CONTEXTUAL INFLUENCE ON PSYCHOLOGICAL ADJUSTMENT OF PUPILS WITH LEARNING DISABILITIES IN INCLUSIVE PRIMARY SCHOOLS IN KISUMU EAST SUB COUNTY, KENYA

BY

CORNILA WANJA OBARE

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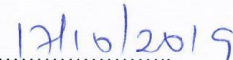
SCHOOL OF ARTS AND SOCIAL SCIENCES

MASENO UNIVERSITY

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DECLARATION

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CORNILA WANJA OBARE

MA/FA/00020/2014

17/10/2019
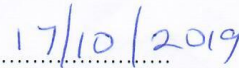
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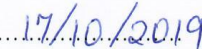
Dr. MARGARET DISIYE

Lecturer, Department of Psychology.

MASENO UNIVERSITY.

17/10/2019

DATE

....

Dr. MAUREEN WINGA

Lecturer, Department of Educational Psychology

MASENO UNIVERSITY

17/10/2019

DATE

DEDICATION

To

My late father

D.D. Obare Awora

A man who truly valued education.

A man who taught me to stand up for myself.

ACKNOWLEDGMENT

ABSTRACT

Learning disabilities (LDs) encompass a very extensive range of academic problems which can give rise to social and psychological problems. Apart from experiencing academic problems, pupils with LDs experience strong feelings of frustrations, sadness and shame as a result of repeated failure and this can lead to psychological difficulties. These psychological problems are experienced at home and at school and if not addressed they add to the burden of the condition and could find their way into adulthood. The purpose of this study was to establish contextual influence on psychological adjustment of pupils with LDs in inclusive primary schools. The study was guided by the following objectives: to find out the dimensions of psychological adjustment of pupils with LDs; to determine the influence of parent child relationships on pupils' psychological adjustment; to determine the influence of peer relationships on the psychological adjustment of pupils with LDs; to examine the influence of teacher pupil relationships on psychological adjustment of pupils with LDs. The study was carried out in Kisumu East Sub County which has relatively high number of inclusive primary schools in Kisumu County. The theoretical framework for the study was Self- Determination Theory by Deci and Ryan (1985). The study adopted mixed method research design and targeted pupils with LDs in the 10 inclusive primary schools in Kisumu East Sub County. Saturated sampling technique was used to select pupils with LDs while purposive sampling technique was used to select parents and special education teachers. The sample size was 116 which comprised of 96 pupils, 10 parents and 10 special education teachers. Questionnaires for the pupils and interview schedules for teachers and parents were used as data collection instruments. The instruments were validated by piloting. Test re-test and reliability analysis were done to establish reliability index of the questionnaire and internal consistency of items respectively. Quantitative data was analysed using SPSS version 22 and summarized using frequencies, mean and standard deviation. Inferential statistics used correlation and regression analysis. Content analysis was used for qualitative data. The study revealed that pupils with LDs had moderate measures of psychological adjustment. They suffer from depressive symptom, anxiety and anger problems, while their self-esteem is moderately high. Parent child relationship, peer relationship and teacher pupil relationship were found to have influence on psychological adjustment of pupils with LDs. It was concluded that relationships at home and at school are important for the psychological adjustment of pupils with LDs. The findings of this study are significant to parents, teachers and government. Among the recommendations were the Ministry of Education should mandate School Guidance and Counselling departments to develop programs to help pupils with LDs cope with the demands of life and thus be well adjusted. Peer counselling should be introduced and strengthened in inclusive primary schools to supplement the teacher counsellors' efforts.

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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Children experience personal, social, psychological, academic and career problems the world over (Chireshe, 2008). However, children with disabilities face unique problems, including restrictions in routine daily activities and participation, limited independence and coping with differences between themselves and their peers. In addition to the demands associated with typical development, these children must also cope with disability-specific stressors and, therefore, face increased psychological and physical demands associated with their diagnosis (Gerber & Puhse, 2008).

Children with Learning Disabilities (LDs) face a number of social, academic, and behavioral challenges inside and outside the classroom. To better understand the extent of these issues, a clear understanding of LDs is required. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the term Specific Learning Disabilities refers to difficulties in retaining and using skills in one or more areas of academics that arise during school-age years. This includes difficulties in the areas of reading, mathematics, or written expression, and often results in performance below what should be reasonably expected given a child's chronological age (American Psychiatric Association, 2013a).

While LDs are typically first noticed within the classroom, their consequences exceed the confines of the school environment. They begin in early childhood, a pivotal time in which many developmental tasks are achieved, and encompass many aspects of life. The presence of LDs can significantly hinder the attainment of many developmental skills that children are expected to master, influencing future success and achievement. For example, learning to read and write are critical academic milestones impaired for many children with LDs, which creates problems across different aspects of their lives (Gardiner & Kosmitzki, 2011). Further, according to Gerber and Puhse (2008), failure to achieve typical developmental tasks is experienced as stressful and can result in negative self-appraisals, which can have significant, long-lasting effects. To understand the problems posed by LDs, it is essential to understand the nature of their impact on psychological adjustment.

Psychological adjustment is considered to be a critical component of overall adaptation to disability. The challenges faced by children with LDs begin early and have the potential to serve as significant barriers to developing psychological well-being. The term psychological adjustment refers to self-acceptance, autonomy, healthy and positive relationships with others, mastery of tasks in the environment, personal growth, and purpose (Kahneman & Deaton 2010). Further, psychological adjustment, includes feeling in control, feeling supported, and having an overall sense of life satisfaction (Winefield, Gill, Taylor, & Pilkington, 2012). Authenticity and competence also play important roles in adaptive psychological functioning across situations, as does obtaining a high level of self-understanding (Kernis, 2003). Many pupils with LDs suffer from unfavorable self-perceptions, depressive symptoms, anxiety, and hence, poor psychological adjustment. This may be due to school failures that they experience, being labeled as having LDs, or due to other factors inherent in LDs.

Burden (2008) noted that society plays a role in identifying the traits that are of value within a given culture. In a society, where academic success and achievement are highly valued, it should come as no surprise that these values have been deeply engrained in children and place pressure on them to perform well. The increasing demand on academic performance may exceed a child's ability to cope. Therefore, as expectations for performance increase, so does the amount of stress experienced by the children with LDs. This stress can lead to exhaustion, which can progress into psychological distress, anxiety, depression, and suicidality (Compas & Reeslund, 2009). To further complicate these stressors, children are required to navigate challenging situations while the parents and teachers expect academic performance. LD, a hidden and unexpected handicap in a child with normal intelligence, presents a great parental stress and creates difficulties in the relationships between parents and children (Amerongen & Mishna, 2004).

Although socialization goals that parents of children with LDs hold have been rarely investigated, there is some evidence that the child's education is one of the most important goals (Russell, 2003). For example, Lithuanian parents of children (with and without LDs) have stressed success in achievement as one of the most significant expectations for their elementary school children (Barkauskiene, 2009). Having a strong relationship with a teacher

is a protective factor against the stressors associated with school. Unfortunately, children with LDs may have more negative relationships with teachers than their typically developing peers. Hornstra, Denessen, Bakker, van den Bergh, and Voeten (2010) posit that a label, such as Dyslexia, may cause some teachers to act differently toward these children, and to hold lower expectations for their academic and behavioral performance.

Lakhani (2006) asserted that the philosophy of inclusive education was a worldwide advocacy of provision of education to children with special needs in the mainstream schools, regardless of their abilities. Both developed and developing countries have been trying to implement the objectives of inclusive education. In an inclusive educational program, children with disabilities are placed in a setting with typically developing peers who can serve as same-aged models with whom they can interact and learn through a natural behavior modeling format (Grubbs and Niemeyer 1999). However, simply giving children with disabilities the chance to interact with typically developing peers often is not enough for meaningful interactions to occur.

Leonard Cheshire Disability project is running inclusive education programs in the 10 inclusive primary schools in Kisumu East Sub County. This project seeks to address the physical/economic and social barriers faced by children with disabilities in accessing primary education. To address these barriers, they strive to increase awareness, capacity, confidence and skills of service providers, especially teachers to respond to the needs of disabled children. They also work on improving awareness, engagement and commitment of families particularly parents to support the inclusion of disabled children in mainstream education (Leonard Cheshire Disability, 2017). The mitigation to these barriers is done through child-child clubs, capacity building of school authorities and parent support groups.

A growing body of research increasingly recognises the importance of addressing influence of school and family environment on academic development (Heiman & Berger, 2008; Barkauskiene, 2009; Bodovski & Youn, 2010; Kinyua 2008; Gateru, 2010). On the other hand, parent child relationship, peer relationship and teacher pupil relationship have been shown to have important impact on psychological adjustment of typical learning pupils (Rueger, Malecki & Demaray, 2010; Sarkova et al, 2014)). Few studies have investigated the influence of these variables on psychological adjustment of pupils with LDs. An

understanding of the role of these variables in a LDs population may have significant implication for psychological interventions. Parent child relationship, peer relationships and teacher pupil relationship are likely to be useful targets for programs aimed at enhancing psychological adjustment among pupils with LDs. However, prior to the utilization of these variables in such interventions, increased knowledge on their impact on psychological adjustment of pupils with LDs is needed. This study therefore sought to investigate the contextual influence on psychological adjustment of pupils with LDs in inclusive schools in Kisumu East Sub County.

1.2 Statement of the Problem

Children with LDs recognise the importance of school and often desire to be successful, making their frequent difficulties and feelings of failure all the more stressful and damaging. Further, when expectations from both the individuals and important people in their lives are high, feelings of inadequate performance can be experienced as stressful. The increase in demand to focus on academic achievement leaves little room for time or resources to be allocated to other aspects of the child's life. While all challenges faced by children are stressful, feelings of failure and inadequacy that stem from poor academic performance may have the greatest impact on their psychological adjustment. Children with LDs are a vulnerable population both inside and outside of the school environment, and it is essential to understand their experiences in order to provide them with the level of support that they need.

This study therefore sought to establish the contextual influence on psychological adjustment of pupils with LDs in inclusive primary schools in Kisumu East Sub County, Kenya.

1.3 Objectives of Study

The specific objectives of the study were as follows;

I) To find out the dimensions of psychological adjustment of pupils with LDs.

II) To determine the influence of parent child relationship on psychological adjustment of pupils with LDs.

III) To determine the influence of peer relationships on the psychological adjustment of pupils with LDs.

IV) To examine the influence of special education teachers on psychological adjustment of pupils with LDs in inclusive primary schools.

1.4 Research Questions

In order to achieve the objectives of the study, the research was guided by the following questions;

a) What are the dimensions of psychological adjustment of pupils with LDs?

b) What is the influence of parent child relationship on psychological adjustment of pupils' with LDs?

c) What is the influence of peer relationships on the psychological adjustment of learning disabled pupils?

d) What is the influence of special education teachers on psychological adjustment of learning disabled pupils in inclusive schools?

1.5 Research Hypothesis

The following three research hypotheses were examined during the study:

i) H_{01}:There is no statistically significant relationship between parent-child relationship and psychological adjustment of pupils with LDs

ii) H_{02}: There is no statistically significant relationship between peer relationships and psychological adjustment of pupils with LDs

iii) H_{03}: There is no statistically significant relationship between teacher-pupil relationship and psychological adjustment of pupils with LDs.

1.6 Scope of the Study

The study focused on contextual influence on psychological adjustment of pupils with LDs in inclusive primary schools in Kisumu East Sub County, Kenya. The study assessed the dimensions of psychological adjustment of pupils with LDs. It also looked at influence of parent, peer and teacher relationships on the psychological adjustment of pupils with LDs. The study confined itself to pupils with LDs in public inclusive primary schools who had undergone assessment at the Educational and Assessment Resource Centre (EARC), parents of pupils with LDs and special education teachers. The study was guided by Self-Determination Theory (Ryan & Deci, 1985). Mixed method research design was used whereby questionnaires were used to collect data from 96 pupils with LDs; while interview schedules were used to collect data from 10 special education teachers and 10 parents. It focused on pupils who live with at least one parent, at least one sibling and who had been in the current school for one year and above. The special education teachers had also taught in the school for more than one year. The researcher interviewed the parents to the pupils with LDs in the school compound during their weekly support group meetings.

1.7 Assumptions of the Study

This study was based on the assumption that the participants responded truthfully to the items in the research instruments.

1.8 Limitations of the study

The participants of this study were pupils with LDs, their parents and special education teachers of public inclusive primary schools in Kisumu East Sub County. Thus views of head teachers, regular teachers and school counselors were overlooked due to financial constraints and other logistics such as time. It was not possible to cover the opinions of typical learners because this would have required considerable time and resources.

1.9 Significance of the Study

The findings of this study are significant because psychological adjustment of children with LDs has not received much attention and it is an important aspect of children's development. The findings will provide useful insights on psychological adjustment of pupils with LDs. Therefore, this study is significant to parents, government, and teachers. Parents of pupils

with LDs will have better understanding of the impact of parent child relationships on their children and hence they will be helped to relate with their children appropriately. Special education teachers will be exposed to the impact of teacher pupil and peer relationships on the psychological adjustment of pupils with LDs and will see the need to foster healthy relationships with pupils in the classroom for positive adjustment of all, particularly pupils with LDs. The findings can also help teachers to strategise on ways to improve the psychological adjustment of pupils with LDs.

1.10 Theoretical Framework

This study was guided by Self-Determination Theory (SDT) which was developed by Edward L. Deci and Richard M. Ryan (Deci & Ryan, 1985). Research on SDT evolved in the 1970s from studies comparing the intrinsic and extrinsic motives, and from growing understanding of the dominant role intrinsic motivation played in individuals' behavior (Deci & Ryan, 1985). SDT is an organismic psychology which assumes that people are active organisms with inherent and deeply evolved tendencies toward psychological growth and development. The development of these tendencies and qualities is dependent upon the kind of support they receive from the socializing environments, which may promote or undermine their intrinsic motivation and internalization (Deci & Ryan, 2002; Soenens & Vansteenkiste, 2005).

