered to be happy and

only 2 (5.6%) were unhappy. This showed majority of the children were happy. On the same trait under Control Group, often unhappy and tearful', majority 18 (48.6%) were rated as average on this trait and minority 7 (18.9%) did not show this behaviour.

As far as the Incredible Years effects on, 'Generally liked by other children', majority 19 (51.4%) were liked by the other children on a small scale and only 5(13.5%) were not liked by the other children under Experimental Group. On the same trait under Control Group, majority 30 (83.3%) were not liked by the other children. This showed that most children were not liked.

On the IYP effect on, has poor concentration under Experimental Group, majority of the children 19 (51.4%) were rated as average on this trait and 5 (13.5%) did not have poor concentration. On the same trait under Control Group, majority 28 (77.8%) had poor concentration only 2 (5.5%) showed average concentration. This showed most of the children had poor concentration.

Table 4.8 indicate that house-parents under experimental group, indicated that majority of the children, 20 (54.1%) were helpful if someone was hurt, upset or feeling ill and minority 5 (13.5%) were rated as not helpful. On average the respondents were somewhat true that the program was helpful if someone was hurt, upset or feeling ill. The study findings of the Control Group indicated that majority of the children, 17 (45.9%) were not helpful when someone was hurt and only 3 (8.1%) were considered helpful.

Regarding being constantly uneasy under Experimental Group, majority 18 (48.6%) were not uneasy and 4 (10.8%) were somehow uneasy. The mean was .97 and standard deviation .891, this showed the Incredible Program effect differed less on this trait. On the same trait under Control Group majority 25 (67.5%) were uneasy and only 5 (13.5%) were rated as less uneasy. This showed most of the children were uneasy.

Concerning the Incredible Years Program on having at least one good friend under Experimental Group, majority 22 (59.5%) showed this behaviour and only 4 (10.8%) did not show this behaviour. The mean was 1.27 and standard deviation was .745, this showed the Incredible Years Program had a somewhat true effect on having at least one true friend. On the same trait under Control Group majority 17 (45.9%) did not show this behaviour and only 4 (10.8%) showed this behaviour. This showed the Incredible Years Program has a somewhat true effect on having at least one true friend.

Concerning the IYP effects on 'often fights with other children or bullies them' under experimental group, majority of the children 18 (48.6%) did not fight with other children often and the minority of the children, 5 (13.5%) fought less. The mean was .66 and standard deviation .615, this showed that majority of the respondents rarely fought or bullied other children. On the same trait under Control Group majority 17 (45.9%) fought often and only 6 (16.2%) did not fight often.

Pertaining to the Incredible Years effects on the trait 'often unhappy and tearful', majority of the children under Experimental Group 24 (64.8 % were considered to be happy whereas only 3 (8.1%) were somehow unhappy. The mean was .76, this showed majority of the observed children were happy in the experimental group as opposed to the control group.

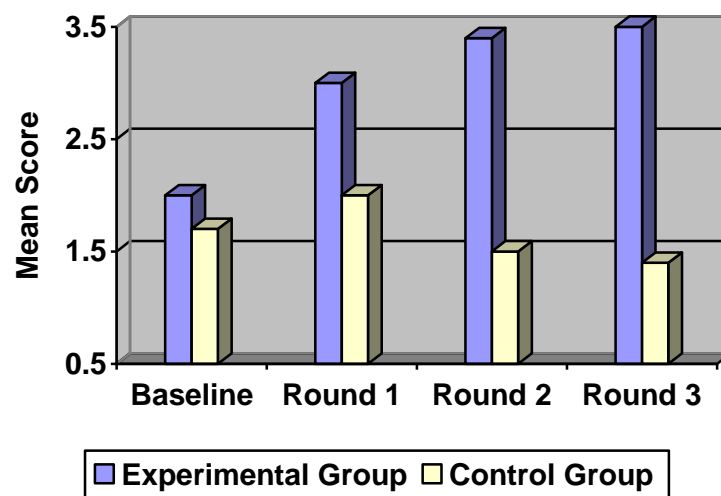
These findings were in agreement with (Serketich & Dumas, 1996) who found out that compared with the control group, mothers in treatment groups reported significantly fewer child behaviour problems, more pro-social behaviours, and less use of spanking following IYP treatment. Fathers in the videotape-based group therapy groups and teachers of children whose parents were in the videotape-based group therapy and group therapy alone groups also reported significant reductions in behaviour problems compared with control subjects. Data collected from home visits indicated that, for treatment groups, mothers, fathers, and children exhibited significant behavioural changes. Reid (2004) indicated the IYP training program, targeted for low income families produced improvement in child behaviour, related the level of parental involvement and the initial problem of the child. The above findings also concur with Kazdin (1995), Webster-Stratton (1981), Woolfenden, Williams, & Peat (2002), Hosford & de Visser (1994) who have cited 'Incredible Years Program' as an effective tool for rehabilitation and to prevent recidivism.

#### 4.4.4 Means of Behaviour of Children in the ‘Incredible Years Program’ and those in Traditional Rehabilitation Method.

The 4<sup>th</sup> objective stated, “**To compare the means of behaviour of children in the ‘Incredible Years Program’ and those in Traditional Rehabilitation Method Program**”.

The researcher also compared the means of behaviour of children in the ‘Incredible Years Program’ and those in Traditional Rehabilitation Method Program” by using a questionnaire rated by the house-keepers and teachers.

Results are presented in figures 4.3 and 4.4 respectively.



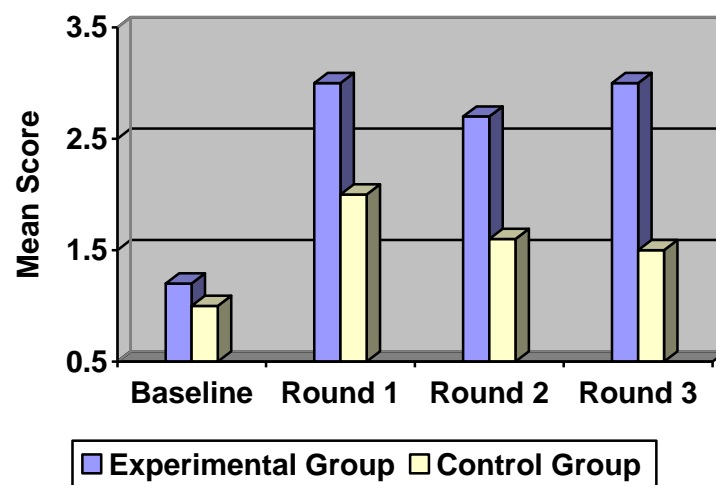
**Fig 4.3: Means of Teachers' Ratings of Children's Behaviour after Incredible Years Program Intervention**

Figure 4.3 shows the mean scores of children's behaviour, during baseline study the Experimental Group had a group mean of 2 compared to the Control Group of 1.7. After the IYP training, Experimental Group improved to a group



mean of 3 in Round One, 3.4 in Round Two and 3.5 in Round Three. The Control Group recorded a group mean of 2, 1.5 and 1.4 in Rounds One, Two and Three respectively. In this study, Round one measurement was taken after six weeks of the introduction of the program. Round Two measurements were taken two months after Round one and Round Three measurements were done two months later after Round Two. The repetitive measures were important to see whether the effect of the IYP fades off.

