RELATIONSHIPS AMONG PHYSICAL AND PSYCHOLOGICAL ABUSE, SOCIAL ADJUSTMENT AND ACADEMIC PERFORMANCE OF PRIMARY SCHOOL PUPILS IN KADUNA STATE, NIGERIA

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A THESIS SUBMITTED TO SCHOOLOF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULIFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY IN EDUCATIONAL PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING AHMADU BELLO UNIVERSITY ZARIA, NIGERIA

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DECLARATION

The researcher declare that the work in this thesis titled ‘Relationships among physical and psychological abuse, social adjustment and academic performance of primary school pupils in Kaduna State Nigeria, has been carried out by me in the Department of Educational Psychology and Counselling under the supervision of Dr. A.I. Mohammed, Prof. M. Balarabe and Prof. E. F. Adeniyi.

The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for a higher degree at this or any other institution.

…… ……..

Saadatu Atiku Date

CERTIFICATION

This research work, titled ‘Relationships among physical and psychological abuse, social adjustment and academic performance of primary school pupils in Kaduna State Nigeria’ by Saadatu Atiku, meets the regulation governing the award of a Ph.D. in Educational Psychology of Ahmadu Bello University, Zaria, Nigeria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This thesis is dedicated to my late parents Hajiya Aminah Abubakar and Khadi Abubakar Atiku Lere, who serve as model for eight of us.

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ABBREVIATION

PAQ	-	Physical Abuse Questionnaire
PAq	-	Psychological Abuse Questionnaire
SAQ	-	Social Adjustment Questionnaire
PAPS	-	Pupils Academic Performance Results
SA	-	Strongly Agree
A	-	Agree
UD	-	Undecided
DA	-	Disagree
SDA	-	Strong Dis Agree
EMSs.	-	Early Maladaptive Schemas
BCC	-	Behaviour Change Communication

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OPERATIONAL DEFINITION OF TERMS

Basic to this study is the definitions of the following variables:

Academic Performance: Are standardized third term results obtained in English, Mathematics, Computer Science and Social Studies to evaluate pupils' performance.

Physical Abuse: Intentional infliction of pain, to maltreat, to act injuriously, use of corporal force upon pupils making them experience bodily pain or trauma with the intention of punishing or correcting pupil's behaviour.

Psychological Abuse: This consists of damaging words or acts on the part of the parents or teachers which communicate that the child is unworthy of love, uncared for, or unsafe. However, this does not leave observable physical marks.

Social Adjustment: Pupils' ability to cope with the environment so as to live independently on their own or live in harmonious condition with their counterparts.

ABSTRACT

The study employed correlation design in investigating the relationship among physical and psychological abuse, social adjustment and academic performance of primary school pupils in Kaduna State, Nigeria. The population of this study was made up of 8,002 Primary Five (5) pupils selected from Six (6) public schools. A total of 377 abused pupils were sampled using proportionate sampling technique and used for the study. Three (3) instruments namely, Physical Abuse Questionnaire (PAQ), Psychological Abuse Questionnaire (PAq) and Social Adjustment Questionnaire (SAQ) were adopted and used for the study. The Data Collected were analyzed using Pearson Product Moment Correlation and t-test, all these were tested at 0.05 level of significance. Findings reveals that significant relationship existed between physical and social adjustment of abused pupils (P = 0.001), significant relationship existed between physical abuse and academic performance of abused pupils (P = 0.001), significant relationship existed between psychological abuse and social adjustment of abused pupils (P = 0.001), significant relationship existed between psychological abused and academic performance of abuse pupils (P = 0.028). Significant difference existed between physically and psychologically abused pupils on their social adjustment (P = 0.004) and also significant differences existed between physically and psychologically abused pupils in their academic performance (P = 0027). Base on the findings of this study, it was recommended that psychologists, counselors, teachers and head teachers, as well as parents should be sensitized through workshop, seminar, and conferences on the negative effect of physical and psychological abuse, on social adjustment and academic performance among the primary school pupils in order to boost their moral, socially and cognitive development in schools.

CHAPTER ONE

INTRODUCTION

1.1Background to the Study

This study is predicated on the role of psychologists in reducing child abuse in Kaduna state. It takes into cognizance the widespread of child abuse not only in Nigeria but the world over and the need to find the causes of the menace with a view to finding lasting solution to the problem. Child abuse is any act by parents, teachers or caregivers that may expose a child to actual or potential harm such as total neglect at home, places of worship, schools and other individuals a childmay interact with. It has become an international phenomenon; its menace has been given serious attention in many parts of the world like the United States of America, Asia and Africa.

Cicchetti (2015) declares physical and psychological abuse as common social problems globally.According to him, the impacts of physical child abuse range from minor injuries to severe brain damage and even death, while psychological impacts range from chronic low self-esteem to severe dissociative states. The cognitive effects on the other hand, range from attention problems and learning disorders to severe organic brain syndromes. Behaviourally, the consequences of abuse range from poor peer relations all the way to extraordinarily violent behaviours (Kempe,2010). For over 30 years, clinicians like medical doctors and other health workers have studied the effects of child abuse on the physical, psychological, cognitive, and behavioural development of children. In recent years, child abuse has been the object of attention, debates and studies at both international and national levels, on its immediate and long term negative impacts on the victims and the society at large. In respect to the calamities of children, on the 26th November, 1924, the assembly of the United Nations declared the child welfare charter that frowns against child abuse. The

Universal Declaration of Human Rights, states that the child shall be protected against all forms of abuse and neglect, cruelty and exploitation. It is further stated in the Universal Declaration of Human Rights that for the foundation of freedom, justice and peace in the world, the governments should protect the children against all forms of abuse and exploitation. The Global International Documentation of International Law stated that the UN Declaration of the Rights of the Child (DRC) should build upon the right to protection against child trafficking, exploitation and all forms of abuse (The United Nations, 1971 and 1999).

Summary of the United Nations declarationon the rights of the child (1999) states that the best interest of the child is that he or she be given the chance to express himself or herself and be given the right to education. The convention posited that for its purposes, a child means every human being in particular, therefore, the elimination of ignorance and illiteracy throughout the world is needed in order to facilitate the protection of the child and stop child abuse. A report by the International Labour Organization (2002) estimated that about 246 million children were engaged in one form of abuse or another worldwide, with Africa and Asia being the most affected continents. These two continents accounted for 70% of the countries affected and 94% of the children that were abused in a survey of more than 100 countries in 1992. A recent UNICEF survey of households in 25 Sub-Saharan African countries indicated that 31% of children between the ages of 5 and 14 are engaged in various forms of child abuse that threaten them physically and psychologically; and affects their health and academic performance as well as their social wellbeing.

However, a look at the Nigerian societyshows that child abuse occurs not only at home but also in school thereby constituting a bottleneck to the attainment of sound academic performance and good social adjustment. Researchers have shown that this

social scourge is on the increase while parents, schools and the society find it difficult to assess and come up with an effective intervention to deal with the situation. Studies have shown that when a child is physically and psychologically balanced, he or she has more motivation, better grades and higher achievement scores(Ebigbo2000). According to Febe (1994)Child abuse is considered the first cause as well as the first indicator that accounts for young people leaving school and going astray.Studies carried out in Nigeria have shown that physical and psychological forms of abuse have had negative impacts on children. The majority of cases of physical and psychological forms of abuse in primary schools in the North Western part of the country have not been recorded or documented. The United Nations'declaration of child abuse, as a social problem, gained recognition of the Nigerian public only recently. Nigeria's human rights record remains poor and government officials at all levels continue to commit serious abuses. However, Nigeria has made serious improvements in the matters of human rights under the current constitution (1999 Constitution as amended), item 2(a) of the fourth schedule to the constitution, provides for the right of a child to compulsory, free, uniform and qualitative basic education throughout Nigeria.

Donli(1988) pointed that some Nigerian States like Kaduna State, which has long been regarded as one of the most developed states and center of learning in the North West zone of Nigeria, such states could eradicate so many social problems. This situation is manifested in cases of lack of provision of school materials and fees, divorce among couples, abandoned children, street begging, child labour and physical assault. The consequences of this scourge may include poor academic performance and massive failure, school dropout, criminal acts, prostitution, drug abuse and addiction among children. Fafunwa (1974) stated that looking at the Nigerian child as

a direct victim of the low purchasing power of his or her parents in which children are regarded as a source of joy to families and evaluation assets to the parents, children are supposed to be nurtured in family environment and grow up in an atmosphere of happiness, love, care and understanding. Besides, because of their peculiar needs for physical and mental development, children need special care in every aspect of their lives, particularly in the areas of their physical, mental, emotional and social developments and require legal protection in terms of freedom, diginity and security. They are not supposed to be maltreated, exploited, overworked or deprived of their right to education.

1.2 Statement of the Problem

This study is predicated on massive public outcries and media campaign against the prevalence of child abuse in our society, in addition to data collected from Kaduna state ministry of education (2010-2015) which showed that private schools pupils performed better at common entrance than their counterparts from public schools.In view of the above, this study investigated the causes with a view to finding lasting solution to the menace. Thus, the study explored whether relationships existed among the physical and psychological abuse, social adjustment and academic performance of primary school pupils in Kaduna state. It also investigated whether there were differences in the relationships between social adjustment and academic performances of physically abused and psychologically abused pupils in public primary schools.

1.3 Objectives of the Study

In specific terms, the objectives of the study are to:

i. Investigate the relationship between physical abuse and social adjustments of primary school pupils in Kaduna State, Nigeria.

ii. Find out the relationship between physical abuse and academic performances of primary school pupils in Kaduna State, Nigeria.
iii. Investigate the relationship between psychological abuse and social adjustments of primary school pupils in Kaduna State, Nigeria.
iv. Find out the relationship between psychological abuse and academic performances of primary school pupils in Kaduna State, Nigeria.
v. Find out the difference between social adjustments of physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria.
vi. Find out the difference between academic performances of physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria.

1.4 Research Questions

This study seeks to answer the following questions:

i. What are the relationships of physical abuse on the social adjustments of primary school pupils in Kaduna State, Nigeria?
ii. What are the relationships of physical abuse on the academic performances of primary school pupils in Kaduna State, Nigeria?
iii. What are the relationships of psychological abuse on the social adjustments of primary school pupils in Kaduna State, Nigeria?
iv. What are the relationshipsof psychological abuse on the academic performances of primary school pupils in Kaduna State, Nigeria?
v. Are there any differences between the social adjustments of physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria?
vi. What are the differences between the academic performances of the physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria?

1.5 Hypotheses

The following hypotheses are tested at $p<0.05$ alpha level of significance.

HO_1: There is no significant relationship between physical abuse and social adjustment of primary school pupils in Kaduna State, Nigeria.

HO_2: There is no significant relationship between physical abuse and academic performance of primary school pupils in Kaduna State, Nigeria.

HO_3: There is no significant relationship between psychological abuse and social adjustment of primary school pupils in Kaduna State, Nigeria.

HO_4: There is no significant relationship between psychological abuse and academic performance of primary school pupils in Kaduna State, Nigeria.

HO_5: There is no significant difference between the social adjustment of the physically abused and the psychologically abused pupils.

HO_6: There is no significant difference between the mean performance scores of physically abused and psychologically abused pupils in the study area.

1.6 Basic Assumptions

For the purpose of this study, it is assumed that:

i. Physical abuse might have high or low relationship with social adjustment of primary school pupils.
ii. Physical abuse might have high or low relationship with the academic performances of its victims.
iii. Psychological abuse might have high or low relationship with social adjustments of its victims.
iv. Psychological abuse might have high or low relationship on the academic performances of its victims.

v. Significant difference might exist between the social adjustments of physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria

vi. Significant difference might exist between the academic performance of physically abused and psychologically abused primary school pupils in Kaduna State, Nigeria.

1.7 Significance of the Study

This research is significant in the sense that it will help a great deal in providing additional information on the prevailing problem of physical and psychological forms of child abuse in our society. Over the years, there have been different researches with varying degrees of success on different aspects of child abuse such as drug abuse, moral abuse, sexual abuse, emotional abuse, but the aspects of physical and psychological forms of abuse have not been seriously explored or investigated at the primary school sub-sector. The study will also provide useful information and serve as a guide for the scope and nature of child abuse, the immediate and long-term consequences and aftermaths of this scourge on individuals, families and the society at large.

Furthermore, it will provide effective and sustainable policies for child protection programmes. As a result, the study is significant to the following people. It will assist classroom teachers in identifying physically and psychologically abused pupils in their classrooms. Moreover, this identification is the prerequisite for the teacher in his or her attempt to help the victims overcome their appalling conditions. It will also serve as a guide for teachers and school authorities design and implement special classes in their bid to help the affected pupils before referring them to the appropriate agencies or specialists for adequate, further or complementary help or measures. It will help abused pupils get solutions to their problems. It will also direct

them to the people from whom they should seek help instead of suffering in silence.It will be of great significance to school counselors in knowing more about the various forms that physical and psychological abuses take. This will help them render counseling services effectively and efficiently to their pupils that are in dear need of help.

This study is relevant to psychologists in the sense that it will enable them learn more about physical and psychological forms of abuse children experience. As such, the research will help them in solving cases of abuse in good time, in the midst of pupils, thus contributing to the promotion of effective learning. It will help educationists identify the various forms of abuse pupils are subjected to and insert proper ideas on how to treat the affected pupils within the school and class rooms so that they can perform better, into the curriculum.The study will also serve as a source of information and guide for educational policy makers and administrators. For example, the Ministry of Education can set up and implement special educational programmes and services for the physically and psychologically abused children similar to those of the disabled children. It is hoped that this research will enlighten the NGOS as to the physical and psychological forms of abuse children suffer and how these affect the learning process of the children. By being significant to the above-mentioned people, this work will surely help in curbing if not eradicating child abuse in order to make the society a better place for children.

1.8 Scope and Delimitation of the Study

The scope was limited to public primary schools in Kaduna State, which spread across the three zones namely Kaduna North, Kaduna Central and Kaduna South. The study was also delimited to physical and psychological abuse in Kaduna State, the research hinged on the premise that these forms of abuse have various abysmal short or long-term consequences on the lives of the children. Most cases of

abuse are not reported and from the prevailing circumstances, it is believed that pupils in public schools are likely to suffer from the scourge. Finally, the study was delimited to six (6) public primary schools.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviewed the concepts of child abuse, social adjustment and academic performance of pupils in public primary schools.The concept and theoretical framework upon which the work was based and the empirical studies were discussed in details. The researcher relied on theories associated with human needs, child abuse, social adjustment and academic performance. The chapter ended with a summary of the whole review and uniqueness of the study.

2.2 Concept of Child Abuse

A review of the concept of child abuse is expected to give direction and shape to this work in the sense that previous researches showed what has been done, what has not been done and what needs attention now. But one thing that complicates the issue is that many abused people especially children, do not know that they are abused. One reason for this is the failure on the part of individuals and the public to agree upon a definite definition of child abuse. Also many mental or psychological health services providers focus on the diagnoses only without investigating the actual causes of abuse. Another likely reason is that the adaptive cognitive styles victims of abuse develop preclude awareness of abuse and refuse to make their case known for the fear of being stigmatized and cast out. According to Dill (1999) child abuse is a social phenomenon which cannot be precisely defined. He stated that it is appropriate to examine what is considered normal or abnormal behaviour as parents, teachers, psychologists and other adults who come in contact with children on regular basis often have different values, viewpoints and criteria for judging what is normal or abnormal. This means that the definition of child abuse largely depends on who gives

the definition or evaluates the phenomenon. Although there are different types of abuses but the present study is only interested in physical and psychological forms of abuse.