A central tenet of SDT is that human beings have three basic psychological needs, namely, autonomy, competence, and relatedness (Deci & Ryan, 1985). Autonomy is about being volitional and self-endorsing in one's behaviour and having the control to make choices from one's own will. Competence refers to having the feeling of being able to effectively master challenging tasks within ones environment. Relatedness is about the need to achieve a sense of closeness, connectedness, and belongingness with others. SDT postulates that the satisfaction of the three basic psychological needs is pertinent for the optimal development and functioning of human persons (Bao & Lam, 2008). Studies have provided evidence that support for students' psychological needs for autonomy, competence, and relatedness facilitates autonomous self-regulated learning, academic performance, and well-being (Niemiec & Ryan, 2009).

According to Self Determination Theory, people need to feel competent, connected and autonomous in order to achieve psychological growth and well being. These three psychological needs are satisfied through the warmth, support, and nurturance provided by significant others, including teachers and parents (Deci & Ryan, 2012). Pupils with LDs face challenges at home and school and the concentration on academic performance affects parent child and teacher pupil relationships. This in turn interferes with the psychological needs satisfaction and thus lead to poor psychological adjustment. Pianta, Hamre, and Allen (2012) suggest that teacher-student relationships are the "media" through which psychological needs are met. It is hypothesised that teacher-family communication that promotes students' sense of competence and enhances their feelings of relatedness to the teacher or school, can foster higher levels of student motivation (Urdan, & Schoenfelder, 2006).

The Self Determination Theory tends to promote the element of relationships in a child's life. The theory therefore portends that the extent of basic psychological needs satisfaction determines the level of psychological growth and well being. The opportunity to experience stable relationships, responsibility, motivation, feelings of safety and positivity, as well as a sense of social relatedness, can have a powerful influence on the mental health of pupils (Bonny, Britto, Klostermann, Hornug, & Slap, 2000). This thus becomes an important foundation of psychological adjustment and promotes psychological wellbeing in children with LD.

The present study identified the three basic psychological needs in the Self Determination Theory as being important in the psychological adjustment of pupils with LDs. In line with the Self Determination Theory, the provision of conducive environment for psychological well being of children with LDs lies with the kind of relationships they have with significant others. The provision of conducive environment for psychological well being of pupils with LD would entail encouraging positive and supportive relationships with parents, teachers and peers. On the other hand, pupils with LDs would be aided to understand the kind of support that they receive from the environment as a way of promoting intrinsic motivation and internalization.

1.11 Operational Definition of Terms

Pupil: Defined as a child or young person who is learning under the close supervision of a teacher at school. This study confined itself to pupils in the 11-15 years age bracket.

Psychological adjustment: A term used to describe general feelings of well-being and satisfaction that pupils with LDs come to experience because of reduction of the stress of living with LDs. In this study it was conceptualized in terms of emotional and affective components comprising of depressive symptoms, anxiety, self esteem and anger.

Parent-child relationship: A term used to refer to the unique and enduring bond between a parent and his or her child. To understand this relationship, we look at the ways that parents and children interact with one another physically, emotionally, and socially. In this study, the interaction was conceptualized as comprising of parental support and parent-child communication.

Peer relationship: Defined as types and quality of social interactions among same-aged peers. In this study, the social interactions comprised of peer support and acceptance.

Teacher pupil relationship: Defined as positive interaction between teacher and pupil and is characterized by teacher acceptance and support in a school environment.

Typical Learners: Is a termed used to refer to children who have intellectual ability that would normally be seen in children of their age. The terms typical learners and normally achieving children were used interchangeably in this study.

Learning Disabilities: This is a term used to describe specific academic problems in one or more of the following areas: reading, writing, spelling, arithmetic, listening and speaking.

Inclusive Primary Schools: This is a term used to refer to primary schools open to all children including those with special needs in education.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This section contains review of research literature. It includes discussions and critique of opinions and studies done by other people in the area of pupils with LDs. The source of literature includes books, journals, theses and seminar papers. It is divided into five sections. These are;

a) Meaning of psychological adjustment.

b) Measures of psychological adjustment of pupils with LDs.

c) Parent child relationship and psychological adjustment of pupils with LDs.

d) Peer relationships and psychological adjustment of pupils with LDs

e) Special education teachers and psychological adjustment of pupils with LDs.

2.2 Meaning of Psychological Adjustment

The concept adjustment is closely related to adaptation and has been defined as changes which individuals' actively engender or passively accept in order to achieve or maintain satisfactory states within themselves. According to the American Psychological Association (2007) adjustment is defined as change in attitude, behaviour or both by an individual on the basis of some recognised need or desire to change. Psychological adjustment is therefore considered to be general feelings of well-being and satisfaction the individual comes to experience because of reduction of the stress in their everyday lives (Jackson et al, 2008). Psychological adjustment is considered to be a critical component of overall adaptation to disability. The challenges faced by children with LDs begin early on and have the potential to serve as significant barriers to developing psychological well-being.

The psychological adjustment of children with LDs has remained an area of interest for many years. This is because it reflects the outcome of children with LDs' ability to maintain a balance between the demands of stressful situations and the availability of personal and social resource to cope with these demands. This is to mean that if the demands of the environment such as growing up with LDs exceed the perceived resources such as supportive relationships needed to manage the circumstances, adjustment difficulties may occur. In

contrast, if there is congruence between the demands of the environment and the available resources, the child is more likely to cope adaptively with the experience and is likely to be well adjusted.

2.3 Measures of Psychological Adjustment among Pupils with LDs

Ward and Kennedy (1999) argued that psychological adjustment is defined in terms of emotional and affective outcomes. It has a number of mental health outcomes such as depressive symptoms, mood disturbances, general well-being and satisfaction with life. In assessing psychological adjustment among pupils with LDs, four indicators namely depressive symptoms, self-esteem, anxiety and anger were used in this study.

2.3.1Depressive Symptoms

Depression is a major psychological problem among young people and children with 11–18% of adolescents reporting at least moderate levels of depressive symptoms. Depressive symptoms include sad or depressed mood, loss of interest, feelings of worthlessness, helplessness, or hopelessness and sleep disorders (Yousefi, Mansor, Juhari, Redzuan & Talib, 2010). Researchers have consistently linked depression to children with LDs (Raghavan & Patel, 2005). There are many explanations why children with LDs might experience depression. Some children may not be able to tolerate the repeated frustration and failure they experience as a result of LDs. This discouragement, if not checked can lead to feelings of helplessness, inadequacy and hopelessness. Other children may internalize criticism from others and consequently develop self-hatred (Alexander-Passe 2006).

A comparative study was conducted on 35 dyslexic children in specialized school and 31 children without dyslexia in Switzerland. The findings suggest that global scores of depression appear to be the same for dyslexic children and the control group (Wydell & Pollak, 2012). In another study in the UK, Carroll, Maughan, Goodman, & Meltzer (2005) evaluated different internal and external problems in 68 girls and 221 boys from 11 to 15 years old with specific reading disabilities. Reading disabilities were associated with depressive mood in self-evaluation scores of adolescents. Although there was no association between dyslexia and depressive mood in girls, there was a strong correlation between depression and dyslexia in boys, especially younger ones. Carroll et al (2005) thus,

concluded that specific reading disabilities were associated with all the major psychiatric diagnosis except with depression where no relationship was found. No link between dyslexia and depression was found (Carroll et al, 2005). Results from research by Miller, Hynd, and Miller (2005) also found no significant difference in levels of depressive symptoms between dyslexic children and the normally achieving children. The above studies found no difference in depression levels between pupils with dyslexia and those without. They however point to the need to address LDs in general in a non comparative study.

2.3.2 Self-esteem

Self-esteem which is the ability to understand and accept-one's own feelings is an aspect of psychological adjustment. It has been defined as a form of self-evaluation of one's self-worth that guides future behaviour and action, which has major implications for the quality of a person's life (Boden, Fergusson, & Horwood, 2008). The well-adjusted person has an attitude toward self which includes acceptance of weakness and pride in strength. The frequent academic difficulties and negative feedback that children with LDs experience often contribute to negative beliefs and low self-esteem (Whelan, Haywood, & Galloway, 2007). Pupils with LDs are likely to see other pupils do things they cannot do and others may make critical comments to them. Teachers and parents may show at least some impatience and frustration at the pupils inability to understand or perform in the areas affected by their LDs. These pupils are likely to internalise their failures. This may result in feelings of inferiority to others and they may develop low self-esteem (Zastrow & Kirst-Ashman, 2013).

Children who experience problems in learning may develop maladaptive self-referential styles, in other words, they consistently refer to themselves in a negative way, and they also develop low levels of self-esteem (Humphrey, 2002). Low self-esteem may in turn lead to adjustment difficulties, substance abuse, depression, and suicide ideation (Saghatoleslami, 2005). Thus, some research has shown that having LDs can adversely affect self-concept and self-esteem as well as children's adjustment (Humphrey, 2002).

Analyses of a study by Alesi, Rappo, and Pepi (2012) suggested that children with LDs had lower ratings of self-esteem at school than did children whose learning was normal. The study was carried out on Grade 3 pupils with a mean age of 8 years. This corroborates the results of other studies that have demonstrated that people with LDs are more likely to

experience low self-esteem (LaBarbera, 2008). Additionally, Daderman, Nilvang and Levander (2014) studied self-esteem in adolescents and young women with dyslexia and found that young women with dyslexia had lower self-esteem than young women in the general population. The study was carried out in Sweden on a population with a mean age of 19 years. While results from these studies reveal similar results, there is a gap whereby pupils in other grades are not included and in one of the studies, boys were not included. Therefore, including pupils from class four to class eight in the study may yield different results.

2.3.3 Anxiety

Freedom from incapacitating anxiety and unrealistic fear is an important criterion of psychological adjustment. The combination of stresses likely to be encountered by children with LDs could result in increased anxiety. Children with LDs perform substantially lower than what is expected based on intelligence and age and previous studies suggest that these children are predisposed to social and emotional difficulties (Elksnin & Elksnin 2004; Forness, Walker, & Kavale, 2003; Kavale & Moster, 2004). Pupils with LDs experience higher levels of overall anxiety especially in school compared to their typical developing classmates. This is because they face many situations during the school day where they might experience learning problems. Heightened anxiety may also be related to a pupil's sense that things are beyond his/her control (Urdan, & Schoenfelder, 2006). Pupils with LDs may express their anxiety directly such as by doubting themselves. Anxiety can also be demonstrated indirectly through somatic complaints. Pupils who somaticise their anxiety are unaware that they are worried and instead only feel physical symptoms of anxiety such as headaches, stomachaches and fatigue (Urdan, & Schoenfelder, 2006).

Studies have concluded that children with LDs, when compared to typically developing peers, show higher levels of anxiety and helplessness (Sharma, 2004). Nelson and Harwood carried out a meta-analysis on 58 studies aimed at analysing anxious symptoms in students with LDs. They found that around 70% of pupils with LDs presented anxious symptoms. The review finds that there is evidence to suggest the presence of a significantly higher level of anxiety in children with LDs (Nelson & Harwood 2011).

A study by Chaudhary and Meghwal (2015) also found that children with LDs had very high levels of anxiety compared to the normally achieving children. Mammarella, Ghisi, Bomba, and Nacinovich (2014) studied anxiety and depression in children with nonverbal learning disabilities, reading disabilities and typically developing children. Results from the study by Mammarela et al (2014) recorded those children with nonverbal learning disabilities and reading disabilities had more anxiety compared to the typically developing children. Results from research by Miller et al (2005) conducted in the USA found no link between dyslexia and anxiety. The results of these comparative studies have shown different findings, although one studied specific learning disabilities while the other studied LDs in general. In this regard, the current study focused on LDs in general in inclusive primary schools.

2.3.4 Anger

Loescher (2006) defines anger as a strong emotion often characterized by feelings of great displeasure, indignation, hostility, wrath and vengeance. Anger is a frequent problem for many people with LDs and is often associated with verbal and physical aggression (Taylor & Novaco, 2005). Social scientists have frequently observed that frustration produces anger. Anger can also be a defensive response to underlying fear or feelings of vulnerability or powerlessness.

Failure experienced by pupils with LDs may result in excessive anger, which can be turned on others or back onto the child. People with LDs tend to express anger and aggression to even those who help them on a daily basis. Pupils with LDs experience anger at home and at school. First they are angry at their parents because the parents have high expectations of them. When the child wants sympathy because he/she has LD, the parent expects performance (Haller, 2001).

Pupils with LDs get angry at their peers too. Anger towards peers could be as a result of other pupils laughing at their mistakes. School work can be frustrating for the pupils with LD and they would rather not attempt. However, their teachers urge them not to give up and try harder. Unable to explain why the work is too hard, these children often get angry at the teachers. The most common source of interpersonal anger for people with LDs was the perception that they are being treated in a condescending manner. Furthermore, high levels of

exposure to negative life experiences such as stigmatization may fuel sense of disempowerment and dissatisfaction expressed by people with LDs (Emerson, 2005).

Another potential difficulty might be linked to a lack of autonomy. A defining feature of someone with LDs is that the person requires a great deal of support from others to manage in their everyday lives. In the event that the people with LDs feel that others are being controlling and restrictive, it may lead to feelings of anger and frustration.

A review of recent studies on aggressive challenging behaviour reported that over half the population with LDs display some form of aggression and anger is highly prevalent in people labeled as having challenging behavior (Benson & Brooks, 2008). Thus anger is an important component of psychological adjustment of pupils with LDs. While depression, self esteem and anxiety have been widely recognized as indicators of psychological adjustment and previous research has indicated that elevated levels of depressive symptoms, anxiety and low levels of self esteem are common in people with LDs, anger has not been widely studied. Including anger in this study therefore, may lead to a better understanding of anger as a dimension of psychological adjustment.