This is in agreement with other researchers who found out that children who have more conduct disorders are also more likely to truant, which is also linked to offending (Farrington, 2002).



**Fig 4.4: Means of House-keepers' Ratings of Children's Behaviour after Incredible Years Program Intervention**

Figure 4.4 shows the mean scores of children's behaviour during baseline study were almost the same. After the IYP training, Experimental Group improved to a mean of 3, 2.7 and 3 in Rounds One, Two and Three

respectively. In contrast, the Control Group lagged behind in with 2, 1.6 and 1.5 respectively, as they did not receive the IYP treatment. A high mean after IYP intervention mean that there was a positive change in behaviour. Other researches done support these study findings that ‘Incredible Program’ cause highly significant attitudinal and behavioural changes in mothers and children compared with control groups. Nearly all the changes were maintained at the 1-year follow-up (Webster-Stratton, 1981; 1982, 1985).

#### **4. 4. 5 Sex differences in Behaviour Change towards Response to ‘Incredible Years Program’**

The researcher sought to find out if there are sex differences towards response to Incredible Years Program in line with the 5<sup>th</sup> objective that stated, **“To find out if there are sex differences in behaviour change towards response to Incredible Years Program”**. Results are presented in table 4.9.

**Table 4.9: Sex differences in behaviour change in response to ‘Incredible Years Program as Boys and Girls.**

Variables	EXPERIMENTAL GROUPS					
	BOYS			GIRLS		
	Not True	Somewhat True	Certainly True	Not True	Somewhat True	Certainly True
	Freq %	Freq %	Freq %	Freq %	Freq %	Freq %
	3 (8.1%)	8 (21.6%)	26 (70.3%)	8 (22.2%)	1 (2.7%)	27 (75.0%)
Kind to younger children	21 (56.8%)	12 (32.4%)	4 (10.8%)	34 (94.4%)	1 (2.7%)	1 (2.7%)
Often lies	27 (73.0%)	7 (18.9%)	3 (8.1%)	27 (75%)	1 (2.7%)	8 (22.2%)
Bullied by other children	3 (8.1%)	12 (32.4%)	20 (54.1%)	5 (13.8%)	5 (13.8%)	26 (72.2%)
Often volunteers to help others	5 (13.5%)	19 (51.4%)	13 (35.1%)	2 (5.5%)	0 (0%)	34 (94.4%)
Thinks before acting	17 (45.9%)	17 (45.9%)	3 (8.1%)	32 (88.8%)	0 (0%)	4 (11.1%)
Steals from home school	7 (18.9%)	18 (48.6%)	12 (32.4%)	7 (19.4%)	17 (47.2%)	12 (33.3%)
Gets on better with adults than with other children	4 (10.8%)	12 (32.4%)	21 (56.8%)	21 (58.3%)	11 (30.5%)	4 (11.1%)
Easily scared	1 (2.4%)	7 (18.7%)	29 (78.9%)	8 (5.5%)	10 (27.3%)	19 (52.7%)
Good attention span	1 (2.4%)	7 (18.7%)	29 (78.9%)	8 (5.5%)	10 (27.3%)	19 (52.7%)

**N=150**

According to the study findings in Table 4.9 on the effect of the ‘Incredible Years Program’ on the boy child behaviour under experimental group, majority 26 (70.3%) of the respondents rated most children being kind to younger children and only 3 (8.1%) were considered unkind. This shows that the IYP had notable effect for the child to be kind to the younger children.

According to the study findings of the boy-child behaviour under the Control Group, majority 26 (70.2%) of the respondents were unkind to younger children and only 2 (5.4%) were kind. The mean was 0.78 which shows that the majority of the children were not kind to the younger children.

Regarding the behaviour of 'often lies' under experimental group, 27 (73.0%) did not tell lies only 3 (8.1%) lied. On the same behaviour under Control Group, majority 18 (48.6%) did not tell lies and 6 (16.2%) lied.

On the behaviour of, 'often volunteers to help others' majority of the children, under Experimental Group, 19 (54.1%) were found to exhibit volunteer spirit and only 5 (13.5) did not show this trait. This shows that the IYP had an effect on the children's volunteerism behaviour. On same behaviour under Control Group, majority 21 (56.8%) did not volunteer while only 4 (10.8 %) volunteered. This showed that the children under Control Group did not exhibit much volunteerism spirit.

Pertaining to 'Thinks before acting' under experimental group, majority 17 (45.9%) were found to be thoughtful and only 3 (8.1%) were not thoughtful. On the same behaviour under control group, majority 34 (91.9%) were unthoughtful.

According to the study findings concerning stealing from school under Experimental Group', majority 18 (48.6%) did not steal much and minority 12 (32.4%) were found to have stolen.

Further under experimental group, the study findings indicated, that majority 21 (56.8%) of the children got better with adults than with other children and 4 (10.8%) did not get on better with adults. This shows that the majority of the children often got better with adults than with other children. On the same behaviour under control group, majority 32 (86.5%) of the children got better with adults than with other children, while minority 5 (13.5%) did not. This showed most children often got better with adults than with other children.

Majority 29 (78.8%) of the children under Experimental Group were not easily scared. The mean was .599 this shows that most children were not easily scared. On same behaviour under control group, majority 32 (86.5%) of the children were found to be easily scared. This shows that most children were easily scared.

Table 4.9 indicates the effect of the IYP on the girl child behaviour under experimental group. Majority 27 (75.0%) of the children were found to be kind to younger children. The mean was 1.53, which shows that the Incredible Year's Program had positive effect for the child to be kind to the younger children. Behaviour of the girl-child behaviour under control Group according to the study findings, majority 32 (88.8%) of the children were not kind to

younger children. The mean was .77, which shows that majority the children were not kind to the other children.

On the behaviour of often lying under Experimental Group, 34 (94.4%) of the children did not tell lies. The mean was .84, which showed on average the Incredible Year's Program has positive effect on the children's truthfulness. Under control group, 29 (80.5%) of the children were found to be liars.

Concerning being bullied by other children under Experimental Group, majority 27 (75.0%) were not bullied by other children. The mean was .047; this showed that the Incredible Year's Program has an effect on the children bullying behaviour because this behaviour was not observed much among the children. Under Control Group, majority 17 (47.2%) were bullied sometimes and only 5 (13.8%) were always bullied.

The behaviour of 'often volunteers to help others under Experimental Group,' majority 26 (72.2%) of the children were found to volunteer while 5 (13.8%) did not. This means that majority of the children exhibited volunteerism. Under control group, majority 34 (94.4%) of the children did not volunteer. This showed the children did not exhibit remarkable volunteerism spirit.

According to the study findings, majority under Experimental Group 34 (94.4%) were found to be thoughtful and minority 2 (5.5%) were not. Further, the study findings indicated, that majority 17 (47.2%) of the children got better with adults than with other children, while 7 (19.4%) of the children did not.

The mean was 0.84; this showed the children often got better with adults than with other children.

Majority 21 (58.3 %) of the children under Experimental Group were not easily scared and only 4 (11.1%) were easily scared. The mean was .74 this showed that most children did not look to be easily scared.

On the trait of 'good attention span' Under Control Group, 21 (58.3%) of the children were found to have poor attention span compared to Experimental Group children with majority of the children 19 (52.7) having good attention span. The mean was .54, this depicts that the Traditional Rehabilitation Method (TRM) did not impart good attention span in the children.

