

**LINKING ATTACHMENT INSECURITY TO INCREASED CONDUCT AND  
BEHAVIORAL PROBLEMS IN ADOLESCENTS**

**GRACE NDUKU WAMBUA**

(H56/71943/2011)

Department of Psychiatry,

College of Health Sciences,

The University of Nairobi

*A dissertation submitted in partial fulfillment for the degree of Master of Science in Clinical  
Psychology*

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## **DECLARATION**

I, hereby declare that this thesis dissertation is my own original work carried out in fulfillment of the requirement for the award of the degree of Masters of Science in Clinical Psychology at The University of Nairobi. I further declare that this thesis dissertation proposal has not been submitted for the award of any other degree or to any other university for research and evaluation.

Author: GRACE NDUKU WAMBUA - B.A. Counseling Psychology.

Signature: .....

Date: .....

## **SUPERVISORS' APPROVAL**

This dissertation has been submitted for the degree of Master of Science in Clinical Psychology  
with our approval as University supervisors:

**1. Dr. Manasi Kumar**

Senior Lecturer, Department of Psychiatry,  
College of Health Sciences,  
The University of Nairobi

Signature.....

Date.....

**2. Dr. Ann Obondo**

Senior Lecturer, Department of Psychiatry,  
College of Health Sciences,  
The University of Nairobi

Signature .....

Date.....

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## **ABBREVIATIONS AND ACRONYMS**

SDQ ... Strength and Difficulties Questionnaire

SES ... Socioeconomic Status

VASQ ... Vulnerable Attachment Scale Questionnaire

## **ABSTRACT**

**Background/Objectives:** Research has suggested that there exists a significant link between insecure attachment and the development of psychopathology in adolescence as shown in increased conduct and behavioral problems. It is therefore due to the increase in behavioral problems among adolescents, that this study seeks to investigate the relationship between parental attachment status and development of conduct and behavioral problems among adolescents in Kenya. This study aimed to investigate attachment patterns in adolescence and their relationship to the development of conduct and behavioral problems; as well as to determine whether secure attachment serves a protective role in the development of later psychopathology.

**Method:** The study used a cross-sectional descriptive study design. A sample of 137 students were recruited. The data was collected through use of questionnaires; a researcher designed questionnaire was used to obtain socio-demographic information, Strength and difficulties questionnaire (SDQ) was used to screen behavior and the Vulnerable Attachment Scale Questionnaire (VASQ) was used to measure attachment. Analysis was done using SPSS 20.0.

**Results:** Participants showed high vulnerable attachment (89.9%); with those from low SES (94.2%) and middle SES (85.3%). 32.4% of the participants from the low SES had higher emotional or behavioral problems compared to those from the middle SES at 13.2%, that is, were categorized as ‘abnormal’ on the TDS.

**Conclusion:** Adolescents from low SES have higher attachment difficulties than those from middle SES. It was also seen that their attachment style is more of avoidance than anxious style. It is therefore recommended that parents be educated on how to relate and respond to the needs of their children, as it has an impact on their emotional and psychological wellbeing.

## **1.0 INTRODUCTION AND BACKGROUND**

### **1.1 Introduction**

Conduct and behavioral problems among adolescents have become a serious phenomenon in Kenya (Muola et al, 2009). Statistics have shown that behavioral problems are becoming widespread, and this will continue to increase if appropriate action is not taken. There has been increasing research in many areas that suggest the causes of conduct and/or behavioral problems among adolescents. Among them include poverty, marital relations, communication, gender, family disruptions, parental absence, lack of support and cohesiveness in families (Muola et al, 2009; Ndugwa et al., 2011). One of the main concerns for the rise of conduct and behavioral problems is the adolescent's attachment with family and friends (Muola et al. 2009; Hoeve et al. 2012).

The emotional connection is one of the most important obligations that a parent has to a child (Raikes and Thompson; 2008, Cooper, 2009). This attachment to one's caregiver is fundamental for human development. It is believed that the early relationships determine the behavior and emotional development of a child. The theory of attachment suggests that human beings are equipped with an innate attachment behavioral system, which regulates proximity-seeking behaviors in times of distress or fear (Moss et al. 2009).

According to Bowlby, all children, if given any opportunity, become attached; but it is the quality of attachment that varies widely. Depending on the attachment organization; the child's ability to transition from states of distress to feelings of safety will be altered (Howes & Ritchie, 1999; Cruz and Cruz, 2008). The repeated experience of a caregiver reducing uncomfortable emotions (e.g., fear, anxiety, sadness), enables the child to feel soothed and safe when upset. This then becomes encoded in the child's implicit memory as an expectation and then as the internal working model

of attachment, which serves to help the child feel an internal sense of a secure base in the world (Pearson & Child, 2007; Thomas, 2011).

Based on repeated daily interactions with an attachment figure, babies develop reasonably accurate representations of how the attachment figure is likely to respond to their attachment behavior (Williams and Kelly, 2005; Moss et al. 2009). Caregivers who are generally unavailable and rejecting, have infants with internal representations of themselves as unworthy and unlovable (Williams & Kelly, 2005). Children, who experience insecure attachment relationships with caregivers, appear to grow up aggressive and hostile. These attachment styles, once formed are thought to be relatively stable and tend to influence the adolescent's later cognitions, emotions, and behaviors (Williams & Kelly, 2005; O'Connor & Scott, 2007).

Children who experience secure attachment with the caregivers and peers result in positive outcomes such as higher self-esteem, better academic achievement, better emotional regulation and higher social competence (Pearson & Child, 2007; Hovee et al., 2012; Sarracino, 2011; Kochanska and Kim, 2013). In contrast, children who experience poor attachment with their caregivers and friends are more likely to result in negative outcomes such as conduct and behavioral problems.

## **1.2 Problem Statement**

Adolescence provides a challenging developmental period for young people throughout the world. In Kenya, this period of development has been associated with the increase of substance use, sexual deviance, unwanted pregnancies, increased school dropouts leading to involvement in criminal behaviors (Ndugwa et al, 2010; Oindo, 2002, Kenya National Youth Policy, 2006). These difficulties the young often experience are often exacerbated by factors such as poverty, limited access to education, and unstable social contexts. Such circumstances increase pressure to engage in behavioral problems that can compromise ones development.

Many variables such as low levels of education, poverty among others have been attributed to the ever increasing conduct and behavioral problems among the youth in Kenya (Khasakhala et al, 2013; Mbuthia, 2013), but no study has looked at the impact one's attachment has to the development of these behaviors. Bowlby proposed that disturbances in an individual's attachment relationship are the main cause of psychopathology, and which place the child at risk (Mikulincer and Shaver, 2012). They render the child less able to cope with later adverse experiences, and they increase the likelihood that the child will behave in such a way as to bring about more adverse experiences (Sroufe et al, 1999; Karavasilis, 2003).

It is therefore due to the increase in adolescent behavioral problems, that this study sought to investigate the relationship between parental attachment status and development of conduct and behavioral problems among adolescents in Kenya.

### **1.3 Hypothesis**

**Null hypothesis:** Adolescents with secure or insecure attachment relationships are not likely to develop conduct or behavioral problems.

**Alternative hypothesis:** Adolescents with insecure attachment relationships are likely to develop conduct or behavioral problems.

### **1.4 Objectives**

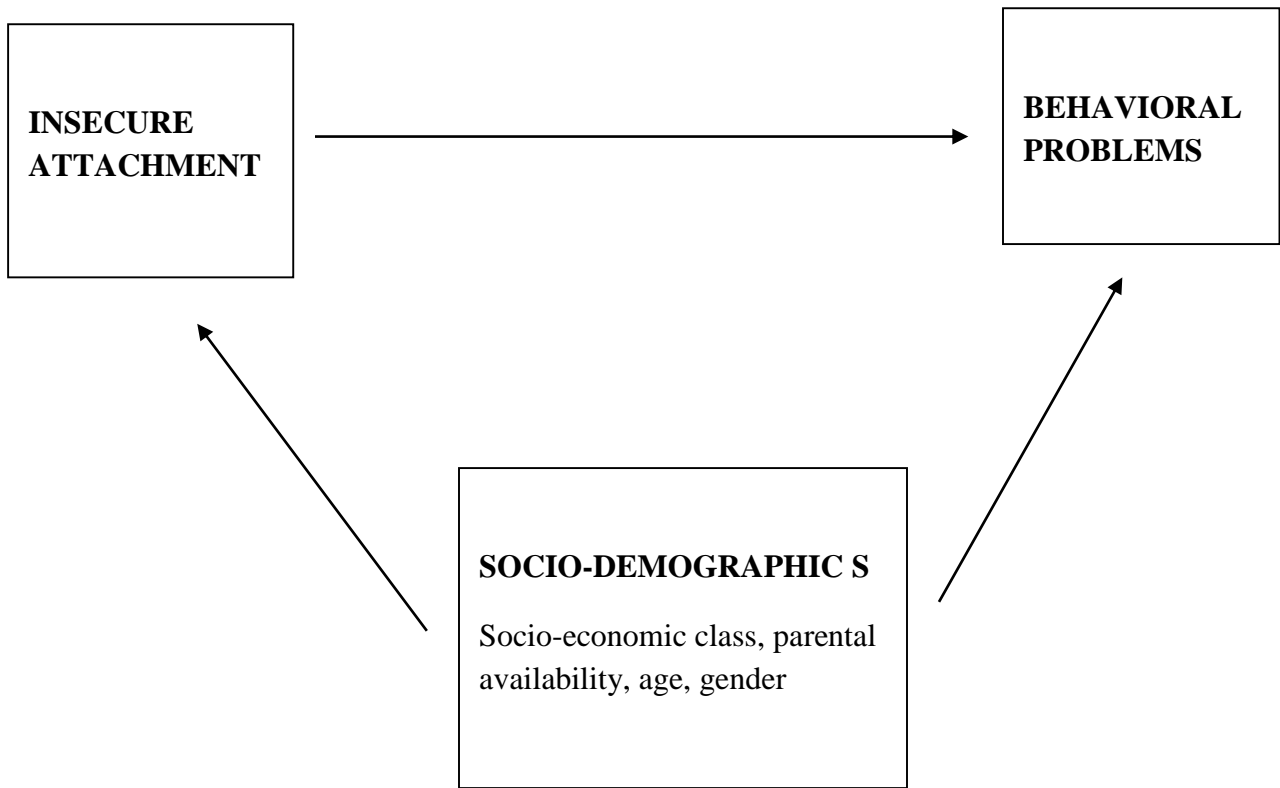
#### **Broad Objectives**

To investigate the relationship between attachment security and the emotional and psychological adjustment of adolescents (conduct and behavioral problems).

#### **Specific Objectives**

- i. To determine the attachment status of the participants of this study.
- ii. To investigate the prevalence of conduct and behavioral problems of the study's participants.
- iii. To investigate whether socio-demographic factors such as age, gender, etc influence participants' development of emotional and behavioral problems.

## 1.5 Conceptual Framework



## **2.0 LITERATURE REVIEW**

### **2.1 Attachment**

Attachment theory is a major developmental framework. It includes the relationship between parent and child, as well the child's development. Bowlby originally referred to attachment as the child's tie to its mother (Sroufe et al., 1999; Hovee et al., 2012). It is through this bond that the child looks for support and security from the relationship with their care-giver in times of fear and/or distress. The parent/ caregiver is thought of as a secure base for the child and a safe haven in times if distress.

Bowlby defined different attachment styles that were based on significant interactions of the child with their attachment figures. Attachment related experiences are the basis for developing internal representations of the relationship between one's self and others, and serve as templates for future relationships (Sroufe et al, 1999, Ma and Huebner, 2008). From infancy, children internalize and organize patterns of relating to people. They can mentally represent their experiences with attachment figures and construct ideas and expectations about relationships with primary as well as secondary attachment figures. As such, an internal working model of attachment is gradually shaped during development (Allen et al, 2003; Pearson, 2007). These styles become relatively stable mental representations of oneself and others.

Securely attached children expect appropriate responsiveness and availability from their parents in time of distress and feel sufficiently safe and competent for mastering their environment at times of low stress. According to Bowlby (1988), securely attached infants are therefore more likely to develop generally positive internal working models of others as trustworthy and available. These models subsequently guide the individual in making judgments about his world (Ma and Huebner,



2008). Children who do not receive appropriate and responsive parental availability during times of distress develop insecure internal working models of their relationships with their caregivers. Insecure attachment is conceptualized in terms of two dimensions; which are attachment avoidance and attachment anxiety. Attachment avoidance results from encountering consistent rejections from attachment figures and is characterized by a strong preference for self-reliance, reluctance to get close or show emotions to relationship partners, as well as discomfort with letting others depend on oneself. Attachment anxiety, is thought to result from encountering inconsistent and intrusive care-giving behaviors and is characterized by a strong desire for closeness to—and protection from—relationship partners, and a hyper-vigilance toward cues of partner rejection or unavailability.

If the parent-child attachment relationship is disrupted during infancy, long-term negative consequences include the inability to show affection or concern for others and aggressive and delinquent behavior. Bowlby (1944) suggested that delinquents are really "affectionless," that is, they have been unable to intimately connect with others, leading to affectionless psychopathy. Bowlby describes a number of events occurring in the lives of children that appear to interfere with the development of a secure primary attachment to a caregiver, such as multiple placements, traumatic conditions in early childhood, and the early absence of a parent. The most delinquent boys and girls in Bowlby's original 44 thieves study were unable to intimately connect with others and were insecurely attached to their primary caretakers in early childhood.