2.4 Influence of Parent-Child Relationship on Pupil's Psychological Adjustment

Parent- child relationships are generally believed to play a crucial role in shaping children's development and adjustment. Parental involvement and affection is a major factor in the emotional and social development of the child, which in turn affects the psychological self-assessment of the child. In relation to child development, it is important that children are raised in a supportive environment, with appropriate parenting and social support from others. The parent-child relationship can be viewed as being positive or conflictual (Pianta, 1992). Positive parent-child relationships are characterized by responsiveness, sensitivity, and availability. On the other hand, parents' conflictual relationships with their children are marked by low levels of sensitivity and availability. Parents' responsiveness consists of warm, accepting and affectionate behavior (Karreman, van Tuijl, van Aken, Dekovic, 2006; Spinrad et al, 2007).

Social scientists in general and psychologists in particular, largely agree that parent-child relationships play a crucial role in shaping children's development and adjustment. Research

literature shows evidence that the quality of both mother and father and child relationships remains the most reliable predictor of individual differences in psychological, social and cognitive adjustment in children (Lamb & Lewis, 2011; Thompson 2006). Parent-child relationships are significantly related to both children's and adolescents' levels of externalizing and internalizing behaviors. Specifically, children and adolescents with good parent-child relationships experience lower levels of depression (Demir, Karacetin, Demir, & Uysal, 2011).

In addition, close parent-child relationships increased children's and adolescents' self-esteem (Ackard, Neumark-Sztainer, Story, & Perry, 2006). Other studies show that family conflicts, hostility, and rejection have all been linked to a later diagnosis of depression, while deficits in family communication were also related to substance use, suicidality, depression, low self-esteem, and maladaptive eating patterns (Ghanizadeh & Shams, 2007). Yap, Pilkington, Ryan, and Jorm (2014) found that parental warmth, emotional support and autonomy granting reduce the risk of depression and anxiety. Thus targeting specific risk and protective factors that are within parents' control is likely to be effective in preventing depression and anxiety in children.

While recognising that both parents play significant roles in the nurturing and the raising of their children, there are conflicting findings on effects of mother child and father child relationships on the development and adjustment of children. Some studies have shown that mothers' relationships with children are more closely linked to children's mental health than relationships with fathers (Gryczkowski, Jordan, & Mercer 2010; Sandler, Miles, Cookston, & Braver, 2008). Branje, Hale III, Frijns, and Meeus (2010) reported significant findings regarding the parent-child relationship and depression. Branje et al (2010) indicated that relationship quality with mothers was a predictor of more depressive symptoms reported in adolescents. Relationship quality with fathers also predicted depressive symptoms, but only for boys. On the other hand, recent research suggests father-child relationships are as influential on children's and adolescents' mental health as mother-child relationships (Graziano, Bonino, & Catellino, 2009; Gryczkowski et al, 2010; Mallers, Charles, Neupert, & Almeida 2010). These studies were carried out on normally achieving and typically

developing children. The current study focused on parental relationships with children with LDs.

Several studies (Dyson, 1997; Cohen, 1999) indicate that mothers and fathers of school-age children with disabilities experience greater and more frequent stress because of their parenting demands than parents of children without disabilities. LD, a hidden and unexpected handicap in a child with normal intelligence, presents a great parental stress and creates difficulties in the relationship between parents and children (Amerongen & Mishna, 2004). Once a child has been diagnosed with LDs, the parents' main concern is usually on how to help the child improve in his/her academic performance. It appears that relentless focus on the child's academic failures can undermine family relationships and impact on the quality of the parent interactions with the child. Wiener (2003) suggests some parents may place such value on achievement that they are unable to accept the existence, extent of, or implications of their children's LDs. Even though they provide support for learning, their children may experience high levels of anxiety because they can never measure up to their parent's expectations.

Researches on parenting children with disabilities have focused on remediation programs, little research has focused on parent child relationships in relation to psychological wellbeing. The psychological adjustment of pupils with LDs is an important aspect of the pupils' development and the effects of poor psychological adjustment could have more devastating effects than academic failures. This study therefore focused on how parent-child relationships influence psychological adjustment of pupils with LDs.

Children with LDs need support as they come to terms with their disability. The value of parental support for children with LDs may lie in the quality of emotional support rather than practical support. Graziano et al (2009) examined the role of parental support on depressive feelings and social and academic self-efficacy. Data were collected from a sample of 1118 Italian students, aged 14 to 18 years, living in intact families, using a self-report questionnaire and ANOVAs were performed. Results indicated that high levels of perceived support from both parents were related to lower levels of depressive feelings and higher levels of social and academic self-efficacy. In another study, self-esteem was associated with family characteristics and routines as well as parent-child relationship quality. Thus children

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who perceive the presence of supportive family have high self-esteem and that an increase in the quality of parent child relationship is always paired with higher self-esteem among children (Lian & Yusoof, 2009). The above studies were carried out in Italy and Malaysia respectively. It was therefore necessary to carry out a study in Kisumu East Sub County, Kenya so as to ascertain whether cultural differences have influences on the findings. This makes it possible to generalize the findings to other Sub Counties in Kisumu County.

Shehu, Zhilla and Dervishi (2015) studied the impact of quality social relationships on self-esteem of children with dyslexia. Dyslexia is a specific learning disability. The data analysis identified a positive correlation between healthy parent-child relationship and high level of self-esteem in dyslexic children. Strong self-esteem is related to good psychological health. Dyslexia has a negative effect on self-esteem, but this effect depends on support levels at home and/or school. Those with dyslexia have a low self-esteem and try to protect or restore their vulnerable self-esteem in different ways, mostly by hiding, working hard, fighting back, or explaining their difficulties (Alesi et al*, 2012*; Singer, 2008). Shehu et al, (2015) and Alesi et al, (2012) focused on self esteem and dyslexia which is a specific LDs. The current study focused on depression, self esteem, anxiety and anger because conceptualizing psychological adjustment requires more than one dimension.

 Open parent–child communication is one aspect of good parent–child relationships that plays a critical role in maintaining the healthy function of the family system and children's development. One solution to the problem of negative self-concept and low self-esteem is positive and frequent family involvement. Ochoa, Lopez, and Emler (2007) found a link between open communication between parents and children's positive family self-concept, which in turn related to a positive academic self-concept. Bireda and Pillay (2017) found that parents would continue to influence children's psychological adjustment through their continuous interactions and quality of communication. The findings thus show that open communication with parents protects children from experiencing school adjustment problems, low self esteem and depression.

A study was conducted by Emam and Abu-Serei (2014) to investigate whether family functioning can predict the self-concept and self-esteem of normally achieving and at risk for

LDs students in Oman regardless of parent education level and gender status. A total of 259 elementary school students were selected which included 78 with LDs and normally achieving students 181. In addition, demographic data on parents' education levels (PEL) and gender were collected. The study specifically investigated whether family functioning dimensions of communication, cohesion, conflict, and social/recreational orientation can predict the self-concept and self-esteem of children regardless of PEL and gender status. Results showed that family functioning was a strong contributory factor of self-concept for both children with and without LDs although the two groups differed in terms of the significant family functioning predictors. Family functioning was a weak contributory factor of self-esteem in children with and without LDs. The study by Emam and Abu-Serei (2014) investigated both normally achieving pupils and pupils at risk of LDs and looked at four dimensions of family functioning. The current study focused on pupils with LDs and looked at dimensions of parental support which is missing in the above study and communication which though covered in the previous study focused on normally achieving pupils and those at risk for LDs.

Another study by Chohan and Khan (2010) revealed there is significant impact of parental support on the academic achievement as well as on the development of self-concept of the children. This study examines the impact of educational support given by the parents on the academic achievement and on the self-concept of grade 4 public school students. The data regarding parental support, its effects on the academic achievement and self-concept were collected from a sample of grade 4 students in the urban primary and elementary public schools. The sample students who have or have not parental support were compared on two measures, namely the annual school result report and the self-concept scale. For the study of self-concept of the students, Beck Youth inventory for self-concept (BSCI-Y) was adapted. The Beck Youth Inventories of Emotional and Social Impairment includes five self-report inventories used to assess anxiety, depression, anger, disruptive behavior, and self-concepts in children between the ages of 7 and 14 years old. The findings of this study revealed the significant impact of parental support on the academic achievement as well as on the development of self-concept of the children. The above study collected from grade 4 pupils and looked at educational support from parents. The current study focused on pupils with LDs from class four to class eight. It also focused on parental support and communication.

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The findings of the study by Chohan and Khan are in agreement with the study conducted by Rueger et al (2010) who found that there were significant associations between all sources of support with depressive symptoms, anxiety, self-esteem, and academic adjustment with parental support as a robust unique predictor of adjustment for both boys and girls. Moreover, Crockett et al (2007), in their study among Mexican American college students found that parental support and active coping buffered the effects of high acculturative stress on anxiety symptoms and depressive symptoms.

The research findings show that social support from parents are positively associated with children's psychological adjustment and that children with high parental support are better adjusted and less distressed than those with low parental support. Despite the many studies done on parent child relationships and psychological adjustment, there remains need to investigate this area as most of them have been carried out in Europe and America. The current study was carried out in Kisumu East Sub County, Kenya. For the purpose of this study, parent child relationship is conceptualized in terms of single and intact families comprising of parental support and parent child communication.

2.5 Influence of Peer Relationships on Psychological Adjustment.

The push behind inclusion from an educational and research standpoint came primarily from early research evidence that contact with typical or nondisabled peers was likely to increase the social, communication, and behavioral skills of students with disabilities. For instance, the amount of contact with students without disabilities has been shown to be associated with increases in social skills and reciprocal interactions, positive parental expectations and attitudes (Cole & Meyer, 1991), development of friendships and social support networks (Fryxell & Kennedy, 1995), and improved behavioral outcomes (Lee & Odom, 1996) for such students. The opportunity to interact with and learn from peers without disabilities has been shown to correlate with measures of self-esteem, social skills, positive affective and behavioral outcomes, and academic achievement for students with developmental disabilities (Alper & Ryndak, 1992).

Recent data shows that a growing number of parents have opted for regular education for their children with special needs, and the number of students with special needs attending

regular education has increased substantially in recent decades (Ferguson, 2008). Parents often name academic advantages as positive benefits of their child's regular school placement. However, parents' main motive for sending their child with special needs to a regular school and blocking referral to a special school seems to be the increased social opportunities for the child. They hope their child can build positive relationships with typically developing peers in their neighbourhood school (Frederickson, Dunsmuir, Lang, & Monsen, 2004). The move to integrate children with LDs into regular education classrooms has however not necessarily led to them becoming accepted by their peers without LDs.

Children's relationships with peers have long been considered to play an important role in their development. Children with LDs may develop psychological problems because of the social difficulties they often experience. They may have social difficulties such as making and keeping friends (Kavale & Forness 1996). Children with LDs may also be less accepted, and rejected by their peers. Such social rejection can result in loss of self-esteem and negative views of oneself. In addition, social rejection can result in feelings of loneliness, which, in turn, may lead to psychological difficulties such as anxiety and depression (Dyson, 2003). Peer relations are vital for healthy social development and are strong predictors of emotional and adult adjustments (Gresham, Sugai, & Horner, 2001). Many researchers have suggested that LDs may negatively affect a child's psychological functioning because the disabilities influence the child's ability to develop positive interpersonal relationships. A substantial body of evidence suggests that children with LDs are more likely to have few friendships, experience more peer rejection, and have deficits in social cognition that result in an inability to read social cues and correctly interpret the feelings of others (Hallahan, Kauffman, & Pullen, 2009; Murray & Greenberg, 2006). In this study, peer relationships were investigated with an aim of understanding how they influence psychological well being of pupils with LDs.

Research results indicate that children with LDs are less accepted by peers, and they are at greater risk for loneliness and depression than the children without LDs (Guralnick, Neville, Hammond, & Connor, 2007). Thus, it is postulated that the combination of LDs and low peer acceptance would increase the likelihood of the development of psychological adjustment problems. Recently, researchers (Hallahan et al 2009; Weiner, 2003) have theorized how

negative peer treatment may result in psychosocial maladjustment. This negative peer treatment may contribute to negative self-appraisals and selective avoidance of social interactions. Such social isolation may reduce the victims' exposure to positive peer relationships and interfere with the development of healthy interpersonal skills and self-esteem (Storch & Ledley 2005). It is therefore clear that peer acceptance is an important element in the psychological adjustment of pupils with LDs and was used in this study as a dimension of peer relationships.

Friendship which is described as reciprocal liking and behavioral involvement between people plays an important role in children's social development and well-being (Hall & McGregor, 2000). School-aged friendships bring with them important learning opportunities, which, in turn, can shape many aspects of a child's development. Friendships also benefit children by creating a sense of belonging and security and by lessening stress (Geisthardt, Brotherson, & Cook, 2002). Authors have been concerned about friendships that develop within regular education settings between children with disabilities and their typical classmates (Siperstein, Leffert, & Wenz-Gross, 1997). Interest in the friendships of children with disabilities has increased along with the inclusive education movement (Taylor, Peterson, McMurray-Schwarz, & Guillou, 2002). While some researchers have described relationships of children with disabilities in inclusive settings as being very ordinary and characteristic of friendships between typically developing children (Staub, 1998), others have suggested that the friendships involving children with developmental disabilities may be different in quality or features (Bauminger & Kimhi-Kind 2008; Chamberlain, Kasari, & Rotherham-Fuller, 2007). With regard to mutual friendships, the main effect model predicts that children who have close mutual friends show better psychological adjustment than children who do not have close mutual friends, and that this is equally likely for low accepted and average to high accepted children with and without LD (Maag & Reid, 2006).

Research by Hollingsworth (2006) investigating beliefs and practices of parents and teachers in support of friendships between preschool children with and without disabilities demonstrated strong links between children's friendship experiences and their psychosocial, emotional, and communication development; and academic performance. Koster, Pijl, Nakken and Van Houten (2010) studied the social participation of Grade One to Grade Three

pupils with special needs in regular Dutch primary schools. They examined four aspects of social participation namely friendships/relationships, contacts/interactions, acceptance by classmates and pupils' self-social perception. They found that students with special needs had, on average, fewer friends, fewer interactions with classmates and low peer acceptance by their typical peers. The study by Hollingsworth (2006) collected data from the parents and teachers while Koster et al (2010) studied children with special needs in general. The current study focused on LDs because children with different disabilities face different challenges which may influence their capacity to make friends differently. Data was collected from pupils, parents and teachers. By collecting data from the pupils, they were given the opportunity to share how they experienced friendship with their peers.