These findings are in agreement with (Walker & Buckley, 1972) who found out that behaviour analytic programs like IYP continued to function to control truancy and reduce delinquency. In a study by Kinyua, (2004) to compare the self-esteem of children in Kenyan Rehabilitation schools thus, Kirigiti Girls and Kabete Rehabilitation Schools, the study utilized two instruments, the self-esteem inventory and an interview schedule. The results of the study showed that there was no significant difference between the self-esteem of children. Children with low self-esteem are more likely to truant.

The Strengths and Difficulties Questionnaire was analyzed after data collection. Items on the instrument dealt with the objectives that sought to identify the types of conduct problems presented by children admitted in

rehabilitation schools and to find out the effectiveness of the I Y P by comparing it to the traditional rehabilitation methods. To establish the effect of ‘The Incredible Years Program’ on behaviour change of children was one of the study objectives.

Scoring of the instrument was done by adding up all the negative attributes across four out of the five scales: Emotional Symptoms, Conduct Problems, Hyperactivity/ Inattention and Peer Problems excluding Prosocial Behaviour. The measure yielded a total score of 30. A score of 9-11 was normal, 12-14 was borderline behaviour and a score of 15 and above was problematic. The children’s conduct problems and progress made after intervention were analyzed using the Strengths and Difficulty Questionnaire and results presented in Table 4.10.

**Table 4.10: Behaviour of Children after Intervention of IYP**

<b>SDQ Score</b>	<b>Frequency</b>	<b>Percent</b>
9-11(normal behaviour)	32	86.5 %
12-14 (borderline behaviour)	4	10.8 %
15 and above (problematic behaviour)	2	2.7 %
<b>Total Average</b>	<b>38</b>	<b>100 %</b>

**N= 150**

According to the results in table 4.10: a large number with an average of 32 (86.5%) of the rehabilitees in each Rehabilitation School were in the range of



normal meaning they were rated as not true for most of the negative attribute and had stopped most of the negative traits while on the borderline behavior were few 4 (10.8%) and only 2 (2.7%) were still problematic. This means that the Incredible Years Program had a positive effect on the rehabilitation of the rehabilitees.

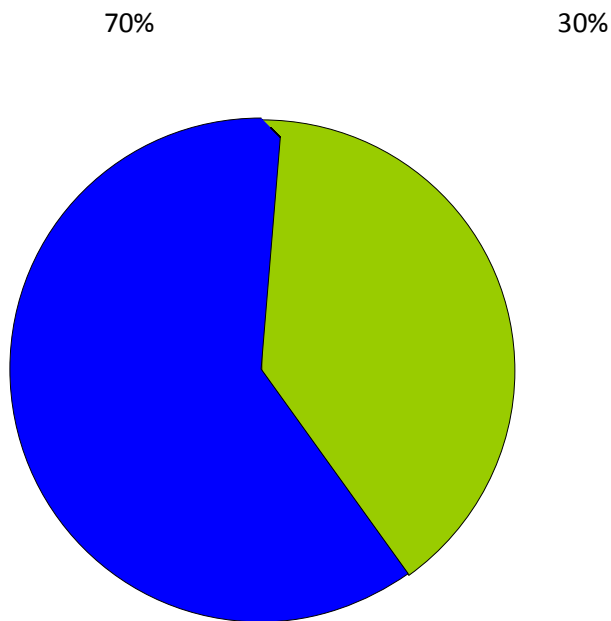
#### **4.6. Observed Behaviour of Children after IYP Intervention**

The researcher conducted a non-participant observation of both the Experimental and Control Groups after IYP Intervention and made the observations in the observation schedule.

##### **4.6.1.2 Children's behaviour Difficulties**

The researcher sought to establish if the children still had behaviour difficulties. The findings are indicated on figure 4.5.

Children in Control Group had more behaviour difficulties. The analysis showed that (70%) of the 72 children in the Control Group still had behaviour difficulties as compared to (30%) of the 74 children in Experimental group who still had difficulties after exposure to the 'Incredible Years Program'. Those with difficulties either portrayed uneasiness, often fighting, poor concentration, lying and being solitary.

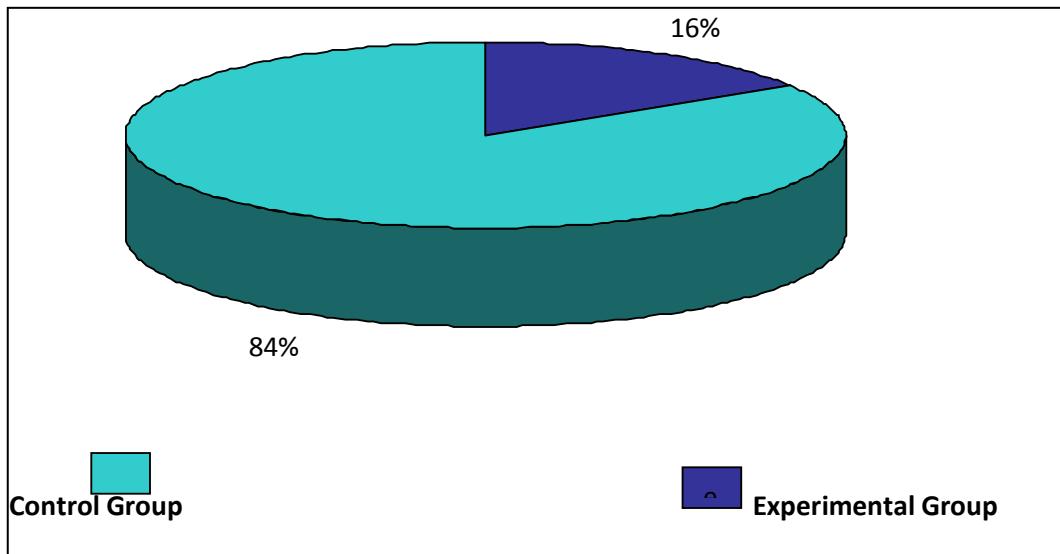


**Fig 4.5: Children's Behaviour Difficulties.**

#### **4.6.1.2 Children's Learning Difficulties**

It was fundamental to find out how many children still had learning difficulties after IYP intervention. Results showed high scores for the control group on the trait many worries, which hindered learning.

The findings in Fig 4.6 showed that after exposure to IYP only 16% of the 74 children in the Experimental Group of the respondents had learning difficulties as compared to the most children, 84% of the 72 children in the Control Group who still had learning difficulties and were exposed to Traditional Rehabilitation Program. Learning difficulties included; easily losing confidence Poor concentration and lack of good attention span.



**Fig 4.6: Children's Learning Difficulties**

#### **4.7: Inferential Statistical Results**

In this section results related to Study Hypotheses are presented. All hypotheses were tested at  $\alpha = 0.05$ .

##### **4.7.1 Testing of $H_{01}$**

The first hypothesis postulated that: “**There is no significant effect of ‘Incredible Years Program’ and behaviour change among the rehabilitees.** This hypothesis was tested using a **t- test** alpha at 0.05 level of significance (Table 4.11).