Cohen (2013) argues that child abuse is closely related to the context of traditions as well as official and unofficial child rearing practices which differ from one state or culture to another. However, there exists a consensus on the acts that portray child abuse across cultures. Similarly, Febe (1994) stated that there is a general consensus among psychologists that human behaviour is dynamic in nature. This contributes in making the psychological discourse interesting in finding out the upsurge of behavioural problems among which is child abuse. He further states that lack of a consensual definition of child abuse has been described as problematic for the fact that, due to its nature, it is not easy to concentrate on all the aspects of the phenomenon. In addition, the problem lies in the frequency and extent of abuse, that is, how often and serious the abuse is. Moreover, the problem is ascribed to differences in cultures and child rearing practices in different societies. Though, many critics of child abuse have based their definitions on the intent, that is, whether the abuse is deliberate or accidental. Murkhjee (1978) stated that the definition of child abuse largely depends on the condition of the family to which the child belongs. If the parents of the victim are alcoholic or are known to have psychiatric problems, it can be assumed that they cannot adequately take care of the child. For this reason, such parents cannot be termed as abusers. Other definitions of child abuse, according to Gelles (2015), focus on the physical injuries inflicted on the child. It alsoincludes all forms of hurt, physical and emotional alike. Some psychologists limit their definitions to the operational level and this limitation restricts them to the particular aspect of abuse being investigated. Gills (2009) defines child abuse and neglected acts as “any

acts of commission (abuse) or omission (neglect) and any condition resulting from such acts or inaction (consequences) which deprive children of equal rights and liberties and interfere with their optimal development".

Nigeria's Child Rights Act came into effect in 2003 as stated by UNICEF (2009), when the Convention reached its 20th anniversary, twenty out of thirty-six states of Nigeria had child rights laws that conformed to the act. These laws make it possible for states to protect children against all forms of abuse, neglect, exploitation and discrimination. According to Kemp (2010), child abuse refers to situations in which a child is suffering serious physical injuries intentionally inflicted on him or her; is suffering as a result of neglect, malnutrition or sexual abuse; is growing up without necessary basic physical care or is growing up under conditions which threaten his or her physical and emotional survival. On its part, the Centers of Disease Control and Prevention (C.D.C.P.) views child abuse as maltreatment of any act or series of acts or commission or omission by a parent or another caregiver that results in harm, potential for harm, or threat of harm to a child (Labeeb, 2008) .

Mccloskey (2003) states that child abuse happens much more in the child's home than in organizations, schools or communities the child interacts with. Erick (2010) distinguishes four major forms of child abuse, namely; neglect, physical abuse, psychological or emotional abuse and sexual abuse.Different jurisdictions have developed their own definitions of what constitutes child abuse for the purposes of removing a child from his or her family and/or prosecuting a criminal charge. Paulozzi (2008) states that child abuse is any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation, an act or failure to act which presents an imminent risk of serious harm. The African Network for Prevention and Protection against Child Abuse and Neglect (ANPPCAN, 2009)defines child abuse as the intentional,

unintentional or well intentional acts which endanger the physical health, emotional, moral and the educational welfare of children.

Child abuse can therefore be seen as any act of omission or commission, physical or psychological mistreatment or neglect of a child by its parents, guardians, caregiver or other adults that may endanger the child's physical, psychological or emotional health and development. In this definition, maltreatment of a child or selfish use of a child by adults responsible for the child constitutes child abuse. Thus, the adult may not be directly related to the child but a person under whose care the child is can be an abuser. This may include educators, healthcare workers, day care workers and other responsible adults.

Child abuse can be categorized into two groups i.e. the moderate and the severe groups. The moderate forms are done unconsciously, ignorantly or negligently. They may entail the use of corporal punishment beyond reasonable limits, physical abuse like beating or other acts of physical aggression that cause bruises, starving, house arrest and prohibition from associating with other children, constant show of dislike by shouting or scolding, neglect towards the provision of basic necessities like clothing or any other personal thing that can contribute to development. In severe child abuse, the victim is usually demoralized, suffers both physically and psychologically at higher degrees. This is because the abuse usually affects the personality, body and cognition. It is detrimental because it can disturb the victim throughout his or her life thus hampering his or her development. Severe child abuse could be child trafficking, denial of education and hard labour(Child Welfare Information Gateway, 2008).

Kolo (2010) identified the following as the commonest causes of child abuse in Nigeria:

I. **Domestic Violence:** This is the use of physical force to injure somebody or damage something in the home or everyday life within the household. Very often, children suffer this domestic violence.

II. **Alcohol and Drug Abuse** Living with an alcohol or drug addicted person is very difficult especially for children and can easily lead to abuse and neglect. Parents who are under the spell of alcohol or drugs cannot take care of their children. Thus, they commonly hurt their children physically and psychologically, and neglect them.

III. **Untreated Mental Illness:**Parents who suffer from depression, anxiety disorder, bipolar disorder, or another mental illness cannot take care of themselves needless to talk of their children. A mentally ill or traumatized parent may be distant and withdrawn from his or her children, or getangry quickly without any good reason. Thus, treatment for the caregiver means better care for the children.

IV. **Parents' Lack of Skills:**Some caregivers never learned the skills necessary for good parenting. Teen parents may have unrealistic expectations about how much care babies and small children need, or parents who were themselves victims of child abuse may only know how to raise their children the way they were raised. Parenting classes, therapy, and care caregiver support groups are great resources for learning better parenting skills.

V. **Stress and Lack of Support:** Parenting can be a very difficult job, especially when dealing with relationship problems or financial difficulties. Caring for a child with disability, special needs, or difficult behaviours can also be a challenge. It is important for parents and caregivers to get the needed support, so that children will not suffer.

VI. **Death of Parents:** The death of one or both parents can lead to child abuse if the surviving parent remarries or the children are forced to live with step parents or relatives.

In addition, Erick (2010) associates poverty with cultural values and traditional belief systems which he states are the major contributors to child abuse in most African countries. Aremu (2004) classifies child abuse into five broad perspectives namely: physical abuse, emotional abuse, sexual abuse, neglect and child exploitation (child labour).

I. **Physical Abuse:** Physical abuse may be seen as the infliction of a non-accidental bodily injury on a child. The injury may not have been intended by the parent or caregiver and is not an accident either, but may be due to over-discipline or corporal punishment beyond the limits of tolerance, especially when the child's age is considered.

II. **Emotional Abuse:**Emotional abuse is also known as verbal abuse, mental abuse or psychological maltreatment. The National Clearinghouse on Child Abuse and Neglect Information (2006) defines emotional abuse as "acts or omissions by the parents or other caregivers that have caused, or could cause serious behavioural, cognitive, emotional or mental disorders". It is also seen as any attitude, behaviour that hinders a child's mental health, social development or sense of self-worth. It is probably the least understood, yet the most prevalent, cruelest and most destructive type of abuse. It attacks the child's self-concept by making the child see his/herself as unworthy, worthless and incapable. When a child is constantly humiliated, shamed, terrorized or rejected he or she suffers more than if he or she is physically maltreated. Their salting effect is that most children often withdraw to themselves, become depressed and cannot lack concentrate in school.

III. **Sexual Abuse: S**exual abuse is the employment or use of persuasion, inducement, enticement, or coercion in order to engage a child in any sexual act or stimulation of such an act. Examples of this appalling act are rape, incest, molestation, prostitution and for the fear of shame and stigmatization these cases are kept secret. Sexually abused children suffer emotional problems as a result of feeling guilty and shameful (Corwin and Olafson, 1997).

IV. **Neglect:** This is a failure to provide the basic needed care for the child such as shelter, food, clothing, education, supervision, medical care and other basic necessities needed for the child physical, intellectual and emotional growth. It is a situation whereby the guardians or parents fail to perform tasks that are necessary for the wellbeing of the child and actually endanger the child.

V. **Child Exploitation:**This is often referred to as child labour or child trafficking. It involves the use of a child in work or other activities for the benefit of others. Child exploitation is a systematic destruction of the children through hard work, with little or no compensation and consideration of their health and safety (Newton, 2001). These children are usually asked to do hard work on farms or hawk. Such children rarely benefit from education and eventually drop out of school. By the time these children reach adulthood, they are physically, emotionally, morally and intellectually damaged.

2.2.1 Signs of Child Abuse

There are various patterns of child abuse in Nigeria. So, in this section, different types of inhuman acts inflicted on children in the Northwest zone of Nigeria are going to be discussed. Hodges (2001) identifies the following eighteenpatterns:

I. **Beating and Battering Children:**The use of corporal punishment is very common in African culture, as the saying goes: ‘spare the rod and spoil the

child'. The use of beating as a means of shaping behaviour may not be harmful when applied with caution and only rarely. However, in many cases, the punishments meted out to children are extremely harsh and are both physically and emotionally damaging. Some parents get to the extent of cutting the skin of offenders and apply pepper on the incision or to sensitive parts of the body. Similarly, many parents and teachers usually beat their children or wards and pupils with sticks, rubbers, rods and other injurious objects which inflict serious harms and injuries on these children, such as head injuries, bruises, cuts, or lacerations, internal injuries, injuries to bones, muscles, cartilages, ligaments fractures, dislocations, sprains, strains displacements, hematomas. The end result of these, if care is not taken can be social maladjustment and lack of good performance in school.

II. **Psychological Trauma:**Many of Nigerian homes are characterized by marital conflicts between husband and wife or wives, among co-wives and other forms of intra-family squabbles. In all these situations of crises, the children are at the receiving end and in the process they experience a lot of distress and misery. Other forms of child abuse that result in trauma are rape, discriminatory treatment among others. These negative experiences do not promote the healthy growth and development of the children.

III. **Gender Discrimination:**Majority of the Nigerian communities is patriarchal and as such consequently, there is preference for male children. This social system does not favour the girl child; hence, no or little effort is made towards educating her or ensuring that she gets the much needed attention, care and affection.

IV. **Child Marriage:**Many of Nigerian girls are given out for marriage by their parents between the ages of ten and thirteen, when they are too young to be

consulted for their consent or approval. This cultural practice tends to negatively affect the chances of the girl-child of getting good and sound education. A consequence of early marriage is early pregnancy with a high risk of maternal mortality and morbidity, and the greater prevalence of virginal fistula (VVF).

V. **Female Genital Mutilation:**This refers to the various forms of the female circumcision, in which the clitoris or the prepuce of the girl child is cut in the name of forestalling sexual promiscuity and prevention of diseases. This inhuman practice usually causes serious bleeding that leads to death in some cases.

VI. **Economic Marginalization:**In many African communities, when the male spouse dies or the marriage is dissolved, the woman and the children are exposed to economic deprivation and marginalization. This is rooted in traditional customs and practices which do not generally have any provision for inheritance by women or ways of ensuring the up-keep of the divorcee or widow and the children. The provisions are even abused where they exist and therefore expose the children to abysmal hardship which jeopardizes their future well-being.

VII. **Discriminatory Treatment:**Marital conflicts lead to divorce in many cases and the children may be put under the custody of the father. In such a situation, the children are left under the care of their stepmothers. Very often, such children are exposed to distressing experiences like inadequate feeding and undue labour. This problem also applies to those children adopted by relatives who do not treat them like their biological children within the household.

VIII. **Child Labour:** The economic depression in the country has driven many children into different types of labour that are exploitative, hazardous and prejudicial to their welfare and growth. Such work is exploitative and injurious to the physical, social, cognitive and moral development of the child. Examples of this exploitation are street begging, hawking, scavenging and head-loading. These activities occupy the child throughout the day and in most cases, interfere with his or her educational pursuit or even deny him or her, the opportunity necessary for his or her intellectual and moral development.

IX. **Child Begging:** Child begging takes many forms. For example, the child begs entirely on his own or leads a blind parent or relative or else acts as the front to parents who watch him or her from distance. Such unfortunate children usually sleep in the street and run enormous risks. These children suffer severe psychological consequences as a result of these dehumanizing activities.

X. **Sexual Exploitation of the Child:** Child prostitution has become rampant in many Nigerian cities (Ademola, 2010). The girl child hawking is also exposed to sexual promiscuity. The problem of child prostitution has taken an international dimension with the emergence and increase in the rate of children and women trafficking.

XI. **Abandoned Children and Orphans:**Another form of child abuse is the abandonment of children and orphans. Children are abandoned in public places due to various reasons which include the fear of disgrace in the case of pregnancies without marriage and economic problems. Such children are usually taken to orphanages. But unfortunately, these children are brought up in unhealthy conditions in these orphanages. As a matter of fact, these children

find it difficult to adjust in the community life when they eventually leave the orphanage.

XII. **Street Children:** These are children that wander in some of Nigerian cities who have no contact with their families. Undoubtedly, they have exceptional harsh and hazardous way of life. They live under bridges, in motor parks, markets, dilapidated or abandoned houses.The public is less aware of the existence of young children in the street. Such children are exposed to frequent illnesses due to malnutrition, inadequate clothing, accommodation and lack of hygiene. They survive by engaging in menial activities like head loading, scavenge and even stealing or other criminal activities.

XIII. **Children Born to Imprisoned Mothers:** When a breastfeeding mother or expectant mother is convicted, the innocent child or children find themselves incarcerated too. This situation definitely interferes with the normal physical and psychological growth of the child.

XIV. **Ritual Killings:** The activities of secret societies have brought another dimension of child abuse, wherein children are not spared in human sacrifices (Ebigbo, 2000). The children of the poor are usually kidnapped by unknown people, and no serious efforts are made by the authorities to curb this social menace.Child abuse is more than bruises and broken bones. While physical abuse might be the most visible sign, other types of abuse, such as emotional abuse or child neglect, also leave deep and long lasting scars. Some signs of child abuse are subtler than others. However, by learning common types of abuse and what one can do, one can make a great change in a child's life. The earlier abused children get help, the greater chance they have to heal from the abuse and prevent further abuse. Ability to recognize the signs and symptoms of child abuse can help break the cycle and give appropriate help to the

children and their caregivers. Where the level of injury or damage is beyond one's professional ability, adequate referral should be made (Scarupa, 2012). However, there are other variables to be considered when trying to find out the cause of a child's behaviour or underachievement in or outside school.

XV. **Poverty** Most of the child abuse in Nigeria can be traced to the economic predicament facing the nation (Bukoye, 2004). The problems associated with poverty include begging, prostitution and hawking individuals engage in to boost their economic income. Likewise, children are discharged in streets or abandoned in public places or even taken to affluent relatives for fostering. In addition to poverty, material wants or desire also leads to atmospheres of tension and general nervousness which can easily cause intra-marital conflicts and their attendant consequences on innocent children.

XVI. **Superstitious Beliefs:** Superstitious beliefs are rampant among Nigerian communities. This is one of the major reasons behind many harmful traditional practices such as female genital mutilation, early marriage, ritual killings and even sexual exploitation of the virgins.

XVII. **Ignorance:** Some of the acts of child abuse can be attributed to ignorance. For instance, in the case of child labour, some communities are not even aware of the idea of child labour; and in the case of female genital mutilation, the practitioners do that out of the belief that it is a good cultural practice. In both case, the communities are unaware of the negative effects of those practices.

XVIII. **Government Insensitivity:** The level of child abuse in the country and the relegation of the task of protecting children and women's rights to the non-governmental organizations is a sign of the insensitivity of the government to the entire problem. (Hughes, 2014).

2.3 Physical Abuse

2.3.1 Concept of Physical Abuse

Ushie *et al*. (2011) defined physical child abuse as other signs of injury that occur when a child is hit in anger. The physical signs of child abuse are called 'battered child syndrome'. This syndrome refers to many fractures that occur to children very often even at a tender age. The syndrome includes black eyes, broken bones and bruises, using hands, fingers or objects such as belts and pressing irons on the child. Other battered child syndromes include choke marks around the neck, human bite marks, lash marks, circular marks around the wrists or ankles (signs of twisting or tying up), burns and bulging fontanels.

In the same vein, the Department of Children and Families (DCF, 2013) stated that physical child abuse involves physical harm or injury to a child. It may be the result of a deliberate attempt to hurt the child, but not always; because it can also result from severe disciplinary measures, such as using a belt on a child, or physical punishment that is inappropriate to the child's age or physical condition. Similarly, the Children First-National Guidance for the Protection and Welfare of Children, (CF-NGPWC, 2011) referred to child physical abuse as that treatment a child receives which may results to actual or potential physical harm from an interaction, or lack of interaction, which is reasonable within the control of a parent. It can also be within the control of any person in a position of responsibility, power or trust. Based on the above views, physical child abuse is any physical injury inflicted on the body of a child whether intentionally or unintentionally that can cause damage to the child.