## **2.2 Attachment and Adolescence**

Adolescence is a period of change in an individual. It is a period which is recognized as a window of opportunity and risk in development (Moretti and Peled, 2004; Ndugwa et al., 2011). It is a period of change of such magnitude and rapidity, that it is associated with the onset or exacerbation

of a number of health-related problems including depression, eating disorders, substance abuse and dependence, risky sexual behavior, antisocial and delinquent activity and school dropout (APA, 2002). There has been growing evidence that parents do make a difference at this stage, and it is this difference that operates through the nature of attachment between the parent and child.

Adolescence presents an attachment dilemma, which is maintaining connection with parents while exploring new social roles away from the family and developing attachment relationships with others (Allen et al, 1998). Of great importance is the fact that the successful transition of adolescence is not achieved through detachment from parents. In fact, healthy transition to autonomy and adulthood is facilitated by secure attachment and emotional connectedness with parents (Karavasilis et al, 2003). In a nutshell, research has shown that attachment security in adolescence exerts precisely the same effect on development as it does in early childhood: a secure base fosters exploration and the development of cognitive, social and emotional competence (Sroufe et al, 1999).

Securely attached adolescents manage transition more successfully, and enjoy more positive relationships and experience less conflict with family and peers than do insecurely attached adolescents (Allen et al, 1998; Thomas, 2011). It is during this transition that the adolescent begins to form close relationships with peers. When the adolescent is securely attached to his parents, the adolescent is afforded the opportunity to experiment with potential identities while having an emotional “safe base” to return to (Karavasilis, 2003; Allen et al, 2003; Rosenthal and Kobak, 2010). Secure attachment is clearly important to healthy adolescent adjustment. What do adolescents need from their parents to sustain healthy attachment? Research suggests that the attachment function of parents changes in some ways, but remains stable in others. Adolescents do not need the same degree of proximity as children do and can derive comfort from knowing

their parents are supportive even when they are not present (Allen et al, 2003; Rosenthal and Kobak, 2010).

Therefore, adolescents who feel understood by their parents and trust their commitment to the relationship, even in the face of conflict, confidently move forward toward early adulthood.

### **2.3 Attachment and Behavioral Problems**

Insecure attachment bonds result not only from poor parenting; such as inconsistency, lack of warmth, unresponsiveness, insensitivity, rejection; but also from a discontinuity in parenting (Demuth and Brown, 2004). Research has also noted that family breakups and prolonged separation from their mothers are likely to produce conduct and other behavioral problems (Green; Muola, 2009; Kamau, 2011).

Adolescents that have a less secure attachment with their parents are more likely to compensate for their emotional disturbances by engaging in conduct behaviors (Karavasilis et al, 2003). Studies have shown that poor-quality mothering has a relation to the number of convictions during adolescence and adulthood (Allen et al, 1998). Parent-child rearing practices have also been associated with seriousness of behavioral problems, as well as parental involvement with the child, poor discipline and parental aggression in the child's early years (Allen et al, 1998; Demuth and Brown, 2004; Cota- Robles and Gamble, 2006). These effects are seen to become more pronounced as the child ages.

It is good to note that although many adolescents are exposed to various negative experiences only a few develop inappropriate behaviors as a consequence (Green; Sroufe et al, 1999; Demuth and Brown, 2004). It is viewed that the quality of home life (secure or insecure attachment) significantly prepares the growing child to be more resilient or vulnerable to such influences

(Demuth and Brown, 2004). There is growing consensus that features of inadequate parental behaviors are understood to be related to a lower quality of attachment, and thus is predictive of increased behavioral problems.

## **2.4 Studies on Attachment**

Extensive research over the recent years has shown that when an individual experiences reliable care that is sensitive to their developmental needs, more so when they are infants, they are likely to develop a secure attachment to their caregiver, and that this security of attachment endures through to adulthood. In turn, security in the child's key attachment relationship is associated with better outcomes in several domains of personal development, in both the short term and the longer term.

The capacity of parents to provide the kind of care that promotes security of attachment in infancy and good developmental outcomes in childhood can be severely compromised in adverse conditions such as poverty, particularly when mothers have depression (Ndugwa et al, 2011). Early maternal sensitivity/ closeness, criticism and parental behavior have been positively associated with later social problem-solving and negatively with aggressive responses and mental health problems (Raikes and Thompson, 2008, Gilreath et al., 2009; Khasakhala et al. 2012; Cyr et al., 2013). Maternal psychosocial distress influences the mother-child interactions and subsequently child attachment, thus predicting high rates of externalizing and internalizing behaviors in the children (Duboi-Comtois et al, 2013). Maternal closeness has a significant effect on risky behaviors among males and suicidal ideation in females (Gilreath et al., 2009, Sarricino et al., 2011). Secure attachment significantly moderated the association between observed maternal criticism and child aggression. These findings shed new light on how early relational experiences

may contribute to social information processing with others, and that the timing of relational influences may be crucial.

It has been found those children who have early traumatic experiences and multiple placement histories had increased vulnerability to mental health problems. A study by Gabler et al, (2014), on the associations between foster parents and foster children's attachment found that the children showed lower levels of attachment security and therefore had more behavioral problems and that this was predicted by the parent's stress and supportive presence. Another study in an at-risk community by Scott et al (2013), found that as the adolescents perception of caregiver attachment decreases, there is increased risk for both internalizing and externalizing behaviors. They also found that parent-reported harsh punishment, low parental involvement, single parent status, and child-reported depression symptoms predicted insecure attachment during early adolescence, which in turn predicted greater child-reported depression and conduct disorder symptoms in later adolescence.

Studies on attachment with children who have been institutionalized, found that children who have been institutionalized have lower attachment security and predicted higher rates of externalizing and internalizing behaviors than those who had not been institutionalized (Torres et al., 2012; McLaughlin et al., 2012; Zimmerman et al., 2013; Venta et al., 2014). Greater attachment security predicted lower rates of internalizing disorders in both sexes. The development of attachment security fully mediated intervention effects on internalizing disorders (Venta et al., 2014). Zimmerman et al. (2013) found that there were personality differences between the institutionalized group and control group, and that these differences could be a risk-factor for behavioral problems. They noted that the severity of the problem seemed to be influenced by one's attachment security (Goldner et al, 2013). As such personality and attachment have been found to

contribute to the different domains of emotional and psychological adjustment. In cases of moderation, attachment security the implications of personality traits on the child's adjustment. The findings highlighted the contribution of positive personality tendencies in playing down the difficulties of insecurely attached children (Goldner et al, 2013)

Hoeve et al (2012) did a meta-analysis to integrate results from empirical studies examining the association between attachment and delinquency. They found strong links for parental monitoring, psychological control, and negative aspects of support such as rejection and hostility, accounting for up to 11% of the variance in delinquency. Several effect sizes were moderated by parent and child gender, child age, informant on parenting, and delinquency type, indicating that some parenting behaviors are more important for particular contexts or subsamples. Although both dimensions of warmth and support seem to be important, surprisingly very few studies looked at had focused on parenting styles. Fewer than 20% of the studies focused on parenting behavior of fathers, despite the fact that the effect of poor support by fathers was larger than poor maternal support, particularly for sons. A study by Sarracino et al. (2011) found that adolescents were more securely attached to the same-sex parent, and that attachment security with the opposite-sex parents was seen to predict more conservative social value orientations, and lower levels of problem behaviors.

Choon et al (2013) carried out a study among the adolescents in Selangor, Malaysia that aimed to investigate the relationships between parental attachment, peer attachment and delinquency among adolescents. The results revealed significant negative relationship between father and mother attachment with adolescents' delinquency and significant positive relationship between peer attachments with adolescents' delinquency. A study by McElhaney et al (2006) supports the positive link between the quality of the adolescent's current peer attachment and delinquent

behavior. The results revealed that strong and supportive friendships were linked to lower levels of delinquency, but only when adolescents' viewed the attachment organization as secure. Attachment organization therefore plays an important role in describing the conditions under which the qualities of social relationships are likely to be linked to important psychosocial outcomes.

Studies on adolescents who have participated in delinquents acts indicated that parental attitudes and behaviors likely contributed, directly and indirectly, to adolescent behavior (Koiy, 2000; Poduthase, 2012). Research findings showed that two general risk factors of the development of delinquent behavior of adolescents were connected to insecure current attachment styles and disturbances in the overprotection dimension of maternal bonding. The adolescents with behavioral problems were found to be living in families where parental conflict was common, where the father was an alcoholic and/or abusive, and where the adolescents experienced severe parental punishment from their childhood. Ambivalent scores in maternal overprotection dimension, and the repeated separation from both parents during late childhood and adolescence were influential in the genesis of delinquent behavior during adolescence. It is clear from the findings that delinquent and non-delinquent adolescents experienced their family life quite differently, and that their respective home and family environments directly influence behavior patterns.

Closer home, Muola et al (2009) and Kamau (2011) carried out studies that looked at delinquency in adolescents and family relations on former street children in rehabilitation homes and girls in boarding school respectively. Findings found the problem behavior to be significantly related to marital stability, family size, marital adjustment and mode of discipline. A weak relationship between juvenile delinquency and socio-economic status was observed. The delinquency level of

boys was significantly higher than that of girls. It was concluded that there is a relationship between family functions and juvenile delinquency. Adolescents with parents/guardians in conflict, were anxious and constantly engaged in aggressive behavior, especially when confronted with disagreement with others. Parental deviance also contributed greatly to the adolescent's participation in delinquent acts.

Research has shown the predictive significance of attachment security in adolescent behavior. It has shown that insecure attachment and negative caregiver-child interactions both increase the risk of developing conduct and behavioral problems. Insecurely attached children, compared to securely attached children, are more likely to feel mistrust and anger towards the caregiver, thus failing to internalize the caregiver's values, and to have less opportunity to develop the skills needed to regulate affect. Studies have shown that adolescents who were insecurely attached as infants were more likely to have poor relations with others and have more symptoms of aggression and depression in childhood (Allen et al, 1998, Khasakhala et al 2012). There has also been suggesting evidence that the influence to parents weakens as youngsters become older. Attachment organization therefore has an important role in a wide array of aspects of adolescent psychosocial development.

Differences in prevalence rates of behavior problems between girls and boys have been noted, with boys showing higher rates of externalizing behaviors than girls, who showed higher rates of internalizing behaviors. Investigations have shown that boys tend to be more exposed to risk factors of conduct problems, rather than being more vulnerable for risk factors compared to girls (Hoeve et al, 2012). Poor attachment with father figures was also a positive link for problem behaviors. Attachment to the same-sex parent has also been linked to be an important factor for developing conduct and behavioral problems (Cota-Robles and Gambles, 2006, Sarracino, 2011).



Parents who are more attached to their children are more aware of their adolescent's activities and who they interact with, reducing the chances of the adolescent engaging in negative behaviors.

Family instability and increased parental conflict gives rise to conduct and behaviors problems. In the study by Muola, (2009) 68.2% of the children came from single or no parent families. Only 31.8% came from two-parent families, showing that there was more delinquency among children from unstable families than among those from stable families (Demuth and Brown, 2004). The study also showed that the larger the family size can promote behavioral problems because of factors such as provision; effective control and emotional fulfillment were not being met for the individual.

Parental deviance has also been seen to contribute greatly to conduct behavior (Kamau, 2011). Attachment combined with parental control, including supervision, rules setting and strictness has an impact on the adolescent behavior (Poduthase, 2012). As the adolescent grows older, attachment changes, parental control and discipline are more important for predicting problem behaviors. The studies have also shown the importance of the relationship between an adolescent and his peers in that individuals who are highly attached to their peers are more likely to involve in conduct and behavioral problems (Kamau, 2011; Muola, 2009; Choon, 2013).

## **2.5 Theoretical Framework: Attachment Theory**

Attachment theory is a theory of development that focuses on the impact of parent-child attachment relationships on healthy development and psychopathology, including behavioral problems (Bowlby 1969, Hoeve et al, 2012). It has proven to be a very promising framework for studying normal and abnormal development of an individual. Bowlby suggests that early relational experiences have great significance for later development. One of the major tenets he puts forward

is that infants and young children need to develop a secure attachment with parents before launching out into unfamiliar situations. The child's attachment behavior is later activated in especially uncomfortable and frightening situations, and also by the mother being or appearing to be inaccessible. Once this attachment system is activated, the infant seeks out the caregiver or signals the caregiver that comfort or protection is needed.

It is as a consequence of the early attachment relationship that children internalize and encode that which they are exposed to early in life, which are later referred to as internal working models. This models helps the individual predict and understand their environment and establish a psychological sense of security (Pietromonaco and Barrett, 2000; Pielage et al, 2000). Bowlby (1979) claimed that the mental representations of the self and others formed in the context of the child-caregiver relationship, are carried forward and influence thought, feeling, and behavior in later relationships..

A lot of research has been done in regards to finding a relationship between one's attachment style and how one responds to life events. Insecure attachment has been found to increase vulnerability for psychopathology, despite being influenced by other factors like genetics, development and environment (Mikulincer and Shaver, 2012). Bowlby concluded that to grow up healthy, the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or caregiver) in which both find satisfaction and enjoyment.

In our present society and ever developing economy, children are growing up without the attention of their parents. This absence of parental figure/s in the home has been the subject of many discussions and many questions as to why do children behave the way they do. A growing child needs the care and support of both parents to get on well in life. Studies have continuously shown that secure attachment with caregivers reduces participation in behavioral problems, but when

children do not have this connection with their parents then they are at risk. With the prevalent increase in behavioral problems seen in adolescents, there is need to question the parental availability especially as experienced by the child himself.

## **2.6 Rationale**

Studies have continued to show that family and individual factors have been upheld as having some of the most profound influences on adolescent outcomes, including one's predisposition to avoid or engage in behavioral problems. There is need to highlight the importance of stability in the life of an adolescent and the findings of this study may prove to show us that having at least one significant positive attachment (that does not have to be with the mother) can have profound effects on a child's development and ability to overcome adversity (resilience).