**Table 4.11: Mean Differences between Control and Experimental Groups on Behaviour Change among Rehabilitees.**

Source	Sum of Squares	df	Mean Square	F	Sig.
Variable*phases* Control and Experimental Groups	33.42	141	2.785	2.558	0.002
Error	1179.185	1040	1.134		

**$P \leq 0.05$**

**N=150**

Statistical testing in Table 4.11 shows that there was a significant difference ( $F [df=141, 1040] = 2.558, P=0.002$ ), between ‘Incredible Years Program’ and behaviour change among juvenile rehabilitees. The null  $H_{01}$  that stated, “There is no significant effect between the ‘Incredible Years Program’ and behaviour change among the rehabilitees’ was therefore rejected in favour of the alternative hypothesis. It was also concluded that the ‘Incredible Years Program’ training had an effect on the behaviour change among juvenile rehabilitees. Therefore, ‘Incredible Years Program’ is more effective than the Traditional Rehabilitation Method in the rehabilitation of juvenile delinquents.

#### **4.7.1.2 Testing of $H_{02}$**

The second hypothesis postulated that: “There are no significant gender differences in behaviour change among the boys and girls under the

**‘Incredible Years Program’**. This hypothesis was tested using a **t- test** alpha at 0.05 level of significance and results presented in Table 4.12.

**Table 4.12: Mean Difference between Incredible Years Program and Gender of Rehabilitees**

	Sum of Squares	Df	Mean Square	F	Sig.
Variation Between	0.045	1	.045	.177	.674
Variation Within	35.689	141	.253		
Total	35.734	142			
Skewness	0.388				
Kurtosis	8.277				

**N=150**

According to the results in Table 4.12, the Mean Variation within is given by 0.045 while Variation between is given by 0.253. The significance is given by 0.6.

The null hypothesis was accepted. There was therefore no significant gender difference in response to ‘Incredible Years Program’.

Skewness was found to be 0.3 while the kurtosis had a value of 8.7, which is close to the expected value of 9, which therefore indicated the sample was from a normal distribution.

#### **4.8 Summary of Chapter Four**

- Results from the analysis of objectives show that the prevailing situation before the introduction of the ‘Incredible Years Program’ was that the differences among the Experimental and Control Group of rehabilitees were minimal.
- After the Incredible Years Training workshop given to teachers and house-parents and subsequent testing of hypotheses one and two, it was evident that there were significant differences between ‘Incredible Years Program’ and the Traditional Rehabilitation Methods. The rehabilitees in the Experimental Group improved by shading off negative behaviours and portraying more, stable and consistent pro-social, positive behaviours.
- The results concur with known authorities and proponents in ‘Incredible Years Program’ that; despite their diversity, parenting programs have proven effective for behaviour problems and are the treatment of choice for conduct disorders (Barlow, 2005; Mabe, Turner, & Josephson, 2005).

### **CHAPTER V: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

This chapter presents a summary of the study findings, implications of the findings and conclusions deduced from the implications. In addition, recommendations based on the study as they relate to juvenile rehabilitation and further research are next presented.

### **5.1 Summary of the Findings**

The cumulative data was analyzed using quantitative analysis. The study on the 'Effect of Incredible Years Program compared to the Traditional Rehabilitation Methods showed that the IYP is more effective in the rehabilitation of juvenile rehabilitees than the TRM.

(i) Regarding rehabilitees behaviour , overall results show that after the 'Incredible Years Training, the Experimental Group did much better in output of pro-social, positive behaviours than the Control Group.

To ensure consistency of positive behaviours in juvenile rehabilitees, IYP training needs to be done on a regular basis, to avoid IYP having reduced effect over time.

Results from the analysis of objectives show that the prevailing situation before the introduction of the 'Incredible Years Program' was that the differences among the Experimental and Control Group of rehabilitees were minimal.

Positive and nurturing house-parenting analysis showed that the means of Positive and Nurturing House-Parenting in Experimental Group was higher compared to the Control Group.

(iii) Behaviour change of rehabilitees showed that, there was a significant relationship between the ‘Incredible Years Program’ and behaviour change among the rehabilitees. After the IYP treatment, children showed less deviant behaviour.

(iv) Comparison of Incredible Years Program’ and Traditional Rehabilitation Program showed that the IYP was more effective in the rehabilitation of juvenile delinquency than the later.

(v) Gender difference in response to IYP showed that: there were no significant gender differences in behaviour change among the boys and girls in response to the ‘Incredible Years Program.’

#### **5.1.1 Behaviour Presented by Children in Rehabilitation Schools**

Behaviors Presented by Children was collected by use of an observation schedule and the Strengths and Difficulty Questionnaire. Observations were made by both house-parents and the teachers in the rehabilitation schools before and after IYP intervention.

Overall results show that after the ‘Incredible Years Training, the Experimental Group did much better in output of pro-social, positive behaviours than the Control Group.



Experimental group did much better by having less behaviour problems compared to the control group, which exhibited more behaviour problems.

### **5.1.2 Effect of the ‘Incredible Years Program’ on Teachers’ and House-Parents’ Practices towards Juvenile Rehabilitates.**

To find out the teachers’ and house-parents’ practices towards juvenile rehabilitates was the 2<sup>nd</sup> objective. The findings were observed by the researchers through a non-participant observation under the following outcomes: House-parent bonding and involvement, positive and nurturing house-parenting and harsh, coercive, and negative house-parenting.

House-Parent bonding and involvement included; sitting next to the child putting the younger children to bed, sharing housework with the children and talking to the child at dining table. The research findings show that house-parent bonding and involvement had a Grand Mean of 4.02. The means for positive parental practices were higher in the Experimental Group as compared to the Control group. This means that the ‘Incredible Years Program had a positive behavioural effect on the behaviour of house-parent bonding and involvement.

Positive and nurturing house-parenting analysis showed that the means of Positive and Nurturing House-Parenting in Experimental Group was higher compared to the Control Group.

Research findings in this study showed that the number of juveniles exposed to harsh and negative house-parenting was higher in the Control Group which led to their slower rehabilitation compared to the Experimental Group. Kazdin (1995) has shown that, people exposed to harsh parenting beginning in childhood are more likely than others to be aggressive, commit murder, rape, robbery and arson.

Parenting style characterized by harsh discipline is strongly associated with defiant, antisocial behaviour and, later, with criminal outcomes (Scott, 2001b).

(Farrington, Lambert, & West, 1998) found four attributes that were significant in addition to harsh, inconsistent discipline-namely, high criticism, low warmth, low involvement, and low encouragement.

### **5.1.3 Effect of the Incredible Years Program on Behaviour Change of Children.**

The 3<sup>rd</sup> objective sought to establish the effect of the Incredible Years Program' on behaviour change of children.

The Strengths and Difficulties Questionnaire was used by the teachers and house-parents to rate the children.

Pertaining to the Incredible Years Program effects on the children in the Rehabilitation Schools, the behaviour 'helpful if someone is hurt upset or feeling ill' both had similar response rating of either certainly true or

somewhat true with very few being rated as not true. Meaning that most rehabilitees would assist if someone was hurt upset or feeling ill.

For “constantly uneasy” the responses for both schools in the Experimental Groups, the majority of the children were not uneasy as compared to the Control Group who were uneasy.