Several studies have shown that physically abused children may suffer health problems or emotional disequilibrium, act against social norms and have poor performance at school. Reacting to that, Ba-Saddik and Hattab (2013) stated that

physical abuse has long lasting effects on mental health, social isolation, criminal behaviour, drug, alcohol misuse and risky sexual behaviour which persist into adulthood. Similarly, Finkelhor (2008) maintained that physical abuse of children leads to aggressive behaviour, emotional and behavioural problems, and educational difficulties in children. Despite the glaring danger of physical child abuse, the perpetrators of such cruel acts usually come up with strange explanations that no human wisdom would accept because normal childhood activities would not account for the injuries in question. Many physically abusive parents and caregivers insist that their actions are disciplinary and are only meant to make the children learn to behave themselves in the society they belong.

2.3.2 Elements of Physical Abuse

Denga (2002) defined child abuse as exposing children to painful and unwarranted suffering knowingly or unknowingly.There is a clear difference between physical punishment and physical abuse. Physical punishment is not meant to harm i.e. itis carried out in such a way that it does not harm children but rather corrects bad ways and teaches good values. On the other hand, child abuse only harms and has nothing good, but unfortunately, a lot of parents and caregivers do not act wisely and consequently ended up acting abusively or mistaking abuse for punishment. Denga (2002) identifies the following elements of physical abuseto be considered when giving out physical punishment:

I. **Unpredictability:** The child never knows what is going to set the parent off. There are no clear boundaries or rules. The child is constantly walking on eggshells, never sure of what behaviour will trigger off a physical assault.

II. **Lashing out of Anger:** Physically abusive parents act out of anger and desire to assert control on the motivation to love, the angrier the parent, the more intense the abuse on the abused child.

III. **Using fear to Control Behaviour:** Parents who are physically abusive may believe that their children need to fear them in order to behave well, so they use physical abuse to "keep their child in line". However, what children are really learning is how to avoid being hit, not how to behave well and grow as good and honest people.

2.3.3 Effects of Physical Abuse on the Child

Murkhjee (1978) and Gibb (2002) found that the more children received physical aggression from their parents, the more likely they were to engage in physical aggression, including physical fights with another child at home, with nonfamily children, with adults at home, and with nonfamily adults. This applied to all age groups, both genders, and all socioeconomic statuses. They also tested an interaction effect, which indicated no significant verbal or physical aggression. The relationship between verbal aggression by parents and physical aggression by children was not affected by the level of physical aggression used by parents. Kolko (2002) conducted a study that investigated children's reports of family violence and parental verbal aggression, and the relationship between these reports and children's overall functioning and adjustment.

Three hundred and twenty three children ages 6 to 13 years who were part of a larger study on antisocial behaviours and fire-setting were included in the study, as well as community cases and outpatient clinic cases. Both children with and without a history of fire-setting were recruited. Children and one of their parents were interviewed and asked to complete rating scales measuring child, parent, and family functioning at initial assessment and at a 2-year follow-up. Rating scales on children's functioning and adjustment were completed by the children and their parents at 2-year follow-up. Participants completed the Conflict Tactics Scale, (CTS) (Straus, 2003) to assess response patterns during family conflict, including violence (e.g., kicking,

hitting, beating up, threatening with a weapon), and verbal aggression (e.g., insulting, swearing). Each of these factors was rated for five days: child to sibling, child to reporting parent, reporting parent to child, reporting parent to partner, partner to 18 reporting parent. Based on parent reports, verbal aggression from mother to child at initial assessment predicted children's arguing/fighting and hostility at 2-year follow-up above and beyond verbal aggression or physical aggression in other days.

However, these relationships were not significantly based on children's reports. Mother to child physical aggression was also assessed in this study and this construct predicted children's self-reporting of delinquency when controlling for other forms of violence and verbal aggression. A study by Lar (2010) investigated the long-term effects of parental maltreatment, including verbal abuse and emotional neglect. Undergraduate students completed retrospective measures of maltreatment and three measures of current functioning, one of which assessed anger and aggression. They used the CTS to assess verbal abuse and physical abuse. Six dimensions of anger and aggression were measured through the Brief Anger and Aggression Questionnaire (BAAQ). Marijorie *et al*., 2003) stated that assault, indirect hostility, negativism, irritability, hostility, and resentment by parents can affect their children's academic performance. This finding supports the exploratory hypothesis in this study regarding physical abuse differentiating between those psychologically maltreated children who become socially anxious, and those who become aggressive. The authors also used the Harsh Parental Discipline subscale of the CTS, which measures acts of physical punishment not as severe as those on the physical abuse subscale, such as hitting with belts, to examine an exploratory hypothesis examining the relationship between 19 physical punishment and levels of anger and aggression. Similar to the results of physical abuse, harsh parental discipline was found to predict anger and aggression.

As described above, Shaffer (2009) utilized a prospective, longitudinal design to investigate the relationship between observed emotional abuse and neglect from 3 months of age to 42 months of age, negative outcomes in middle childhood and early adolescence, including examining social withdrawal and aggression as mediators. All analyses controlled for physical and sexual abuse. They found that early childhood emotional abuse and neglect were associated with higher levels of aggression in middle childhood. However, although social withdrawal was found to mediate the relationship between emotional abuse and adolescent competence (self-esteem and peer competence), aggression was not. Neither of the mediation models for emotional neglect was supported. The authors interpreted the stronger relationship with social withdrawal demonstrated by this study as perhaps indicating that emotional abuse moves children to more strongly turn "away"from relationships with others (social withdrawal) than "against"relationships with others (aggression).

Turning away from relationships was described as a coping or protective mechanism to prevent further abuse. Cohen (2001)studied a group of juvenile offenders who lived in juvenile detention centres or foster homes and compared them with a control group of randomly selected teenagers the same age with each group having 25 subjects. She hypothesized that the offenders would report experiencing a higher level of violence between family members as reported by the CTS, including physical aggression, verbal aggression, anger, and hostility. Compared to the control group, the offender group was found to have experienced a significantly higher level of verbal aggression from their mothers. The offender group also rated themselves significantly higher for demonstrating physical aggression and hostility. Furthermore, 20 from this group reported being significantly more physically aggressive toward their mothers and fathers, and they reported that their mothers were significantly more

physically aggressive toward them compared to the control group. Interactions between physical and verbal aggression were not examined.

In the studies described above, Leeson and Nixon (2011) and Kim (2003) explored the relationship between psychological maltreatment and externalizing behaviours or conduct problems. They measured externalizing behaviours using the corresponding subscale, which assesses delinquent and aggressive behaviours. They found that above and beyond other maltreatment types, including physical abuse, psychological maltreatment predicted externalizing behaviours in a sample of maltreated children aged 6 to 17 years. Hart *et al.* (1987)examined symptoms of conduct disorder (including behaviours such as lying, cruelty to animals, shoplifting, physical assault, and fire-setting), measured by the Diagnostic Interview Schedule for Children, Version IV (DISC-IV). Children with conduct problems reportedly received higher levels of harsh-inconsistent and hostile parenting behaviours, along with lower levels of warmth and nurturing-involved parenting compared to depressed children and children without adjustment problems across both time points of the study. However, physical abuse was not controlled for in this study.

Shaffer (2009) and (Goldson, 2002)utilized the sample from the Minnesota Longitudinal Study of High Risk Parents and Children. Children in this sample were identified as physically abused or emotionally neglected. Physical abuse was determined by the presence of a substantiated child protection case, and emotional neglect was established during early childhood (0-54 months) through multiple home and laboratory observational assessments. Mothers who were emotionally neglectful appeared to be detached and unresponsive to the child's needs or when the child indicated a desire for comfort.The authors were interested in the relationship between childhood maltreatment (physical abuse and emotional neglect) and antisocial

behaviour in adolescence in which ninety eight anti-social behaviours were measured in different ways at different ages.

In middle childhood stage, it was measured by teacher reports externalizing behaviours subscale, which reflects delinquent and aggressive behaviours. This delinquent and aggressive behaviour subscales were used to measure antisocial behavior at ages 16 to 17. They looked at emotion deregulation and alienation from the primary caregiver as mediators in the relationship between maltreatment and antisocial behaviour. In examining simple relationships, the results indicated that both physical abuse and emotional neglect were risk factors for antisocial behavior in adolescence; however when they tested the mediation model they found that physical abuse had a significant effect on middle childhood externalizing behavior through alienation from the primary caregiver as a mediator not emotional neglect because emotional neglect does not make a unique contribution in predicting externalizing behaviors.

Cawson (2002)examined different types and levels of severity of maltreatment in relation to adaptation in a group children ages 5 to 11 years. The children were all attending a one week summer day camp, which also functioned as a research program, allowing children to be observed in a natural setting. Presence of maltreatment was determined by a review of Child Protective and Preventive Services records on file. The narrative report was used to classify maltreatment according to four types: physical abuse, sexual abuse, emotional maltreatment, and physical neglect. Brewin (2003) stated that the developmental period(s) during which maltreatment occurred was noted e.g. threatening injury to the child, abandonment by caregivers, and suicide attempts by caregivers in the presence of the child. Non-maltreated children were selected from the camp based on matching demographic

variables. Camp counselors completed ratings of externalizing behaviors on the teacher report form of the CBCL (delinquent and aggressive behavior) and also completed a behavior checklist that assessed peer interactions, including aggressive behavior. In addition, children were interviewed and asked to name another child who best fit certain behavioral descriptions such as "a fighter" or "a disruptive child" (Brewin, 2003).

Results indicated that severity of emotional maltreatment and physical neglect in infancy-toddlerhood, physical abuse at preschool age, and physical neglect during middle childhood were related to counselor-rated externalizing behaviors, when controlling for other forms of abuse. Severity scores of emotional maltreatment during infancy-toddlerhood and emotional maltreatment and physical abuse during preschool age significantly predicted counselor-rated aggression. Based on peer ratings, severity of physical neglect during infancy-toddlerhood and emotional maltreatment at preschool age were related to fight-starting. Overall, the authors found that emotional maltreatment in early years (infant-toddlerhood and preschool) was detrimental to adaptive functioning, especially in the areas of aggression and externalizing behaviors. The results also highlighted the impact of physical abuse on aggression, especially when experienced during the preschool years. Psychological maltreatment impacts the relationship between children and caregivers in a way that contributes to a negative internal working model, and therefore an insecure attachment style (Erickson, 1968).

2.4 Psychological Abuse

2.4.1 Concept of Psychological Abuse

Brassard *et al*. (1987) defined psychological abuse as a pattern of behaviour on the part of a caregiver that conveys to a child that he or she is "worthless, flawed, unloved, unwanted, endangered, or only of value in meeting

another's needs". Uzodike (1990) defined psychological abuse, which she referred to as emotional abuse, as the psychological and social aspects of child abuse. She stated that 'it is the most common form of child abuse' and argued that it occurs when a child's emotional, psychological or social well-being and sense of worth is continually battered. It can include a pattern of criticizing, rejecting, degrading, ignoring, isolating, corrupting, exploiting and terrorising a child. It may result from exposure to family violence or involvement in illegal or anti-social activities.

2.4.2 Prevalence and Incidence of Psychological Abuse

A Study by Sedlak (2010) showed that psychological abuse is highly prevalent in schools, although largely underreported due to its psychological nature in contrast with physical abuse. Hefound that 2 out of every 1,000 children are psychologically abused based on a standard of evidence of harm and 4.1 out of every 1,000 children are psychologically abused. According to this study, psychological neglect occurs in 2.6 and 15.9 out of every 1,000 children using standards of evidence of harm and endangerment. Scott (2003) however, argued that there is growing evidence of internal damage to the brain system. Paulozzi (2008) reported another study conducted by The Family Research Laboratory at the University of New Hampshire using telephone surveys completed by a representative sample of American parents. The survey asked parents whether they had engaged in various forms of psychological aggression, and results demonstrated that 89 percent of these parents reported engaging in one or more forms of psychological aggression in the past 12 months, with 33 percent reporting severe psychological aggression.

Although it remains difficult to accurately estimate the prevalence of psychological maltreatment due to underreporting, the data point to a clear presence and significant occurrence of this form of abuse everywhere in the world. Zolotor (2009) conducted a survey on children aged 11 to 19 who lived with their parents. It

was found that psychological victimization of parents and older siblings was experienced by 64 percent of children surveyed in Colombia, 72 percent in India, 81 percent in Russia, and 48 percent in Iceland. Psychological maltreatment has thus been shown to cut across all socio-economic strata, although it is most common among those with low socio-economic status. Based on the data, children from low-income families are psychologically abused five times more consciously and psychologically neglected unconsciously four times more frequently than those in higher income families.

DeBellis (2001) investigated the relationship between having a history of emotional maltreatment and adults' depressive cognitions. History of emotional maltreatment was measured which assesses recalled caregiver derogation, humiliation, rejection, extortion, and teasing. Using a sample of undergraduate students, they found that childhood emotional maltreatment was significantly related to current negative and positive automatic thoughts, with a significantly stronger relationship between recalled childhood psychological maltreatment and current negative automatic thoughts. In addition, their results supported a meditational model wherein negative and positive automatic thoughts fully mediated the relationship between emotional maltreatment and young adults' depressive symptom levels.

In a study conducted by Herrenkohl (2005), individuals were assessed for childhood abuse utilizing the Nemesis trauma interview; subjects were asked in this interview whether they had experienced emotional abuse, emotional neglect, physical abuse and sexual abuse before the age of 16. Emotional abuse was described in the interview to participants as: "You were cursed; you were unjustly punished; your brothers and sisters were favored-but no bodily harm was done." Emotional neglect was defined as: "People at home didn't listen to you; your problems were ignored;

you felt unable to find any attention or support from the people in your house." Presence of childhood abuse was defined as endorsement of any of the four forms of abuse more than once (two or more incidents of abuse of any of kind).Participants with a history of childhood abuse participated in an exercise to determine whether they experience automatic self-associations, specifically self-depression and self-anxiety associations. The self-associations were measured using an indirect performance measure, the Implicit Association Test (IAT). The idea behind the IAT is that subjects will be faster at categorizing when a target and attribute are strongly associated in their minds. For example, depressed individuals will categorize depressive words under the "depressed me" category faster than they would categorize depressive words under the "depressedother" category during another trial. They found that childhood emotional abuse have the strongest link with automatic explicit depressive and anxious associations compared to physical abuse.

Mhya and Gamba (2015) conducted a study on the prevalence of psychological abuse. The control group was recruited from schools in areas matching the socio-economic status of participants in the maltreatment group. Compared to the control group, children who had been psychologically maltreated reported more symptoms of depression and lower self-esteem, even after controlling for other forms of abuse. Parents of the abused children reported that their children experienced more internalizing and externalizing problems than did the parents of children in the control group. Psychological maltreatment was also related to child-reported negative automatic thoughts and post-trauma cognitions, which in turn were predictive of self-reported depression, self-esteem, and also identified as mediators in the relationship between psychological abuse and interpersonal conflict in an adult sample.

Childhood psychological abuse was measured using the Computer Assisted Maltreatment Inventory (CAMI), in which five areas of childhood psychological abuse were assessed, including emotional unresponsiveness, demandingness, terrorizing/spurning, isolating, and corrupting. In addition, parenting style was measured. Their results indicated relationship between psychological abuse and adult interpersonal conflict and suggested that those who experience psychological abuse as children may develop a set of beliefs that those they interact with are not able to be trusted, may abuse them, may abandon them, and will not provide emotional support when needed.