Several researchers describe social participation as typical peers' acceptance of pupils with special needs (Odom, 2000; Stanovich, Jordan, & Perot, 1998), while others emphasise the importance of interactions between pupils (Kamps, Dugan, Potucek, & Collins, 1999; Pavri & Luftig, 2000). Hollingsworth (2006) focused on the beliefs and support of teachers and parents on peer friendship while Koster et al (2010) studied social participation in pupils with special needs in general. The current study focused on peer friendship and peer support.

2.6 Influence of Special Education Teachers on Psychological Adjustment

Literature examining pupil-teacher relationships consistently points to a positive association between good pupil-teacher relationships and pupils' academic, social-emotional, and mental health outcomes (Demaray & Malecki, 2002; Hamre & Pianta, 2001; Reddy, Rhodes, & Mulhall, 2003). This has been demonstrated in both regular and special education classes in community settings throughout the developmental stages. For example, pupils' relationships with their kindergarten teachers predict grades and standardized-test scores through fourth grade, and positive pupil-teacher relationships are associated with fewer disciplinary actions and increased work habits through middle school (Hamre & Pianta, 2001). In middle school, pupils' perceived teacher support has corresponded to increases in self-esteem and decreases in depressive symptoms (Reddy et al, 2003), and teachers' ratings of relationship quality has been linked to student risky behavior (Rudasill, Reio, Stipanovic, & Taylor, 2010). In high school, feelings of relatedness with teachers are associated with positive school attitudes, including motivation, success expectations, and interest in school (Roeser, Eccles, &

Sameroff, 1998; Wentzel, Battle, Russel, & Looney 2010), as well as improved achievement and self-esteem (Martin, Marsh, McInerny, Green, & Dowson, 2007) and fewer depressive symptoms (Possel, Rudasill, Sawyer, Spence & Bjerg, 2013). Teachers have significant lifelong impact on all their students. The impact not only involves academic skill but also in fostering psychological well being. Therefore, the influence of teacher pupil relationship on psychological adjustment of pupils with LDs was an important element of this study.

As children enter formal school settings, relationships with teachers provide the foundation for successful adaptation to the social and academic environment. From the first day of school, young children must rely on teachers to provide them with the understanding and support that will allow them to get the most out of their daily interactions in the classroom. Children who form close relationships with teachers enjoy school more and get along better with peers. Positive relationships with teachers can also serve as a secure base for young children; they are better able to play and work on their own because they know that if things get difficult or if they are upset, they can count on their teacher to recognize and respond to these problems (Hamre & Pianta, 2001).

Pupils' relationships with their teachers have shown to be important predictors of adjustment. Indeed, schools are interpersonal settings, in which relationships influence pupils' motivation, academic performance, and teach psychosocial adjustment. Relationships with teachers can be particularly important to learners with LD, who are often undergoing profound shifts in their sense of self and are struggling to negotiate changing relationships with their parents and peers. An increasingly large number of theorists and specialists acknowledge the therapeutic role of the educator in dealing with children with serious problems or difficulties (Elliott & Place, 2012; Kourkoutas, 2012).

In the past, many studies have explored the influence of the teacher-student relationship quality on the adequate development of typically developing students (Murray & Greenberg, 2006; Murray & Pianta, 2007). At the same time, few studies investigated the role of teacher-student relationships among school pupils with disabilities (Al-Yagon & Margalit, 2006). The few existing studies on close relationships with teachers of pupils with disabilities revealed the role of these relationships as a protective factor for the children's social and

emotional adaptive functioning (Al-Yagon, 2009; Arthur, 2003). Most of the existing studies indicate that, compared to teacher-student relationships of typically developing pupils, those of pupils with disabilities are characterized by a higher level of rejection and dissatisfaction, and lower levels of acceptance and closeness. Moreover, teachers in general have difficulty establishing optimal relationships with students with disabilities (Al- Yagon & Mikulincer, 2004).

Wang and Eccles (2013) found that teacher acceptance is associated with student psychological adjustment in both boys and girls and has protective roles against depressive symptoms, behavioural problems and promotes resilience and academic achievement. This corroborates with a study carried out earlier by Rohner (2010), which was a cross-cultural meta-analysis that tested the contribution of teachers' and parents' acceptance to youth's psychological adjustment and school conduct. It was based on nine studies involving 2,422 school-going youth in 12 nations. Results showed that both parental and teacher acceptance correlate significantly in all countries with psychological adjustment and school conduct of children, regardless of gender differences.

Given that youths spend a good deal of their lives at school, it seems reasonable that supportive relationships with teachers could benefit their emotional well-being. Reddy and colleagues found that changes in perceptions of teachers' support reliably predicted changes in self-esteem and depression in both boys and girls (Reddy et al, 2003). A five years longitudinal study on the associations between teacher emotional support and depressive symptoms in Australian adolescents found that students of both sexes with average and high numbers of stressful events benefit from teacher support (Possel et al, 2013). Teachers undoubtedly play a substantial role in taking action to prevent pupils from developing further psychological problems. Of course teachers are not trained to be experts in psychological difficulties and interventions; however they are often involved in intense interaction with their students; as they spend a substantial amount of time with them, teachers can provide vital information regarding their behaviour and functioning and help professionals in designing appropriate interventions (Kauffman & Landrum, 2013).

Majority of studies on teacher pupil relationship have focused on typically developing and normally achieving children. The results from these studies have shown that teacher pupils' relationships are associated with increased motivation and learning. The current study examined the teacher pupil relationship between special education teachers and pupils with LDs. The focus was on how this relationship influenced psychological adjustment.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

Research methodology is the logic through which researchers address research questions and collect data for studies (Ary, Jacobs & Razavieh, 2001). In this chapter, the researcher explains how the research study was conducted. The chapter focuses on the research design, study area, the population, sample size and sampling techniques, data collection techniques, reliability and validity, data analysis and presentation, and ethical considerations.

3.2 Research Design

A research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process (Polit, Tatano & Beck, 2004). Mixed method research approach was used for this study. Mixed method research is a research design whose central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems. This approach to research was used to integrate both qualitative and quantitative methods to provide a better understanding of the research problem. In addition, by mixing both quantitative and qualitative research and data, the researcher showed in breadth and depth of understanding and corroboration, while offsetting the weaknesses inherent to using either of the approaches. Quantitative research is the collection and analysis of numerical data in order to describe, explain, predict or control phenomena of interest. Numerical data is used to perform statistical analysis and results used for answering research questions (Ogula, 2005). Qualitative research approach, as described by Gay, Geoffrey and Peter (2009), seeks to probe deeply into the research setting to obtain in-depth understanding about the way things are, why they are that way and how participants in their contextual natural settings perceive them. It enables the uncovering of the subtle, less overt and personal understandings of a phenomenon.

The research design within the mixed method approach that was used for this study is the concurrent triangulation design. In this design, qualitative and quantitative data are collected concurrently in one phase. The data is analyzed separately and then compared and/or

combined. This method is used to confirm, cross-validate or corroborate findings (Creswell & Plano Clark 2007). Triangulation also enabled the researcher to identify aspects of the phenomenon more accurately by approaching it from different vantage points using different methods and techniques.

3.3 Study Area

The study was conducted in Kisumu East Sub County. Kisumu East Sub County is one of the seven Sub Counties in Kisumu County. It covers a total of 135.90 square kilometers. It borders Vihiga Sub County to the North, Kisumu West Sub County to the West, Kisumu Central to the South and Nyando Sub County to the East. According to the national census of 2009, the population of the Sub County is 150,124 (Kenya National Bureau of Statistics, 2009). Leonard Cheshire Disability (LCD) has been implementing inclusive education in Kisumu East Sub County and this is one of the reasons as to why the study was carried out in the Sub County. Another reason for the choice of this area for the study is that it has relatively higher number of inclusive schools compared to other Sub Counties in the county (Educational Assessment and Resource Centre (EARC), 2016). The study was carried out in the Sub County so that the results and recommendations made are used to improve service delivery to learners with LDs in the Sub County and in the County.

3.4 Study Population

Polit et al (2004) define a population as the entire aggregation of cases that meet a designated set of criteria. Population is therefore the group of individuals who are the focus of the study to which research results would be generalized. The population in the current study was class 4 to 8 pupils with LDs, parents of pupils with LDs and special education teachers in inclusive primary schools in Kisumu East Sub County. According to Cortiella, and Horowitz (2014), the diagnosis of LDs is often determined when children begin to exhibit academic difficulties in school and the average age when they receive assessment is 9 years. Most children aged 9 years were in standard three, therefore the researcher settled for class 4 to 8. According to report from EARC (2016), Kisumu East Sub County has 10 inclusive public primary schools. It has a population of 128 pupils with LDs and 23 special education teachers. However, the study targeted pupils with LDs living with at least one parent or both. The pupils with LDs who were found to have at least one parent were 96. 34 pupils lived with both parents, 45

lived with mothers only and 17 lived with fathers only giving a total of 130 parents. Therefore the target population was 96 pupils who met the inclusion criteria, 130 parents and 23 special education teachers.

3.5 Sampling Procedure and Sample Size

Sampling is the process of selecting a sample from the whole population that can be used to fairly represent the population (Daniel, 2012). A sample is a subset of the research population which is selected to participate in a study representing the research population (Burns & Grove, 2001). Since this is a mixed research, the sampling was designed for both quantitative and qualitative research components of the study. Saturated sampling method was used for sampling the pupils with LDs. Saturation is the state where no more new data of importance to the study emerges and the elements of all of the themes, concepts, and theory are accounted for (Onwegbuzie & Collins, 2007). In this study, saturated sampling implied that the whole target population (96) for the pupils with LDs was used. For the parents and special education teachers, purposive sampling method was used. There were 10 inclusive schools. Each school has a parent support group headed by a team leader, and the team leader was selected for the study. The same was applied to the special education teachers; the leader was selected for the study. Therefore total sample size was 116 comprising of 96 pupils with LDs, 10 special education teachers and 10 parents of pupils with LDs.

3.6 Data Collection Techniques

Mixed methods research primarily use interviews and questionnaires for data collection (Cohen et al, 2007). For a comprehensive assessment of psychological adjustment in pupils with LDs, collection of data from various sources is helpful, as it may produce different perspectives on the pupil's adjustment. In this study, questionnaires and interview schedules were used to collect data from pupils with LDs, special education teachers and parents of pupils with LDs.

3.6.1 Questionnaire

The study used interviewer administered closed- ended questionnaire items for pupils with LDs. The questionnaire was selected based on its quality of ensuring anonymity and the respondents' willingness to freely provide responses. Interviewer administered

questionnaires allows room for clarification on the questions and can also save time (McMillan & Schumacher, 2006). The questionnaire was developed by the researcher with some statements adapted and modified from Janda (2001); a psychologists' book of personality tests. Four items were adapted and modified from the depression and self esteem tests (Hollon & Kendall, 1980; Nugent & Thomas, 1993). The depression test had 30 items and self esteem test had 40 items. The word "pupils" was added to the item that read "I feel others do things better than me" and the words "most of the time" added to the item that read " I hate myself" to them to be appropriate for the pupils. This was also to ensure that all the pupils understood the items in the same way.

In the study, a five-point Likert scale was used for closed-ended questionnaire items in order to approximate accurate assessments of the perceptions and experiences of the research participants on contextual influences on psychological adjustment of pupils with LD in inclusive primary schools in Kisumu East Sub County. The scoring was on a scale of 1 to 5 where 1 indicated "not at all," 2 indicated "sometimes," 3 indicated "moderately often," 4 indicated "often," and 5 indicated "all the time". The researcher administered the questionnaires to the respondents by asking the questionnaire items in the same way in order to eliminate any bias as far as possible. The scale of adjustment was the inverse type, whereby the higher the score on the questionnaire items meant less adjusted person. The contents of the questionnaire were derived from the research problem, research questions and literature reviewed in the study. The questionnaire had two parts.

Part 1: Demographic form. It had five items on demographic information of the participants namely age, gender, class levels and family status.

Part 2: Psychological adjustment scale. It was divided into four sections with 64 items:

Section A: 39 items addressing levels of psychological adjustment of pupils' with LDs.

Section B: Had eight items concentrating on pupils with LDs relationship with parents.

Section C: Had ten items focusing on pupils with LDs relationship with peers

Section D: Had seven items focusing on pupils with LDs relationship with teachers.

It is noted that the number of items were not the same in each section of the questionnaire. This is because the questionnaire was partly adapted and modified from Janda (2001).

3.6.2 Interview Schedule

The interview schedule was structured and based on predetermined questions. Face to face interview was used for the study where the interviewer asked the interviewees oral questions with regard to the objective of the study. This was mainly used to get more information regarding the topic of the study and cross check questionnaire responses to enhance reliability of data collected. The researcher spent 20 minutes with each interviewee. The researcher used an interview schedule with specific questions that were organized by topics but are not asked in a specific order. That it is the flow of the interview, rather than the order in the guide, that determines how and when a question is asked. In agreement with the assertion of Ogula (2005), the use of an interview schedule in this study was ideal because of its recognition of the unrestricted environment it provides for the respondents to express themselves openly, without the restrictions of written questionnaire items. All the interview information was first recorded and appropriately transcribed by the researcher for analysis. The interview schedules which were developed by the researcher had two sections: for background information and another one with open ended questions which gave the interviewee opportunity to discuss the topic in depth. Yin (2003), states that interviews are one of the most important sources of data and defines an interview as a two-way conversation that gives the interviewer the opportunity to participate actively in the interview.

3.7 Pilot Study

A pilot study is a preliminary survey (Kothari, 2004) and it was carried out by administering questionnaires to 20 pupils with LDs and the interview schedules to four teachers in four inclusive primary schools from Kisumu Central Sub County and four parents of pupils with LDs from the same schools. This is because, according to Gay et al (2009), though they did not participate in the study, they are similar to the intended participants. The pilot study was done to (a) to determine whether participants would understand the questions; (b) to provide information about deficiencies as well as suggestions for improvement; and (c) to determine if the questions were clear and comprehensive enough. After piloting, the items in the questionnaire that were unclear to respondents were rephrased and questionnaire further refined, while ambiguous and difficult questions were corrected and modified.