Most of the respondents had at least one good friend. Regarding ‘often fights with other children or bullies them’ majority of the children in the Experimental Group did not fight often like in the Control Group. The rehabilitees in the Experimental Group were generally liked by others. Overall, children in the Experimental Group showed more positive behaviour and less negative behaviour. This is an improvement compared to the baseline study.

These study findings are in line with (Reid, 2004) study that indicated the IYP training program, produce improvement in child behaviour, related the level of parental involvement and the initial problem of the child. The above findings also concur with Kazdin (1995), Webster-Stratton (1981), Woolfenden, Williams, & Peat (2002), Hosford & de Visser (1994) who have cited ‘Incredible Years Program’ as an effective tool for rehabilitation and to prevent recidivism.

The 4<sup>th</sup> objective compared behaviour change of children in the ‘Incredible Years Program’ and those in Traditional Rehabilitation method Program.

Children's behaviour during baseline study was almost the same. After the IYP training, Experimental Group improved gradually. In contrast, the Control Group lagged behind in behaviour change.

These results agree with other researches done elsewhere that 'Incredible Program' causes highly significant attitudinal and behavioural changes in parents and children (Webster-Stratton, 1981; 1982, 1985).

The teachers noted that children who performed poorly in class had more conduct problems. This is in agreement with other researchers who found out that children who perform poorly at school are also more likely to be truant (Farrington, 2002). Rice (1987) notes that poor school performance has been associated with delinquent behaviour.

The findings showed that (70%) of the 75 children in the Control Group had behaviour difficulties after six weeks exposure to the IYP as compared to (30%) of the 75 children in the Experimental group who had difficulties after exposure to the 'Incredible Years Program'. Those with difficulties either portrayed uneasiness, poor concentration, lying and being solitary.

The findings showed that after exposure to IYP only 16% of the 75 children in the Experimental Group of the respondents still had learning difficulties as compared to most children, 84% of the 75 children in the Control Group who

had learning difficulties and were exposed to Traditional Rehabilitation Method. Learning difficulties included; Poor concentration easily loses confidence and lack of good attention span.

#### **5.1.5 Sex differences in response to ‘Incredible Years Program’**

The 5<sup>th</sup> objective sought to find out if there were sex differences in response to ‘Incredible Years Program’

Results showed that there were no significant gender differences in behaviour change among the boys and girls. The girls however scored slightly higher on Emotional Symptoms Scale on the Strengths and Difficulties Questionnaire as opposed to boys who recorded more Conduct Problems. The Hyperactivity/Inattention and Peer Problems scale of the SDQ recorded no difference in the behaviour of both boys and girls.

Mwangi (1991) in a study of Kenyatta University students observed that students were faced with many problems regardless of sex. Ongubo (1987) did a study on problems facing high school students and found that students were concerned most about educational and vocational problems and least with emotional ones.

The study findings indicated the conduct on boys in the rehabilitation schools did not differ a lot with that of girls. In boys’ school the conduct ‘Shares readily with other children (toys, pencils etc) differed with that of girls having majority were perceived to share less with others while the girls being

perceived to share easily with others. Pertaining to the ‘Incredible Years’ effects on ‘often fights with other children or bullies them’ majority were rated by both housekeepers and teachers as not fighting whereas minority fought in the experimental Group, meaning that the ‘Incredible Years Program’ had an effect in reducing the tendency of juveniles fighting.

## **5.2 Implication of the Findings**

The present findings hold a number of implications for educational researchers and practitioners. The ‘Incredible Years Program’ has ascertained areas that can be of focus in the effective rehabilitation of juvenile rehabilitees.

- The findings of this study will improve rehabilitation services in Kenyan Rehabilitation Schools and enable follow-up studies to be carried out.

The intervention focused on strengthening parenting competencies and fostering house-parents’ involvement in children’s day to day activities and reduce delinquent behaviours. This paves way for practicing new parenting skills that will see reduction of delinquency.

Merton's theory (1957) is used to explain not only why individual adolescents become delinquents but also why some social classes are characterized by more delinquency than others. Since members of the lower class are assumed to be most affected by the disparity between

the goals and the means of attaining success, this class is expected to have a higher rate of delinquent behaviour than the upper and middle classes. The upper and middle classes also experience delinquency but to a lesser extent compared to the lower class. The implication here is that parents will improve their parental skills by sharpening adolescent-management skills to reduce delinquent behaviour.

- The present findings indicate that the Incredible Year's Program can reduce the tendency of children committing crime and faster rehabilitation of those who have committed crime (Kazdin 1995).
- During the study, the children with behaviour difficulties in the Experimental Group showed gradual and consistent improvement in behaviour change. This concurs with past researches that, despite their diversity, parenting programs have proven effective for behaviour problems and are the treatment of choice for conduct disorders (Barlow, 2005; Mabe, Turner, & Josephson, 2005).
- The cases of negative behaviour among juvenile delinquents drastically reduced as the house-parents and teachers showed love and acceptance to these children. This practice should be replicated in families for proper upbringing of children.

Lipsey (1992), focused on interventions or treatments designed to reduce, prevent, or treat delinquency or antisocial behaviour problems similar to

delinquency. In the majority of the studies he examined, the treatment group did better (in most cases this finding refers to a reduction in recidivism) than the control group.

- The Incredible Years Program training of house-parents and teachers seemed to have influenced greatly the teaching and parental competencies and reduced conduct problems among juveniles. This program should also be advocated for in Kenyan schools to prevent cases of indiscipline among students. According to Rice (1987), “it is known that those who become delinquent are more likely to be socially assertive, defiant, ambivalent to authority, resentful, hostile, suspicious, destructive, impulsive, having low self-esteem and lacking in self-control”(p.285).

The quantitative findings pointed out to the importance of juveniles being shown acceptance by the society, this speeded up their rehabilitation. This supports research, demonstrating the link between positive parental involvement and positive child outcomes. Specifically ‘Incredible Years Program’ involve, parents limiting their use of coercive child management strategies (like, yelling, hitting, and verbal aggression) and increasing their use of positive, supportive responses (for example. encouragement, praise, and physically positive behaviors).

Kazdin (1995) has shown that, ‘Incredible Years Program’ can significantly reduce the development and persistence of conduct problems and improve the



quality of parent-child relationships. Kazdin (1997) also notes that, people exposed to harsh parenting beginning in childhood are more likely than others to be aggressive, commit murder, rape, robbery and arson.

### **5.3 Conclusions**

The study was conducted to assess effectiveness of ‘Incredible Years Program’ compared to the Traditional Rehabilitation Methods in the rehabilitation of juvenile delinquents in Kenya. Results show that the ‘Incredible Years Program’ was effective in the rehabilitation of juvenile delinquents, which was also indicated by other studies cited. The IYP was used on children in the Experimental Group whereas the TRM was used on children in the control group.

It has been established that most of the items from the Goodman, (1999) Strengths and Difficulties Questionnaires, the respondents were rated as ‘not true on the various items researched on describing the child negative conduct after introduction of IYP. This showed that most children abandoned negative behaviour implying the program was effective on juvenile rehabilitation by causing gradual behaviour change of the children.