Wright and Crawford (2009) in another study looking at maladaptive schemas as mediators between emotional maltreatment and later distress in adulthood, measured college students self-reported experiences of childhood abuse and neglect, early maladaptive schemas and current psychological distress, specifically internalizing and dissociative symptoms. Childhood emotional abuse and neglect uniquely predicted symptoms of depression, anxiety, emotional neglectand dissociation. The findings suggest that experiences of psychological maltreatment as a child may lead to beliefs about self-defective or shameful beliefs that one cannot prevent catastrophes at any time,

2.4.3 Effects of Psychological Abuse on the Child

Psychological abuse is almost always present when other forms of abuse occur. The effects of this form of abuse are not always immediate or visible. The long-lasting effects of psychological abuse may only become evident as a child becomes older and begins to show difficult or disturbing behaviors or symptoms. The following are the signs and effects of psychological abuse:

I. **Signs in Childhood:** From infancy to adulthood, emotionally abused people are often more withdrawn and emotionally disengaged than their peers, and find it difficult to predict other people's behaviour, understand why they behave in the manner that they do, and respond appropriately. As Uzodike (1990) pointed out, psychologically abused children exhibit a range of specific signs. They often feel unhappy, frightened and distressed behave aggressively and anti-socially, or they may act too mature for their age experience difficulties with academic achievement and school attendance find it difficult to make friends show signs of physical neglect and malnourishment experience incontinence and mysterious pains.

II. **Signs in Adulthood**: Adults emotionally abused as children are more likely to experience mental health problems and difficulties in personal relationships. Many of the harms of physical and sexual abuse are related to the emotional abuse that accompanies them, and as a result many emotionally abused adults exhibit a range of complex psychological and psychosocial problems associated with multiple forms of trauma in childhood (Glaser 2002).

Anderson (2014) found that significant early relationships in childhood shape responses to new social situations in adulthood. Adults with emotionally abusive parents are at a disadvantage as they try to form personal, professional and romantic relationships, since they may easily misinterpret other people's behaviours and social cues, or misapply the rules that governed their abusive relationship with their parent to everyday social situations. Many parents are psychologically abusive without being physically or violent abusive though, psychological abuse invariably accompanies physical and sexual abuse. Some parents who are psychologically abusive parents practice forms of child-rearing that are orientated towards fulfilling their own needs

and goals, rather than those of their children. Their parenting style may be characterized by overt aggression towards their children, including shouting and intimidation, or they may manipulate their children using more subtle means, such as emotional blackmail.

Iwaneic and Herbert 1999 pointed thatpsychologicallyabusive parents have negative attitudes towards children, perceive parents as unrewarding and difficult to enjoy, and that they associate their own negative feelings with the child's difficult behaviour, particularly when the child reacts against their poor parenting methods. Psychological abuse has increasingly been linked to parental mental health problems, domestic violence, drug and alcohol misuse, being abused or having been in care as children

Daro (1988) further pointed that psychological abuse does not only occur in the home as children can be emotionally abused by teachers and other adults in a position of power over the child. Children can also be psychologically abused by other children in the form of "bullying". Chronic psychological abuse in schools is a serious cause of harm to victimized children and warrants ongoing active intervention.

2.5 Social Adjustment

2.5.1 Concept of Social Adjustment

Lehtinen *et al*. (2005) define social adjustment as an important functional dimension of human life that is indicative of mental health. It is essential to the well-being of individual and to his or her ability to ‘perceive, comprehend and interpret the surrounding and to consequently adapt to it or change it if necessary. It is also essential for communication and successful social interactions among human beings. Children who experienced physical or psychological abuse or both were found to have poorer social adjustment when compared to non-abused children.

Deb (2006) observes that adjustment is not so much a matter of conformity to a specific culture but is observed as increasing satisfaction in being able to cope because the expatriate learns how to work effectively within the host country. In short, the goal of adjustment is not assimilation only; it is also informed by acculturation. The degree of adjustment may be specific to a country, organization, or an individual. It should also be noted that the social learning theory approach mentioned above deemphasizes specific time frames for adjustment and focuses on learning curves for individuals.

However, Black*et al.* (1991) identified five major in-country variables affecting adjustment. First, individuals bring with them differing levels of self-efficacy, relational skills and perceptions that may be either evaluative or non-judgmental. Second, the degree of clarity, discretion, novelty, and conflict in the job itself strongly influences adjustment outcomes. Third, how novel (different) the host organization's culture is compared to the parent's corporation, and the level of social and logistical support from the host organization, play a major role in adjustment. Fourth, whether formal or informal, effective tactics and content of organizational socialization help expatriates successfully in the host organization. Fifth, non-work factors including how novel the mainstream culture is and whether family-spouse are successful adjustment influence the overall success of the placement. All the five factors simultaneously interact and contribute to the mode and degree of overall adjustment.

2.5.2 Physical Abuse and Social Adjustment

Hart and Brassard (1987) viewed physical abuse and children's social adjustment as one system in which children's social expectations and behaviour develop within the context of abusive parenting and mediate current social functions. A research was conducted in New York showed that children's social expectations

regarding peers were compared with two social behaviours--aggressive behaviour and pro-social behavior. The two social behaviours were found to mediate between positive and negative social status, as well social expectations were generally found to mediate between abuse and internalizing problems. Negative social status (peer rejection) added to social expectations can lead to production of internalizing problems. Identification of these mediating pathways can serve as guide to secondary preventive intervention efforts that can best address the problems that abused children face in the absence of adequate parental and peer support as the children enter adolescence. Physical abuse problems associated with health include hypertension, somatic complaints, respiratory ailments, failure to thrive, and delayed physical and behavioural development. This study will explore in depth the effect of physical abuse in areas of social adjustment among primary school pupils in Kaduna state, Nigeria.

2.5.3 Psychological Abuse and Social Adjustment

Briere and Runtz (1988) made the point that psychological abuse impacts intrapersonal thoughts, feelings, and behaviours which can lead to depression, anxiety, impaired self-esteem, a negative outlook on life and negative cognitive styles. Psychological problems in return leads to social adjustment difficulties, lack of impulse control, emotional instability, borderline symptoms, substance abuse, symptoms of eating disorders, and unresponsiveness. Also, problems in social functioning was found to be affected by impaired social competency, antisocial behaviour, non-compliance, attachment insecurity or disorganization, self-isolation, withdrawal, social phobia, lack of empathy towards others, high dependence, aggression and violence, criminality, sexual maladjustment, and increased criminal behaviour.

Botto and Nielsen (2014), investigated social adjustment problems created by psychological maltreatment showed lack of enthusiasm, lowers achievement and intelligence, decreased mental competence, problems with impulse control, low creativity, difficulty in learning and solving problems, and poor performance in school. Also, Binggeli *et al.* (2001), stated that significant evidence of the damaging effects of psychological abuse exist on several areas of adjustment in children and adolescents which have adverse effect on intrapersonal thoughts, feelings and behaviours, emotional problems, problems in social functioning, learning, and physical health.This study will explore in depth the effect of psychological abuse in areas of interpersonal thoughts, feelings, behavior and social functioning among pupils in order to provide basis for hypothesizing the relationships between psychological abuse and social adjustment of primary school pupils in Kaduna state, Nigeria.

2.5.4 Effects of Psychological Abuse on Social Adjustment

Mills (2004) defined psychological abuse a measure of parental bonding instrument which creates an impaired sense of self that manifests as low self-esteem, damaged self-concept and internalizing problems leading to depression, anxiety and anger. Further evidence of the effect of psychological abuse on social adjustment was demonstrated by Binggeli and Brassard (2001) in which seven behaviour categories, including rejecting behaviours, degrading behaviours, isolating behaviours, terrorizing behaviours, corrupting behaviours, exploiting behaviours, and behaviours that deny emotional responsiveness were identified. The results revealed psychological abuse as a significant predictor not only of low self-esteem.

Simeon *et al*. (2001) utilized a measure that assessed seven types of verbal aggression and found that in a sample of 144, fifth grade children recruited from a public school, those who had experienced a significant level of parental verbal

aggression demonstrated poorer self-perceptions (in the areas of social acceptance, scholastic competence, behavioural conduct, and global self-worth) than those who had experienced a low level of parental verbal aggression. Cohen (2001) evaluated the impact of emotional abuse and parenting style on adult psycho social among a sample of Israeli college students and revealed that recalled childhood emotional abuse and parenting style had an effect on self-reported adult psycho social, with immature defense mechanism organization and self-esteem acting as mediators. It was also found that there is relationship between childhood abuse and self- depreciation in a community sample of adults.

Kim (2003) evaluated parental behaviours of African-American parents and the occurrence of symptoms of depression in their children. In this evaluation, a longitudinal design and community sample of 897 African-American children and their caregivers were used to assess children at mean ages of 10 and 12. It was found that compared to those children who did not have social adjustment problems, depressed youths reported a higher level of harsh-inconsistent parenting and hostility. Furthermore, children whose social adjustment increased over the two assessment periods of the study reported a significant decrease in warmth and nurturing parenting as well as a significant increase in parental hostility and harsh-inconsistent parenting.

2.6 Academic Performance

2.6.1 Concept of Academic Performance

Ganai and Ashraf (2013) defined academic performance as the knowledge obtained or skills developed in school subjects usually designed by test scores or marks assigned by the teacher. It indicates the learning outcome of the students. Browsard (2002) defined academic achievement as the overall academic performance of the students in the school assessed by the use of teachers' rating tests and examinations. United Nations (2010) postulated that academic achievement includes

standardized test scores in subject areas such as reading, mathematics and language arts; grade point average (s); classroom test scores and other formal assessments.

2.6.2 Physical Abuse and Academic Performance

Academic achievement is the outcome of education, the extent to which a learner has achieved his or her educational goals. Academic achievement of pupils in primary schools may vary significantly by gender. Eze (2009) described academic achievement as something which has been accomplished successfully, especially by means of exertion, skills, practice or perseverance. Children who are abused also receive lower rating performance from their school teachers, score lower in cognitive assessments and standardized tests of academic achievement, obtain lower grades and get suspended from school and get retained in grade more frequently.

Zimmerman and Schunk (2001) note that abused children do not learn effectively hence they perform poorly in school, this is because children that have been victimized by one or more form(s) of abuse exhibit some behaviours different from others in school with attendant effects on their academic performance. Child abuse generally delays students' progress academically, as there is always lack of trust in people because they have been disappointed and abused by those that ought to be source of joy, trust, defense and security to them. Shonk and Cicchetti, (2001) stated that abused pupils believe nowhere is safe and nobody is to be trusted and this leads to changes in behaviour such as emotional pain, physical pain, withdrawal from opposite sex, poor social relationship, anxiety, mental stress, depression, difficulty in socializing, sadness, hooliganism, thuggery, rebellious, malnourishment, anger, scars on body parts, addictions, sexual difficulties, unhealthy appearance and all these traits lead to poor academic performance by the child as concentration becomes a problem.

Heckman and Rubinstein (2001) observed that physically abused children encounter academic problems at home, school and among their mates. In the same

vein, students that are neglected by their parents or care-givers tend to be independent, lack moral values, rude to teachers and law breakers as a result of lack of parental roles especially the motherly roles and advice. On the other hand, children who are given too much attention might be too dependent, have low confidence, self-esteem, psychologically affected and might not be able to face challenges or solve high tasking work in school; they also tend to have lower grades and high rate of class repetitions than their mates. A study by Togunde and Arielle (2008) showed that most abused children are not punctual to school and therefore perform poorly in their academics with consequent implications on their future and the economy generally. In the same vein, Aliyu and Garba (2012) disclosed that child abuse leads to child poverty in Nigeria, that 36 percent of Nigerian children are deprived of educational opportunities as a result of child abuse with negative effect on the Nigerian economy.

2.6.3 Psychological Abuse and Academic Performance

Ngwoke and Eze (2010) opined that in a traditional African setting, child training was the prerogative of parents and community members but the advent of Western education made parents to hand over their training responsibility to the schools which put more demands on the school basic functions, making teachers' tasks enormous leading to occasional maltreatment and neglect of students. Conlee (1986) submitted that students at all grade levels experience abusive emotional assaults from teachers in classroom environments. This problem is further compounded with claim by some scholars that most teachers are not familiar with psychological abuse and how to identify its signs leading to widespread child abuse (Osei-Hwedie and Hobona, 2001).

Okoza *et al*. (2011), studies have consistently affirmed the existence and manifestations of all dimensions of psychological abuse among students in schools cutting across class, school type and age particularly cases of isolation, degradation,

exploitation, rejection, corrupting, ignoring, and terrorizing among others. Bulus (2000) conducted a research in Edo State, Nigeria comprising 1537 secondary school students drawn from multistage proportionate sampling technique indicated that students experienced psychological abuse dimensions of terrorizing, isolating, ignoring, and verbal assault in junior secondary schools while senior secondary school students experienced domination and terrorism. Umobong (2010) gave instances when teachers or school authorities intentionally or unintentionally indulged in psychological abuse of students making reference to schools where teachers addressed students with sinister words or phrases such as "idiots," "never do well", "I knew you will never perform well". At times, students are confined to dark rooms as a form of punishment or locked up for inability to pay school fees. "

Shumba (2002) indicated in other countries in Zimbabwe, female teachers used vulgar language, shout and scold, humiliate, and label students as "stupid", "ugly", "foolish. While Ba-Saddik and Hattab (2013) indicated that in Yemen, teachers have been responsible for 45.6 % of psychological abuse among school pupils. Caesarian (2000) showed that 34 per cent of 700 students used for a study reported six incidences of psychological abuse by teachers while 11 per cent reported 31 cases within the school year. It was also found that students in public schools were more likely to suffer verbal abuse; insult by schoolmates and teachers was the most frequently recalled abuse. Benbenishty *et al*. (2002) found that almost one third of Israeli students had been emotionally maltreated by staff members.

From the foregoing, it is evident that there are certain factors inherent in students that tend to make them susceptible or expose them to the risk of being abused by teachers. One of the prominent determinant variables is the age of the victim. Cohen (2013) recognized adolescent period as a determinant variable which is subdivided into early (12-15years), middle (15-18years) and late (18-22years)

periods. He specifically postulated that students at late adolescent period are at higher risk of exposure to both physical and emotional abuse because they tend to have more freedom to move around and that increases opportunities to get in contact with psychological abusers in school and community. In the same vein, Okoza *et al*. (2011) observed that adolescent period of life is a time of storm and stress which is characterized by conflict and mood swings leading to crises between teachers and students which may probably prompt teachers to emotionally abuse them.

Newton (2014) stated that the class in which an adolescent belongs has also been identified as a possible predictor of psychological maltreatment by teachers. The students in the junior classes are mostly at their early adolescent phase of life unlike those in the senior classes who are in the late adolescent phase. Students from junior classes have certain distinguishing characteristics from those in senior classes and have been found not only to be vocal but also powerful in protecting themselves against constituted authorities in school. Okoza *et al.* (2011) observedthat the class dichotomy tend to bring about difference in perceptions and interactions with teachers which eventually would influence their emotional abuse with teachers while identified that the difference that class dichotomy tends to generate has been found to be insignificant.

Cohen (2001) identified that the type of school students attend has also been identified as a correlate of teachers' psychological abuse. Basically, school type has been broadly classified into public and private. Public schools are owned by governments at local, state, and federal levels as it is operational in Nigeria while private schools are owned by individuals or group of individuals including missions' schools. Osei-Hwedie and Hobona (2001) have established among students aged between 10 -18 that students in public schools system reported diverse dimensions of all types of abuse than those in private schools, although those in children in public

schools were also more likely to suffer from verbal abuse. The impact of psychological abuse in schools is destructive. Regrettably, some teachers have no knowledge of it or considered it as part of their job to include provision of support for abused children or are even unaware of its impacts on behaviours. It has been observed that college students who experienced verbal abuse from teachers missed vital learning opportunities and at the risk of behavioural, emotional, and social maladjustment (Brannan 1972). Also Brendgen *et al.* (2005) found that repeated verbal abuse by the teacher has been found to significantly predict delinquent behaviour during early adolescence. Stewart *et al.*(2002) contrary with the above findings stated that psychological abuse has not been found to be related to later juvenile offence.