The majority of research investigating attachment and psychopathology has focused largely on children, and adults. By comparison, few studies have considered the role of attachment on the development of psychopathology during adolescence, especially given that adolescence is a critical period of psychological adjustment. The scarcity of studies in this area in Africa is also surprising. This study therefore aimed to add literature in the area and provide baseline for further investigations on attachment security.

### **3.0: RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Study design**

This research used a cross-sectional descriptive study design.

#### **3.2 Study Site**

Two schools in Nairobi's, Dagoretti North Constituency were conveniently chosen for the study. One of the schools was from a low-socio economic setting; Lavington Mixed Secondary and the other from a middle socio-economic setting; Makini Senior school. The age bracket that was looked at was between 14 -18 years; Form 1 to Form 4.

#### **3.2 Study Population**

The study's population included high school students, between 14 – 17 years.

Inclusion criteria:

Those students who consented.

Those students whose parents consented.

Those who are under 18 years.

Exclusion criteria:

Students who did not have consent.

Students who are orphans.

Students with a history of mental health challenges.

#### **3.4 Sample Size Determination**

The study used cross-sectional design Cochran formula (Cochrane, 1977) to determine the minimum required sample size population, using a sample frame of 500 persons.

$$n = z^2 pq / d^2$$

Where,

n = sample size

p = population proportion with behavioral problems (assumed to be 10% as proposed by Goodman, et al 1997)

q = 1-p

d = absolute precision (confidence level of 5%)

z = score of 95% confidence level

The researcher used a confidence level of 95%, a precision of 5%. A minimum sample size of 138 was yielded for the proposed study, but the study will use a sample size of 150 students.

### **3.5 Data Collection Instruments and Materials**

The study used the following tools:

1. *The Socio-demographic questionnaire*: The researcher designed a questionnaire that will capture the relevant demographic variables like age, gender, family type (two –parent home or single parent home), parental level of education, perceived relationship with caregiver
2. *The Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997)*: is a brief behavioral screening questionnaire targeting 3-17 year olds. It asks about 25 items on psychological attributes, positive and negative. These 25 items are divided between 5 scales: emotional symptoms, conduct problems, hyperactivity/ inattention, peer relationship problems and pro-social behavior.
3. *Vulnerable Attachment Style Questionnaire (VASQ) (Bifulco, et al, 2003)*: is a brief self-report tool contains 22 short statements. On a 5-point scale, participants rate the extent to which each statement best describes their characteristic style in relation to others.

### **3.6 Data Management and Statistical Analysis Plans**

All the data collected from the study was stored carefully under lock and key by the researcher to avoid damage of any information collected from the study and to maintain privacy and confidentiality throughout the study. Data analysis was done using SPSS statistical software, version 20.0.

## **4.0 RESULTS AND ANALYSIS**

### **4.1 Introduction**

This chapter details the findings of the study and the discussion with respect to the study objectives. The aim of the study was to investigate the relationship between attachment security and the emotional and psychological adjustment of adolescents (conduct and behavioral problems). The findings of the data analysis as per study objectives were presented and organized into the following segments:

1. Socio-demographics factors
2. Attachment status of participants,
3. Prevalence of emotional and conduct problems among participants
4. Relationship between attachment security and emotional and behavioral problem

### **4.2 Response Rate**

The targeted number of respondents was 150. A total of 150 respondents took part in the study. 13 of the questionnaires were incomplete, which brought the number to respondents to 137 (91.3%).

Table 4.1: Summary on Socio-demographic factors

	Total	Low SES	Middle SES	Significance
	N (%)	N (%)	N (%)	
School	137 (100)	69 (50.5)	68 (49.6)	NS
Gender				
Female	65 (47.4)	31 (44.9)	34 (50)	NS
Male	72 (52.6)	38 (55.1)	34 (50)	
Lives with				
Parent	116 (84.7)	51 (73.9)	65 (95.6)	Tau-b -.301 (p=0.000, df=136)
Guardian	21 (15.3)	18 (26.1)	3 (4.4)	
Religion				
Christian	106 (67.1)	56 (84.8)	50 (73.5)	NS
Muslim	28 (20.9)	10 (15.2)	18 (26.5)	
Parents/guardian marital status				
Married	93 (81.6)	35 (70)	58 (90.6)	Tau-b -.264 (p=0.005, df=136)
Other	21 (18.4)	15 (30)	6 (9.4)	
Mother's employment status				
Employed	101 (87.7)	42 (82.4)	59 (92.2)	NS
Unemployed	14 (12.2)	9 (17.6)	5 (7.8)	
Father's employment status				
Employed	100 (95.2)	40 (95.2)	60 (95.2)	NS
Unemployed	5 (4.8)	2 (4.8)	3 (4.8)	
Guardian's employment status				
Employed	19 (95)	16 (94.1)	3 (100)	NS
Unemployed	1 (5)	1 (5.9)	0	



Table 4.2: Proportion of Experienced adversity and Emotional Needs in Low SES and Middle SES

	Total	Low SES	Middle SES	Significance
	N (%)	N (%)	N (%)	
<b>Emotional Needs</b>				
Feels that emotional needs are met by parents				
Yes	70 (54.7)	43 (68.3)	27 (41.5)	NS
No	58 (45.3)	20 (31.7)	38 (58.5)	
Perceived parental relationship				
Supportive and loving	50 (46.3)	26 (57.8)	24 (38.1)	Tau-b .195 ( $p=0.034$ , $df=136$ )
Unsupportive & lacks understanding	58 (53.7)	19 (42.2)	39 (61.9)	
Perceived relationship with mother				
Available when needed	105 (95.5)	45 (93.8)	60 (96.8)	NS
Never available when needed	5 (4.5)	3 (6.3)	2 (3.2)	
Perceived relationship with father				
Available when needed	89 (84.8)	36 (83.7)	53 (85.5)	NS
Never available	16 (15.2)	7 (16.3)	9 (14.5)	
Perceived relationship with guardian				
Available when needed	19 (95)	10 (58.8)	3 (100)	NS
Never available	1 (5)	7 (41.2)		
<b>Experienced Adversity</b>				
Experienced adversity in childhood				
Yes	35 (27.1)	16 (25.8)	19 (28.4)	NS
No	94 (72.9)	46 (74.2)	48 (71.6)	
Experienced sexual/physical violence family				
Yes	8 (6)	4 (6)	4 (6)	NS
No	126 (94)	63 (94)	63 (94)	

### **4.3 Attachment security and emotional and behavioral problems for the two schools**

The Vulnerable Attachment Scale Questionnaire (VASQ) was used to measure attachment while The Strength and Difficulties Questionnaire (SDQ) was used to measure emotional and psychological adjustment of the participants. Independent-samples t-test were utilized to compare attachment and emotional and behavior problems between the two schools. Significant mean differences were found in the VASQ score of the two schools with those from low SES having a significantly higher mean (M=68.87, SD 7.81) compared to those from a middle SES (M= 65.38, SD 8.73),  $t(135)=2.47$ ,  $p=0.01$ . The combined mean VASQ score for both groups was 67.14 (SD 8.42). In terms of emotional and behavioral problems, the mean SDQ for those from low SES (M=16.53, SD 5.33) and middle SES (M= 14.99, SD 3.846), were not statistically different ( $t(134)=1.94$ ,  $p=0.05$ ). The combined mean SDQ score for both groups was 15.76 (SD 4.696). Table 4.3 provides the total and subscale means for the VASQ and SDQ.

Table 4.3: Comparison of Mean VASQ and Mean SDQ scores for Low SES and Middle SES (Independent t-tests)

	Combined		Low SES		Middle SES		Mean Difference	t-statistic
	Mean	SD	Mean	SD	Mean	SD	Low- Middle SES	
<b>VASQ</b>								
Insecurity	35.34	6.77	35.01	7.14	35.68	6.40	-0.66	t= -0.57, p=0.57
Proximity Seeking	31.80	5.97	33.86	5.14	29.71	6.05	4.15	t= 4.32, p<0.01
<i>Total VASQ</i>	<i>67.14</i>	<i>8.42</i>	<i>68.87</i>	<i>7.78</i>	<i>65.38</i>	<i>8.73</i>	<i>3.49</i>	<i>t=2.47, p=0.01</i>
<b>SDQ</b>								
Emotion	3.47	2.41	3.68	2.50	3.25	2.31	0.43	t= 1.05, p=0.30
Conduct	2.98	1.92	3.28	2.12	2.68	1.64	0.60	t= 1.85, p=0.07
Hyper	5.00	1.42	5.12	1.54	4.88	1.29	0.23	t= 0.96, p=0.34
Peer	4.32	1.39	4.47	1.45	4.18	1.32	0.23	t=1.23, p=0.22
Pro social	7.50	2.01	7.88	1.97	7.12	1.99	0.77	t= 2.27, p=0.02
<i>Total SDQ</i>	<i>15.76</i>	<i>4.70</i>	<i>16.53</i>	<i>5.33</i>	<i>14.99</i>	<i>3.85</i>	<i>1.54</i>	<i>t=1.94, p=0.05</i>

## 4.4 Attachment

### 4.4.1. Attachment status of participants

The attachment status of the participants was measured using the Vulnerable Attachment Scale Questionnaire (VASQ). Of the 137 participants, 10.2% reported normal attachment, while 89.9% reported high vulnerable attachment. The scale was also able to measure level of insecurity or mistrust and the degree of proximity seeking among the participants. 21.9% showed normal level of insecurity, while 78.1% showed high levels of insecurity. 19% showed normal degree seeking, while 81% showed high degree seeking behaviors. A one-way ANOVA was carried out, the only subscale whose difference between groups was statistically significant was Degree of proximity seeking with a  $F(1, 135) = 22.205, p = .000$ . See tables 4.4.

Table 4.4: Attachment status

	Combined	Low SES	Middle SES	P-value
	(N,%)	(N,%)	(N,%)	
Normal attachment (>56)	14 (10.2)	4 (5.8)	10 (14.7)	p = 0.086
High vulnerable attachment (<57)	123 (89.9)	65 (94.2)	58 (85.3)	
Normal level of insecurity (>29)	30 (21.9)	16 (23.2)	14 (20.6)	p = 0.715
High level of insecurity (<30)	107 (78.1)	53 (76.8)	54 (79.4)	
Normal degree of proximity seeking (>26)	26 (19.0)	3 (4.3)	23 (33.8)	p = 0.000
High degree of proximity seeking (<27)	111 (81.0)	66 (95.7)	45 (66.2)	

The attachment subscales were compared between schools. The differences suggest disparities that could be attributed to gaps in parental and guardian availability and different the socioeconomic background of the groups. In the Total vulnerable attachment score; from Low SES had a greater mean (68.87) than those from middle SES (65.38) indicating that participants from the middle SES had higher vulnerable attachment than those from low SES; Cohen’s effect size value ( $d = .42$ ) suggested a moderate significance. Low SES population also had a higher mean than those from middle SES in the Degree of proximity seeking sub-score, whose Cohen’s effect size value ( $d = .74$ ) suggested high practical significance.

Table 4.5: Effect size between schools

	Low SES	Middle SES	Cohen’s d	R
Total	68.87 (7.782)	65.38 (8.732)	0.4222	0.206
Level of insecurity	35.01 (7.142)	35.68 (6.401)	-0.099	-0.049
Degree of proximity seeking	33.86 (5.14)	29.71 (6.052)	0.739	0.347

#### 4.4.2 Attachment Styles

Attachment styles were also calculated. Out of the 137 participants, 58.4% had undefined attachment styles; 13.1 % were insecurely anxious while 28.5% were insecurely avoidant. Those from Middle SES showed higher percentage with defined attachment styles than those from low SES. See Table 4.6.

Table 4.6 Attachment Styles

	Insecure anxious style		Insecure avoidance style	
	n	%	n	%
Overall	18	13.14	39	28.47
<b>School</b>				
Low SES	6	8.69	12	17.34
Middle SES	12	17.65	14	20.59
<i>L - M</i>		8.96		3.25
<b>Gender</b>				
Male	13	18.06	23	31.94
Female	5	7.69	16	24.62
<i>Male - Female</i>		10.37		7.32

#### 4.5 Emotional and Behavioral Problems

The behavioral scores of the participants was measured using the Strength and Difficulties Questionnaire (SDQ). Of the 137 participants, total difficulties score; 70% reported normal punctuations, 25.7% showed borderline punctuations and 22.8% had abnormal punctuations, with  $t = 1.937$ ;  $p = 0.012$ . See tables 4.6 for the differences in subscale scores for the two groups.