The observation schedule showed that juvenile rehabilitees in the experimental group showed gradual improvement in behaviour change and fewer cases of recidivism. The juveniles in the control group lagged behind in

behaviour change and recorded high incidences of recidivism. Conclusively it can be said that the ‘Incredible Years Program’ had a positive effect in the rehabilitation of juvenile delinquents. To minimize or prevent the cases of recidivism, training on ‘Incredible Years Program’ for personnel handling juveniles in our corrective institutions is mandatory. After this training, juveniles in the experimental group who were under the care of teachers and house-parents who underwent this training, showed gradual then drastic changes in behaviour. In conclusion, then, it is proposed that staff in Kenyan rehabilitation schools should be encouraged to attend regular training on ‘Incredible Years Program’ for better rehabilitation outcomes of juvenile rehabilitees.

#### **5.4 Recommendations**

The present findings offer a number of directions for juvenile rehabilitators and other stakeholders in juvenile rehabilitation. This study has revealed salient features influencing rehabilitation outcomes that are amenable to change in terms of rehabilitation policy.

##### **5.4.1 Recommendation to Policy Makers**

- Policy makers need to ensure that after policies are formulated they are followed to the letter. If ‘Incredible Year’s Program’ is introduced in Kenya, the policy makers should ensure that it is implemented fully.

- The government should provide opportunities for short term and long term training on ‘Incredible Year’s Program’ for all personnel working with juvenile delinquents.

#### **5.4.2 Recommendation to Rehabilitation Schools Managers**

- Rehabilitation Schools Managers and administrators should be aware of the need for regular training on this program for their rehabilitation staff. This will facilitate faster rehabilitation of the juveniles under their care.
- In order to motivate house-parents and teachers in rehabilitation schools, they should not only be sponsored to attend ‘Incredible Year’s Program’ training but that those whose children under their care that experience less behavioural recidivism per a given duration of time, should be rewarded as an incentive.
- Managers of rehabilitation schools should access Juvenile Rehabilitation policy documents that specify the treatment of juvenile and ensure they comply with the standards of best practices.

#### **5.4.3 Recommendation to Parents and other Juvenile Rehabilitation Stakeholders**

- Parents and other stakeholders should be taught the principle of the ‘Incredible Year’s Program’ and encouraged to apply it. This includes

positive gestures like hugging the children or sitting next to the child should be used. In case of misbehavior, prompt punishment should come in handy, but the child should be made to understand that what he/she has done is what is wrong but the child is still loved.

- All teachers and house-parents in rehabilitation schools should be trained in IYP.
- Parents should supervise their children effectively to avoid them getting into bad company. Rehabilitated juveniles who are placed back into the society should have constant supervision by parents to avoid them falling back into criminal activities.
- It is recommended that parents should be encouraged to work hand in hand with the teachers in order to develop a positive approach to children who are vulnerable to falling into crime by engaging crime-preventive strategies. Parents should not base love and acceptance of their children on children's behavior for they come to associate love and acceptance with self-worth. Parents should also encourage cooperative behaviour among their children as this can be useful in promoting pro-social behaviour.

#### **5.4.4 Recommendation for Further Research**

The present data not only provided a number of new perspectives on the many constructs involved in the investigation but also extended current

understanding of these constructs. The present study adapted the Strengths and Difficulty Questionnaire and operationalized it. While conclusions have been drawn and recommendations made for future research, these must be placed in the context of the adapted instrument and operationalization. Further research is required in other provinces to validate the instrument.

The researcher recommends that the following research areas should be undertaken in relation to the study findings:

- The study focused on children in rehabilitation schools who were under a given rehabilitation program. It is necessary to study the behaviour of children in the Juvenile Remand Homes to establish their psychological behaviour and how this determines their rehabilitation process once they join the Rehabilitation Schools.
- ‘The Strengths and Difficulties Questionnaire’ is a widely and internationally used behavioral screening instrument assessing child positive and negative attributes across five scales: Emotional Symptoms, Conduct Problems, Hyperactivity/ Inattention, Peer Problems and Prosocial Behaviour that is, positive behaviour. It appears then that there are social and emotional influences that determine the general behavioural outcomes of children. Therefore, future research might explore the precise role, which these social and emotional factors play in determining juvenile behavioural outcomes.

The role of the family in influencing conduct problems need clarification through future research. Qualitative findings were suggestive of some family influence in this respect, but further work is required to determine the precise nature and extend of this influence.

- Many studies have found a strong correlation between a lack of supervision and offending, and it appears to be the most important family influence on offending. (Farrington, 2002). It would be interesting to survey parents about the type and level of supervision they give to their children and how this determines the behavioural outcomes of their children. Importantly, the present data indicated that family related factors are quite relevant in child- offending trends.
- The learning climate and its impact on offending is unclear. Children with low intelligence are likely to do worse in school. This may increase the chances of offending because low educational attainment, a low attachment to school, and low educational aspirations are all risk factors for offending in themselves. Children who perform poorly at school are also more likely to truant, which is also linked to offending. The effect of altering the learning climate from competitive to cooperative on juvenile offending has not been studied and future research might focus on this with a view of identifying interventions that can take place at class and institutional levels.

Other recommendations for further research include;

- The study on ‘assessment of Incredible Program’ compared to the Traditional Rehabilitation Methods in the rehabilitation of juvenile rehabilitees in Kenya only covered selected divisions in Nairobi. It has provided the basis for further studies in other divisions not covered, districts, or provinces in Kenya to see if the trend is comparable.
- The various conduct problems should be observed on the children under different categories for example conduct disorder can be further categorized as physical and psychological.

The following studies can be undertaken:

- Types of conduct problems presented by girls admitted in Rehabilitation Schools.
- Types of conduct problems presented by boys admitted in Rehabilitation Schools.
- The effects of Incredible Year’s Program on frequency of girl’s misbehaviour.
- The effects of incredible Year’s Program on frequency of boy’s misbehaviour.

Finally, on a methodological note, the contribution of the qualitative data to quantitative findings underscores the importance of the interface and the integration of qualitative and quantitative methodologies. It is proposed

that further research along these lines can enhance current rehabilitation practice particularly in areas that have previously relied heavily on quantitative data.



## REFERENCES

- Acuda, S.W. (1982). Drugs and alcohol problems in Kenya today: A Review of Research. *East Africa Medical Journal*, 59, 642- 644.
- Barlow, J. (2005). Promoting the social and emotional health of children: Where to now? *Journal of Social Health*, 125 (2), 64- 70 (Review).
- Barry, G. & Joan, H. (1997). True and quasi-experimental designs. *Practical Assessment, Research & Evaluation*, 5(14).
- Borg, R.W. & Gall, M.D. (1989). *Educational research: an introduction 3<sup>rd</sup> ed.* New York: Longman.
- Children's Act of Kenya (2001). Nairobi. Government Printers.
- Children and Young Person's Act (CAP 141) of the laws of Kenya. (1963). Nairobi. Government Printers.
- Children Ordinance Act (1955). Nairobi. Government Printers
- Brown, S (1998). Understanding youth and crime (listening to youth?). Buckingham: Open University Press.
- Chilcott, T. & Odgers, R. (2009). Violence. *The Courier-Mail*. Brisbane. P.18, July, 9.
- Coleman, C.T, (1984). *Juvenile delinquency*. New York: Knopf. Couch, R.H., & Allen, C.M. (1983). Behavior modification in rehabilitation facilities: A review. *Journal of Applied Rehabilitation Counseling*, 4(2), 83- 95.
- Dawson, E.T. (1997). A Primer on experimental and quasi- experimental design. In [http:// www. citeulike.org](http://www.citeulike.org).
- Downing, D.E. (1968). *Organization of guidance services in USA Schools*. New York: Macmillan.
- Durojaiye, O. (1972). *Psychological counseling of the school child*. Ibadan: Evans Brothers Ltd.
- Eadie, T. & Morley, H. (2003). *Crime, justice land and punishment. social policy* (3 rd ed.) Oxford: Oxford University Press.
- Easton, A. (2006). *Polish drug use and suicide sparks school plan*. In BBC. Retrieved from [http:// news.bbc.co.uk](http://news.bbc.co.uk).