2.7 Theoretical Framework

Erickson (1968) drew upon early theories relating negative childhood experiences to later social adjustment problems. According to Erickson, these theories were based on the idea that early experiences of physical and psychological abuses impact perceptions of others' intentions, attitudes toward them, and trustworthiness. The concept of Bowlby's attachment theory showed inner working models of what to expect from the development of relationships based on the consistency of having one's needs met by caregivers in early childhood. He argued that when needs are rejected, insecure working models arise, with accompanying anxieties about being accepted. These models of insecure attachment extend to interpersonal difficulties in adolescence and adulthood, impacting the quality of relationships.

2.7.1 Theories of Human Needs

Maslow postulated that human needs are many and varied. At any instant, individuals are confronted with many needs seeking attention. Physiological needs include primary needs such as food, water, shelter, sex, rest and sleep. If these needs

are not met, the human body simply cannot continue to function. Considering the need for sleep and food further, he stated that it is easy to see areas of this stage that can seriously affect how a child performs in school. Without a proper diet and reasonable amount of sleep, children's concentration will decline and their minds will be focused on other things such as hunger. The implication is that children will lack the energy required to actively participate in activities throughout the school day and this could affect their academic performance. Safety needs include the need for security, dependency, structure, freedom from fear and long-term stability. If the classroom is a fearful, unpredictable place and students seldom know where they stand, they are likely to be more concerned with security than with learning. Children require protection, but a child who is under the pressure of being abused is likely to experience insecurity.

Maslow is basically of the opinion of meeting human needs in a hierarchical order of importance from physiological needs to needs for self-actualization. It is important to understand that all children have a set of needs that if met, with the help of parents, friends and teachers, can help mould them and build a good foundation for adulthood and for better academic performance. If there is a deficiency in the needs or any of them is neglected, the child's academic performance and behaviour will be hindered. A child who is well fed and protected will pay attention in the class and this will result in better academic performance.

This study will examine the relationship among physical and psychological abuses, social adjustment and academic performance of primary five pupils in Kaduna State, Nigeria. Erickson (1968) conceptualized a cognitive pattern characterized by the expectation of social rejection as rejection sensitivity. This pattern of thinking includes defensively expecting, either anxiously or angrily and rejection from others. There is evidence that negative interactions with caregivers precede the development

of rejection sensitivity and that rejection sensitivity negatively impacts interpersonal relations due to an underlying predisposition to anxiety or anger in the context of social interactions. Existing researches including cross-sectional and longitudinal studies sampling both clinical and community populations indicated that child abuse and neglect are predictors of social anxiety and aggression, and there is further evidence that this may occur through the building of cognitive patterns that serve as a template for expectations of negativity from others.

2.7.2 Attachment Theory

Attachment theory was pioneered byAinsworth (1969). The theory offered a mechanism by which children create a representational model of the self, significant others or attachment figures, and their interrelationships based on relationships and experiences with caregivers. According to this theory, at infancy, children form a mental representation of their attachment figures and develop a model through which they form expectations about what to anticipate from others. Bowlby (1991) referred to this as an internal working model. A secure attachment style is developed when caregivers respond consistently and lovingly to the needs of the child, and in turn, a working model is internalized wherein others are perceived as loving and dependable. On the other hand, inconsistent, indifferent, and harsh responses on the part of the caregiver yield insecure attachment styles, wherein a child internalizes a perception of others as unreliable and harsh or cold; and consequently they may view themselves as worthless.

2.7.3 Beck's Cognitive Theory

Beck (1976) proposed a cognitive theory which described a mechanism by which child psychosociallevel is developed and maintained. The theoryprovides that depressed individuals are negatively biased in their perception of reality and so develop negative and depressive cognitions surrounding them, their experiences, and

the future. Beck referred to that as the "negative triad" i.e. depressed individuals think negatively of themselves, interpret their experiences negatively, and predict that things will not go their way in the future. Their thought processes and life experience are largely dominated by cognitive distortions or automatic thoughts which are based in their distorted core beliefs. Such individuals are unaware of these automatic thoughts, because they are in natural alignment with ingrained cognitive structures and patterns that provide a blueprint for processing information and interpreting experiences meaningfully. These cognitive structures are called "schemas". Distressing events activate dysfunctional schemas which lead to negative interpretation and deduction of events and experiences. This, in turn, impacts on a person's behavioural and emotional responses. Beck (1983) hypothesized that schemas are formed through early experiences, especially childhood experiences in the context of the family. Children who experience psychological abuse may develop depressive schemas based on negative interactions with caregivers, and their thoughts are in turn dominated by negative automatic thoughts which may lead to depression.

2.7.4 Schema Theory

Young (1999) defined Early Maladaptive Schemas (EMSs) as extremely broad and pervasive themes regarding oneself and one's relationships with others, developed during childhood and elaborated throughout one's life. These dysfunctional and self-defeating schemas serve as the basis upon which later experiences are processed. EMSs result showed that collective childhood experiences with caregivers, siblings and peers are extremely resistant to change and can produce extreme emotional responses which can lead to negative consequences for the individual or harm to others. EMSs can lead to distress on different levels, including psychological distress, strained and dysfunctional interpersonal relationships and impaired work performance. EMSs are all-encompassing, applying across different life themes such

as intimacy and autonomy, rather than being characteristic to particular contexts. EMSs induce a more intense level of effect because the schemas involve core human needs based on interpersonal experiences and perpetuated through these experiences.

Young (1999) divided Early Maladaptive Schemas into five domains:

Domain i: Disconnection and Rejection - Schemas in this domain result from early experiences of a detached, explosive, unpredictable, or abusive family environment. People with these schemas expect that their needs for security, safety, stability, nurturance, and empathy in intimate or family relationships will not be met in a consistent or predictable way. Domain ii: Impaired Autonomy and Performance - Schemas in this domainhave to do with expectations about oneself and the environment that interfere with one's ability to separate and function independently and one's perceived ability to survive alone. The typical family of origin is enmeshed, undermining the child's judgmentor overprotection. Domain iii: Impaired Limits - Schemas in this domain relate to deficiencies in internal limits, respect and responsibility to others, or meeting realistic personal goals. The typical family origin is permissiveness and indulgence. Domain iv: Other-Directness - Schemas in this domain relate to an excessive focus on meeting the needs of others, at the expense of one's own needs. The typical family origin is based on conditional acceptance, whereby children suppress normal needs and emotions in order to gain attention, approval and love.

Domain v: Over Vigilance and Inhibition - Schemas in this domaininvolve an excessive focus of controlling, suppressing, or ignoring of one's emotions and spontaneous feelings in order to avoid making mistakes, or meeting rigged internalized rules. Typical family origins are domination and suppression of feelings, or a bleak environment where performance standards and self-control take priority over pleasure and playfulness.

2.7.5 Social Adjustment Theory

Social Learning Theory stipulates that people can learn new behaviors by observing others. Earlier learning theories emphasized how people behave in response to environmental stimuli, such as physical rewards or punishment, Social Learning however emphasized the reciprocal relationship between social characteristics of the environment, how they are perceived by individuals, and how motivated and able a person is to respond socially to thing happening around them (Bandura, 1977).The Social Learning Theory believed that people learn by:

i. Observing what other people do
ii. Considering the apparent consequences experienced by those people
iii. Rehearsing (at first mentally) what might happen in their own lives if they followed other peoples' behavior
iv. Taking action by trying the behavior themselves
v. Comparing their experiences with what happened to the other people
vi. Confirming their belief in the new behavior

The principles of Social Learning can be applied to any Social and Behavior Change Communication (SBCC) program to influence social behaviors, particularly behaviors that are complex or involve interactions with other people. It may be especially useful when a particular behavior is difficult to describe, but can be explained throughdemonstration or modeling.

Bandura (1986)identifies four necessary conditions for effective modeling:

I. Attention: various factors increase or decrease the amount of attention e.g. distinctiveness, affective valence, prevalence, complexity, functional value. One's characteristics affect attention.
II. Retention: remembering what you paid attention to e.g. symbolic coding, mental images, cognitive organization, symbolic rehearsal, motor rehearsal

III. Reproduction: reproducing the image e.g. physical capabilities, and self-observation of reproduction.

IV. Motivation: having a good reason to imitate e.g. past (traditional behaviorism), promised (imagined incentives) and vicarious (seeing and recalling the reinforced model).

2.7.6Atkinson's Theory of Achievement (1957)

This theory explains why people think and behave as they do. It provides a productive approach to a variety of behavioral phenomena that give direction to educationally relevant research. The theory holds that to perform is to produce valued results and a performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey and the level of performance describes location in the journey. McClell *et al.* (1955) agree that the major variable affecting classroom performance is motivation. No matter how important motivational variables are in understanding, predicting, and controlling classroom behaviour, there is insufficient of information and theories associated with them. There are many theories of human motivation; but little attempt has been made to extend these theories in a systematic way to educational situations. Mischel (1961) and Mills (2004), maintains that current level of performance depends holistically on six (6) components i.e. context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. McClelland *et al.* (1955) agreed that children who were greatly rewarded for independence, achievement motivation factors are highly in their cognitive processes, while children who were neglected do not have a history of feeling pride in meeting a certain standard of excellence. Also, it wasbelieved that when children are properly motivated, the emotional arousal that occurs within the unconscious becomes stronger and a child is challenged with the possibility of success.

2.8 Review of Empirical Studies

This section reviewed empirical findings by researchers in various studies which are relevant to the topic. Specifically it focused on the relationshipsamong physical and psychological abuse, social adjustment and academic performance of pupils in public primary schools. Several researches have been carried out by scholars and professionals on the issues of child abuse whether physical or psychological. Ugwu (2007) carried a research on the forms of child Abuse and neglect in primary schools in Nsukka Education Zone. His research identified physical abuse, psychological abuse and child neglect as major forms of child abuse capable of affecting academic activities in Nigeria. Ibiam (2005) conducted a study on the incidence of child abuse on primary school children in Abakaliki using 210 staff of the welfare unit and 20 police officers concerned with juvenile welfare services. The researcher identified physical abuse, child neglect, child abandonment and child labour as forms of child abuse and discovered that boys were more physically abused.

Adejobi *et al.* (2013) research examined the effects of child maltreatment on the academic performance of senior secondary school students in Ibadan, Nigeria. Questionnaires were administered to five hundred and twelve students selected randomly in two local government areas. The result indicated that there was significant negative relationship between child maltreatment and academic performance. Ezenwa (2009) conducted a study on the influence of child abuse and parental support on children's interest in school attendance and achievement motivation among primary school pupils in Nsukka. The data collected were analyzed using mean and standard deviation and t-test statistical tools revealed that pupils' interest in school attendance is significantly influenced by psychological abuse. The result also showed that physical and psychological abuse influence pupils' academic performance. Based on the findings, it was recommended that parents and guardians

should see beating, hitting, slapping, punching among others as physical abuse and should desist from using them as means of correcting the children under their care. Rather, advice and statement of the implications of any negative behaviour a child wears should be used to correct them whenever they derail from adult expectations; also make home a peaceful place for the children; love, protect and care for them. The study concluded that if physical and psychological abuse were reduced to the barest minimum, pupils' academic performance in primary schools would be enhanced towards the development of other levels of education for national development.

A study conducted by Kendall (2000) examined the effects of physical and psychological abuse on academic performance and school disciplinary problems for elementary, junior high and senior high students. The results revealed that the abused children performed less than their non-maltreated counterparts, having lower grades, more suspensions, more disciplinary referrals, and more grade repetitions.Psychological abuse alone was related to lower grades and more suspensions and abused students in junior high school had the highest number of grade repetitions. The number of disciplinary referrals continued to increase through senior high for both physically and psychologically abused students. Interestingly, the academic performance of all subjects dropped during junior high school.

From the literatures reviewed, it can be deduced that physical and psychological abuse are universal problems that are deeply rooted in societies assuming a byzantine dimension in the 21st century, thus the need for the present study. The researcher therefore seeks to find out the relationship among physical and psychological abuse, social adjustment and academic performance of primary school pupils using a model proposed by Salzinger, Feldman, Mojica, Stockhammer to explain the association among physical and psychological abuse of children, social adjustment and academic performance status.

Studies by Coie *et al.* (2010) on social adjustment of pupils proposedtwo ways by whichchildren's social adjustment can be assessed i.e. social acceptance and aggressive behavior with peers. The social acceptance construct was created by combining peer-and teacher-report of peer liking and disliking for each child. Peer nominations were group-administered in the classroom setting using traditional socio-metric methodology.Using unlimited nominations, children were asked to nominate all the peers in their grade who they (1) like the most and (2) like the least. Unlimited nominations have been shown to decrease error variance and improve stability and reliability in the measurement of children's peer relations.In a similar study, Terry (1994) indicated that the number of nominations a child received for each socio-metric item was summed and standardized within nominating group (i.e., across grade at school). Social acceptance was calculated by subtracting peer disliking from peer liking and standardizing this difference within nominating group. Support has been provided for the predictive and concurrent validity of socio- metric methodology as well as its stability over time and across settings in public schools. Teachers provided parallel assessment of children's social acceptance during an interview about the students in their classes. Teachers rated how much each child was liked or disliked by other children in his/her grade at school. Ratings were made on a 7-point Likert scale from (1) Never True to (7) Almost Always True. The peer-report, teacher-rated social acceptance was calculated by subtracting peer disliking from peer liking and standardizing this difference within nominating group (i.e., across classroom within school). Teacher- and peer-reports of social acceptance were correlated (at Time 1: r = .54, p< .0001) with one another, but not redundant, and each showed significant stability over the school year *(*r = .58 for teacher-report, p< .0001; r = .78 for peer-report, p< .0001). The composite social acceptance score was created by averaging across the teacher and peer social acceptance scores.

Coie and Dodge (2010) reviewed the other area of aggressive behavior with peers which can also be accessed through combined peer- and teacher-report. Using unlimited peer nominations, children were asked to nominate all the peers in their grade who are often physically (hit, kick, punch others) or verbally (say mean things) aggressive with peers. The number of nominations a child received was summed and standardized across grade within school. This socio-metric item has considerable support as a valid, reliable measure of children's aggressive behavior with peers. As part of the teacher interview, using the same scale as that described above, teachers rated how aggressive each child in their class was with other children in five areas: starts physical or verbal fights, says mean things, overreacts with anger, bullies others, and uses physical force to get his/her way. Excellent internal consistency was found across these five items (Cronbach's $\alpha = .86$, $p<.0001$) which were averaged to form the teacher-report aggression scale.Teacher- and peer-reports of aggression were positively correlated (at Time 1: $r = .63$, $p< .0001$) with one another and each showed significant stability over the school year *(*$r = .75$ for teacher-report, $p< .0001$; $r = .82$ for peer-report, $p< .0001$). The composite aggressive behavior score was created by averaging across the teacher and peer aggression scores.

Given the relation between academic and social adjustment in school, Piaget (1970) proposed that same-age peer interactions can create socio-cognitive conflict, which can help children view the world from multiple perspectives and promote their cognitive development. Similarly, Vygotsky (1978) believed that children are able to acquire higher mental functions through interactions with more competent adults and peers. Moeller, Tomblin *et al.*(2007) observed that with guidance of more knowledgeable people, children can successfully complete more challenging tasks within their zone of proximal development (ZPD) and eventually use what they

learned independently. Furthermore, research has shown that early social skills are a positive predicator of future academic performance in hearing students. Caprara *et al.*(2000) conducted a longitudinal study of 294 elementary-aged hearing children and found that early pro social behaviors had a positive effect on later academic functioning. In Malecki and Elliott's (2002) study with 139 hearing elementary students, they demonstrated that students with well-developed social competency tended to achieve higher academic performance in the present and future. Consistently, the work of Flook *et al.*(2005) with 248 hearing children demonstrated that poor peer group relationships in 4^{th} graders led to lower academic achievement when they were in the 6^{th} grade.