Table 4.7: SDQ scores

	N(%) of children in Goodman's behavior bandings (Goodman, 1997)						T-test
	Low SES			Middle SES			
	Normal	Borderline	Abnormal	Normal	Borderline	Abnormal	
Emotional	49 (71)	12 (17.4)	8 (11.6)	55 (80.9)	7 (10.3)	6 (8.8)	t= 1.047, p = 0.301
Conduct	44 (63.8)	8 (11.6)	17 (24.6)	47 (69.1)	4 (20.6)	7 (10.3)	t =1.846; p = 0.11
Hyperactivity	43 (62.3)	13 (18.8)	13 (18.8)	50 (73.5)	9 (13.2)	9 (13.2)	t = 0.963; p = 0.104
Peer	13 (19.1)	41 (60.3)	14 (20.6)	19 (27.9)	38 (55.9)	11 (16.2)	t = .239; p = 0.308
Prosocial	59 (86.8)	4 (5.9)	5 (7.4)	57 (83.8)	3(4.4)	8 (11.8)	t = 2.268; p = 0.959
TDS	29 (42.6)	17 (25)	22 (32.4)	41 (60.3)	18 (26.5)	9 (13.2)	t = 1.937; p = 0.012

Table 4.8 Effect size between Low SES and Middle SES

	Low SES	Middle SES	Cohen's d	R
Emotional	3.68 (2.5)	3.25 (2.3)	0.18	0.9
Conduct	3.28 (2.1)	2.68 (1.64)	0.35	0.16
Hyperactivity	5.12 (1.5)	4.88 (1.29)	0.18	0.09
Peer	4.47 (1.6)	4.18 (1.31)	0.21	0.1
Prosocial	7.88 (2.0)	7.12 (2.0)	0.38	0.19
TDS	16.53 (5.3)	14.99 (3.9)	0.33	0.16

Table 4.9 Effect size between Study sample (n – 137) and British sample (n - 4228)

	Kenyan sample	British sample	Cohen's d	<i>r</i>
Emotional	3.5 (2.4)	2.8 (2.1)	0.41	0.2
Conduct	2.98 (1.9)	2.2 (1.7)	0.43	0.21
Hyperactivity	5 (1.4)	3.8 (2.2)	0.65	0.31
Peer	4.32 (1.4)	1.5 (1.4)	2.02	0.72
Prosocial	7.5 (2)	8.0 (1.7)	-0.27	-0.13
TDS	15.8 (4.7)	10.3 (5.2)	1.1	4.8

The difference in effect sizes among the two schools suggest small effect in relation to the means of the schools, which could mean that the differences between the two schools as suggested by the socio-economic factors may not be as significant as originally thought (See table 4.8). The difficulties of the study sample size was also compared to that of the British sample (Goodman, 1997). The differences suggest disparities that could be attributed to gaps in educational exposure and also difference socioeconomic factors. Peer subscale and the total difficulties score showed big difference as a large effect size was reported; 2.02 and 1.10 respectively showing that there is a substantial overlap between the two samples. The results suggest certain differences in the two samples. See Table 4.9.

The prosocial subscale, the higher the score the lesser the difficulties. The British sample had a better mean score than the Kenyan sample, meaning that the population could be having greater social support which could possibly add to their resilience. The Kenyan sample had a higher mean score in the Peer subscale than that of the British sample showing that the Kenyan sample had greater peer problems as opposed to the British sample.



#### **4.6 Association between Attachment Security and the Development of Emotional and Behavioral Problems**

The broad objective of the study was to investigate the relationship between attachment security and the emotional and psychological adjustment of adolescents. Literatures has shown that socio-demographic factors can influence both attachment security and the development of emotional behaviors in adolescence. A regression analysis was carried out determine which factors had significant casual; relationship with the development of emotional and behavioral problems. The results are shown in Table 4.10 and 4.11.

	Total Difficulty Score		Emotional symptoms		Conduct problems		Hyperactivity		Peer problems		Prosocial problems	
	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)
<b>School</b>												
A#												
B	0.53[0.26,1.07]	-	0.58[0.26,1.27]	-	0.79[0.38,1.6]	-	0.60[0.28,1.22]	-	0.61[0.27,1.35]	-	1.29[0.50,3.41]	-
Age	1.37[1.01,1.89]*	<b>1.39</b> <b>[1.01,1.94]*</b>	1.36[0.98,1.93]	-	1.22[0.9,1.67]	-	0.82[0.59,1.13]	-	0.84[0.59,1.18]	-	0.79[0.50,1.21]	-
<b>Gender</b>												
Female	2.62[1.29,5.44]*	<b>2.67[1.30,5.64]*</b>	3.40[1.50,8.15]*	2.36 [0.78,7.61]	1.17[0.57,2.38]	-	1.02[0.49,2.09]	-	0.73[0.33,1.61]	-	0.89[0.34,2.31]	-
Male#												
<b>Lives with</b>												
Guardians	2.41[0.92,6.46]	-	1.32[0.44,3.60]	-	1.6[0.61,4.12]	-	0.82[0.27,2.20]	-	3.14[0.84,20.49]	-	0.97[0.21,3.28]	-
Parents#												
<b>Religion</b>												
Christian	1.30[0.55,3.27]	-	1.65[0.61,5.28]	-	1.34[0.55,3.5]	-	1.97[0.77,5.72]	-	1.13[0.40,2.87]	-	2.48[0.65,16.3]	-
Muslim#												
<b>Drug use</b>												
Yes	1.14[0.48,2.67]	-	0.83[0.28,2.15]	-	1.13[0.46,2.65]	-	0.51[0.18,1.30]	-	0.90[0.36,2.51]	-	1.36[0.41,3.94]	-
No#												
<b>Experienced adversity in childhood</b>												
Yes	2.12[0.94,4.85]	-	2.71[1.12,6.61]*	3.14[0.93,11.27]	2.10[0.90,4.90]	-	1.55[0.65,3.62]	-	0.78[0.31,2.06]	-	0.45[0.07,1.88]	0.63[0.06,4.57]
Cannot say	1.00[0.32,2.90]	-	0.81[0.17,2.88]	1.05[0.18,4.91]	1.78[0.59,5.18]	-	1.67[0.55,4.83]	-	0.54[0.18,1.76]	-	3.72[1.08,12.4]*	0.69[0.03,7.36]
No#												
<b>Experienced sexual or physical violence in family</b>												
Yes	3.29[0.77,16.69]	-	2.24[0.44,9.74]	-	1.29[0.25,5.54]	-	2.42[0.54,10.73]	-	-	-	0.83[0.04,5.09]	-
Cannot say	3.95[0.37,86.50]	-	7.46[0.69,164.29]	-	4.31[0.40,94.34]	-	1.21[0.06,13.00]	-	-	-	-	-
No#												
<b>Feels that emotional needs are met by parents</b>												
Yes	0.91[0.42,1.99]	-	0.52[0.22,1.25]	-	1.50[0.68,3.42]	-	0.73[0.33,1.62]	1.13[0.41,3.21]	0.85[0.34,2.04]	-	0.53[0.17,1.58]	-
Cannot say	1.22[0.32,4.43]	-	1.14[0.27,4.29]	-	1.27[0.30,4.81]	-	0.16[0.01,0.91]*	0.26[0.01,1.72]	0.83[0.20,4.28]	-	0.95[0.13,4.58]	-
No#												
<b>Marital status of the parents</b>												
Married	2.20[0.31,43.99]	-	1.31[0.18,26.41]	-	0.75[0.12,5.92]	-	2.20[0.31,43.99]	-	1.81[0.23,11.56]	-	0.54[0.07,11.00]	-
Separated	1.33[0.09,34.66]	-	0.57[0.02,17.21]	-	0.21[0.01,3.09]	-	1.33[0.09,34.66]	-	-	-	1.33[0.09,34.66]	-
Divorced	1.33[0.09,34.66]	-	0.57[0.02,17.21]	-	0.21[0.01,3.09]	-	1.33[0.09,34.66]	-	2.00[0.17,25.23]	-	1.33[0.09,34.66]	-
Single#												

<b>Perceived parental relations</b>												
Unsupportive with lack of understanding	3.07[0.75,13.44]	-	3.88[0.86,16.69]	<b>6.15[1.41,30.48]*</b>	2.40[0.55,10.00]	-	2.27[0.56,9.85]	2.50[0.52,12.89]	1.17[0.26,8.28]	-	-	-
Quite neutral	2.45[0.76,7.99]	-	3.63[1.05,12.33]*	<b>1.55[1.01,8.95]*</b>	1.67[0.46,5.47]	-	0.73[0.19,2.40]	0.76[0.15,3.06]	1.22[0.34,5.82]	-	1.80[0.36,7.06]	-
Reasonable ok and amicable	0.49[0.07,2.06]	-	0.44[0.02,2.58]	0.23[0.01,1.62]	2.14[0.58,7.53]	-	0.16[0.01,0.92]*	0.18[0.01,1.04]	0.67[0.19,2.72]	-	1.32[0.19,6.02]	-
Supportive and loving#												
<b>Perceived relationship with mother</b>												
Never there when needed	2.18[0.94,5.07]	-	2.12[0.83,5.35]	-	3.22[1.38,7.68]*	<b>3.70 [1.52,9.32]*</b>	1.43[0.60,3.32]	-	1.90[0.72,5.64]	-	5.11[1.61,18.03]*	<b>5.96[1.02,47.00]*</b>
Always there when needed#												
<b>Perceived relationship with father</b>												
Never there when needed	1.40[0.58,3.42]	-	1.25[0.44,3.62]	-	1.99[0.80,5.16]	-	1.27[0.52,3.13]	-	1.06[0.41,2.73]	-	4.42[1.03,30.52]*	<b>7.77[1.17,157.48]*</b>
Always there when needed#												
<b>Level of Security</b>												
Normal	0.54[0.26,1.11]	-	0.44[0.18,0.99]*	<b>0.18[0.04,0.67]*</b>	0.36[0.16,0.77]*	<b>0.32[0.12,0.81]*</b>	0.63[0.29,1.31]	-	1.46[0.65,3.42]	-	0.72[0.25,1.90]	-
Vulnerable#												
<b>Level of proximity</b>												
Normal	0.51[0.23,1.08]	-	0.41[0.15,0.98]*	0.51[0.15,1.63]	0.85[0.40,1.78]	-	1.26[0.59,2.64]	-	0.88[0.39,2.05]	-	2.64[1.01,7.09]*	3.46[0.66,24.18]
High level #												

Table 4.10: Associations between behavioral problem subscales and insecure attachment indicators (plus socio – demographic characteristics):

Logistic regression estimates:

# - Reference level; CI – Confidence Interval; \* - Significant at 5%; UOR – Unadjusted odds ratio; AOR – Adjusted odds ratio

Abnormal emotional symptoms were significantly associated with less supportive maternal relations with AOR = 6.15, 95% CI 1.41-30.48 and paternal relations AOR = 1.55, 95% CI 1.01-8.95 and increased level of insecurity AOR=0.18, 95% CI 0.04 - 0.67.

Conduct problems were significantly associated with mother being unavailable whenever needed (AOR = 3.70, 95% CI 1.52 - 9.32) and increased level of insecurity (AOR = 0.32, 95% CI 0.12 - 0.81).

Increased prosocial problems were significantly associated with both mother AOR = 5.96, 95% CI 1.02 - 47.00 and father (AOR = 7.77, 95% CI 1.17-157.48) being unavailable whenever needed.

Overall total difficulty was related with being older and being a female with AOR = 1.39, 95% CI 1.01-1.94.

Table 4.11: Association between emotional symptoms and (conduct problems, hyperactivity, peer and prosocial problems)

	<b>TDS</b>	<b>Emotional</b>	<b>Conduct</b>	<b>Hyper</b>	<b>Peer</b>	<b>Prosocial</b>
	OR (95% CI)					
<b>VASQ score</b>	-	-	-	-	-	-
Abnormal	0.66 [0.17,2.10]	0.22 [0.01,1.17]	0.51 [0.11,1.73]	0.55 [0.12,1.86]	1.96 [0.50,13.03]	2.67 [0.67,9.11]
Normal#	-	-	-	-	-	-

OR – Odds ratio; # - reference level

## **5.0 DISCUSSION**

This study was carried out to establish the attachment patterns in adolescents, the prevalence of emotional and behavioral problems, as well as to examine the association between insecure attachment and the development of emotional and behavioral difficulties.

### **5.1 Attachment status**

According to the findings, 89.9% of the respondents were found to fall under the high vulnerable attachment, while 10.2% had normal attachment, showing us that socio-economic status does not have an influence on the attachment security of an individual. A study by Bakermans et al, (2003) between a white high SES and African-American Low SES sample found that SES was not a significant predictor of attachment security. In another study by Allen et al (2004), poverty appeared to be a predictor in relative decreases in security, as it is a risk factor that is likely to impinge on the adolescent's development within the family. It could be said that the stressors associated with poverty could most likely affect the adolescent's affect regulation while undermining the parent's capacity to provide support and comfort. The socio-economic status of an individual can therefore be seen as having the potential to overwhelm the adolescent while leaving them unable to get support from attachment figures (Allen et al, 2004).

It has been suggested that secure attachment, especially during adolescence may serve as a buffering system in the developmental stage of many internal and external pressures. Adolescents from this study, who perceived their parents as being less supportive were found to have increased prosocial problems, and these findings were supported by Voort A et al, (2014) who found that supportive and sensitive parenting in adolescence may protect them from developing inhibited behavior and internalizing behavior problems. Bannik et al (2013), in a similar population found that unfavorable parent-adolescent attachment at baseline was

related to increased risk of mental health problems at follow up as well. Secure attachment therefore can be said to enhance the individuals coping abilities, which they use to assess potentially stressful situations while evaluating their resources (e.g. parent-adolescent relationship) to handle the situation (Bannik et al, 2013).

## **5.2 Prevalence of emotional and behavioral problems**

Although results on the SDQ showed that those from low SES had higher emotional and behavioral difficulties than those from middle SES with means of 16.53 and 14.99 respectively; this was found to be similar in a study done by Maynard and Harding (2010) in a multi-ethnic British sample. Means of the total difficulty score on the SDQ were compared between the study sample and that of the British sample (Goodman, 1997), Cohen's effect size value ( $d = 1.1$ ) suggested high practical significance between the two groups, suggesting certain differences within the two samples. Another study focused on finding the difference in SDQ scores between cross-nationals, also found that SDQ symptom scores were so high in rural Yemen and India that the population mean of non-disordered children was comparable to that of children with a disorder in Britain (Goodman et al, 2012). The differences in scores between groups is therefore seen to be dependent on different multiple factors that have great influence; for example parental control, work burden of parents and reduced child support.