- Ettinger, R. H. (2006). *Understanding psychology*. United States of America; CA: Horizon Textbook Publishing.
- Eyberg, S., & Pincus, D. (1999). Eyberg child behaviour inventory & Sutter- Eyberg student behaviour inventory - *Revised. Psychological Assessment Resources, Odessa, FL Psychological Assessment Resources*.
- Farrington, D.P., Lambert, S. and West, D.J. (2002). 'Criminal careers of two generations of family members in the cambridge study in delinquent development', *Studies on Crime & Crime Prevention, Vol. 10, No. 1*, pp. 68– 94.
- Farrington, D.P., Lambert, S. and West, D.J. (1998). 'Criminal careers of two generations of family members in the Cambridge study in delinquent development', *Studies on Crime & Crime Prevention, Vol. 7, No. 1*, pp. 85–106.
- Galand, B., Lecocq, C., & Philipott, P. (2007). *British Journal of Educational Psychology*, 77, 465-477. Gardner, F.E.M. (1987). 'Positive interaction between mothers and conduct problem children: is there training for harmony as well as fighting', *Journal of Abnormal Child Psychology*, Vol. 17, pp.223–33.
- Garry, W. (2008). *Violence rife in South Africa schools*. In BBC, <http://news.bbc.co.uk>.
- Gendreau, P., & Ross, R.R. 1987. Revivification of rehabilitation: evidence from the 1980's. *Justice Quarterly* 4(3):349-407.
- Glasser, W.L. (1957). *Reality therapy: A new approach to psychiatry*. New York: Harper & Row
- Graham, B., & Bowling W. (1995). *Family environment and child offenders*. London: Academy Press.
- Gottfredson, A & Barton, L. (1993). *Juveniles and recidivism*. Oxford: Oxford University Press.
- Hoagwood, K. and Erwin, H. D. (1997). Effectiveness of school based mental services for children: A 10 year research review. *Journal of Child and Family Studies*, 6 (4), 435-51.
- Hosford, R., & de Visser, L. (1974). *Behavioral approaches to counseling: An introduction*. Washington, DC: American Personnel and Guidance Association Press.

- Irungu, M. (1993). Parenting programs and adolescence delinquency. (Unpublished M.Ed thesis). Kenyatta University, Kenya.
- Juvenile Ordinance Act (1934). Nairobi. Government Printers.
- Kangethe, R. (1988). *Juvenile justice and management of child offenders in Kenya, An annotated Bibliography of Research, 1958-2005*. Kenyatta University, Kenya.
- Kazdin, A.E. (1995). *Conduct disorders in childhood and adolescence*. New York: Thousand Oaks.
- Kazdin, A. (1997). Parent management training: Evidence, outcomes, and issues. *Journal of the American Academy of Child and Adolescent Psychology*, 36, 1349–1356.
- Knapp, Scott, S. & Davis, J. (1999). The cost of antisocial behaviour in young children. *Clinical Child Psychology Psychiatry*, 180:19-23.
- Kinyua, M.B. (2004). *A comparative analysis of pupil's self-esteem in selected government and NGO' rehabilitation schools in Nairobi and Central province of Kenya*. (Unpublished M.A thesis). Kenyatta University, Kenya.
- Koech, D.K. (1999). Totally intergrated quality education and training. Report of the commission of inquiry into the education system of Kenya. Nairobi.
- Kostadinov, P. (2009, June, 19). *Little or nothing*. Sofia Echo, pp.9.
- Lavera, L. W. (2002). *Rehabilitation process of juvenile delinquents in Kenyan approved schools*. (Unpublished doctoral thesis). Egerton University, Kenya.
- Litchfield, J. (2007, March 27). Violence in the lycees leaves France reeling. *The Independent*, P.5.
- Lipsey, M. (1992). *Juvenile Diliquent Treatment: A meta-analysis inquiry into the variability of effects*. New York: Russel Sage Foundation.
- Lobber, R. (1985). Patterns and development of antisocial child behaviour. in *annals of child development, vol. 2, G.J(Ed)*. Whitehurst. NewYork, NY: JAI Press.
- MacDonald, J.A & O'Brien, E. (2008). 'Quasi-experimental design and representing women's interests: re-examining multivariate statistical verdicts.' *Paper presented at the annual meeting of the MPSA Annual meeting of the MPSA Annual National Conference, Palmer House Hotel, Hilton, Chicago*.

- Mabe, P. A., Turner, M. K., & Josephson, A.M. (2005). Parent management training. *Adolescent Psychology Clinic North America*, 10(3), and 451-60.
- The Maryland Report (1980). *Review of the juvenile wilderness and challenge programs*. Oxford: Blackwell.
- Maru, H.M. (1998). Psychiatric morbidity in children appearing in Nairobi juvenile court. (Unpublished M.Med thesis in psychiatry). University of Nairobi, Kenya.
- Mbiti, D. (1974). *Foundations of school administration*. Nairobi: Oxford University Press.
- Merton, D.J. (1957). *Functional theory of juvenile delinquency*. Stanford University, California.
- Mugenda, O. and Mugenda, A. (1999). *Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.
- Ministry of Education, Science and Technology,(2001).*Teaching and learning in the primary classroom; core module, school based*. Nairobi: Government Printer.
- Mugo, J., Musembi, D. & Kange'the, R.K. (2006). *Juvenile justice and management of child offenders in Kenya, An annotated Bibliography of Research, 1958-2005*. Kenyatta University, Kenya.
- Mulupi, P. (2006). *Conduct disorders among adolescents*. (Unpublished M.Ed thesis ). University of Nairobi, Kenya.
- Mutie, K. & Ndambuki, P. (1999). *Guidance and counseling for schools and colleges*. Nairobi: Oxford University Press.
- Mwangi, S.W.(1969).Youth Retreat Centers. (Unpublished Bachelor of Architecture thesis ). University of Nairobi, Kenya.
- Mwita, J. (1985). *Conduct disorders among the adolescents*. (Unpublished M.Med thesis). University of Nairobi, Kenya.
- Ndirangu, J.M. (2000). *Youth in danger*. Nairobi: Act Print.
- Ndunda, J. (1978). Approved Schools in Kenya. (Unpublished M.Ed thesis). University of Nairobi, Kenya.
- Oketch, E., & Ngumba, W. (1991).Principles of guidance. Nairobi: Nairobi University Press.