3.8 Validity

According to Orodho (2009), validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under investigation. The lack of validity and reliability renders any study null and void (Cohen et al, 2007). The researcher subjected the instruments to content validity. Content validity is the degree to which data solicited using a particular instrument represent a comprehensive coverage of specific domains of indicators or content of a particular concept (Cohen et al, 2007). Additionally, expert scrutiny was sought from the university supervisors assigned to the researcher. Use of content validity was considered appropriate because where a test measures a trait that is difficult to define; an expert judge may rate each item's relevance. Because each judge is basing their rating on opinion, two independent judges rate the test separately. Items that are rated as strongly relevant by both judges were therefore included in the final questionnaire. Their comments and suggestions were also incorporated in the final draft of the research instruments.

Validity in qualitative research indicates consistency and trustworthiness regarding activities and events associated with the phenomenon as signified by the study results explored in the research (Golafshani, 2003). Credibility which is often called internal validity refers to the believability and trustworthiness of the findings. To assure credibility triangulation was employed. Triangulation was used to cross validate the study findings.

3.9 Reliability

Mugenda & Mugenda (1999) argue that reliability is a measure of the degree to which a research instrument yields same results after repeated trials. Nachmias and Nachmias (1996) assert that an instrument is reliable when it can measure the construct of a variable accurately and consistently and obtain the same results under the same conditions over time. In this study, the reliability of the questionnaires was established through the pretest in the pilot study in four inclusive primary schools in Kisumu Central Sub County. The study used test re-test method to test reliability of the questionnaire and Cronbach's Alpha to test internal consistency of the items in the sub-scales.

3.9.1: Test re-test Reliability

The pilot group did not participate in the main study because it had completed the questionnaire twice in line with the Test re-test reliability method and they were from a different Sub County. The researcher established the Test re-test reliability through distributing the researcher administered questionnaires to 20 pupils with LDs in four inclusive schools in Kisumu Central Sub County and readministering the questionnaires to the same group after two weeks. The resulting two sets of scores were correlated using Pearson's Product-Moment Correlation Coefficient to get the reliability coefficient of the researcher administered questionnaires for pupils with LDs. A Pearson Moment Correlation Coefficient of r =.74 was established.

This revealed that the questionnaires were of adequate reliability for data collection. According to Mugenda & Mugenda (2003), a coefficient reliability of at least r = 0.7 indicates adequate reliability of the instruments. This was also in line with the recommendation by Creswell and Plano Clark (2007) who had suggested that reliability of r =0.7 is adequate for questionnaires administered in survey study.

3.9.2: Reliability Analysis

In addition to the use of test re-test to establish reliability index of pupils' questionnaire, internal consistency of the items in each subscale was measured. Creswell and Plano Clark (2007) assert that internal consistence is the degree to which an instrument is error free, reliable and consistent across time and across the various items in the scale. Cronbach's alpha coefficient analysis was used to measure the internal consistency of the instruments, because it is the most consistent test of inter-item consistency reliability for Likert scaled or rating scaled questionnaire. The reliability for multi-item opinion items were computed separately for all the subscales in the students' questionnaires and the coefficient alpha of these variables were reported in Table 1.

Table 1

Internal Consistency: Cronbach's Alpha Results for the Questionnaire

Scale	No. Items	Cronbach's alpha	Conclusion (Reliable/Unreliable)
Psychological adjustment	39	.650	Reliable
Parent-child relationship	8	.721	Reliable
Teacher-child relationship	7	.661	Reliable
Peer relationship	10	.685	Reliable

 Source: Author (2018), SPSS Analysis.

Results of the internal consistency in table 3.1 above show that all the sub-scales met the required level of internal consistency of reliability, with the Cronbach's alpha values ranging from a low of 0.65 (psychological adjustment questionnaire) to a high of 0.72 (parent-child relationship). These findings were in line with the recommendation by Oso and Onen (2013) that a coefficient of 0.60 is of adequate reliability while coefficient of 0.70 and above indicates that the instrument has a high inter-item consistency reliability standard. The Cronbach's alpha for all the subscales reveals that the instruments had adequate reliability for the study. It was noted that all items were correlated with the total scale to a good degree in all the subscales. Therefore, the questionnaires were suitable for data collection because they adequately measured the constructs for which they were intended to measure.

On the other hand, Patton (2001) states that reliability is a factor which any qualitative researcher should be concerned about while designing a study, analysing results and judging the quality of the study. Qualitative research is based on subjective, interpretive and contextual data. It is therefore critical that steps are taken to ensure the reliability and validity of research findings. The findings must be believable, consistent, applicable and credible if they are to be useful. Dependability otherwise known as reliability refers to the consistency with which the results could be repeated in similar findings. The dependability of the findings also lends legitimacy to the research method. To ensure dependability, the researcher used triangulation and also verified participants' response uniformity.

Confirmability is the last criterion of Trustworthiness that a qualitative researcher must establish. This criterion has to do with the level of confidence that the research study's

findings are based on the participants' narratives and words rather than potential researcher biases. Confirmability is there to verify that the findings are shaped by participants more so than they are shaped by a qualitative researcher (Tobin & Begley, 2004). Confirmability was achieved through an audit trial. According to Bowen (2009) an audit trail offers visible evidence from process and product that the researcher did not simply find what he or she set out to find. An audit trail entailed detailing the process of data collection, data analysis, and interpretation of the data. Records were made of topics that were unique and interesting during the data collection, researcher's thoughts about coding were written down, a rationale for merging codes together was provided, and what the themes meant was explained.

3.10 Data Collection Procedure

Before proceeding to the field for data collection, the researcher submitted the research proposal to the School of Graduate Studies, Maseno University for examination and approval through the Department of Psychology. The permission to conduct the main study was first sought from the National Council for Science and Technology through the School of Graduate Studies of Maseno University, and subsequently from Kisumu East Sub County Education office, as well as the participating inclusive primary school administrators. Upon receipt of relevant authorization documents including introductory letter from the school of graduate studies of Maseno University, the researcher sought the indulgence of the teachers on the logistics of carrying out the research especially in regard to identification of the parents and pupils with LDs. Thereafter the researcher went to the selected schools to embark on collecting data from the pupils and teachers during games time so that the teaching and learning processes would not be interrupted. The parents were accessed during their weekly support group meetings. The purpose of the research was explained adequately to the respondents, and sufficient clarification made where concerns arose. The researcher personally administered the questionnaires to the pupils and conducted face to face interviews with the special education teachers and parents. Each questionnaire took 10 minutes to complete while each interview lasted 20 minutes.

3.11 Data Analysis and Presentation

Data analysis is the process of organising data into meaningful and useful information that helps to answer the research questions (Glense, 2006). This research used quantitative and qualitative data analysis procedures. Quantitative data was obtained from the closed-ended items in the questionnaire. Raw data was coded and analysed using Statistical Package for Social Sciences (SPSS) version 22. Data was summarised using descriptive statistics such as frequencies, means, standard deviation and percentages and presented using tables. The inferential statistics was used to help make inferences and draw conclusions. To estimate the level of influence of independent variables on the dependent variable, Regression analysis was done. Regression analysis is a statistical method that allows the researcher to examine the relationship between two or more variables of interest. Regression analysis is a reliable method of identifying which variables have impact on a topic of interest. The process of performing a regression allows the researcher to confidently determine which factors matter most, which factors can be ignored, and how these factors influence each other. Qualitative data was derived from interview schedules conducted with special education teachers and parents of pupils with LD. Content analysis was used to analyze the data obtained by the use interview schedules. According to Cooper (1996), content analysis is appropriate for analyzing content of a communication. The researcher therefore was convinced that the content analysis was the most appropriate to analyze the information obtained during interview.

3.12 Ethical Considerations

Research ethics constitute beliefs about what is right or wrong, proper or improper, good or bad in conducting studies (McMillan & Schumacher, 2006). Researchers need to secure the approval of the research participants prior to conducting their studies (American Psychological Association, 2002). In order to secure the approval of the research participants, the researcher sought and secured clearance from Maseno University, Ministry of Education, and Kisumu East Sub County Education Offices. Then the participating inclusive primary schools head teachers were approached for approval before embarking on the investigation. The researcher explained to the research participants the rationale for the study in order to get their cooperation.

Any participation in studies by individuals should be strictly voluntary (American Psychological Association, 2002). Informed consent demands that respondents be allowed to choose to participate or not to participate in a study after receiving full information about the possible risks or benefits of participating from the researcher. Participating pupils with LDs from inclusive primary school in Kisumu East Sub County, their parents and special education teachers were informed about the rationale and nature of the study and given the choice of either participating or not participating. Research participants were also told that if they agreed to participate, they had a right to withdraw from the study at any time. The researcher sought initial consent for the pupils with LDs to participate in the study from the schools head teachers who signed the consent form on behalf of the pupils with LDs. The parents to the pupils with LDs and special education teachers consented by signing the consent form.

Confidentiality connotes the ethical obligation of the researchers to keep the identity and responses of the research participants private (McMillan & Schumacher, 2006). Anonymity in a study is realized when a researcher cannot identify a given response with a given respondent (Ritchie & Lewis, 2003). Confidentiality and anonymity were assured by requesting the participants not to disclose their identities in the research instruments. The participants were also assured that their responses would be used solely for the study.

Researchers should not expose research participants to undue physical or psychological harm (McMillan & Schumacher, 2006). Psychological harm to the research participants was avoided by maintaining privacy, confidentiality and anonymity.

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of data analyses and also discusses the findings of the study. In the present chapter, the data generated from the study is presented, analysed and discussed in the context of the research objectives and questions. Specifically, the objectives that guided the study were: to find out the levels of psychological adjustment for pupils with LD, to determine the influence of parent child relationship on psychological adjustment of pupils with LD, to determine the influence of peer relationships on psychological adjustment of pupils with LD and to examine the influence of special education teachers on psychological adjustment of pupils with LD. The data was analyzed in two categories: quantitative analysis which was used to analyze the data collected by questionnaires and content analysis for the data collected through interview schedule. The researcher interviewed 10 special education teachers and 10 parents who were purposively selected.

4.2: Demographics of Participants

The demographics description of all the participants involved in this study is presented in tables 2, 3 and 4.

4.2.1: Gender of the Respondents

Table 2

Respondents' Gender

Gender	Frequency
Boys	53(51.1%)
Girls	43(48.9%)
Total	**96(100%)**

Table 2 shows the gender of the respondents. There were more boys than girls in the study. The reason for having more boys in the study could be that more boys are enrolled in school as compared to girls and girls are also more likely to drop out of school compared to boys. However, it is evident that both genders were involved in the study.

4.2.2: Age of the Respondents
Table 3

Distribution of Age of the Respondents

Age	Frequency
12 yrs & below	31(32.3%)
13-14 years	44(45.8%)
15 yrs & above	21(21.9%)
Total	**96(100%)**

Table 3 shows the distribution of ages of the respondents. 45.8% were in the 13-14 years age bracket. The participants of 12 years and below age bracket constituted 32.3%, while 21.9% of the study population was made up of 15 years and above bracket.

From the above table it is observed that the majority of respondents fell under age group of 13 to 14 years. Although LDs can be diagnosed in early stages of an individual's life, awareness on LDs is still low and late realization or late diagnosis probably might be the reason.

4.2.3: Class of the Respondents
Table 4

Distribution of Class of the Respondents (n=96)

	Frequency	%	Cumulative %
IV	2	2.1	2.1
V	8	8.3	10.4
VI	41	42.7	53.1
VII	25	26.0	79.2
VIII	20	20.8	100.0
Total	96	100.0	

Table 4 shows class levels of the students who took part in the survey. Class six had the highest number of respondents, accounting for 42.7%, while class four had the least number of respondents with 2.1%. Considering that LDs are hidden disabilities, teachers and parents may not be aware of their manifestations. That means that assessment and diagnosis may only be considered when parents and teachers get concerned with pupils' poor performance as the pupils approach the class eight examinations. Therefore few pupils may be assessed by the time they reach class four.

4.2.4: Family Status of the Respondents
Table 5

Distribution of Family Status of the Respondents (n=96)

	Frequency	Percent	Cumulative Percent
Who the respondents lived with			
Mother only	45	46.9	46.9
Father only	17	17.7	64.6
Both parents	34	35.4	100.0
Total	96	100.0	
Number siblings			
1-2	15	15.6	15.6
3-4	41	42.7	58.3
5 and above	40	41.7	100.0
Total	96	100.0	

Table 5 shows the distribution of who the respondents lived with and the number of siblings in their household. The distribution shows that 46.6% of the respondents lived with the mothers only, 35.4% with both parents and 17.7% lived with fathers alone. Some 42.7% of the pupils who took part in the study had between 3-4 siblings, 41.7% had more than five siblings, while 15.6% had between 1-2 siblings.

4.3: Measures of Psychological Adjustment of Pupils with Learning Disabilities.

The first objective of the study was to investigate the measures of psychological adjustment among pupils with LDs. In order to realise the objective, the following research question was asked: What are the dimensions of Psychological adjustment of pupils with LDs? In order to answer this question, a rating questionnaire was used. The questionnaire items had constructs related to psychological adjustment indicators of pupils with LDs. The pupils were asked rate the statements of indicators of psychological adjustment, using the Likert scale ranging from 1 to 5. Psychological adjustment was conceptualized as comprising different dimensions of psychological states; depressive symptoms, self-esteem, anxiety and anger. The dimensions were measured in a scale ranging from 1 to 5; where 5 represented the least adjustment level and 1 represented the highest adjustment level. The measures of dimension of psychological adjustment were summarized, as shown in Table 5.