Overall those from low SES were found to have higher difficulties than those from the middle SES. Those from low SES had fewer participants showing difficulties in the pro-social subscale at 13.3%, with those from the middle SES having 16.2% suggesting that emotionally, they were better adjusted than those from middle SES. This could be because those from low SES backgrounds are found to have high support system. They also tend to live in densely populated areas which tends to create a sense of community for the individual. Further research is needed

to explore the different factors that can be considered risk or protective to the development of emotional and behavioral problems in adolescents.

### **5.3 Association between attachment status, socio-demographic factors and the development of emotional and behavioral problems**

This study's findings revealed an association between level of insecurity was found to be positively related with the development of emotional AOR 0.18[CI 0.04, 0.67] and conduct problems AOR 0.32[CI 0.12, 0.81] in the sample group. Security in attachment looks at the capacity of the adolescent to establish autonomy while maintaining relatedness in interactions between them and their parents and with their peers as well. A study by Allen et al (2008), found that the degree to which the adolescent maintained positive relationships with their parents, influenced their attachment security, which is in turn linked to the development of emotional and behavioral problems.

Degree of proximity seeking 81% indicated high degree of proximity seeking to 19% who reported normal degree seeking of the participants was clinically significant with  $F(1, 135) = 22.205, p = .000$  found that the utilization of emotional support and proximity from parents and peers was related to overall self-esteem, coping abilities and social competence. Even though the degree of proximity seeking was not found to have any relationship with the development of any emotional or behavioral difficulties in the study sample; studies have shown that the quality of attachment to parents was a significantly better predictor of adolescent wellbeing well-being (Paterson et al, 1994; Moretti and Peled, 2004).

Age was found to have a positive relationship to the development of emotional and behavioral difficulties with AOR=1.39, 95% CI 1.01-1.94]; showing that as the adolescents grow older, they become more vulnerable to the development of emotional and behavioral problems. This was found to be similar in a meta-analysis done by Hoeve et al, (2012) who found that the age of the participants moderated the link between attachment and delinquency: larger effect sizes

were found in younger than in older participants. A study by Allen et al, (2004), using an adolescent sample within the same range found that attachment insecurity increased with age. This could be used to explain different processes of stability and change in individual differences in the organization of the attachment system across adolescence.

Being a girl was found to be associated with the increased possibility of developing emotional and behavioral difficulties with AOR=2.67, 95% CI 1.30-5.64 among this sample. This was found to be similar to a study done in East London, to measure psychological distress in adolescents of different ethnicities, (Maynard and Harding; 2010).

The development of conduct problems in the study sample was found to be significantly associated with the child's perceived relationship with their mother. Showing that those who perceived their mother's as being unavailable as having a greater vulnerability at developing conduct problems than those who perceived their mother's as being always available when they are needed. A study by Freeze et al (2015) found that the boys with conduct disorder seemed to receive less care from the mother, and were more overprotected/over-controlled by the father, than the non-conduct disorder group. Research has shown that parenting style that the adolescent perceives influences their emotional and behavioral adjustment. Low care from one's parents increases one's vulnerability to insecure attachment patterns which then influences how they adjust to the situations they face.

Overall attachment insecurity was found to have increase in emotional and behavioral problems as consistent with literature associating attachment insecurity with externalizing behaviors at other points in a child's lifespan (Allen, et al, 1998; Allen et al, 2002; Sousa et al, 2011). This study therefore lends support to the notion that attachment insecurity increases the adolescents' vulnerability to the development of emotional and behavioral problems.



#### **5.4 Limitations of Study**

There are some limitations of the current study: First, the sample size was from an urban area and it was focused only on school-going children, therefore the results are not generalizable to a larger Kenyan population. Second, conducting attachment research in a Kenyan population sample maybe challenging because of the lack of well-validated measures. The attachment measure used may have had some limitations, for example taking into account different aspects of the attachment relationship that are unique to the African ethno-cultural setting, which could have given us a better understanding of attachment in our context.

#### **5.5 Conclusion**

This study sort to find out the influence attachment security has on the development of emotional and behavioral problems in our Kenyan context. Based on the findings of the study we are able to conclude that adolescents had high levels of insecure attachment, even though those from lower SES were seen to have higher attachment difficulties than those who come from middle SES. It was assumed that there are factors which them more vulnerable to developing emotional and behavioral difficulties than those from middle SES. Although the same could be said in reverse. It was seen that those from lower SES had better prosocial development than those from middle SES, which shows that they are more resilient than those from middle SES. This could show us that those who are considered high-risk are better adjusted to the harshness of life.

The findings showed us that adolescence is a stage in which the child is undergoing a series of changes and that it is no surprise to find that it is associated with the onset or exacerbation of a number of health-related problems, including psychological issues. The study did not capture many aspects such as parental control, peer influence; that would have helped shed better light on attachment and the influence it has on the developing adolescent.

## **5.6 Recommendations**

From the findings of this study it is therefore recommended that:

- The Ministry of Health to develop programs aimed at sensitizing parents and caregivers on the importance of parent roles and attachment, so as to mediate development of psychopathology in children and adolescents. That parents be educated on how to relate and respond to the needs of their children, as it has an impact on their emotional and psychological well-being.
- The development of school mental health programs, with the specific aim at addressing emotional and conduct related needs and difficulties of the students.
- Early screening for those with vulnerable attachments and in high-risk families for psychological disorders.

## **5.7 Future Research**

The area of attachment relationships in the Kenyan, or African context has not been tapped into, thereby leaving many opportunities for future research. There is first and foremost critical need to develop reliable, valid instruments that measure the quality of individual attachment relationships. This will help us to advance our knowledge about attachment specifically in our context.

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**Study title: LINKING ATTACHMENT INSECURITY TO INCREASED CONDUCT AND BEHAVIORAL PROBLEMS IN ADOLESCENTS**

My research is based on the emotional tie between mother and child and also with the father, and the impact it has on a child’s emotional adjustment and engagement in delinquent behaviors. The aim this research is to find out if there is a casual link between the adolescent’s attachment status and development of conduct and problem behaviors.

Kindly answer the following three questionnaires: one on general socio-demographic background, a strength difficulties questionnaire and an attachment questionnaire – Vulnerable Attachment Style Questionnaire.

Thank you.

**Appendix 1: SOCIO-DEMOGRAPHIC QUESTIONNAIRE**

Date:.....

School code: .....

**A. PERSONAL INFORMATION**

1. School A/B
2. Age .....
3. Date of Birth .....
4. Gender
  - Male
  - Female
5. Where do you currently reside?  
.....
6. Who do you live with?
  - Parents
  - Guardian
7. If you answered “Guardian” on No. 7 above, please specify their relationship to you?  
.....
8. Religious affiliation
  - Christian/Catholic
  - Christian/Non-catholic
  - Muslim
  - Hindu
9. What recreational activities do you engage in when you are not in school? (List them if they are many).  
.....  
.....  
.....
10. Have you ever used drugs?
  - Yes
  - No
11. If ‘yes’ in No. 10, please tick which substances you have used?
  - Alcohol
  - Cigarettes

- Cannabis/Bhang
- Other drugs (Cocaine, Heroin, Inhalants)
- 12. Who introduced you to the drugs?
  - Friends
  - Family
  - Other person? If yes, who?.....
- 13. Have you experienced a number of traumas or adversities in your childhood?
  - Yes
  - No
  - Cannot say
- 14. Have you experienced sexual or physical violence in your family?
  - Yes
  - No
  - Cannot say
- 15. Have you experience with serious or long lasting health conditions personally?
  - Yes
  - No
  - Cannot say
- 16. If 'yes' in 15, which condition?.....
- 17. Do you feel your emotional everyday needs are met well by your parents?
  - Yes
  - No
  - Cannot say

**B. PARENTAL INFORMATION**

- 18. Marital status of parents:
  - Married
  - Separated
  - Divorced
  - Never married
- 19. Do you feel that your parents are happy with no another?
  - Yes
  - May be not sure
  - May not be not sure
  - No
- 20. Perceived parental relations
  - Supportive and loving
  - Reasonably okay and amicable
  - Quite neutral
  - Unsupportive with lack of understanding
- 21. Have your parents had any experience with serious or long lasting health conditions?
  - Yes
  - No
  - Cannot say
- 22. If 'yes' in 20, which condition?.....
- 23. Have you seen either of your parents with other partners?
  - Yes
  - No
  - Cannot say

**C. MOTHER'S INFORMATION**

- 24. Educational background
  - Primary school
  - Secondary education
  - Tertiary education
    - Bachelors
    - Masters
    - Doctorate
  - No education
- 25. Employment Status: Are they currently...?
  - Employed
  - Self-employed
  - Out of work and looking for work
  - Out of work but not currently looking for work
  - A homemaker
  - A student
  - Military
  - Retired
  - Unable to work
- 26. What is your mother's profession? .....
- 27. Please report on estimated income
  - Under Ksh. 10,000
  - Between Ksh. 10,000 – 50,000
  - Between Ksh. 50,000 – 100,000
  - Above Ksh. 100,000
- 28. How do you perceive your relationship with your mother?
  - She is never available when needed
  - She is sometimes available when needed
  - She is always available when needed

**D. FATHER'S INFORMATION**

- 29. Educational background
  - Primary school
  - Secondary education
  - Tertiary education
    - Bachelors
    - Masters
    - Doctorate
  - No education
- 30. Employment Status: Are they currently...?
  - Employed
  - Self-employed
  - Out of work and looking for work
  - Out of work but not currently looking for work
  - A homemaker
  - A student
  - Military
  - Retired
  - Unable to work
- 31. What is your father's profession? .....

32. Please report on estimated income  
 Under Ksh. 10,000  
 Between Ksh. 10,000 – 50,000  
 Between Ksh. 50,000 – 100,000  
 Above Ksh. 100,000
33. How do you perceive your relationship with your father?  
 He is never available when needed  
 He is sometimes available when needed  
 He is always available when needed

**E. SIBLING INFORMATION**

34. How many siblings do you have? .....
35. How do you perceive your relationship with them?  
 They never available  
 They are sometimes available  
 They always available
36. Do you get along with them?  
 Yes  
 Sometimes  
 No
37. Have your siblings had any experience with serious or long lasting health conditions?  
 Yes  
 No  
 Cannot say
38. If ‘yes’ in 33, which condition?.....

*If you answered “Guardian” in No. 7, please answer questions 25-29.*

**F. GUARDIAN’S INFORMATION**

39. Educational background  
 Primary school  
 Secondary education  
 Tertiary education  
 Bachelors  
 Masters  
 Doctorate  
 No education
40. Employment Status: Are they currently...?  
 Employed  
 Self-employed  
 Out of work and looking for work  
 Out of work but not currently looking for work  
 A homemaker  
 A student  
 Military  
 Retired  
 Unable to work
41. What is your guardian’s profession? .....
42. Please report on estimated income  
 Under Ksh. 10,000  
 Between Ksh. 10,000 – 50,000

Between Ksh. 50,000 – 100,000

Above Ksh. 100,000

43. How do you perceive your relationship with your guardian?

He/she is never available when needed

He/she is sometimes available when needed

He/she is always available when needed

#### **G. PARTNER INFORMATION**

44. Are you in a relationship?

Yes

No

Cannot say

Don't want to share

45. How do you perceive your relationship with your partner?

He/She is never available when needed

He/She is sometimes available when needed

He/She is always available when needed

46. If yes in '44' above, is your relationship with your partner free of violence and abuse?

Yes

No

**Appendix 2: STRENGTH AND DIFFICULTIES QUESTIONNAIRE** (Goodman, 1999)

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your School .....

Male/Female

	<b>Not true</b>	<b>Somewhat true</b>	<b>Certainly true</b>
I try to be nice to other people. I care about their feelings	[ ]	[ ]	[ ]
I am restless, I cannot stay still for long	[ ]	[ ]	[ ]
I get a lot of headaches, stomach-aches or sickness	[ ]	[ ]	[ ]
I usually share with others (food, games, pens etc.)	[ ]	[ ]	[ ]
I get very angry and often lose my temper	[ ]	[ ]	[ ]
I am usually on my own. I generally play alone or keep to myself	[ ]	[ ]	[ ]
I usually do as I am told	[ ]	[ ]	[ ]
I worry a lot	[ ]	[ ]	[ ]
I am helpful if someone is hurt, upset or feeling ill	[ ]	[ ]	[ ]
I am constantly fidgeting or squirming	[ ]	[ ]	[ ]
I have one good friend or more	[ ]	[ ]	[ ]
I fight a lot. I can make other people do what I want	[ ]	[ ]	[ ]
I am often unhappy, down-hearted or tearful	[ ]	[ ]	[ ]
Other people my age generally like me	[ ]	[ ]	[ ]
I am easily distracted, I find it difficult to concentrate	[ ]	[ ]	[ ]
I am nervous in new situations. I easily lose confidence	[ ]	[ ]	[ ]
I am kind to younger children	[ ]	[ ]	[ ]
I am often accused of lying or cheating	[ ]	[ ]	[ ]
Other children or young people pick on me or bully me	[ ]	[ ]	[ ]
I often volunteer to help others (parents, teachers, children)	[ ]	[ ]	[ ]
I think before I do things	[ ]	[ ]	[ ]
I take things that are not mine from home, school or elsewhere	[ ]	[ ]	[ ]
I get on better with adults than with people my own age	[ ]	[ ]	[ ]
I have many fears, I am easily scared	[ ]	[ ]	[ ]
I finish the work I'm doing. My attention is good	[ ]	[ ]	[ ]



### Appendix 3: VULNERABLE ATTACHMENT STYLE QUESTIONNAIRE (VASQ)

Bifulco, A.; Mahon, J.; Kwon, H.; Moran, P.M. and Jacobs, C. (2003).

Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about close relationships. Write the number in the space provided, using the following rating scale:

1	2	3	4	5
<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Unsure</i>	<i>Agree</i>	<i>Strongly Agree</i>

1. I take my time getting to know people.
2. I rely on others to help me make decisions.
3. People let me down a lot.
4. I miss the company of others when I am alone.
5. It's best not to get too emotionally close to other people.
6. I worry a lot if people I live with arrive back later than expected.
7. I usually rely on advice from others when I've got a problem.
8. I feel uncomfortable when people get too close to me.
9. People close to me often get on my nerves.
10. I feel people are against me.
11. I worry about things happening to close family and friends.
12. I often get into arguments.
13. I am clingy with others.
14. I look forward to spending time on my own.
15. I like making decisions on my own.
16. I get anxious when people close to me are away.
17. I feel uneasy when others confide in me.
18. I find it hard to trust others.
19. Having people around me can be a nuisance.
20. I feel people haven't done enough for me.
21. It's important to have people around me.
22. I find it difficult to confide in people.

**Cheo Utafiti: KUSHIRIKIANA KUKOSEKANA KWA USALAMA NA KUONGEZKA KWA MAADILI NA MATATIZO KWA VIJANA**

Utafiti wangu unanagalia uhusiano kati ya mama na motto, na pia na baba, na athari inaypo juu ya hisia marekebisha ya mtoto na ushiriki katika tabia mbaya. Lengo utafiti huu ni kujua kama kuna uhusiano kati ya uhusiano hii kwa vijana na maendeleo ya mwenendo na matatizo ya tabia.

Tafadhali jibu maswali katika dodoso zifuatayo.

Asante.

**Kiambatisho 1: DODOSO YA KIJAMII NA IDADI YA WATU**

**A. TAARIKA BINAFSI**

1. Shule .....
2. Miaka .....
3. Tarehe ya kuzaliwa .....
4. Jinsia  
     Kiume  
     Kike
5. Unaishi wapi? .....
6. Unaishi na nani?  
     Mzazi  
     Mlezi
7. Kama ulijibu “Mlezi” kwa No. 7 hapo juu, tafadhali eleza uhusiano wako nao?  
.....  
.....  
.....
8. Madhebu ya dini  
     Mkristo/Katoliki  
     Mkristo/Si Katoliki  
     Kiislamu  
     Kihindi
9. Unashughulika katika burudani gani wakati hauko shuleni?  
.....  
.....  
.....  
.....
10. Je, umewahi kutumia madawa ya kulevya?  
     Ndio  
     La
11. Kama 'ndiyo' katika No 10, tafadhali Jibu ambayo vitu una kutumika?  
     Pombe  
     Sigara  
     Bhangi  
     Dawa nyingine (Cocaine, Heroine, Inhalants)
12. Nani amabaye alikuanzisha madawa y akulevya?  
     Marafiki  
     Familia  
     Mtu mwingine? Kama ndiyo, nani?.....
13. Je, uzoefu wa idadi ya majeraha na maafa katika utoto wako?  
     Ndio

- La  
 Siwezi sema  
 14. Je, uzoefu na unyanyasaji wa kijinsia au kimwili katika familia yako?  
 Ndio  
 La  
 Siwezi sema  
 15. Je, uzoefu wowote na hali mbaya au kwa muda mrefu afya ya kudumu binafsi?  
 Ndio  
 La  
 Siwezi sema  
 16. Kama 'ndiyo' katika 15, hali gani?.....  
 17. Je, unajisikia kama wazazi wako wanakutana vizuri sana na mahitaji yako hisia ya kila siku?  
 Ndio  
 La  
 Siwezi sema

## **B. HABARI YA WAZAZI**

18. Hali ya ndoa ya wazazi:  
 Ndoa  
 Kinachotenganishwa  
 Talaka  
 Kamwe ndoa  
 19. Je, waona kuwa wazazi wako ni furaha pamoja?  
 Ndio  
 Mei kuwa na uhakika  
 Mei si kuwa na uhakika  
 La  
 20. Unaona aje mahusiano ya wazazi?  
 Mkono na upendo  
 Sawa nay a kirafiki  
 Si mzuri na si mbaya  
 Ukosefu wa ufahamu kati yao  
 21. Je, wazazi wako yoyote amewahi kudumu kwa muda mrefu afya masharti?  
 Ndio  
 La  
 Siwezi sema  
 22. Kama ndio kwa 20, hali gani?.....  
 23. Je, umeona wazazi wako na wapenzi wengine?  
 Ndio  
 La  
 Siwezi sema

## **C. HABARI YA MAMA**

24. Elimu  
 Shule ya msingi  
 Elimu y asekindari  
 Elimu ya juu  
 Bachelors  
 Masters

- Udaktari
- Bila elimu
- 25. Hali ya ajira:: Je wao ...?
  - Walioajiriwa
  - Kujiajiri
  - Kati ya kazi na kutafuta kazi
  - Kati ya kazi lakini kwa sassa hawatafuti kazi
  - Mke nymbani
  - Mwanafunzi
  - Jeshi
  - Mstaafu
  - Hawezi fanya kazi
- 26. Taaluma ya mama yako ni nini? .....
- 27. Tafadhali ripoti juu ya makadirio ya mapato yake?
  - Chini ya Ksh. 10,000
  - Kati ya Ksh. 10,000 – 50,000
  - Kati ya Ksh. 50,000 – 100,000
  - Juu ya Ksh. 100,000
- 28. Unaona aje uhusiano kati yako na mama yako?
  - Yeye hapatikani anapohitajika
  - Yeye hupatikana wakati mwingine anapohitajika
  - Yeye hupatikana anapohitajika

**D. HABARI YA BABA**

- 29. Elimu
  - Shule ya msingi
  - Elimu yasekondari
  - Elimu ya juu
    - Bachelors
    - Masters
    - Udaktari
  - Bila elimu
- 30. Hali ya ajira:: Je wao ...?
  - Walioajiriwa
  - Kujiajiri
  - Kati ya kazi na kutafuta kazi
  - Kati ya kazi lakini kwa sassa hawatafuti kazi
  - Mke nymbani
  - Mwanafunzi
  - Jeshi
  - Mstaafu
  - Hawezi fanya kazi
- 31. Taaluma ya baba yako ni nini? .....
- 32. Tafadhali ripoti juu ya makadirio ya mapato yake?
  - Chini ya Ksh. 10,000
  - Kati ya Ksh. 10,000 – 50,000
  - Kati ya Ksh. 50,000 – 100,000
  - Juu ya Ksh. 100,000
- 33. Unaona aje uhusiano kati yako na baba yako?
  - Yeye hapatikani anapohitajika
  - Yeye hupatikana wakati mwingine anapohitajika

Yeye hupatikana anapohitajika

**E. TAARIFA YA NDUGU**

34. Je, una ndugu wangapi? .....

35. Unaona uhusiano baina yako nao kwa aje?

Wao hawapatikani wanapohitajika

Wao hupatikana wakati mwingine wanapohitajika

Wao hupatikana wanapohitajika

36. Je, unapatana nao?

Ndio

Wakati mwingine

La

37. Je, ndugu yako yoyote amekuwa ana shida kubwa au kudumu kwa muda mrefu hali ya afya?

Ndio

La

Siwezi sema

38. Kama ndio kwa No. 33, hali gani?.....

***Kama ulijibi "Mlezi" kwa No. 7, tafadhali jibu maswali 25-29.***

**F. HABARI YA MLEZI**

39. Elimu

Shule ya msingi

Elimu yasekondari

Elimu ya juu

Bachelors

Masters

Udaktari

Bila elimu

40. Hali ya ajira:: Je wao ...?

Walioajiriwa

Kujiajiri

Kati ya kazi na kutafuta kazi

Kati ya kazi lakini kwa sasa hawatafuti kazi

Mke nymbani

Mwanafunzi

Jeshi

Mstaafu

Hawezi fanya kazi

41. Taaluma ya mlezi yako ni nini? .....

42. Tafadhali ripoti juu ya makadirio ya mapato yake?

Chini ya Ksh. 10,000

Kati ya Ksh. 10,000 – 50,000

Kati ya Ksh. 50,000 – 100,000

Juu ya Ksh. 100,000

43. Unaona aje uhusiano kati yako na mlezi wako?

Yeye hapatikani anapohitajika

Yeye hupatikana wakati mwingine anapohitajika

Yeye hupatikana anapohitajika

**G. TAARIFA YA MPENZI**

44. Je, ukokatika uhusiano?

Ndio

la

Siwezisema

Sitaki kusema

45. Jinsi gani unaona uhusiano wako na mpenzi wako?

Yeye hupatikani anapohitajika

Yeye hupatikana wakati mwingine anapohitajika

Yeye hupatikana anapohitajika

46. Kama ndio katika '44' hapo juu, uhusiano wako na mpenzi wako huru ya vurugu na unyanyasaji?

Ndio

La

## Kiambatisho 2: MASWALI YA UWEZO NA UGUMU

Kwa kila swali, tafadhali weka alama ya sio kweli, kweli kiasi, hakika kweli. Itatusaidia kama utaweza kujibu maswali yote kadri wako. Tafadhali jibu ukizingatia hali yako katika kipindi cha miezi sita iliyo pita.

Jina .....

Mvulana/Msichana

	<b>Sio Kweli</b>	<b>Kweli Kiasi</b>	<b>Hakika kweli</b>
Najali hisia za wengine	[ ]	[ ]	[ ]
Situlii, siwezi tulia mahali moja kwa muda mrefu	[ ]	[ ]	[ ]
Mara kwa mare nalalmika kuumwa na kichwa, tumbo na kutapika	[ ]	[ ]	[ ]
Mimi hugawa kwa urahisi vitu vyangu na watoto wengine	[ ]	[ ]	[ ]
Mimi hukasirika mara kwa mara na ninahasira kali	[ ]	[ ]	[ ]
Kwa kawaida mimi huwa pekee yangu, ninacheza pekee yangu	[ ]	[ ]	[ ]
Kwa kawaidamimi ni mtiifu, nafanya ninachoambiwa na watu wazima	[ ]	[ ]	[ ]
Mimi huwa na wasiwasi wa vitu vingi	[ ]	[ ]	[ ]
Mimi husaidia mtu kama ana huzuni au mgonjwa	[ ]	[ ]	[ ]
Ninapoketi, huwanajinyongoa, mikono yangu haitulii na huwa nashikashika vitu	[ ]	[ ]	[ ]
Nikona rafiki wa karibu	[ ]	[ ]	[ ]
Mara kwa mara maramimi hupigana na watoto wenzangu, kuwa chokoza na kuwaonea.	[ ]	[ ]	[ ]
Mara kwa mara sina furaha na ninamachozi ya karibu	[ ]	[ ]	[ ]
Kwa kawaida nina pendwa na watoto wenzangu	[ ]	[ ]	[ ]
Ni rahisi kwangu kupoteza mweleko na kupoteza makini haraka	[ ]	[ ]	[ ]
Mimi huwa muoga katika mazingira mapya	[ ]	[ ]	[ ]
Mimi huwa mkarimi kwa watoto wadogo	[ ]	[ ]	[ ]
Mara kwa mara watu husema mimi ni mdanganyifu	[ ]	[ ]	[ ]
Watoto wenzangu kunichokoza na kunionea	[ ]	[ ]	[ ]
Mara kwa mara mimi hujitolea kuwasaidia wengine (wazazi, walimu, watoto wenzangu)	[ ]	[ ]	[ ]
Mimi hufikiria kabla kuamua kufanya jambo	[ ]	[ ]	[ ]
Mimi huiba nyumbani, shuleni na sehemu nyingine	[ ]	[ ]	[ ]
Kwa kawaida mimi huelewana na watu wazima kuliko watoto wenzangu	[ ]	[ ]	[ ]
Mimi huogopa vitu vingi kwa urahisi	[ ]	[ ]	[ ]
Mimi humaliza kazi ninayopewa na makini ya kutosha	[ ]	[ ]	[ ]

### **Kiambatisho 3: MASWALI YA UHUSIANO**

Tafadhali soma kila mojawapo ya kauli zifuatazo na kiwango cha kiwango ambacho unaamini kila kauli kinaelezea hisia zako juu ya uhusiano wa karibu. Kuandika idadi katika nafasi iliyotolewa, kwa kutumia zifuatazo binafsi wadogo

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<i>Si kubali kabisa</i>	<i>Si kubali</i>	<i>Sijui</i>	<i>Na kubali</i>	<i>Nakubali kabisa</i>

1. Mimi kuchukua muda kujuana na watu.
2. Mimi kuwategemea wengine kufanya maamuzi.
3. Watu huwa na tama kwangu sana.
4. Mimi hutamani kampuni ya wengine wakati mimi niko peke yake.
5. Ni bora kupata pia kihisia karibu na watu wengine
6. Mimi huwa na wasiwasi sana kama watu ninaoishi nao huwasili nyuma baadaye kuliko ilivyotarajiwa.
7. Mimi kawaida wanategemea kupata ushauri kutoka kwa watu wengine wakati nimepata tatizo.
8. Mimi sipendi wakati watu hupata karibu sana na mimi.
9. Watu waliokaribu na mimi mara nyingi hunikasirisha.
10. Mimi huona kama watu wakinionea.
11. Mimi huwa na wasiwasi juu ya mambo yanayotokea kwa familia na marafiki.
12. Mimi mara nyingi kupata ndani ya hoja.
13. Mimi hupenda kuwa na watu wengine sana.
14. Natarajia kutumia muda wangu mwenyewe.
15. Mimi hupenda kufanya maamuzi yangu mwenyewe.
16. Mimi hupata wasiwasi wakati watu huwa karibu na mimi.
17. Mimi huwa na wasiwasi wakati wengine huweka tumaini ndani yangu.
18. Ni vigumu kwangu kuamini wengine.
19. Kuwa na watu karibu yangu inanikero.
20. Najisikia watu hawajafanya kutosha kwa ajili yangu.
21. Ni muhimu kuwa na watu karibu yangu.
22. Mimi ni vigumu kwangu kupata tumaini katika watu.