- Oliver, W. (2000). *The Structural-cultural perspective: A theory of black male violence* in: Hawkins, Darnell F. (2003). *Violent Crime: Assessing Race and Ethnic Differences*. Cambridge Cambridge University Press.
- Orodho, J.A. (2005). *Elements of education and social science research methods*. Nairobi: Bureau of Educational Research .Kenyatta University.
- Osaka, S. (2008, December). Getting children to get along. *The Japan Times*, P.17.
- Patterson, G.R., Reid, J.B. & Dishion, T.J. (1992). *Antisocial boys (A Social Interactional Approach Vol. 4)*. Eugene, OR: Castalia.
- Reid, M. J., Webster-Stratton, C., & Baydar, N. (2004). Halting the development of conduct problems in head start children: The effects of parent training. *Journal of Clinical Child and Adolescent Psychology*, 33(2)279-91.
- Rice, F.P. (1987). *Adolescent development, relationships and culture*. Boston:Allyn and Bacon.
- Robson, C. (2002). *Real world research: A resource for social scientists and practitioner- researchers*. New York: Blackwell Publishing.
- Save the Children (UK) (2001): *Programme workshop report on diversion for children in conflict with the law*. Kenya, 10-11<sup>th</sup> January, 2001.
- Scott, S., Knapp, M., Henderson, J. & Maugham, and B. (2001b). 'Financial cost of social Exclusion: follow- up study of antisocial children into adulthood', *British Medical Journal*, Vol. 323, No. 7306, pp. 190–3.
- Scott, S. (2002). 'Parent training programs.' in M. Rutter and E. Taylor (eds). *Child and adolescent psychiatry*. Oxford: Blackwell.
- Serketich, W., & Dumas, J. (1996). The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behaviour Therapy*, 27, 171–186.
- Skinner B.F. *Theories of behaviour modification*. Oxford: Blackwell.
- Standrisge, M. (2008). *Behaviourism and behavioral modification*. University of Georgia: University Press, Georgia, Atlanta.
- Syengo, M. (2005). Conduct disorder among high school students. (Unpublished M.Med thesis in psychiatry). University of Nairobi, Kenya.

- Tharp, R.J., & Wetzel, R.G. (1969). *Behaviour modification in the natural environment*. London: Academic Press.
- The Colony and Protectorate of Kenya (1958). *Approved school annual report*. Nairobi: Government Printers.
- Trochim, W.M. (2006).).Quasi-experiment.In<http://www.socialresearch methods.net>.
- United Nations, UNESCO: Moving towards constructive discipline (2001).
- Vance, R. (2006). *Society for Human Resource Management: Employee Engagement and Commitment*. London: Academic Press.
- Wakanyua, S.N. (1995). *Rehabilitation of juvenile delinquents: survey of approved schools in Kenya*. (Unpublished M.A thesis). University of Nairobi,Kenya.
- Wakube, A. (1983). *Children and Conduct Disorders*. (Unpublished M.Med thesis in psychiatry). University of Nairobi, Kenya.
- Walker, H.M. & Buckley, N. (1972). Programming generalization and maintenance of treatment effects across time and setting. *Journal of Applied Behaviour Analysis*, 5, 209-224.
- Walklate, S. (2003). *Understanding criminology – Current theoretical debates, 2nd edition*, Maidenhead: Open University Press.
- Wanjiku, L. (2008, March 27). Violence in secondary schools .*Saturday Nation*,P.28.
- Wentyman, C.T., & McFall, R.M. (1975). Behavioral training of social skills in shy males. *Journal of Consulting and Clinical Psychology* 43:384–395.
- Webster-Stratton, C. (1981). Modification of mothers' behaviors and attitude through videotape Modeling group discussion program. *Behavior Therapy* 12:634–642.
- Webster-Stratton, C. (1982b). Teaching mothers through videotape modeling to change their Children's behaviors.*Journal of Pediatric Psychology*, 7(3):279–294.
- Webster-Stratton, C. (1982a). The long-term effects of a videotape modeling parent-training Program: Comparison of immediate and 1-year follow-up results. *Behaviour Therapy*, 13:702–714.
- Webster-Stratton, C. & Reid M. J. (2003). *The incredible years parents, teachers and children training series: A multifaceted treatment approach for young children with*

*conduct problems evidence-based psychotherapies for children and adolescents.*

Were, N. (2003). *Discipline, guidance and counseling in schools: A practical guide to teacher counselors and parents.* Nairobi: Strong Wall Africa.

Woolfenden, S. R., Williams, K. & Peat, J.K. (2002). Family and parenting interventions for conduct disorder and delinquency: *A meta-analysis of randomized controlled trials.* *Arch Dis Child*, 86 (4), 251-56.

## APPENDIX I: Strengths and Difficulties Questionnaire [Goodman, 1999]

For each item, please mark the box for Not True, Somewhat True or Certainly True. Please give your answers on the basis of the child's behavior.

Child's Name .....

F

M

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly uneasy.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy or tearful.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor concentration .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily loses confidence.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Kind to younger children .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bullied by other children.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks before acting.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home school etc.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily scared.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good attention span.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature.....

Date.....

House-parent

Teacher

## APPENDIX II: Observation Schedule for House- Parents and Children

Child's Name:..... Male/Female

House-Parent's Name..... Male/Female

Outcomes for House-Parents	Observation in the Dormitory	Observation in the Dining hall	Duration	Frequency
<b>Positive and nurturing house-parenting</b> <ul style="list-style-type: none"> <li>• Praise</li> <li>• Holding hands</li> <li>• Affectionate look</li> </ul>				
<b>2. Harsh, coercive, and negative house-parenting</b> <ul style="list-style-type: none"> <li>• Yelling</li> <li>• Hitting</li> <li>• Name-calling</li> <li>• Verbal aggression</li> <li>• Slapping</li> <li>• Caning</li> <li>• Pinching</li> <li>• Frowning</li> </ul>				

<b>3. House-Parent bonding and involvement</b> <ul style="list-style-type: none"> <li>• Sitting next to the child</li> <li>• Putting the younger children to bed</li> <li>• Sharing house work with the children</li> <li>• Talking to the child at dining table</li> </ul>				
<b>Outcomes for children</b>				
<b>4. Child behaviour problems</b> <ul style="list-style-type: none"> <li>• Uneasiness</li> <li>• Often fights</li> <li>• Poor concentration</li> <li>• Lies</li> <li>• Solitary</li> </ul>				
<b>5. Child positive behaviors and social competence.</b> <ul style="list-style-type: none"> <li>• Volunteers</li> </ul>				

<ul style="list-style-type: none"><li>• Kind</li><li>• Helpful</li><li>• Obedient</li></ul> <p>Good attention span</p>				
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**APPENDIX III: CONSENT BY THE PARTICIPANT**

I **Victor Onyango** being a teacher/housemaster/mistress of Dagoretti Rehabilitation School and having been explained the nature of study by Nancy Cheseto of P.O BOX 16936 – 00100 NAIROBI Tel. No. 0724051106 and as detailed in the assent explanation, do hereby give consent to participate in the study.

Name: **Victor Onyango**

Signature.....

Date.....

**APPENDIX IV: CONSENT BY THE MANAGER OF THE REHABILITATION SCHOOL**

I am **Phillip Wapopa** the Manager of **Kabete** Rehabilitation School and having been explained the nature of study by Nancy Cheseto, of P.O. Box 16936 - 00100, Nairobi ,Tel 0724051106 as detailed in a written assent, do hereby give consent for the teachers, housemasters/mistresses and children in this institution to participate in the study.

Name: PHILLIP WAPOPA

Signature.....

Date.....