Table 6

Measures of Dimensions of Psychological Adjustment (n= 96)

	Depressive symptoms	Self esteem	Anxiety	Anger
Mean	2.56	2.83	2.74	3.00
Std. Deviation	0.96	1.46	1.23	1.68

Source: Survey data (2017)

From Table 6, it is evident that the children exhibited moderate measure of psychological adjustment in regards to the four dimensions that were used to measure psychological adjustment. The pupils showed moderate measures of adjustment in all the dimensions of psychological adjustment; depressive symptoms was at a mean of 2.56, self-esteem with a mean of 2.83, anxiety with a mean of 2.78 and anger with a mean of 3.00. This implies that children were more poorly adjusted in anger dimension than other aspects of psychological adjustment, followed by anxiety and then depressive symptoms. A mean of 2.83 in self esteem signifies that their self esteem was moderately high.

Depressive Symptoms

It emerged from the study that pupils with LDs in inclusive primary schools in Kisumu East Sub County suffer from depressive symptoms, as reflected by a mean rating of 2.56, in a

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scale of 1 to 5. These findings imply that depression is a problem experienced by pupils with LDs. This is consistent with the findings of Sikabofori and Anupama (2012), and Raghavan and Patel (2005) that had established that people with LDs experience depression. Repeated failure in class by the pupils with LDs might lead to feelings of sadness, isolation and frustration. These are some of the symptoms of depression and this in turn affects their psychological adjustment.

Other findings are also in agreement that depression is linked to children with LD (Alesi et al, 2014; Chaudhary and Meghwal, 2015; Tam & Hawkins, 2012). These findings reported varied measures of depression, some reporting low measure while others reporting high measure. This possibly means that other factors could be contributing to the different measures of depression in pupils with LDs.

On the other hand, results from other studies differ from the current study. For instance, a study by Carroll et al (2005) found no link between dyslexia and depression although dyslexia was associated with all major psychiatric diagnosis. Similarly, Miller *et al* (2005) also conducted a research on dyslexic children and found no significant difference in depression levels between pupils with dyslexia and the normally achieving pupils. This shows that pupils with specific reading disability do not suffer from depressive symptoms.

Self esteem

From the analysis presented in table 6 it is revealed that self-esteem, as a dimension of psychological adjustment, had a mean measure of 2.83 and a standard deviation of 1.46. The findings on self-esteem provide evidence that most pupils have moderate measure of self-esteem. This means that the pupils' self-esteem is fairly high. It implies that the pupils LDs have a positive evaluation of their self worth. A possible explanation for the moderate measure of self-esteem in this study is the relationship of the pupil with the parents, peers and teachers. Pupils who enjoy positive and supportive relationships with parents, peers and teachers are more likely to have high self-esteem. When pupils with LDs perceive that their peers are accepting and willing to support them, they are likely to develop healthy self-esteem. The same applies to parents and teachers who encourage pupils' autonomy, making the pupil to believe in his/her competence. Self Determination Theory hypothesises that

teacher-family communication that promotes sense of competence and enhances children's feelings of relatedness can foster higher levels of motivation (Urdan & Schoenfelder, 2006). Thus healthy relationships with parents, peers and teachers help pupils with LDs to maintain high levels of self-esteem. The parents interviewed said that they offered support to their children with LDs and encouraged the other siblings to help them with homework. Special education teachers also reported in the interviews that they supported the pupils with LDs and sensitized the typical learners to accept and help them in class.

The findings of the current study differ from the studies by Alesi et al (2012) and LaBarbera (2008) who suggested that pupils with LDs had low self-esteem. Another study by Daderman et al (2014) found that children with LDs have lower self-esteem. This can be explained probably given the pupils' environment. The frequent academic difficulties and negative feedback that children with LDs experience often contribute to negative beliefs and low self-esteem (Whelan et al, 2007). The finding of the current also differs with Humphrey (2002) who established that having LDs can adversely affect self concept and self esteem. Similarly literature by Zastrow and Kirst-Ashman (2007) suggest that pupils with LDs are likely to internalize failures. This may result in feelings of inferiority to other and these pupils may develop low self esteem.

Children with LDs are likely to see others do things they may not easily do and others make critical comments at them and this may lead to maladaptive self-referential styles and development of low self esteem. Teachers and parents may also show at least some impatience and frustration at the pupils inability to understand or perform. From the results of the study, there is evidence that parents and special education teachers in inclusive primary schools in Kisumu East Sub County get support and sensitization on how to relate with the pupils with LDs from the Leonard Cheshire Disability (LCD) Organization (LCD, 2017). Additionally, parents of these pupils have also formed a support group where they meet and discuss on ways to support their children. This could offer an explanation to the positive self-esteem of the pupils with LDs in inclusive primary schools in Kisumu East Sub County.

Anxiety

The anxiety measure among the pupils with LDs as shown in table 6 was established to be 2.74 and standard deviation 1.23 in the scale of 1 to 5, indicating an average measure of anxiety. This implies that pupils with LDs suffer from moderate anxiety. This means that the daily frustrations and worries associated with LDs that these pupils face usually lead to anxiety symptoms. Anxiety is made evident by pupils finding reasons to skip school or drop out all together. This concurs with the assertion of Urdan and Schoenfelder (2006) that anxiety causes somatic symptoms in pupils with LDs such as headaches and stomachaches and this contributes to the high levels of absenteeism

The findings are consistent with the findings of Nelson & Harwood (2011) who found that pupils with LDs presented anxious symptoms. This might imply that the many situations that children with LDs face where they might experience learning problems or are expected to perform, coupled with the child sensing that things are beyond his/her control might result in heightened anxiety.

Studies carried out by Sharma (2004), and Chaudhary and Meghwal (2015) conclude that children with LDs show higher measure of anxiety than typical learners. These studies indicate that there is a positive relationship between LDs and anxiety, and that pupils' with LDs suffer anxiety at different levels. The studies have shown that LD is a predictor of anxiety; however other factors may mask the extent of these effects, thus accounting for the different measures of anxiety in the studies.

Although the finding of the current study is consistent with Mammarella et al (2014) who recorded that children with nonverbal learning disabilities and reading disabilities have more anxiety compared to the typical developing children, they differ from Miller et al (2005) who found no link between dyslexia and anxiety.

Anger

The findings shown on table 6 indicate moderate measure of adjustment of anger for pupils with LDs with a mean of 3.00. From this finding on anger, it is evident that pupils with LDs have moderate levels of anger. These findings are similar to Benson & Brooks (2008), and Taylor and Novaco (2005) who found that anger is a frequent problem for many people with

LDs. It is frustrating for a pupil with LD not to be able to do what the peers are doing such as reading and writing. The repeated failure in class and struggles that these pupils go through may lead to mockery and ridicule from their peers. This pent up frustration eventually leads to anger. This anger can be taken out on someone or something. Although research studies have categorized anger as a risk factor associated with low self-esteem and depression, other risk factors may be associated with anger in pupils with LDs. They are more likely to be ascribed low social status and stigmatized by their peers. Moreover, they are more likely to be exposed to maltreatment, including risk of being bullied and of facing verbal and physical aggression (Emerson, 2005).

Another potential difficulty might be linked to autonomy. A defining feature of someone with LDs is that the person requires support from others to manage in their educational lives. This may lead to anger and frustration. According to Self Determination Theory (Ryan & Deci 1985) autonomy is about being volitional and self-endorsing in one's behaviour and having the control to make choices from one's own will. This implies that when pupils with LDs feel that they are not autonomous and have to be supported and directed, they may end up eliciting feelings of anger.

4.4: Influence of Parent Child Relationship on Psychological Adjustment of Pupils with LD.

The second objective of the study was to determine the influence of parent-child relationship on psychological adjustment of pupils with LD. It was investigated by exploring the views of respondents, on how often the indicators on parent-child relationships were exhibited by parents. The pupils were presented with questionnaires to generate data on their relationship with their parents. Using a five-point Likert scale, the pupils responded to the questionnaire items by indicating the frequency by which their parents exhibited positive relationship to them. The indicators were related to the constructs of relationship between parent and child in regard to psychological adjustment. From the responses of the respondents, the level of relationship between family structure and the pupils with LDs were summarized in mean percentage frequencies with their standard deviations, as shown in Table 7.

Table 7

Parent Child Relationship

Family		Relationship with parents	Relationship with peers	Relationship with teachers	Psychological Adjustment
Mother	Mean	26.98	37.33	27.33	100.33
	Std. Deviation	7.03	6.86	5.58	14.04
Father	Mean	25.29	37.29	26.94	100.18
	Std. Deviation	9.24	7.35	6.13	16.91
Both	Mean	28.50	36.21	29.06	96.41
	Std. Deviation	6.32	7.77	4.82	15.67
Total	Mean	27.22	36.92	27.88	98.91
	Std. Deviation	7.24	7.22	5.44	15.11

As shown in table 7, the findings of the study show that pupils with both parents have a healthier relationships with their parents (mean =28.50; standard deviation=6.32) than pupils with single parents. However, the findings of the study revealed that psychological adjustment of pupils with mothers is much better than that of pupils with fathers only. This finding suggests that children brought up with both parents enjoy a healthy parent-child relationship which leads to positive outcomes for the children and the family. A positive relationship between parent and child lays the foundation for the child's personality, choices, and overall psychological adjustment.

These findings concur with studies that reveal that mothers' relationships with children are more closely linked to children's mental health than relationships with fathers (Gryczkowski et al, 2010; Sandler et al, 2008). Furthermore, Branje et al (2010) indicated that relationship quality with mothers was a predictor of more depressive symptoms reported in adolescents. Therefore, family structure is an important aspect in psychological adjustment of pupils with LDs. The parent child relationship was conceptualized by the level of communication and support between the parents and their children with LDs. High parent- child relationship ratings indicate that the children enjoyed open and positive communication with their parents. In addition, these pupils received support from their parents and this too was vital for their psychological adjustment. In the study it was found that pupils who enjoyed supportive

relationships and open communication with their parents were better adjusted. In other words they had low scores on depression, self-esteem, anxiety and anger. In concurrence, Chohan and Khan (2010) revealed there is significant impact of parental support on the children. Supportive relationships may involve checking on the child's progress in school, helping with the homework and showing concern for the pupils' wellbeing. Open communication encourages the pupil to share concerns with the parent. This in turn makes the pupil feel valued and cared for leading to positive psychological adjustment. The findings were further supported by the views of the parents who were interviewed.

10 parents were interviewed on their relationship with their children with LDs. Most of the parents (7 out of 10) who were interviewed said that relationships with their children were good. Below are some verbatim from some of them:

P1: "Our relationship is open and quite positive. Her LDs has not affected our communication in any way".
P6: "Relationship with my son is good; I was taught how to relate with him by the British group. We communicate very well; he is free with me and shares most of his concerns with me".
However, 3 parents had different perspectives on relationships with their children with LDs.
P5: "I have two daughters with LDs, and my relationship with them is not good. At times I don't even want to talk to them".

When they were further asked to explain if LDs had affected the way they communicated with their children; their responses were that they do not have difficulties in communicating with their children and that they communicate openly. A number of them attributed this to the awareness created by LCD which has led to a better understanding of the disorder.
The interviewees were also asked to give information on how they offer support for their children. Some of their responses were:
P1: "I provide her school requirements and monitor her progress by visiting the school".
P4: "I make regular visits to the school and encourage their older siblings to help them with their homework".

The responses revealed that the parents visited the schools and assisted the children with their homework.

However, to investigate whether there was any statistical significant influence of overall parent child relationship on psychological adjustment among pupils with LDs, a null hypothesis that stated: *"there is no statistically significant relationship between parent-child relationships and psychological adjustment of pupils with LDs"* was formulated. In order to test the null hypothesis, Pearson Product Moment Correlation Coefficient was computed, with overall scores on indicators of parent child relationship as independent variable and psychological adjustment among the pupils with LDs as dependent variable. Average score were calculated for each sub-scale so that high scores indicate high levels of relationships and high levels of psychological adjustment. The scores of the variables were computed from frequency of responses and converted into continuous data by computing mean responses per respondents. It was necessary to convert the data in continuous scale so that they could be used with Pearson Moment Correlation, which is parametric in nature. The p-value was set at .05. The results of correlation analysis are shown on table 8 below.

Table 8

Relationship with Parents and Psychological Adjustment

		Psychological Adjustment	Relationship with parents
Psychological Adjustment	Pearson Correlation	1	.375[**]
	Sig. (2-tailed)		.000
	N	96	96
Relationship with Parents	Pearson Correlation	.375[**]	1
	Sig. (2-tailed)	.000	
	N	96	96

**. Correlation is significant at the 0.05 level (2-tailed).

The finding of the study showed that there was a positive correlation ($r=.375$, n=96, $p <.05$) between relationship with parents and psychological adjustment. Hence, the null hypothesis was rejected and conclusion that there is statistically significant relationship between parent-child relationships and psychological adjustment of pupils with LDs was reached. It was

therefore concluded that pupils with LDs adjust better when they have a strong positive relationship with the parents.

To estimate the level of influence of parent child relationship on overall psychological adjustment, a coefficient of determination was computed. This was done using regression analysis and the result was as shown in Table 9.

Table 9

Model Summary on Regression Analysis of Influence of Parent Child Relationship on Psychological Adjustment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.375[a]	.141	.132	.06732

a. Predictors: (Constant), Relationship with parents

The model shows that parent child relationship accounted for 14.1%, as signified by coefficient $R^2 = .141$, of the variation in psychological adjustment among learners with LDs. This finding implies that about 14% of variability in psychological adjustment among learners with LDs is explained by parent-child relationship alone.

Further, a regression model on the association between parent-child relationships and psychological adjustment of pupils was developed. Table 10 shows the coefficient value of the model.

Table 10

Coefficient Output: Parent-Child Relationships on Psychological Adjustment

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	2.673	.269		9.948	.000	2.139	3.206
Relationship with parent	.300	.076	.375	3.926	.000	.148	.451

a. Dependent Variable: Psychological Adjustment

From the model, the unstandardized coefficient which is equal to .300 means that for each one unit improvement in parent-child relationship, there is an increase in psychological adjustment of .300 units.