2.9 Summary

The concept of child abuse was reviewed from various perspectives to give direction and shape the work to achieve the stated objectives. Scholars generally view child abuse as situations in which a child is suffering serious physical injuries intentionally inflicted on him or her; is suffering as a result of neglect, malnutrition or sexual abuse; is growing up without necessary basic physical care or is growing up under conditions which threaten his or her physical and emotional survival. Studies have shown that physically abused children may suffer health problems or emotional disequilibrium, act against social norms and have poor performance at school. The review also covered psychological abuse of primary school pupils which showed that it is the most common form of child abuse' and argued that it occurs when a child's emotional, psychological or social well-being and sense of worth is continually battered. It includes a pattern of criticizing, rejecting, degrading, ignoring, isolating, corrupting, exploiting and terrorizing a child. It may result from exposure to family violence or involvement in illegal or anti-social activities. Cognitive and achievement theories maintained that depressed individuals are negatively biased in their

perception of reality and therefore develop negative and depressive cognitions surrounding them, their experiences, and the future. Their thought processes or the way they experience the world is largely dominated by cognitive distortions or automatic thoughts which are based in their distorted core beliefs.

Most scholars who studied child abuse and students' academic performance adopted the survey research design using meta and path analysis, while the present study focuses on relationship among physical and psychological abuse, social adjustment and academic performance using correlational design and Pearson Moment Correlation for analysis. Most studies reviewed were carried out in different socio-cultural environment unlike the present study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research method as such it talks about the research design, the population of the study, the sample and sampling techniques the research instrumentation, the scoring procedure, the validity of the research instruments, pilot study, the procedure for data collection, and the procedure for data analysis.

3.2 Research Design

This research adopted correlation design. It is a non- experimental design used to describe relationship between or among variables. A correlation research study is an opportunity to foretell results and explain the relationship among variables (Waters, 2011). In a correlation research, no attempt is made to control or manipulate the variables as in experimental design; however, the correlation statistic is used to describe and measure the degree of relationship between two or more variables or sets of scores (Davis, Gamble, Humphries, Mitchell, and Pendergrass,2011). Quantitative correlation study was appropriate because it involved the collection of data to determine whether, and to what degree, a relationship existed between two or more quantifiable variables (Gay, 1992).

3.3 Population of the Study

The population for this research is made up of all primary five pupils in the six selected public primary schools in Kaduna State. The population was 8002 as obtained from Kaduna State Ministry of Education (School Census Report 2012/2013). Below is the population distribution of the six schools selected for this study:

Table 3.1 Distribution of Population of Pupils in six selected Public Schools in Three Zones of Kaduna State

S/N	Zone	Name of Schools	Population
1	Kaduna North	L.E.A Makarfi,	183
		SaniAdamu L.E.A	
		T/Jukun, Zaria	3122
2	Kaduna Central	L.E.A Giwa,	483
		MallamJalo Model	
		Prim.Sch. R/Chikun	3280
3	Kaduna South	KwakuL.E.AZangon	
		Kataf	313
		DamaL.E.A Kauru	621
Total			**8002**

Source: Kaduna State Ministry of Education(School Census Report 2012/2013).

Table 3.1 above shows the population of the study consisting of 8002 Primary Five pupils in Kaduna State.

3.4 Sample and Sampling Techniques

The sample was 377 abused pupils form six selected public primary schools in Kaduna state. The six schools were selected using cluster sampling technique to ensure that each zone was represented in the sample. Going by Krejcie and Morgan (1970)'s table for determining sample size, 377 abused respondents were selected for the study through the administration of questionnaires on physical abuse, psychological abuse and social adjustment. The questionnaires were marked and grouped into three i.e. physical abuse, psychological abuse and non-abused pupils. The procedure in which 377 Primary Five pupils were obtained from the six selected schools was through proportionate sampling in which106 samples (28.1 %) represent pupils in Kaduna North while 213 (56.5%) pupils represent Kaduna Central Zone and Kaduna South has a sample of 58 pupils (15.4%).

Table 3.2 below shows the distribution of sampled respondents and schools selected.

Table 3.2 Sampled Schools anddistribution sample of respondents

S/N	Location	Selected Schools	Total No.of abused Respondents
1.	Kaduna North	L.E.A. Makarfi	5
		Sani Adamu L.E.A. T/Jukun. Zaria	101
2.	Kaduna Central	L.E.A Giwa	28
		Mallam Jalo Model Prim. Sch. R/Chikun	185
3.	Kaduna South	Kwaku L.E.A. ZangonKataf	19
		Dama L.E.A. Kauru	39
		Total	**377**

Table 3.2 above, shows the six schools selected and the distribution sample of 377 physically and psychologically abused respondents.

3.5 Instrumentation

Three questionnaires were used to gather information from the respondents. All the three questionnaires contained both closed ended questions and open ended questions. All the three questionnaires were rated on a five point Likert scale. SA (Strongly Agree), A (Agree), UD (Undecided), DA (Disagree), and SDA (Strongly Disagree). In addition, third term standardized examination result in four core subjects were used in order to assess respondents' academic performance.The instruments used for this study include:

3.5.1 Description of the Instruments.

i. Physical Abuse Questionnaire (PAQ): The instrument was adapted from family shelter services.The questionnaire consisted of twenty (20) items that measure characteristics of physical abuse types ranging from corporal punishments, injuries, bites, burns. The scale was delineated on five point

Likert scale, ranging from 1-5, with the scores indicative of greater physical abuse. Respondents are required to tick one of the five responses as applied. (See appendix 1section b). The highest score a respondent will get in each question is 5(5x20 items = 100) and the lowest is 1(1x20 = 20).Therefore, the maximum score = (100), the mid- point of range = (50) while the cut-off point i.e. maximum score (100) minus the mid- point range = (50). Thus the respondents who obtained scores from 50-100 were considered as physically abused and those who obtained scores from 49-20 were considered not abused. This classification served as a guide for the scale of measurement.

ii. **Psychological abuse questionnaire (PAq):** The instrument was adapted from family shelter services.The questionnaire consisted of twenty (20) items that measure characteristics of psychological abuse types ranging from discriminations, rejection, aggression, intimidation. The scale was delineated on five point Likert scale, ranging from 1-5, with higher scores indicative of greater psychological abuse. Respondents are required to tick one of the five responses as applied. (See appendix 1, section c). Therefore, the maximum score (100), the mid- point of range (50) while the cut-off point i.e. maximum score (100) minus the mid- point range (50). Thus the respondents who obtained scores from 50-100 were considered as psychologically abused and those who obtained scores from 49-20 were considered not abused. This classification served as a guide for the scale of measurement.

iii. **Social adjustment Questionnaire**. The overall scores a respondent will score is 100 while lowest social adjustment score is 20.Thus respondents are required to tick one of the five responses as applied.Therefore, the maximum score (100), the mid- point of range (50) while the cut-off point i.e. maximum score (100) minus the mid- point range (50). Thus the respondents

who obtained scores from 50-100 were considered as having low social adjustment. This classification served as a guide for the scale of measurement. The instruments were adapted from family shelter services.(See Appendix 2).

iv. **Academic Performance Result (APR):** Pupils' examination results in English, Mathematics, Social studies and Computer Science derived from their third term examination results were standardized (see Appendix 3). Therefore, each subject was marked over hundred giving the total of four hundred. Each pupils scores were summed and divided by the number of subjects to get the average score and mean academic performance.

3.5.2 Validity of the Instruments

Three sets of structured 5 point Likert scale questionnaires with 20 items on Physical, Psychological abuse and social adjustment of primary school pupils were vetted for predictive face validity by experts from the department of Educational Psychology and Counselling within the Faculty of Education, ABU Zaria. Corrections made were integrated into the instrument in order to provide clarity and relevance of measuring instrument and to assess appropriateness for measuring the variables they were purported to measure.

3.5.3 Reliability of the Instrument

The researcher conducted a pilot study to test the reliability of the instruments at LEA Model Primary School, Samaru, Sabon-Gari Local Government of Kaduna State in which One hundred and fifty (150) questionnaires on physical abuse, psychological abuse and social adjustment were distributed to fifty (50) Primary Five pupils. The researcher began by explaining to the teachers how the pupils should fill in the questionnaires to avoid mistakes. And with their help, each pupil was given a questionnaire to answer which were immediately collected from the respondents. The data collected was analyzed using SPSS. The instruments have an established test and

re-test internal consistency reliability. Osuala (2005) established an internal consistency of the instrument (Cronbach alpha) of 0.91. In addition, Darma (2010) reported the coefficient of stability of the instrument as 0.73. The researcher further obtained 0.80 and .754 as the co-efficient of stability of the instrument. Based on these coefficients, the instruments were statistically adjudged to be reliable and appropriate for the study.

3.6 Procedure for Data Collection

The first step was the adoption of questionnaire items to suit the variables to be tested. The test items were subjected to reliability tests. Then, the researcher proceeded to collect an introductory letter from the Department of Educational Psychology and Counselling, ABU, Zaria. This letter served as a permit for the researcher to conduct the study in the selected schools. The researcher presented the letter of introduction to the Heads of the six schools where the research was conducted. They were requested to give the permission to administer the questionnaires from the class teachers of primary 5. After explaining the nature of the research most of the head teachers of the six schools suggested that the questionnaires should be administered at the end of the term when the pupils were writing examinations because that was the surest way of getting them in the schools.

The examination timetable was collected from each school and this served as a guide for instruments administration. With the help of class teachers, the pupils were given the questionnaires at different days to answer based on the scheduled time table. The questionnaires were collected immediately from the respondents, marked and classified according to whether the respondent was abused or not abused as well as considering his or her social adjustment. From the scores obtained 377 pupils identified to have exhibited at least 50% and above score in line with the cut–off marks were selected. The three questionnaires consisted of 20 items each that measure

characteristics of the variables. The scale was delineated on a 5 point Likert scale ranging from 5 (strongly agreed) 4 (Agree), 3 UD (Undecided), 2 DA (Disagree), and 1 SDA (Strongly Disagree). Therefore, the maximum score =100, the mid-point of range =50 while the cut-off point = maximum score (100) minus the mid-point range (50) = 50. Thus the respondents who obtained scores from 50-100 were considered as abused and those who obtained scores from 49-20 were considered not abused.This classification served as a guide for the scale of measurement. In addition, the third term examination scores in English, Math, Social Studies and Computer Science were collected,standardized and subjected to statistical tests.

3.7 Procedure for Data Analysis

All questionnaires administered to pupils were collected, marked and scored in percentages for onward statistical analysis. The Bio-data was analyzed using frequencies and percentages distributions of items per variable. Hypothesesoneto Four (1-4) were tested using inferential statistics of Pearson Product Moment Correlations (PPMC) to determine if or not a significant relationship existed. Hypotheses Five and six (5 and 6) were tested using inferential statistics of independent t-test to determine whether or not significant difference existedbetween the two independent samples. All the six hypotheses were tested at 0.05 alpha level of significance. The Person Product Moment correlation was chosen for correlational data and parametric data while the t-test was chosen because it was appropriate statistical test for determining significance difference between means of two groups. Pearson Moment Correlation was chosen because it is the appropriate statistical test for determining the significance of relationship among physical and psychological abused, social and academic performance of primary school pupils (Cohen 2007). T-test was chosen because it is the appropriate statistical test for determining the significance of the

difference between physically abused and psychologically abused pupils of public primary schools in line with Gay (2009).

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The main purpose of this chapter is to present the analysis of data obtained from the study. It presents answers to the research questions and tested the null hypothesis. Hypothesis 1, 2, 3 and 4 were analyzed using Pearson Moment of Correlation (PPMR) while t-test was used to test hypothesis 5 and 6. The basis for rejection or acceptance of the hypotheses is 0.05 levels of significance. The chapter is therefore presented in the following order: introduction, Results, Hypothesis testing, Summary of major findings and Discussion.

4.2 Results

4.2.1 Bio Data of Respondents (Subjects)

The bio-data of subjects by location and the nature of abuse are presented in Tables 4.1 and 4.2 respectively.

Table 4.1: Distribution of Respondents by Location

Location	Frequency	Percentage
Kaduna North	106	28
Kaduna Central	213	56
Kaduna South	58	15
Total	377	100

Table 4.1 suggests that more than half of the respondents (56%) are located in Kaduna North within the study area.

4.2.2 Distribution of Physically and Psychologically abused pupils.

The types of abuse identified among the respondents are shown in Table 4.2.

Table 4.2: Distribution of Physically and Psychologically abused pupils

Status	Frequency	Percentage
Physical	182	49.45
Psychological	195	50.54
Total	377	99.99

Table 4.3 reveals48.27% were physically abused while 51.72% were psychologically abused.

4.3 Hypotheses Testing

A total number of six hypothesis were tested which all showed negative relationship existed among physical abuse, psychological abuse, social adjustment and academic performance of primary school pupils in Kaduna state.

$H0_1$: There is no significant relationship between physical abuse and the social adjustments of abused pupils.

A Pearson correlation test was run to determine the strength and direction of the relationship that exists between physical abuse and social adjustment of pupils. The result is presented in Table 4.3

Table 4.3: Correlation between physical abuse and social adjustments ofphysically abused pupils

Variables	N	$\overline{X}$	Std.dev	df	Correlation index r	P
Physical Abuse	182	61.6667	7.86372			
				180	-0.722**	0.001
Social Adjustment	182	55.1135	22.28936			

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

The statistics in Table 4.3 showed that the calculated p value of 0.001 is lower than the 0.05 alpha level of significance with a negative correlation index r equal to -0.722 at df 180. This suggests that when physical abuse increases, the social adjustment decreases and vice versa. Therefore, the null hypothesis which states that there is no significant relationship between physical abuse and social adjustment of physically abused pupils is hereby rejected.

$H0_2$: That there is no significant relationship between physical abuse and the academic performance of abused pupils.

A Pearson co-efficient r test was run to determine the strength of the relationship that exists between physical abuse and academic performance of pupils. The statistical distribution is presented in Table 4.4

Table 4.4: Correlation between physical abuse and academic performance of physically abused pupils

Variables	N	$\overline{X}$	Std.dev	df	Correlation index r	P
Physical Abuse	182	61.6667	7.86372			
				180	-0.999**	0.001
Academic Performance	182	61.5041	31.33275			

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

Statistics in Table 4.4showed that the calculated p value of 0.001 is lower than the 0.05 alpha level of significance with a negative correlation of index r equal to -0.999 at df 180. This implied that when physical abuse increases, the academic performance decreases and vice versa. Therefore, the null hypothesis which states that there is no significant relationship between physical abuse and academic performance of physically abused pupils is hereby rejected.

$H0_3$: There is no significant relationship between psychological abuse and social adjustments of abused pupils.

A Pearson correlation test was run to determine the strength of the relationship that exists between psychological abuse and social adjustments of abused pupils. The result is presented in Table 4.5

Table 4.5 Correlation between psychological abuse and social adjustment of psychologically abused pupils

Variables	N	$\bar{X}$	Std.dev	Df	Correlation index r	P
Psychological Abuse	195	75.1783	15.16907			
				193	-0.887**	0.001
Social Adjustment	195	45.1125	22.28936			

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

Table 4.5 showed that the calculated p value of 0.001 is lower than the 0.05 alpha level of significance with a negative correlation index r equal to -0.887 at df 193. This suggests that when psychological abuse increases, the social adjustment decreases and vice versa.Therefore, the null hypothesis which states that there is no significant relationship between psychological abuse and social adjustment of abused pupils is hereby rejected.

$H0_4$: There is no significant relationship between psychological abuse and academic performance of abused pupils.

A Pearson correlation test was run to determine the strength of the relationship that exists between psychological abuse and academic performance of abused pupils. The test distribution is presented in Table 4.6.