## **Appendix 4: CONSENT EXPLANATION FOR PARENTS AND GUARDIANS**

### **Study Title: LINKING ADOLESCENT ATTACHMENT INSECURITY TO INCREASED CONDUCT AND BEHAVIORAL PROBLEMS IN ADOLESCENTS**

#### **Introduction**

My name is Grace Wambua; I am a final year Clinical Psychology, Masters student. The connection between child and parent has been identified as a protective factor for engagement in different high risk behaviors and development of various mental health problems further in life. My research is based on the emotional tie between mother and child and also with the father, and the impact it has on a child's emotional adjustment and engagement in delinquent behaviors.

The aim of my research is to find out if there is a casual link between the adolescent's attachment status and development of conduct and problem behaviors. Does one's attachment status protect them from problems? Your child will answer three questionnaires: one on general socio-demographic background, a strength difficulties questionnaire and an attachment questionnaire – Vulnerable Attachment Style Questionnaire.

#### **Benefits**

Upon presenting results of the study in the Department of Psychiatry (University of Nairobi), both participating schools will be informed and offered open-talk/presentation about implications of study results for improvement of child-parent relationships (parental sensitivity and parent-child attachment for transitional age). Participated and none-participated children and their parents will be welcomed.

#### **Risks**

There are no anticipated risks. However, interviews might elicit some unpleasant or traumatic memories. In such a case, the child will be debriefed after the interview and will be referred for psychiatric/psychological assistance at Kenyatta National Hospital, Mental Health Department.

#### **Compensation mechanism if any**

There will be no compensation for those who participate in the study.

#### **Voluntarism**

The participation is voluntary.

#### **Confidentiality**

The information collected about your child will be collected and stored in accordance with the Data Protection Act.

All data collected for this study will remain anonymous and confidential. Your child's name will only appear on the consent form, which will be kept separate from all data collected. It is possible that data from this study will be used in subsequent studies, but will remain anonymous.

Researchers' contact details will be made available to you should you wish to contact us with any questions about the research.

#### **Follow up schedules if applicable/expected time in the study**

The duration of the child’s interview will be approximately one hour. Questionnaires will be administered in mutually acceptable time after consultation with Principal and class teachers in order to ensure that child’s classroom time is protected.

**Information about research investigators:**

<b>Principal Investigator</b>	<b>Supervisor</b>	<b>Supervisor</b>
Grace Nduku Wambua (2 <sup>nd</sup> year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 722 161183 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr. Manasi Kumar Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr. Ann Obondo Senior Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-184-96-86 E-Mail: <a href="mailto:nnobondo2@gmail.com">nnobondo2@gmail.com</a>

**Information on the KNH/UON/ERC in case they need to contact the committee:**

UNIVERSITY OF NAIROBI HOSPITAL COLLEGE OF HEALTH SCIENCES P.O. BOX 19676 Code 00202 Telegrams: varsity (254-020) 2726300 Ext 44355 MEDSUP, Nairobi	KENYATTA NATIONAL P.O. BOX 20723 Code 00202 KNH/UON-ERC Email: <a href="mailto:uonknh_erc@uonbi.ac.ke">uonknh_erc@uonbi.ac.ke</a> Website: <a href="http://www.uonbi.ac.ke">www.uonbi.ac.ke</a>	Tel: 726300-9 Fax: 725272 Telegrams:
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Link: [www.uonbi.ac.ke/activities/KNHUoN](http://www.uonbi.ac.ke/activities/KNHUoN)

**Comment or Concerns during the Study**

If you have any comments or concerns you should discuss these with the Principal Researcher. If you wish to go further and complain about any aspect of the way you have been approached or treated during the course of the study, you should contact Researcher’s Supervisors or email the Chair of the KNH/UON/ Ethics Research Committee ([uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke)) who will take complaint forward as necessary.

Thank you for considering your child’s participation in this study, a copy of this form and the signed consent form will be made available for you to keep.

This study has been approved by the Kenyatta National Hospital/ University of Nairobi – Ethics and Research Committee

## **Kiambatisho 4: MAELEZO KUHUSU KIBALI CHA UTAFITI KWA WAZAZI NA WALEZI**

### **UTAFITI JUU YA USALAMA KATIKA MALEZI MIONGONI MWA KUONGEZEKA UHABA WA MWENENDO NA TABIA MATATIZO KWA VIJANA**

#### **Utangulizi**

Jina langu ni Grace Wambua, mwanafuzi katika chuo kikuu cha Nairobi. Uhusiano kati ya mtoto na mzazi imetambuliwa kama sababu ya kinga kwa kushiriki katika tabia mbalimbali na maendeleo ya magonjwa ya akili katika maisha. Utafiti wangu ni msingi uhusiano huu kati ya mama na mtoto na pia kwa baba, na athari katika maendeleo ya juu ya matatizo ya tabia

Lengo la utafiti wangu ni kujua kama kuna uhusiano kati ya kawaida kati vijanai na maendeleo ya mwenendo na matatizo ya tabia. Je, moja ya hali ya usalama katika malezi, kuwalinda kwa matatizo? Mtoto wako atajibu maswali tatu moja juu ya ujumla ya kijamii na idadi ya watu, matatizo ya nguvu dodoso na Uhusiano Sinema dodoso.

#### **Hatari**

Hakuna hatari kutarajia.

#### **Kujitolea kushiriki**

Watakaoshiriki watashiriki katika mahojianowatafanya hivyo kwa hiari yao na na iwapo mhusika atakosa kushiriki hakuna adhabu yoyote itakayotolewa au kuathirika kwa vyovyote vile. Mhusika pia ana uhuru wa kujiondoa katika kushiriki kwenye mahojiano wakati wowote bila kuadhibiwa au kuathirika kwa vyovyote vile.

#### **Siri**

Habari zitakazokusanywa kuhusu mtoto fulani zitakusanywa na kuhifadhiwa kulingana na Sheria inayodhibiti Utunzaji wa Data kwa njia ya Siri.

Data yoyote kutokana na utafiti huu itashughulikiwa bila kuwataja wahusika na kwa siri. Jina la mtoto wako litatokea tu katika fomu ya kibali, na ambayo itawekwa mbali na habari zilizokusanywa. Kuna uwezekano kuwa data kutokana na utafiti huu itatumika katika tafiti za baadaye, lakini wahusika hawatatambulishwa.

Anwani ya mtafiti itatolewa kwako ikiwa utaihitaji katika kuuliza maswali yoyote yanayohusiana na utafiti huu.

#### **Utaratibu utakaofuatwa ikiwa patahitajika/muda utakaotumika katika kukusanya habari.**

Muda utakaohitajika kumhoji kila mtoto unakadiriwa kuwa dakika 30 hadi saa moja. Mahojiano yatafanywa wakati unaofaa kutokana na makubaliano kati ya mtafiti na Mwalimu Mkuu na mwalimu wa darasa ili kuhakikisha kwamba muda wa mwanafunzi wa kuwa darasani hauathiriwi. Panapohitajika kila mhusika atapewa ushauri baada ya mahojiano ili kuhakikisha kuwa hakuna athari zozote hasi zilizoibuliwa na mahojiano

#### **Habari kuhusu Mtafiti na Wasimamizi**

<b>Mtafiti</b>	<b>Msimamizi I</b>	<b>Msimamizi II</b>
Grace Nduku Wambua (2nd year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya	Dr Manasi Kumar Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya	Dr Anne Obondo Senior Lecturer, University of Nairobi

Tel: + 254 72-216-11-83  
E-Mail: [maiden.ndush@gmail.com](mailto:maiden.ndush@gmail.com)

Tel: +254 71-737-96-87  
E-Mail: [manni\\_3in@hotmail.com](mailto:manni_3in@hotmail.com)

Department of Psychiatry,  
College of Health Sciences,  
University of Nairobi, Kenya  
Tel: +254 72-732-99-04  
E-Mail: [nnobondo2@gmail.com](mailto:nnobondo2@gmail.com)

### **Habari kuhusu KNH/UON/ERC ikiwa utahitaji usaidizi wowote**

UNIVERSITY OF NAIROBI  
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COLLEGE OF HEALTH SCIENCES  
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Website: [www.uonbi.ac.ke](http://www.uonbi.ac.ke)

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Telegrams: MEDSUP, Nairobi

Link: [www.uonbi.ac.ke/activities/KNH/UoN](http://www.uonbi.ac.ke/activities/KNH/UoN)

### **Maoni au mapendekezo wakati wa Utafiti**

Ikiwa una maoni au mapendekezo yoyote unaweza kumfahamisha mtafiti. Ikiwa una malalamiko zaidi kuhusu jinsi mtafiti alivyotekeleza kazi yake, unaweza kuwafahamisha wasimamizi wa utafiti huu au Mwenyekiti wa KNH/UON/ERC (Kamati inayoshughulika na Maadili ya Utafiti) kupitia anwani au barua pepe hii: [uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke). Hawa watashughulikia malalamiko hayo inavyotakikana.

Utahitajika kuweka sahihi katika kibali hiki kisha utapewa nakala moja uweke kama ithibati.

Shukrani kwa kumruhusu mtoto wako ashiriki katika utafiti huu.

Utafiti umeidhinishwa na Hospitali Kuu ya Kenyatta/Chuo Kikuu cha Nairobi – Kamati inayoshughulikia Maadili ya Utafiti.

**Appendix 5: CONSENT FORM FOR PARENTS AND GUARDIANS**

**Study Title: LINKING ADOLESCENT ATTACHMENT INSECURITY TO INCREASED CONDUCT AND BEHAVIORAL PROBLEMS IN ADOLESCENTS.**

**CONSENT FORM for Parents and Guardians.**

I have read the details of this study which were made available to me in the Consent Explanation for Parents and Guardian and all my questions and concerns were addressed by researcher.

I (Name/ resident of).....  
am willing to assist in this research by allowing my child (Name)  
.....  
..... (Age) ..... from  
..... school, to participate in the study after he/she  
will give their verbal assent. I give consent for my child to be interviewed and to be administered the questionnaires.

Signature of the Guardian/Parent

Date:

Place and Address:

**Information about the research investigators:**

<b>Principal Investigator</b>	<b>Supervisor</b>	<b>Supervisor</b>
Grace Nduku Wambua (2 <sup>nd</sup> year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 722 161183 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr. Manasi Kumar Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr. Ann Obondo Senior Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-184-96-86 E-Mail: <a href="mailto:mnobondo2@gmail.com">mnobondo2@gmail.com</a>

## **Kiambatisho 5: FOMU YA KIBALI CHA UTAFITI KWA WAZAZI AU WALEZI**

**Jina: UTAFITI JUU YA USALAMA KATIKA MALEZI MIONGONI MWA KUONGEZEKA UHABA WA MWENENDO NA TABIA MATATIZO KWA VIJANA**

### **FOMU YA KIBALI kwa ajili ya Wazazi au Walezi**

Nimesoma maelezo ya utafiti huu ambayo inapatikana katika Fomu ya kibali kwa wazazi/walezi, na maswali yangu yote na wasiwasi walikuwa kushughulikiwa na mtafiti.

Mimi (Jina) ..... (Unapoishi) .....  
nakubali kushiroki katika utafiti huu kwa kumruhusu motto wangu kwa jina  
..... (Miaka) ..... (Fomu / Shule) .....  
..... ashiriki katika mahojiano ya utafiti huu. Mimi kutoa  
idhini kwa mtoto wangu kuhojiwa na kuwa unasimamiwa maswali.

Sahihi ya Mzazi/ Mlezi

Tarehe

Mahali na mitaani

### **Habari kuhusu Mtafiti na Wasimamizi wake**

<b>Mtafiti</b>	<b>Msimamizi I</b>	<b>Msimamizi II</b>
Grace Nduku Wambua (2nd year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 72-216-11-83 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr Manasi Kumar Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr Anne Obondo Senior Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-732-99-04 E-Mail: <a href="mailto:nnobondo2@gmail.com">nnobondo2@gmail.com</a>

## **Appendix 6: ASSENT EXPLANATION FOR STUDENTS**

### **Study Title: LINKING ADOLESCENT ATTACHMENT INSECURITY TO INCREASED CONDUCT AND BEHAVIORAL PROBLEMS IN ADOLESCENTS.**

#### **Introduction**

My name is Grace Wambua, I am a final year Clinical Psychology, Masters student. The connection between child and parent has been identified as a protective factor for engagement in different high risk behaviors and development of various mental health problems further in life. My research is based on the emotional tie between mother and child and also with the father, and the impact it has on a child's emotional adjustment and engagement in delinquent behaviors.

The aim of my research is to find out if there is a casual link between the adolescent's attachment status and development of conduct and problem behaviors. Does one's attachment status protect them from problems? Your child will answer three questionnaires: one on general socio-demographic background, a strength difficulties questionnaire and an attachment questionnaire – Relationship Style Questionnaire.

#### **Benefits**

Upon presenting results of the study in the Department of Psychiatry (University of Nairobi), both participating schools will be informed and offered open-talk/presentation about implications of study results for improvement of child-parent relationships (parental sensitivity and parent-child attachment for transitional age). Participated and non-participated children and their parents will be welcomed.

#### **Risks**

There are no anticipated risks. However, interviews might elicit some unpleasant or traumatic memories. In such a case, the child will be debriefed after the interview and will be referred for psychiatric/psychological assistance.

#### **Compensation mechanism if any**

There will be no compensation for those who participate in the study.

#### **Voluntarism**

The participation is voluntary.