Findings on the influence of parent child relationship on psychological adjustment of pupils with LDs show that there was positive relationship between general parent child relationship and psychological adjustment of pupils with LDs. That means that positive parent child relationship is associated with overall psychological adjustment. LDs diagnosis causes stress and anxiety to parents and this can in turn cause parent child relationship to be strained. The first course of action for most parents after LDs diagnosis is to find ways to help the child improve academically and thus end up neglecting the psychological aspects which could be causing the child more distress than the poor academic performance (Grossman, 2001).

In concurrence with the current study, Yap et al (2014) found that emotional support from parents may reduce symptoms of depression and anxiety in children. Another study by Lian and Yusoof (2009) also found that children who perceive the presence of supportive family possess high self-esteem and that an increase in the quality of family functioning is always paired with higher self-esteem among children. This is important for parents because they can improve their relationships with their children with LDs by being supportive.

The findings of the current study also concur with that of Rueger et al (2010) who found that there were significant associations between all sources of support with depressive symptoms, anxiety, self-esteem and academic adjustment with parental support as a robust unique predictor of adjustment for both boys and girls. Thus, providing children with LDs with social support may be a useful intervention strategy in order to increase self-esteem of these children.

Communication is an important aspect of parent child relationship. A study by Bireda and Pillay (2017) found that both perceived maternal and paternal communication significantly predicted children's well-being as measured by self-reported scores of depression, school adjustment, substance use and self-esteem. This study specifically studied parent child communication. Although studies by Branje et al (2010) and Luk et al (2010) established gender differences on the effect of parent–child communication, present findings are in

agreement with Bireda and Pillay (2017) that parent child communication is not influenced by the gender of the parent. Nevertheless, paternal and maternal communication influences children's well-being.

Equally, the current study revealed that there was no relationship between type of family and psychological adjustment. This means that psychological adjustment of pupils with LDs is not influenced by single parent or intact family relationships; however, this may not be true for all children. The results add to the growing number of conflicting findings on mother child and father child relationships and adjustment of children. In this regard, Gryczkowski et al. (2010) and Sandler et al (2008) linked mothers' relationships to children's mental health and depressive symptoms than relationships with fathers. Similarly, Graziano et al (2009) suggests that father-child relationships are as influential on children's and adolescents' mental health as mother-child relationships. This implies that the findings may have been influenced by the different pathways that led to the single parenthood and intact parenthood. In other words, parent child relationship quality is not influenced by being in a single parent family or intact family. Rather it is influenced by for example parental conflict that might lead to divorce or separation. The present study demonstrates that parent child relationship will continue to influence children's psychological adjustment.

4.5: Influence of Peer Relationships on Psychological Adjustment of Pupils with LD.

The third objective of the study sought to investigate the influence of peer relationships on psychological adjustment of pupils with LD. To achieve this objective, the null hypothesis that stated: "*There is no statistically significant relationship between peer relationships and psychological adjustment of pupils with LDs*" was formulated. To test the null hypothesis, Pearson Product Moment Coefficient was computed. Table 11 below shows the correlation analysis results.

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Table 11

Relationship with Peers and Psychological Adjustment

		Psychological Adjustment	Relationship with peers
Psychological Adjustment	Pearson Correlation	1	.310[**]
	Sig. (2-tailed)		.002
	N	96	96
Relationship with peers	Pearson Correlation	.310[**]	1
	Sig. (2-tailed)	.002	
	N	96	96

**. Correlation is significant at the 0.01 level (2-tailed).

Table 11 indicates that there was a significant positive correlation (r=.310, n=96, $p <$.05) between the variables. Hence, given that a statistically significant p value was established, the null hypothesis was rejected. It was therefore concluded that psychological adjustment of pupils with LDs is positively correlated to their peer relationships, with increase in positive peer relationship resulting to an increase in overall psychological adjustment and vice-versa. It was therefore concluded that pupils with LDs adjust better when they have a strong positive relationship with their peers. This implies that pupils with LDs need supportive accepting and considerate interaction with their peers for positive psychological adjustment. Results from a study by Guralnick et al (2007) are in agreement that combination of LDs and low peer acceptance would increase the likelihood of development of psychological problems. Literature by Maag and Reid (2006) concede that children who have close mutual friends show better psychological adjustment.

To estimate the level of influence of peer relationships on overall psychological adjustment, a coefficient of determination was computed. This was done using regression analysis and the result was as shown in Table 12.

Table 12

Model Summary on Regression Analysis of Influence of Peer Relationships on Psychological Adjustment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.310[a]	.096	.087	.06904

a. Predictors: (Constant), Relationship with peers

Table 12 which shows a model summary indicates that peer relationships accounted for 9.6% as signified by coefficient R^2 = .096 of the variation in psychological adjustment among pupils with LDs. This implies that about 10% of variability in the level of psychological adjustment among children with LDs is explained by variation in peer relationships.

Further, a regression model on the relationship between peer relationships and psychological adjustment of pupils was developed. Table 13 shows the coefficient value of the model.

Table 13

Coefficient Output: Peer Relationships on Psychological Adjustment

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	2.599	.334		7.783	.000	1.936	3.262
Relationship with Peers	.311	.093	.327	3.351	.001	.127	.496

a. Dependent Variable: Psychological Adjustment

From the model, it is evident that for each one unit improvement in peer relationship, there is an ensuing increase in psychological adjustment of .311 units, as reflected by the unstandardized coefficient value of .311.

On the relationship between pupils with LDs and their peers, the findings of the study show that there was a positive relationship between peer relationships and psychological

adjustment, with increase in positive peer relationships resulting in increased overall psychological adjustment and vice-versa. Thus, peer relationships between pupils with LDs and their peers are important for psychological adjustment. Pupils in this study reported that they were satisfied with the support and help they receive from their peers. Although they felt that their peers are better than them, they still seem to enjoy a positive relationship with them. Therefore this positive relationship helps in creating a favourable environment for psychological adjustment of pupils with LDs. Deci and Ryan (1985) in their theory of Self-Determination explained this as a result of relatedness. In this, an individual is guided by the need to achieve closeness, connectedness and belonging with others. As relatedness is achieved, the nondisabled pupils learn to share knowledge, experience and resources with their LDs peers. In other words, children with LDs who receive in-class support or participate in inclusive programmes and are accepted by their peers are more likely to experience positive psychological adjustment than those who receive special support in self-contained special education classes or in resource rooms.

The findings of this study support research results by Sarkova et al, (2014) who found that relationships in school are strongly associated with psychological well-being of pupils with LDs. In particular, it was found that there was a relationship between pupil peer relationships depression/anxiety and social dysfunction as well as self-esteem. That means that pupils who reported better relationships with their peers had better psychological well-being, higher positive self-esteem and lower negative self-esteem. This implies that inclusive schools have social benefits for the pupils with LDs. There pupils are able to learn social skills while maximizing their learning experience. In conclusion, findings confirm that emotional and social support from peers is important for the psychological wellbeing of children with LDs in inclusive schools.

School is not always a safe haven for pupils with LD. They may suffer discrimination, ridicule and rejection from their peers. Academic problems that a child with LD may experience can be a constant source of frustration. They therefore find ways of escaping social and academic interactions with peers. They may struggle with high levels of rejection and shame which has a negative impact on their psychological adjustment (Murray &

Greenberg, 2006). Therefore, pupils with LDs need acceptance, support and friendship from their peers in order to develop well.

4.6: Influence of Special Education Teachers on Psychological Adjustment of Pupils with LD in Inclusive Primary Schools.

The fourth objective of the study sought to establish the influence of special education teachers on psychological adjustment of pupils with LDs. To achieve this objective, a null hypothesis that stated: "*There is no statistically significant relationship between teacher-pupil relationship and psychological adjustment of pupils with LDs*" was formulated. To test this null hypothesis, Pearson Product Moment Correlation analysis was computed, with overall scores on indicators of special education teacher relationship as independent variable and psychological adjustment among the pupils with LDs as dependent variable. Table 14 shows the correlation analysis results.

Table 14

Relationship with Teacher and Psychological Adjustment

		Psychological Adjustment	Relationship with teachers
Psychological Adjustment	Pearson Correlation	1	.571[**]
	Sig. (2-tailed)		.000
	N	96	96
Relationship with teachers	Pearson Correlation	.571[**]	1
	Sig. (2-tailed)	.000	
	N	96	96

**. Correlation is significant at the 0.01 level (2-tailed).

The finding of the study indicates that there was a statistically significant positive correlation (r=.571, n=96, p <.05) between teacher pupil relationship and psychological adjustment. Hence, the null hypothesis was rejected*.* It was therefore concluded that there is a statistically significant relationship between the teacher pupil relationship and psychological adjustment, with improved amiable teacher-pupil relationship resulting in increased overall psychological adjustment of pupils with LDs and vice-versa. This implies that pupils with LDs adjust better when they have a strong positive relationship with their teachers. This suggests that teachers play an important role in the psychological adjustment of pupils with LDs. This could be explained by Pianta et al (2012) while referring to the psychological

needs in the Self Determination theory suggested that teacher student relationships are the media through which these psychological needs are met. Wang and Eccles (2013) in agreement noted that teacher acceptance is associated with student psychological adjustment.

To estimate the level of influence of teacher relationship on overall psychological adjustment of pupils with LDs, a coefficient of determination was computed. This was done using regression analysis and the result was as shown in Table 15 below.

Table 15

Model Summary on Regression Analysis of Influence Teacher Relationship on Psychological Adjustment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.571[a]	.326	.319	.05964

a. Predictors: (Constant), Relationship with teachers

The model summary shows that teacher relationship accounted for 32.6% (R^2 = .326) of the variation in psychological adjustment among learners with LDs. The implication of this is that, teacher-pupil relationship explains about 33% of the variability of psychological adjustment among pupils with LDs, meaning that in about one out of every three of pupils with LDs their level of psychological adjustment is influenced by their relationship with their teacher.

Further, a regression model on the relationship between teacher relationships and psychological adjustment of pupils was developed. Table 16 shows the coefficient value of the model.

Table 16

Coefficient Output: Teacher Relationships on Psychological Adjustment of Pupils with LDs.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.581	.319		4.953	.000	.947	2.215
1 Relationship with Teachers	.530	.079	.571	6.739	.000	.374	.687

a. Dependent Variable: Psychological Adjustment

From the model, the unstandardized coefficient which is equal to .530 means that for each one unit improvement in teacher-child relationship, there is an increase in psychological adjustment of .530 units. This implies that more improvement in teacher pupil relationship results to an improved pupil psychological adjustment.

The teacher pupil relationship is important because it mediates the parent child relationship and the peer pupil relationships. The teacher pupil relationship can be seen as an extension of the parent child relationship, while the peer pupil relationship may be influenced by the pupil's perception of the teacher's relationship with other pupils. Thus pupils who experience positive relationships with teachers are more likely to have positive relationship with peers. The possible explanation for the trust that pupils place on their teachers can influence other relationships in their lives. It is hypothesized that teacher family communication that promotes student's sense of competence and enhances feelings of relatedness to the teacher or school can foster high levels of motivation (Thompson, 2006).

The finding that pupil teacher relationship influences psychological adjustment of pupils with LDs is consistent with research findings by Murray and Pianta (2007) who found that overall teacher student relationships are significantly positively related to psychological adjustment of adolescents. This implies that teacher acceptance and supportive relationships provide some psychological cushion against maladjustment in school. This is supported by Wang and Eccles (2013) and Rohner (2010) who found that teacher acceptance and supportive

relationships were associated with student psychological adjustment in both boys and girls and have protective roles against depressive symptoms.

Teacher pupil relationship is important especially in inclusive schools because of the stigma and frustrations pupils with LDs suffer when they compare themselves to the typical learners. Kourkoutas (2012) postulated that teachers play a therapeutic role in dealing with children with difficulties. Relationships with teachers can be particularly important to pupils with LDs, who are often undergoing profound shifts in their sense of self and are struggling to negotiate changing relationships with their parents and peers. Schools are interpersonal settings, in which relationships influence pupils' motivation, academic performance, and teach psychosocial adjustment. This may be explained by theory of Self determination by Deci and Ryan (1985) which postulates that the support pupils receive from the socializing environment promote or undermine the pupils' intrinsic motivation towards psychological growth and development. That means teacher pupil relationship is characterized by acceptance and support is important for the psychological wellbeing of pupils with LDs.

To get the views of the special education teachers, the researcher conducted a face to face interview with 10 special education teachers. They were asked to describe their relationship with pupils with LD. The responses given were; try to be close and friendly to the pupils, paying keen interest and making follow ups on the pupils.

The interviewees were asked to share on how they showed support and acceptance to pupils with LD. All the interviewees stated that they recognized efforts in class by the pupils, sensitize other learners to accept and give them support and finding time to respond to their questions. Some of their responses are as stated below;

T3: "I sensitize other learners to accept and give them support. I offer them support by breaking class work into manageable units and giving them extra time to complete their work". Another teacher had the following to say;

T2: "I give them remedial work and reward them by praising or clapping for the effort made".

T8: "I give them activities according to their abilities and give them more attention".

The findings from both the analysis and interviews reveal that special education teachers in the inclusive schools under study had a positive relationship with the pupils with LD. This is evident from the responses they gave on how they related with the pupils.

It is thus important for teachers to engage in positive relationships with their pupils in school. One way this has been achieved in Kisumu East Sub County is through the programs by Leonard Cheshire Disability Organization, which provides teachers with training on how to foster positive relationships with their pupils.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions, recommendations of the present study and suggestions for further researches.

5.2 Summary of the Findings of the study

5.2.1 Measures of Psychological Adjustment among Pupils with LDs

The findings of the study revealed that the measure of psychological adjustment among the pupils with LDs is of a moderate measure. The means and standard deviations were; 2.56, SD 0.96 for depressive symptoms, 2.83, SD 1.46 for self-esteem, 2.78, SD 1.23 for anxiety and 3.00, SD 1.68 for anger. This shows that the pupils with LDs suffered from depressive symptoms, anxiety and anger problems, though their esteem was relatively high.