Table 4.6: Correlation between psychological abuse and the academic performance of psychologically abused pupils

Variables	N	$\overline{X}$	Std.dev	Df	Correlation index r	P
Psychological Abuse	195	75.1783	15.16907			
				193	-0.635**	0.028
Academic Performance	195	49.1135	22.28936			

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

Statistics in table 4.6 showed that the calculated p value of 0.028 is lower than the 0.05 alpha level of significance with a negative correlation index r equal to -0.6350 at df 193. This implies that when psychological abuse increases, the academic performance decreases and vice versa.Therefore, the null hypothesis which states that there is no significant relationship between psychological abuse and the academic performance of the psychologically abused pupils is hereby rejected.

Null Hypothesis Five

$H0_5$: There is no significant difference between the social adjustment of the physically abused and the psychologically abused pupils. Independence T-test was used to determine the difference between social adjustment of physically abused and the psychologically abused pupils as shown in Table 4.7

Table 4.7 Independent t-test distribution of social adjustment of the physically abused and psychologically abused pupils

Variable	Status	*N*	$\overline{X}$	*SD*	*SE*	*Df*	*t*	*P*
Social Adjustment	Physically abused	182	54.81	21.12	1.19			
						375	2.007	0.004
	Psychologically abused	195	52.83	21.02	2.60			

Significant at $p \leq 0.05$ level

The results in table 4.7 showed that the calculated p value of 0.004 is lowerthan the 0.05 alpha level of significance, with a mean difference of 1.98 in favour of the physically abused. Therefore, the null hypothesis which states that there is no significant difference in the social adjustment of the physically abused and the psychologically abused pupils is hereby rejected.

$H0_6$: There is no significant difference between the academic performance of the physically abused and the psychologically abused pupils. Independence T-test was used to test H06 and the statistics are shown in Table 4.8 below:

Table 4.8: Independent t-test statistics of academic performance of the physicallyand psychologically abused pupils

Variable	Status	*N*	*X*	*SD*	*SE*	*Df*	*t*	*P*
Academic Performance	Physically abused	182	48.90	49.59	2.80			
						375	2.35	0.027
	Psychologically abused	195	48.30	53.16	6.59			

Significant at $p \leq 0.05$ level

The results in table 4.8 showed that the calculated p value of 0.027 is lowerthan the 0.05 alpha level of significance, with a mean difference of 0.60 in favour of the physically abused. Therefore, the null hypothesis which states that there

is no significant difference in the academic performance of the physically abused and the psychologically abused pupils is consequently rejected.

4.4 Summary of Major Findings

The following are the major findings of the study:

i. Physical abuse has significant association with social adjustments of primary school pupils in Kaduna State (r= 0.722, p= 0.001). The higher the physical abuse the lower the social adjustment.
ii. Physical abuse has significant relationship with academic performance of primary school pupils in Kaduna State (r= 0.999, p = 0.001). The higher the physical abuse the lower the academic performance of the physically abused primary school pupils.
iii. Psychological abuse has significant relationship with social adjustment of primary school pupils in Kaduna State (r = 0.887, p = 0.001).The higher the psychological abuse the lower the social adjustment.
iv. Psychological abuse has significant relationship with academic performance of primary school pupils in Kaduna State (r = 0.635, p = 0.028).The higher the psychological abuse the lower academic performance of the psychologically abused primary school pupils.
v. Psychologically abused pupils have lower social adjustment than their physically abused counterparts with mean difference of 1.98. This means the higher the psychological abuse, the lower the physical abuse and vice versa.
vi. Physically abused pupils have better academic performance than their psychologically abused counterparts with mean difference of 0.60. This means the lower the physical abuse, the higher the psychological abuse and vice versa.

4.5 Discussion

One of the major findings of this study showed that physical abuse negatively affects the social adjustment of primary school pupils in Kaduna State. The finding is in line with the initial assumption of this study that physical abuse might have high or low relationship with the social adjustment of primary school pupils. The finding is also in line with Murkhjee (1978) and Gelles (2009) who stated that the more children received physical aggression from their parents or teachers the more likely they are to have low social adjustment and are also likely to engage in physical aggression like fighting with other children at home or school. Kolko (1996) supported the above finding which indicated that negative relationship exists between physical abuse and children's overall social adjustmentsfunctioning. Ba-Saddik and Hattab (2013) similarly observed that physical abuse has long lasting effects on the mental health and social adjustment of young children leading to social isolation, criminal behaviours, drug and alcohol misuse, risky sexual behaviour and even obesity; and all these behaviours if not addressed can persist up to adulthood. Reacting to that, Finkelhor (2008) maintained that physical abuse of children leads to low social adjustment, and as a result, the victims showed aggressive behaviour, emotional and behavioural problems, and educational difficulties.

Despite the glaring danger of low social adjustment, the perpetrators of such cruel acts usually come up with strange explanations that no human wisdom would accept because normal childhood activities would not account for the injuries in question. Moreover, many physically abusive parents and caregivers argue that their actions are disciplinary, that they are only meant to make the children learn to behave themselves in the society they live. Fergusson and Lynskey (1997) however, disagreed with the above findings, they argued that physical abuse is often difficult

to identify not only because of the ethics involved in doing so, but because of the intra-familial issues that may be present; different cultural acceptances, religion and loyalties to parents and siblings often prevent the open declaration of the levels of abuse or to show actually the abuse exist or not.

The study also showed that physical abuse has significant negative relationship with academic performance. The finding is in line with the initial assumption of this study that physical abuse might have low relationship with the academic performance of physically abused pupils. This showed that the relationship is directly proportional and this implies that the higher the physical abuse, the lower the academic performance of the physically abused pupils, and vice versa. Theoretically, the finding is supported by Beck's cognitive model in which 'Early Maladaptive Schemas' (EMSs) can lead to distress at different levels, including physical distress, strained and dysfunctional interpersonal relationships, and impaired academic performance. This is in line with Adejobi *et al.* (2013) who asserted that physically abused children score lower on cognitive measures and demonstrate lower school achievement when compared to non-abused peers. This is because they are always inattentive, apathetic and have difficulties in concentrating on cognitive tasks. However, when a child is often beaten, over-used at home or in the farm, it will be difficult for him or her to concentrate and pay attention in the class. An over-used child usually suffered from fatigue and is unable to stand academic challenges. This finding is supported by B-Saddik and Hattab (2013) who agreed that physical forms of abuse such as beating, slapping, giving a child too much domestic work, hitting and punching negatively affect the academic performance of children.

Another finding showed that psychological abuse has significant negative relationship with social adjustment. The relationship is directly proportional and this

implied that the higher the psychological abuse, the lower the social adjustment of the psychologically abused pupils, and vice versa. Theoretically, this is in line with Erickson (1968) conception that psychologically abused children have low social adjustments with cognitive pattern characterized by the expectation of social rejection known as rejection sensitivity. This pattern of thinking includes being defensive, expecting anxiety or anger and rejection from others. This is also supported by Bandura's Social Learning Theory which emphasized that part of what a person learns is through imitation or modeling and that learning takes place in a social situation. This implied that a child who is psychologically abused will become abusive because he learns from his abusive parents, teachers or peers and which can lead to low social adjustments.

The evidence that negative interactions with caregivers precede the development of rejection sensitivity and that rejection sensitivity negatively impacts interpersonal relations due to an underlying predisposition to anxiety or anger in the context of social interactions and social adjustment. Briere and Runtz (1988) found that psychologically abused pupils have low social adjustment and this is likely to have impacts on their intrapersonal thoughts, feelings, and behaviours, demonstrating problems of depression, anxiety, impaired self-esteem, negative outlook on life, and negative cognitive styles. Sroufe and Rutter (1984) disagreed with that, insisting that certain intrinsic strengths and vulnerabilities within a child and the child's environment may affect the extent to which abuse will have adverse effect, thus disordered patterns of adaptation may lie dormant, only to appear during times of stress or in conjunction with particular circumstances.

It was also found that psychological abuse has significant negative relationship with academic performance. This is in line with the initial assumption of this study

that psychological abuse might have low relationship with the academic performance of physically abused pupils. The relationship is directly proportional and this implied that the higher the psychological abuse, the lower the academic performance of the psychologically abused pupils, and vice versa. Supporting the above, Onyango and Kattambo (2001) noted that in the traditional African setting, child training was the prerogative and duty of parents and community members, but the advent of Western education made parents to hand over their training responsibility to the school with more demands on the basic functions to the school. Consequently, the teachers' tasks have become enormous leading to all kinds of maltreatment and neglect of students on daily basis and has been established that most teachers are not familiar with psychological abuse and how to identify its signs.

Psychological abuse occurs when parents or teachers fail to motivate, show love, do not give a child food, do not pay attention to a child's education, or refuse to pay attention to a child when he/she is sick. The end results showed that the child scored low in language development,academic performances and is likely to have improper social adjustment. Ngwoke and Eze (2010) argument is in support of this, they maintained that psychologically abused children have the worst delay in language comprehension and expression, and score lower in intelligence quotient tests. Olakanmi (2007) observed that individuals who suffered from psychological abuse in early childhood more often show academic and cognitive deficits and social withdrawal in later life.

It was also found that psychologically abused pupils have significant lower social adjustment than their physically abused counterparts, with a mean difference of 2.198 in favour of the physically abused. Zolotor (2009) argued that psychological maltreatment has been shown to cut across all socio-economic classes, although most

common among those with low socio-economic class. He proved that children from low-income families have low social adjustment five times more and psychologically neglected children, four times more than those from higher income families. This is in support of the present study for the fact that the majority of pupils attending public schools are from low socio-economic class. This concurred with Ainsworth (1969) who maintained that teachers, peers and parents' influences are major factors leading to the character formation of an individual. Many studies have found that parent unfavorable attitudes such as lack of affection and insecurity at the early stage of the child's life is considered as the crucial foundation years that affect social adjustment of children in later life.

Furthermore, the study found that the psychologically abused pupils have significant lower academic performances than their physically abused counter parts. Supporting the above, Asogwu (2002) opined that psychologically abused children experience poor academic consequences and have malnourished and sick appearance. The child therefore finds it difficult to concentrate and pay attention in the class. This leads to poor academic performance and push many children to leave school at early ages. Also the end result will affect the moral, social development and lead the child to have poor performance at school. Theoretically, Atkinson's Theory of Achievement agreed with the above, it declared that the major variable affecting classroom performance is motivation and this is linked to the maintenance of the psychological needs of the child.Findings of the study reported above, indicated the usefulness of Attachment, Becks and Atkinson theories in understanding the relationship among physical and psychological abuse, social adjustment and academic performance of primary five pupils in public schools in Kaduna state.

In view of the above, it can be deduced that a child who is physically abused can recover from the injury sustained and continue with his normal life, while the trauma on the psychologically abused child could be permanent i.e. long time effects. Also the psychological abuse is found in all types of abuses but most people are not ignorant.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary and conclusion of the investigation aimed at examining the relationship of physical and psychological forms of abuse on the academic performance and social adjustment of primary school pupils in Kaduna State, Nigeria and makes recommendations.

5.2 Summary

This study was structured into five chapters in order to effectively carry out this research work. Chapter one presented the background and purpose and objectives of the study, the statement of the problem, six research questions, six hypotheses, basic assumptionsas well as the scope and limitations of the study. The study is significant as it will provide Kaduna state government and NGOs with adequate information on experts' views on how to curb the menace of physical and psychological forms of abuse among primary school pupils and provide quality service delivery to the physically and psychologically abused pupils for better academic performance and social adjustment. Chapter Two presented literatures related to this study under the conceptual framework, theories of child abuse, physical and psychological abuses as they affect academic performance and social adjustment of pupils.

In Chapter Three, the research methodology adopted was discussed. The target population for this research consisted of 21,469 Primary Five pupils of public schools in Kaduna State. Six schools were selected and 377 abused respondents were used. Three (3) instruments, namely physical abuse questionnaire, psychological abuse questionnaire and social adjustment questionnaire were used for the study. Pupils'

examination results in English, Mathematics, Social Studies and Computer Science were derived from their third term examination results. Content and face validity of the instruments were assessed by lecturers in the Department of Educational Psychology and Counselling in Ahmadu Bello University Zaria and corrections were made. The researcher proceeded to conduct a pilot study to test the reliability of the instrument using Cronbach alpha coefficient statistical technique. Procedures for data collection were administered and the data collected were analyzed using Statistical Packages for Social Sciences (SPSS version19) in which Pearson Moment Correlation (PPMR) was used to analyse hypotheses One(1) to Four (4) and T- test was used to analyse hypotheses Five (5) and six (6). The number of pupils who had experienced different types of abuse was expressed in percentages andthe P value enabled the researcher to reject or retain the formulated hypotheses. The interpretation of the significant value calculated by SPSS was done by comparing the value with alpha level (0.05) at which each of the hypothesis was tested.

The analysis, presentation and discussion of the result were carried out in chapter four. The SPSS version 20 statistical package was used to carry out the entire data analysis. It was discovered that physical abuse had significant negative association with social adjustments and academic performance of primary school pupils in Kaduna State.It was revealed that psychological abuse had significant negative relationship with social adjustment and academic performance of primary school pupils in Kaduna State. The result also showed that psychologically abused pupils had lower social adjustment and poor academic performance than their physically abused counterparts. Finally, Chapter five presented the summary, conclusion and recommendations of the entire study.

5.3 Contributions to Knowledge

The study established that:

1. Significant relationship existed between physical and social adjustment of abused pupils (P = 0.001),
2. Significant relationship existed between physical abused and academic performance of abused pupils (P = 0.001),
3. Significant relationship existed between psychological abused and social adjustment of abused pupils (P = 0.001),
4. Significant relationship existed between psychological abused and academic performance of abused pupils (P = 0.028).
5. Significant difference existed between physically and psychologically abused pupils on the social adjustment (P = 0.004) and also
6. Significant differences existed between physically and psychologically abused pupils in the academic performance (P = 0027)

5.4 Conclusions

Based on the above findings, the researcher concluded that physical and psychological forms of abuse have negative association with low social adjustment and poor academic performance among pupils,especially those attending public primary schools. In addition, the psychologically abused pupils are discovered to have lower social adjustment and poorer academic performance than their physically abused counterparts.

5.5 Recommendations

Based on the outcome of the study, the researcher recommended that:

1. Psychologists,counselors, teachers and parents should be sensitized through workshops on how to prevent low social adjustment among physically abused pupils and to develop maladaptive coping strategies and techniques to remedy the menace that showed as physical abused increases, the social adjustment of pupils decreases.

2. Psychologists, counselors, teachers and parents should give proper educational support and counselling supervision to physically abused pupils. They should be made to understand that as physical abuse increases pupils academic performance decreases and vice versa. This can be achieved by increase in funding of educational inspectorate departments.
3. Psychologists, counselors andteachers should be given special allowance toprovide psychological support services and conducive learning environment to psychologically abused pupils.Theyshould be made to understand thatincrease in psychological abuse leads to decrease in the social adjustment of pupils.
4. Psychologists, counselors, teachers and parents should provide academic and social skills enhancement training in schools for psychologically abused pupils. Theyshould understand that when psychological abuse increases, the academic performance of pupils decreases.
5. Significant difference existed between social adjustment of physically abused and psychologically abused pupils with mean difference of 1.98. The physically abused have better social adjustment.
6. Significant difference existed between academic performance of physically abused and psychologically abused pupils with mean difference of 0.60. The physically abused performed better.

5.5 Suggestions for Further Studies

Base on the findings of this study, the following suggestions were made for further studies in order to widen the scope of this area of study.

1. The scope of this study covered only public primary schools. It is therefore suggested that a similar study should be replicated to cover private schools for

comparative reasons and generalization about all primary schools in Kaduna State in case of similarities inthe findingsthe research on private primary schools in Kaduna State.

2. The population for this research was upper primary pupils only. It is therefore recommended that a similar study but on lower primary school classes should be carried out so that more variables such as class level, parental socio-economic status, gender and educational background could be incorporated in this area of study.

3. The present study used physical and psychological forms of abuse; a similar study could be carried out using other forms of abuse such as sexual abuse, neglect, financial or material exploitation and self-neglect.