#### **Confidentiality**

The information collected about you will be collected and stored in accordance with the Data Protection Act.

All data collected for this study will remain anonymous and confidential. Your name will only appear on the assent form, which will be kept separate from all data collected. It is possible that data from this study will be used in subsequent studies, but will remain anonymous.

Researchers' contact details will be made available to you should you wish to contact us with any questions about the research.

#### **Follow up schedules if applicable/expected time in the study**

The duration of the interview will be approximately one hour. Questionnaires will be administered in mutually acceptable time after consultation with Principal and class teachers in order to ensure that your classroom time is protected.

**Information about research investigators:**

<b>Principal Investigator</b>	<b>Supervisor</b>	<b>Supervisor</b>
Grace Nduku Wambua (2 <sup>nd</sup> year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 722 161183 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr. Manasi Kumar Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr. Ann Obondo Senior Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-184-96-86 E-Mail: <a href="mailto:nnobondo2@gmail.com">nnobondo2@gmail.com</a>

**Information on the KNH/UON/ERC in case they need to contact the committee:**

UNIVERSITY OF NAIROBI	KENYATTA NATIONAL	
HOSPITAL		
COLLEGE OF HEALTH SCIENCES	P.O. BOX 20723 Code 00202	
P.O. BOX 19676 Code 00202	KNH/UON-ERC	Tel: 726300-9
Telegrams: varsity	Email: <a href="mailto:uonknh_erc@uonbi.ac.ke">uonknh_erc@uonbi.ac.ke</a>	Fax: 725272
(254-020) 2726300 Ext 44355	Website: <a href="http://www.uonbi.ac.ke">www.uonbi.ac.ke</a>	Telegrams:
MEDSUP, Nairobi		

Link: [www.uonbi.ac.ke/activities/KNHUoN](http://www.uonbi.ac.ke/activities/KNHUoN)

**Comment or Concerns during the Study**

If you have any comments or concerns you should discuss these with the Principal Researcher. If you wish to go further and complain about any aspect of the way you have been approached or treated during the course of the study, you should contact Researcher's Supervisors or email the Chair of the KNH/UON/ Ethics Research Committee ([uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke)) who will take complaint forward as necessary.

Thank you for considering your child's participation in this study, a copy of this form and the signed consent form will be made available for you to keep.

This study has been approved by the Kenyatta National Hospital/ University of Nairobi – Ethics and Research Committee



## **Kiambatisho 6: MAELEZO KUHUSU KIBALI CHA UTAFITI KWA WANAFUNZI**

### **UTAFITI JUU YA USALAMA KATIKA MALEZI MIONGONI MWA KUONGEZEKA UHABA WA MWENENDO NA TABIA MATATIZO KWA VIJANA**

#### **Utangulizi**

Jina langu ni Grace Wambua, mwanafuzi katika chuo kikuu cha Nairobi. Uhusiano kati ya mtoto na mzazi imetambuliwa kama sababu ya kinga kwa kushiriki katika tabia mbalimbali na maendeleo ya magonjwa ya akili katika maisha. Utafiti wangu ni msingi uhusiano huu kati ya mama na mtoto na pia kwa baba, na athari katika maendeleo ya juu ya matatizo ya tabia

Lengo la utafiti wangu ni kujua kama kuna uhusiano kati ya kawaida kati vijana na maendeleo ya mwenendo na matatizo ya tabia. Je, moja ya hali ya usalama katika malezi, kuwalinda kwa matatizo? Mtoto wako atajibu maswali tatu moja juu ya ujumla ya kijamii na idadi ya watu, matatizo ya nguvu dodoso na Uhusiano Sinema dodoso.

#### **Hatari**

Hakuna hatari kutarajia.

#### **Kujitolea kushiriki**

Watakaoshiriki watashiriki katika mahojianowatafanya hivyo kwa hiari yao na na iwapo mhusika atakosa kushiriki hakuna adhabu yoyote itakayotolewa au kuathirika kwa vyovyote vile. Mhusika pia ana uhuru wa kujiondoa katika kushiriki kwenye mahojiano wakati wowote bila kuadhibiwa au kuathirika kwa vyovyote vile.

#### **Siri**

Habari zitakazokusanywa kuhusu mtoto fulani zitakusanywa na kuhifadhiwa kulingana na Sheria inayodhibiti Utunzaji wa Data kwa njia ya Siri.

Data yoyote kutokana na utafiti huu itashughulikiwa bila kuwataja wahusika na kwa siri. Jina la mtoto wako litatokea tu katika fomu ya kibali, na ambayo itawekwa mbali na habari zilizokusanywa. Kuna uwezekano kuwa data kutokana na utafiti huu itatumika katika tafiti za baadaye, lakini wahusika hawatatambulishwa.

Anwani ya mtafiti itatolewa kwako ikiwa utaihitaji katika kuuliza maswali yoyote yanayohusiana na utafiti huu.

#### **Utaratibu utakaofuatwa ikiwa patahitajika/muda utakaotumika katika kukusanya habari.**

Muda utakaohitajika kumhoji kila mtoto unakadiriwa kuwa dakika 30 hadi saa moja. Mahojiano yatafanywa wakati unaofaa kutokana na makubaliano kati ya mtafiti na Mwalimu Mkuu na mwalimu wa darasa ili kuhakikisha kwamba muda wa mwanafunzi wa kuwa darasani hauathiriwi. Panapohitajika kila mhusika atapewa ushauri baada ya mahojiano ili kuhakikisha kuwa hakuna athari zozote hasi zilizoibuliwa na mahojiano

#### **Habari kuhusu Mtafiti na Wasimamizi**

<b>Mtafiti</b>	<b>Msimamizi I</b>	<b>Msimamizi II</b>
Grace Nduku Wambua (2nd year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya	Dr Manasi Kumar Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya	Dr Anne Obondo Senior Lecturer, University of Nairobi

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E-Mail: [manni\\_3in@hotmail.com](mailto:manni_3in@hotmail.com)

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College of Health Sciences,  
University of Nairobi, Kenya  
Tel: +254 72-732-99-04  
E-Mail: [nnobondo2@gmail.com](mailto:nnobondo2@gmail.com)

### **Habari kuhusu KNH/UON/ERC ikiwa utahitaji usaidizi wowote**

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HOSPITAL  
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P O BOX 19676 Code 00202  
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Link: [www.uonbi.ac.ke/activities/KNH/UoN](http://www.uonbi.ac.ke/activities/KNH/UoN)

### **Maoni au mapendekezo wakati wa Utafiti**

Ikiwa una maoni au mapendekezo yoyote unaweza kumfahamisha mtafiti. Ikiwa una malalamiko zaidi kuhusu jinsi mtafiti alivyotekeleza kazi yake, unaweza kuwafahamisha wasimamizi wa utafiti huu au Mwenyekiti wa KNH/UON/ERC (Kamati inayoshughulika na Maadili ya Utafiti) kupitia anwani au barua pepe hii: [uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke). Hawa watashughulikia malalamiko hayo inavyotakikana.

Utahitajika kuweka sahihi katika kibali hiki kisha utapewa nakala moja uweke kama ithibati.

Shukrani kwa kumruhusu mtoto wako ashiriki katika utafiti huu.

Utafiti umeidhinishwa na Hospitali Kuu ya Kenyatta/Chuo Kikuu cha Nairobi – Kamati inayoshughulikia Maadili ya Utafiti.

**Appendix 7: ASSENT FORM FOR STUDENTS**

**Study Title: LINKING ADOLESCENT ATTACHMENT INSECURITY TO INCREASED CONDUCT AND BEHAVIORAL PROBLEMS IN ADOLESCENTS.**

**ASSENT FORM for Students.**

I have read the details of this study which were made available to me in the Assent Explanation for students and all my questions and concerns were addressed by researcher.

I (Name)..... (Residence) .....  
(Age) ..... (Form/ School)..... am willing to assist in this research by assenting to participate in the study.

Signature of the Student

Date:

Place and Address:

**Information about the research investigators:**

<b>Principal Investigator</b>	<b>Supervisor</b>	<b>Supervisor</b>
Grace Nduku Wambua (2 <sup>nd</sup> year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 722 161183 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr. Manasi Kumar Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr. Ann Obondo Senior Lecturer University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-184-96-86 E-Mail: <a href="mailto:nnobondo2@gmail.com">nnobondo2@gmail.com</a>

## **Kiambatisho 7: FOMU YA KIBALI CHA UTAFITI KWA WANAFUNZI**

### **Jina: UTAFITI JUU YA USALAMA KATIKA MALEZI MIONGONI MWA KUONGEZEKA UHABA WA MWENENDO NA TABIA MATATIZO KWA VIJANA**

#### **Fomu ya Kibali kwa ajili ya Wanafunzi.**

Nimesoma maelezo ya utafiti huu ambayo inapatikana katika Fomu ya kibali kwa wanafunzi, na maswali yangu yote na wasiwasi walikuwa kushughulikiwa na mtafiti.

Mimi (Jina) ..... (Unapoishi) ..... (Miaka)  
..... (Fomu / Shule) ..... niko tayari kusaidia  
katika utafiti huu na kitendo hicho kushiriki katika utafiti.

Sahihi ya Mwanafunzi

Tarehe

Mahali na mitaani

#### **Habari kuhusu Mtafiti na Wasimamizi wake**

<b>Mtafiti</b>	<b>Msimamizi I</b>	<b>Msimamizi II</b>
Grace Nduku Wambua (2nd year MSc Student) Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: + 254 72-216-11-83 E-Mail: <a href="mailto:maiden.ndush@gmail.com">maiden.ndush@gmail.com</a>	Dr Manasi Kumar Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 71-737-96-87 E-Mail: <a href="mailto:manni_3in@hotmail.com">manni_3in@hotmail.com</a>	Dr Anne Obondo Senior Lecturer, University of Nairobi Department of Psychiatry, College of Health Sciences, University of Nairobi, Kenya Tel: +254 72-732-99-04 E-Mail: <a href="mailto:nnobondo2@gmail.com">nnobondo2@gmail.com</a>

## Appendix 8: TIME LINE

March - April 2014	Proposal Development
May 2014	Finalizing Individual Proposal, Proposal Presentation in Department of Psychiatry (UoN), Corrections
October 2014	Approval by KNH –UON Ethics Committee, Corrections
March 2015	Data collection
May – June 2015	Data analysis, report writing, results presentation
July 2015	Submission of report
July 2015	Results presentation in participating institutions

## Appendix 9: BUDGET

	<b>CATEGORY/ITEM</b>	<b>TOTAL COST FOR ITEMS (Kshs.)</b>
1	Charges for the KNH/UoN-ERC Proposal Review	2,000
2	For data collection purposes; stationery to input data in the questionnaires i.e. Pencils, Pens, Pencil sharpener, Erasers, Stapler, Storage boxes etc.	3,000
3	Operating expenses that may be incurred by the researcher: a) Input of data @ 2,000/= b) Report writing @ 2,000/= c) Transport costs @ 1,000 per week for 4 weeks	5,000
4	Hard copies of the Data Collection Tools for the participants - Strength and Difficulties Questionnaire - Vulnerability Attachment Style Questionnaire - Socio-demographic Questionnaire	6,000
5	For hard copies of the Consent and Assent Forms for the participants and their parents	2,000
6	a) Document printing and copying, b) Proposal copies (3copies) c) Copying and binding of the final research dissertation; (5 copies)	8,000
7	For efficient and accurate data analysis	20,000
	<b>Grand Total</b>	<b>46,000</b>

## Appendix 10: Ethics Approval Letter



UNIVERSITY OF NAIROBI  
COLLEGE OF HEALTH SCIENCES  
P O BOX 19676 Code 00202  
Telegrams: varsity  
(254-020) 2726300 Ext 44355

KNH/UON-ERC  
Email: [uonknh\\_erc@uonbi.ac.ke](mailto:uonknh_erc@uonbi.ac.ke)  
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KENYATTA NATIONAL HOSPITAL  
P O BOX 20723 Code 00202  
Tel: 726300-9  
Fax: 725272  
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/A/335

Link: [www.uonbi.ac.ke/activities/KNHUoN](http://www.uonbi.ac.ke/activities/KNHUoN)

7<sup>th</sup> October 2014

Grace Nduku Wambua  
Dept. of Psychiatry  
School of Medicine  
University of Nairobi

Dear Grace

**RESEARCH PROPOSAL: LINKING ATTACHMENT IN SECURITY TO INCREASED CONDUCT AND BEHAVIOURAL PROBLEMS IN ADOLESCENTS (P385/06/2014)**

This is to inform you that the KNH/UoN-Ethics & Research Committee (KNH/UoN-ERC) has reviewed and **approved** your above proposal. The approval periods are 7<sup>th</sup> October 2014 to 6<sup>th</sup> October 2015.

This approval is subject to compliance with the following requirements:

- a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
- b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH/UoN ERC before implementation.
- c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH/UoN ERC within 72 hours of notification.
- d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH/UoN ERC within 72 hours.
- e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
- f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
- g) Submission of an *executive summary* report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/or plagiarism.

For more details consult the KNH/UoN ERC website [www.uonbi.ac.ke/activities/KNHUoN](http://www.uonbi.ac.ke/activities/KNHUoN).

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Yours sincerely



**PROF.M.L. CHINDIA**  
**SECRETARY, KNH/UON-ERC**

- c.c.    The Principal, College of Health Sciences, UoN  
          The Deputy Director CS, KNH  
          The Chair, KNH/UoN-ERC  
          The Assistant Director, Health Information, KNH  
          The Dean, School of Medicine, UoN  
          The Chairman, Dept. of Psychiatry, UoN  
          Supervisors: Dr. Manasi Kumar, Dr. Anne Obondo

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