5.2.2 Influence of Parent Child Relationship on Psychological Adjustments of Pupils with LDs

According to the findings of the study, positive parent child relationship is associated with overall psychological adjustment irrespective of type of family. Looking at the single parent families, it was noted that the pupils who lived with the mothers were better adjusted psychologically compared to the ones who lived with fathers. The findings also revealed that there was a positive relationship between parent child relationship and psychological adjustment. This means that a positive parent child relationship resulted in a positive psychological adjustment. The regression model showed that the parent child relationship accounted for 14.1% of the variation in psychological adjustment of children with LDs.

5.2.3 Influence of Peer Relationship and Psychological Adjustment of Pupils with LDs

Findings on peer relationships indicated that there was an association between peer relationships and psychological adjustment. This is to mean that an increase in positive peer relationship results in increased overall psychological adjustment of pupils with LDs. Further, the estimated level of positive peer relationship on overall psychological adjustment indicated that peer relationships accounted for 9.6% of the variation in psychological adjustment of pupils with LDs.

5.2.4. Influence of Teacher Pupil Relationship on Psychological Adjustment of Pupils with LD

It was established from the findings that there was a relationship between teacher pupil relationship and psychological adjustment of pupils with LDs. This shows that, improved teacher pupil relationship resulted in an increased overall psychological adjustment. The regression model shows that the teacher pupil relationship accounted for 32.6% of the variation among pupils with LDs. This is to imply that teacher pupil relationship characterised by acceptance and support leads to positive psychological adjustment. Teachers who were interviewed said they showed acceptance and support their pupils with LDs in a variety of ways in order for them to cope with the class work.

5.3 Conclusions

The following conclusions were made on the basis of the findings of the study.

From the findings on the measure of psychological adjustment among children with learning disabilities, it was concluded that pupils with learning disabilities have moderate measure of psychological adjustment. It is concluded that pupils' relationship at home and school have a positive effect on their self-esteem.

From the findings on the influence of parent child relationship on psychological adjustment of pupils with LDs, it was concluded that pupils with both parents have a healthier relationship with their parents than pupils with single parents. It was also concluded that psychological adjustment of pupils with both parents was the highest, but pupils with mothers alone psychologically adjust better than pupils with fathers a lone. However, it was generally concluded that strong parental relationship with a child with LDs always results into overall psychological adjustment irrespective of the gender of the parent; that is, pupils with LDs adjust better when they have a strong positive relationship with the parents.

From the findings of the study on peer relationship, it was concluded that a strong relationship with peers leads to more overall psychological adjustment of children with LDs. In other words, it was concluded that pupils with LDs adjust better when they have a strong positive relationship with their peers.

On the relationship with teachers and psychological adjustment, it was concluded that with improved cordial teacher pupil relationship there is an increase in overall psychological

adjustment. This was concluded to mean that pupils with LDs adjust better when they have a strong positive relationship with their teachers. This means that teacher pupil relationship that is characterized by acceptance and support is important for the psychological wellbeing of pupils with LDs.

5.4 Recommendations
The study made the following recommendations based on its findings and conclusions:

i. The study recommends that the Ministry of Education should mandate School Guidance and Counselling departments to develop programs to help pupils with LDs cope with the demands of life and thus be well adjusted.

ii. Since positive peer relationships have been found to increase psychological adjustment of pupils with LDs, peer counselling should be introduced and strengthened in inclusive primary schools to supplement the teacher counsellors' efforts.

iii. Given that parent child relationship has an influence on psychological this study recommends that awareness creation sensitization in inclusive on prevalence and manifestations of LDs be encouraged so that more parents can take their children for assessment and develop positive relationships with them.

iv. Even though special education teachers seem to be offering support to the pupils with LDs, the study recommends that the government should train and post more special education teachers to the inclusive schools for the pupils with LDs to benefit more.

5.5 Suggestions for Further Research
From the study findings the following topics are suggested for further research:

i) This research should be replicated in other sub-counties in Kisumu County, given there is a lot of sensitization on learning disabilities in the area of the current study, which may have influenced the findings of the current study.

ii) In the current study, data was only collected from pupils with LDs, parents and special education teachers. Diverse perspectives and experiences on psychological adjustment of pupils with LDs would be realized through participation of other stakeholders such as school heads, general teachers, typical learners and school counsellors as participants.

iii) Other studies that would compare psychological adjustment of pupils with LDs in inclusive primary schools and those in special schools to reveal any differences or similarities.

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Appendix A: Informed Consent Letter

Dear Participant,

I am a student at Maseno University pursuing Masters Degree in Counseling Psychology. As part of my study, I am conducting a study on Factors Influencing Psychological Adjustment of Pupils with Learning Disabilities in Inclusive primary schools in Kisumu East Sub County. You are therefore being asked to take part in the study.

Your responses will be anonymous. Please do not write any identifying information on this paper. Every effort will be made by the researcher to preserve your confidentiality. Your participation in this study is voluntary. You are free to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign below. After you sign the consent, you are still free to withdraw at any time and without giving a reason.

Participant's signature _____ Date _____

Researcher's signature _____ Date _____

Appendix B: Head teacher Informed Consent

Dear Sir/madam,

A pupil in your school is being asked to participate in a research study conducted by a student from Maseno University. The title of this study is Factors Influencing Psychological Adjustment of Pupils with Learning Disabilities in Inclusive primary schools in Kisumu East Sub County. This study will contribute to the researcher's completion of her master's thesis.

The responses of the pupil will be anonymous. They will not write any identifying information on the questionnaire. Every effort will be made by the researcher to preserve their confidentiality. The pupil's participation is entirely voluntary. He/she is free to choose not to participate. Should the pupil choose to participate, he/she can withdraw at any time without consequences of any kind.

I have read this consent form and I understand what is being requested of pupil in my school as a participant in this study. I freely consent for the pupil to participate.

_____

Name of Head teacher

_____   _____

Sign   Date

Appendix C: Questionnaire for Pupils

This questionnaire aims to collect information on your feelings and relationship with others. This is not an exam and there is no right or wrong answer. The researcher is only interested in your response. All the responses you give are completely confidential. That means that your responses will not be given to anybody else, not even to your teachers or friends. You are therefore kindly requested to complete the questionnaire as honestly as you can.

The following are some statements that may be very true, true, neutral, not true always, not true at all for you. Please tick (√) one option on the statement to show the way you feel about them.

Example: not at all, all the time

		Hardly ever	Occasionally	Sometimes	Frequently	Almost always
1	I have nobody to talk to		√			
2	I like school very much					√

PART I: DEMOGRAPHICS OF PARTICIPANTS

1.What is your Age?

11☐   12 ☐   13☐   14☐   15☐   above 15 ☐

2.What is your gender?

Boy ☐   Girl ☐

3.What class are you?

IV ☐   V ☐   VI ☐   VII ☐   VIII ☐

4. Who do live with?

Mother ☐   Father ☐   Both parents ☐

5. How many brothers and sisters do you have? _____

PART II: PSYCHOLOGICAL ADJUSTMENT QUESTIONNAIRE

	LEVELS OF PSYCHOLOGICAL ADJUSTMENT					
		Not at all	Sometimes	Moderately often	Often	All the time
1	I feel sad most of the time					
2	I have interest in many activities both at school and home					
3	I seem to do everything wrong					
4	I like to keep to myself					
5	I hate myself					
6	I feel tired most of the time					
7	I feel I will never make it					
8	I eat very little most of the time					
9	I feel like no one understands me					
10	I feel good about myself most of the time					
11	I feel that people really like to talk with me.					
12	I feel that I am likely to fail at things I do					
13	I feel ashamed about myself.					
14	I feel that others do things much better than					

	I do					
15	I feel that other people are smarter than myself.					
16	At times I feel I am not good at all					
17	I am able to do things well as most people					
18	I avoid new tasks in school					
19	I ask my friends to play games that I want					
20	Many days I feel like crying					
21	I try to find it difficult to concentrate in class					
22	I worry most of the time					
23	I always have headaches					
24	I always have stomachaches					
25	Sometimes I avoid participating in class activities					
26	I am always biting my nails					
27	I rarely feel relaxed around people					
28	My hands always shake					
29	I always have disturbed sleep					
30	I feel angry when I am not able to do what my classmates can do					

31	At times I don't feel like talking to my teachers and classmates					
32	When I am not happy I feel like striking out verbally or physically					
33	I get impatient when people don't understand me.					
34	I find myself frequently annoyed with myself					
35	I find myself annoyed with some friends or family most of the time					
36	I remember things that make me angry for a long time					
37	When I am angry, I feel like breaking or tearing things					
38	I am always arguing with my teachers and parents					
39	I always get into fights at school					
C	**RELATIONSHIP WITH PARENTS**					
40	My parent(s) care about my feelings					
41	I talk over my problems with my parent(s)					

42	My parent(s) take time to check on my academic progress					
43	In my home, my parent(s) pay attention to me					
44	My parent(s) shows concern when I talk about my academic problems					
45	My parent(s) encourage me to work hard					
46	My parent(s) always compare me to my siblings					
47	My parent(s) offer me support when studying					
D	**RELATIONSHIP WITH PEERS**					
48	My classmates like me					
49	I feel that my classmates do not understand me					
50	Most of my classmates are willing to help me in class					
51	I get along very well with my classmates					
52	I am satisfied with the support I receive from my friends					
53	I feel I am left out by my friends because of					

	my learning disability				
54	My friends understand me well.				
55	My friends encourage me in school				
56	I feel comfortable talking about my problems with my friends				
57	My friends behaviours influence me a lot				
E	**RELATIONSHIP WITH TEACHERS**				
58	Most of my teachers are available when I need help				
59	My teachers give me encouragement to improve				
60	My teachers find time to interact with me after class.				
61	I think my teachers believe in my success				
62	My teachers give support in my studies				
63	My teachers treat me the same as other pupils				
64	My teachers praise my efforts in class				

Appendix D: Interview Schedule for Special Education Teachers

This interview schedule is seeking for information concerning the relationship between pupils with learning disabilities and the special needs teachers. Please be honest and frank in your responses. All responses will be treated with utmost confidentiality. Thank you for participating.

Section A: Demographic Background

1. What is your gender?

Male ☐   Female ☐

2. What is your Age?

25- 34 ☐   35-44 ☐   45-55 ☐   above 55 ☐

3. Professional qualifications

Degree ☐   Diploma ☐   Certificate ☐

4. Number of years in service

Below 5 yrs ☐   6-10yrs ☐   11-15 yrs ☐   16-20yrs ☐   21yrs and above ☐

Section B

5. Briefly describe your relationship with pupils with learning disabilities in your class_____

_____

6. Describe briefly how you show acceptance to pupils with learning disabilities in your class._____

_____

_____

7. List some five ways that you use to support pupils with learning disabilities

a)_____

b)_____

c_____

d) _____

e)_____

Appendix E: Interview Schedule for Parents

This interview schedule is seeking for information concerning the relationship between pupils with learning disabilities and the parents. Please be honest and frank in your responses. All responses will be treated with utmost confidentiality. Thank you for participating.

Section A: Demographic Background

1. What is your gender?

 Male [   ]   Female [   ]

2. What is your Age?

Below 25 [   ]   25-34 [   ]   35-44 [   ]   above 45 [   ]

3. What is your level of education?

 College [   ]   Secondary [   ]   Primary [   ]

4. How many children do you have? _____

5. How many of your children have learning disabilities? _____

Section B

6. Briefly describe your relationship with your child_____

_____

7. How has learning disabilities affected the way you communicate with your child

_____

_____

8. Discuss ways in which you offer support for your child's school work
_____

_____

Appendix F: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MISS. CORNILA WANJA OBARE
of MASENO UNIVERSITY, 7465-40100
KISUMU, has been permitted to conduct
research in *Kisumu County*

on the topic: *CONTEXTUAL INFLUENCES
ON PSYCHOLOGICAL ADJUSTMENT OF
PUPILS WITH LEARNING DISABILITIES IN
INCLUSIVE PRIMARY SCHOOLS IN
KISUMU EAST SUB COUNTY*

For the period ending:
13th April, 2019

Permit No : NACOSTI/P/17/17542/16771

Date of issue : 18th August, 2017
Fee Received : Ksh 1000

Applicant's
Signature

Director General
National Commission for Science,
Technology & Innovation

Appendix G: Maseno University SGS Approval

MASENO UNIVERSITY
SCHOOL OF GRADUATE STUDIES
Office of the Dean

Our Ref: MA/FA/00020/014

Private Bag, MASENO, KENYA
Tel:(057)351 22/351008/351011
FAX: 254-057-351153/351221
Email: sgs@maseno.ac.ke

Date: 17th July, 2017

TO WHOM IT MAY CONCERN

RE: PROPOSAL APPROVAL FOR CORNILA WANJA OBARE—MA/FA/00020/2014

The above named is registered in the Master of Arts in Counseling Psychology Programme of the School of Arts and Social Sciences, Maseno University. This is to confirm that her research proposal titled "Contextual Influence on Psychological Adjustment of Pupils with Learning Disabilities in Kisumu East Sub County" has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.

Prof. J.O. Agure
DEAN, SCHOOL OF GRADUATE STUDIES

Maseno University   *ISO 9001:2008 Certified*

Appendix H: Ministry Of Education Authorization

MINISTRY OF EDUCATION
State Department of Basic Education

Telegrams:"schooling",Kisumu
Telephone: Kisumu 057 - 2024599
Email:
countyeducation.kisumu@gmail.com

When replying please quote

CDE/KSM/GA/19/3A/V.ii/45

COUNTY DIRECTOR OF EDUCATION
KISUMU COUNTY
PROVINCIAL HEADQUARTERS NYANZA
3RD FLOOR
P.O. BOX 575 – 40100
KISUMU

20th August, 2017

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION
CORNILA WANJA OBARE- PERMIT NO. NACOSTI/P/17/17542/16771

The above named is a student at Maseno University.

This is to certify that she has been granted authority to carry out research on "*Contextual influences or psychological adjustment of pupils with learning disabilities in inclusive primary schools in Kisumu East Sub County, Kisumu County*" for the period ending **13th April, 2018.**

Any assistance accorded to her to accomplish the assignment will be highly appreciated.

ORINA NYANKIRA
For: COUNTY DIRECTOR OF EDUCATION
KISUMU COUNTY