4. The present study used the survey method, a similar study using the experimental method is recommended.

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APPENDICES

Appendix I Personal Information and Abusive Questionnaires

SECTION A: ***Pupil's Bio-data***

School:

_____

Gender: [ ]

Age: [ ]

Class: [ ]

Do you live with your biological parents?		Yes		No
Are you the first child in your parents?	Yes	[ ]	No	[ ]
		[ ]		[ ]

SECTION B: ***Physical Abuse Questionnaire***

		SDA	**DA**	**UD**	**A**	**SA**
S/No.	**Items***:*	**1**	**2**	**3**	**4**	**5**
1.	My parents or teachers beat me up so hard that I have signs of it on my body.					
2.	I am punched because of any little mistake I make.					
3.	I am often pepped on my genitals for any little mistake I make.					
4.	I am flogged with an electric cord for any little mistake I make.					
5.	I was kicked so hard that it caused me serious injury like broken bones.					
6.	I receive punishment with a belt on different parts of my body.					
7.	I usually receive bites for any little mistake I make.					
8.	I testify I have marks of human bites marks.					
9.	I have marks of hot object on my body.					
10.	I am hurt with cigarette burns on the palm, back or buttocks.					
11.	I am stabbed hard even without making any mistake.					
12.	The corporal punishment is not proportionate to my mistakes.					
13.	I always receive choking punishment when I make a mistake					
14.	I receive corporal punishment by scraping my head or eyes.					
15.	I do receive punishment of cut on my ears, mouth or lips.					
16.	I am punished with sharp objects on my face or body.					
17.	I am thrown from the stairs mistake because of any little mistake.					
18.	I am asked to crawl until my knees bleed.					
19.	I am often pepped in my eyes for any little mistake I make.					
20.	I do report any case of abuse to my parents or teachers.					

Source: Abusive Behavior Questionnaire

Adopted from Family Shelter Service605 ILLINOIS 60187 HOTLINE: (630)

SECTION C: Psychological Abuse Questionnaire:

Have you ever experienced any of the following?

		SDA	**DA**	**UD**	**A**	**SA**
S/No.	**Items:**	**1**	**2**	**3**	**4**	**5**
1.	I am denied of school materials					
2.	I feel other members of my family and my teachers reject me.					
3.	I suffer different forms of discrimination at home or school.					
4.	My parents or teachers always isolate me.					
5.	My parents or teachers are always aggressive to or harsh on me.					
6.	I feel my parents or teachers make fun of me and are unkind.					
7.	I always come to school with a torn uniform.					
8.	I am not given enough food to eat.					
9.	My parents or teachers treat me with disrespect.					
10.	My parents and teachers don't allow me to express myself					
11.	I always have a feeling of worthlessness.					
12.	I look underweight.					
13.	I do have sleeping problems at night.					
14.	I always get intimidated.					
15.	I always feel withdrawn and do not want to learn.					
16.	I feel stupid and fearful when in school.					
17.	I always feel shy and have low self-esteem.					
18.	I feel like attempting suicide.					
19.	I do not have confidence in myself and do not trust anyone.					
20.	I do report any case of abuse to my parents or teacher.					

Source: Abusive Behavior Questionnaire

Adopted from Family Shelter Service605 ILLINOIS 60187 HOTLINE: (630)

APPENDIX 11

Social Adjustment Questionnaire

		SA	A	UD	DA	SDA
S/No.	***Items:***	**5**	**4**	**3**	**2**	**1**
1.	I often make others happy and excited.					
2.	I often need friends to cheer me up.					
3.	I often change my mood when I am with friends.					
4.	I always smoke when I am unhappy.					
5.	I do take alcohol for no good reason.					
6.	I suddenly feel shy when I want to talk to a stranger.					
7.	I often loose temper and fight others.					
8.	I wish I would live with another family.					
9.	I sometimes hide some of my feelings and thoughts from others.					
10.	I always want to make new friends.					
11.	Other members of my family would help me if I were in trouble.					
12.	My family pays attention to my wishes.					
13.	I am allowed to decide for my wishes.					
14.	My family cares for my hygiene.					
15.	I was once forced to have sexual intercourse.					
16.	My family's expectations are to the extent of my potentiality.					
17.	My teachers' expectations are to the extent of my potentiality.					
18.	My life is generally going well.					
19.	My parents care for my nutrition state.					
20.	I have enough sleep and restful life.					

Source: Abusive Behavior Questionnaire

Adopted from: Family Shelter Service605 ILLINOIS 60187 HOTLINE: (630)

APPENDIX 111

ACADEMIC PERFORMANCE QUESTIONAIRE

S/No.	Maths Score	MZ Score	English Score	ENZ Score	Computer	COMZS Core	S/Studies	S/S Z Score	Total Score	AVERAGE SCORE
1	56	0.648	56	0.350	19	-1.689	33	-0.568	164	41
2	65	1.232	55	0.295	89	3.336	89	2.779	298	74.5
3	45	-0.066	35	-0.815	23	-1.402	20	-1.345	123	30.8
4	34	-0.779	41	-0.482	26	-1.187	38	-0.269	139	34.8
5	28	-1.169	35	-0.815	55	0.895	3	-2.361	121	30.3
6	70	1.557	78	1.571	89	3.336	50	0.448	287	71.8
7	50	0.259	86	2.015	56	0.967	63	1.225	255	63.8
8	89	2.790	89	2.181	56	0.967	89	2.779	323	80.8
9	40	-0.390	38	-0.649	36	-0.469	29	-0.807	143	35.8
10	70	1.557	67	0.961	58	1.111	78	2.122	273	68.3
11	40	-0.390	42	-0.427	35	-0.541	39	-0.209	156	39
12	34	-0.779	55	0.295	20	-1.617	34	-0.508	143	35.8
13	45	-0.066	35	-0.815	31	-0.828	26	-0.986	137	34.3
14	70	1.557	95	2.514	90	3.408	89	2.779	344	86
15	34	-0.779	41	-0.482	35	-0.541	20	-1.345	130	32.5
16	69	1.492	78	1.571	59	1.182	58	0.926	264	66
17	87	2.660	56	0.350	78	2.546	59	0.986	280	70
18	89	2.790	87	2.070	55	0.895	77	2.062	308	77
19	23	-1.493	28	-1.204	23	-1.402	38	-0.269	112	28
20	39	-0.455	40	-0.538	23	-1.402	34	-0.508	136	34
21	86	2.595	89	2.181	87	3.192	80	2.241	342	85.5
22	67	1.362	50	0.017	67	1.757	69	1.584	253	63.3
23	90	2.855	70	1.127	67	1.757	56	0.807	283	70.8

24	69	1.492	78	1.571	50	0.536	90	2.839	287	71.8
25	65	1.232	55	0.295	35	-0.541	28	-0.867	183	45.8
26	45	-0.066	35	-0.815	23	-1.402	25	-1.046	128	32
27	37	-0.585	23	-1.481	28	-1.043	34	-0.508	122	30.5
28	67	1.362	70	1.127	67	1.757	44	0.090	248	62
29	24	-1.428	31	-1.037	23	-1.402	30	-0.747	108	27
30	58	0.778	45	-0.260	23	-1.402	41	-0.090	167	41.8
31	50	0.259	90	2.237	89	3.336	68	1.524	297	74.3
32	34	-0.779	55	0.295	23	-1.402	23	-1.166	135	33.8
33	58	0.778	43	-0.371	47	0.321	41	-0.090	189	47.3
34	48	0.129	60	0.572	30	-0.899	50	0.448	188	47
35	28	-1.169	39	-0.593	28	-1.043	50	0.448	145	36.3
36	90	2.855	60	0.572	50	0.536	64	1.285	264	66
37	70	1.557	60	0.572	35	-0.541	62	1.166	227	56.8
38	45	-0.066	50	0.017	11	-2.263	39	-0.209	145	36.3
39	78	2.076	87	2.070	98	3.982	47	0.269	310	77.5
40	40	-0.390	38	-0.649	23	-1.402	40	-0.149	141	35.3
41	50	0.259	50	0.017	35	-0.541	50	0.448	185	46.3
42	50	0.259	50	0.017	39	-0.253	38	-0.269	177	44.3
43	89	2.790	60	0.572	50	0.536	60	1.046	259	64.8
44	45	-0.066	60	0.572	45	0.177	45	0.149	195	48.8
45	88	2.725	50	0.017	55	0.895	26	-0.986	219	54.8
46	75	1.881	78	1.571	45	0.177	59	0.986	257	64.3
47	50	0.259	63	0.739	45	0.177	34	-0.508	192	48
48	90	2.855	89	2.181	78	2.546	77	2.062	334	83.5
49	41	-0.325	26	-1.315	12	-2.192	26	-0.986	105	26.3
50	98	3.374	56	0.350	60	1.254	60	1.046	274	68.5

51	89	2.790	90	2.237	87	3.192	58	0.926	324	81
52	20	-1.688	30	-1.093	45	0.177	20	-1.345	115	28.8
53	45	-0.066	45	-0.260	60	1.254	56	0.807	206	51.5
54	60	0.908	34	-0.871	43	0.034	45	0.149	182	45.5
55	60	0.908	50	0.017	90	3.408	45	0.149	245	61.3
56	45	-0.066	50	0.017	45	0.177	58	0.926	198	49.5
57	23	-1.493	56	0.350	50	0.536	35	-0.448	164	41
58	50	0.259	60	0.572	60	1.254	40	-0.149	210	52.5
59	89	2.790	50	0.017	67	1.757	45	0.149	251	62.8
60	70	1.557	50	0.017	67	1.757	56	0.807	243	60.8
61	60	0.908	76	1.460	78	2.546	40	-0.149	254	63.5
62	89	2.790	56	0.350	45	0.177	48	0.329	238	59.5
63	45	-0.066	89	2.181	60	1.254	39	-0.209	233	58.3
64	90	2.855	67	0.961	65	1.613	66	1.405	288	72
65	78	2.076	89	2.181	78	2.546	40	-0.149	285	71.3
66	70	1.557	55	0.295	44	0.106	50	0.448	219	54.8
67	69	1.492	78	1.571	78	2.546	50	0.448	275	68.8
68	87	2.660	50	0.017	87	3.192	40	-0.149	264	66
69	90	2.855	70	1.127	67	1.757	58	0.926	285	71.3
70	80	2.206	87	2.070	89	3.336	51	0.508	307	76.8
71	78	2.076	67	0.961	60	1.254	50	0.448	255	63.8
72	79	2.141	60	0.572	60	1.254	48	0.329	247	61.8
73	48	0.129	50	0.017	89	3.336	30	-0.747	217	54.3
74	60	0.908	77	1.516	50	0.536	58	0.926	245	61.3
75	89	2.790	87	2.070	67	1.757	40	-0.149	283	70.8
76	78	2.076	89	2.181	67	1.757	57	0.867	291	72.8
77	90	2.855	70	1.127	67	1.757	30	-0.747	257	64.3

78	100	3.504	35	-0.815	87	3.192	50	0.448	272	68
79	60	0.908	70	1.127	60	1.254	58	0.926	248	62
80	89	2.790	45	-0.260	50	0.536	30	-0.747	214	53.5
81	70	1.557	46	-0.205	40	-0.182	35	-0.448	191	47.8
82	78	2.076	45	-0.260	76	2.403	44	0.090	243	60.8
83	87	2.660	60	0.572	60	1.254	45	0.149	252	63
84	70	1.557	78	1.571	60	1.254	20	-1.345	228	57
85	79	2.141	63	0.739	58	1.111	30	-0.747	230	57.5
86	78	2.076	55	0.295	50	0.536	10	-1.943	193	48.3
87	85	2.530	60	0.572	89	3.336	60	1.046	294	73.5
88	85	2.530	75	1.405	67	1.757	57	0.867	284	71
89	45	-0.066	60	0.572	55	0.895	60	1.046	220	55
90	89	2.790	60	0.572	58	1.111	28	-0.867	235	58.8
91	48	0.129	46	-0.205	50	0.536	30	-0.747	174	43.5
92	40	-0.390	50	0.017	30	-0.899	50	0.448	170	42.5
93	70	1.557	45	-0.260	67	1.757	60	1.046	242	60.5
94	50	0.259	45	-0.260	66	1.685	60	1.046	221	55.3
95	53	0.454	45	-0.260	60	1.254	29	-0.807	187	46.8
96	42	-0.260	58	0.461	60	1.254	50	0.448	210	52.5
97	42	-0.260	60	0.572	60	1.254	86	2.600	248	62
98	46	-0.001	59	0.517	60	1.254	33	-0.568	198	49.5
99	60	0.908	50	0.017	52	0.680	28	-0.867	190	47.5
100	89	2.790	64	0.794	59	1.182	48	0.329	260	65
101	67	1.362	58	0.461	50	0.536	30	-0.747	205	51.3
102	78	2.076	70	1.127	78	2.546	50	0.448	276	69
103	90	2.855	30	-1.093	30	-0.899	60	1.046	210	52.5
104	45	-0.066	60	0.572	55	0.895	30	-0.747	190	47.5

105	69	1.492	40	-0.538	35	-0.541	50	0.448	194	48.5
106	69	1.492	65	0.850	25	-1.258	60	1.046	219	54.8
107	40	-0.390	45	-0.260	50	0.536	30	-0.747	165	41.3
108	35	-0.714	39	-0.593	34	-0.612	38	-0.269	146	36.5
109	40	-0.390	45	-0.260	43	0.034	25	-1.046	153	38.3
110	40	-0.390	45	-0.260	58	1.111	48	0.329	191	47.8
111	50	0.259	93	2.403	58	1.111	60	1.046	261	65.3
112	40	-0.390	35	-0.815	41	-0.110	48	0.329	164	41
113	79	2.141	50	0.017	50	0.536	48	0.329	227	56.8
114	45	-0.066	45	-0.260	41	-0.110	10	-1.943	141	35.3
115	65	1.232	60	0.572	75	2.331	48	0.329	248	62
116	75	1.881	30	-1.093	26	-1.187	25	-1.046	156	39
117	69	1.492	56	0.350	26	-1.187	50	0.448	201	50.3
118	45	-0.066	45	-0.260	41	-0.110	48	0.329	179	44.8
119	69	1.492	35	-0.815	39	-0.253	48	0.329	191	47.8
120	45	-0.066	45	-0.260	43	0.034	50	0.448	183	45.8
121	69	1.492	45	-0.260	40	-0.182	50	0.448	204	51
122	40	-0.390	45	-0.260	36	-0.469	50	0.448	171	42.8
123	60	0.908	63	0.739	56	0.967	38	-0.269	217	54.3
124	50	0.259	65	0.850	60	1.254	28	-0.867	203	50.8
125	45	-0.066	35	-0.815	26	-1.187	50	0.448	156	39
126	50	0.259	40	-0.538	40	-0.182	40	-0.149	170	42.5
127	40	-0.390	65	0.850	40	-0.182	28	-0.867	173	43.3
128	89	2.790	70	1.127	60	1.254	26	-0.986	245	61.3
129	40	-0.390	35	-0.815	55	0.895	30	-0.747	160	40
130	45	-0.066	40	-0.538	55	0.895	22	-1.225	162	40.5
131	50	0.259	60	0.572	60	1.254	16	-1.584	186	46.5

132	48	0.129	40	-0.538	32	-0.756	55	0.747	175	43.8
133	69	1.492	33	-0.926	60	1.254	38	-0.269	200	50
134	48	0.129	55	0.295	43	0.034	60	1.046	206	51.5
135	40	-0.390	50	0.017	60	1.254	43	0.030	193	48.3
136	40	-0.390	35	-0.815	55	0.895	50	0.448	180	45
137	45	-0.066	34	-0.871	43	0.034	40	-0.149	162	40.5
138	65	1.232	35	-0.815	45	0.177	40	-0.149	185	46.3
139	45	-0.066	35	-0.815	30	-0.899	45	0.149	155	38.8
140	97	3.309	58	0.461	30	-0.899	50	0.448	235	58.8
141	63	1.103	50	0.017	60	1.254	0	-2.540	173	43.3
142	60	0.908	30	-1.093	50	0.536	20	-1.345	160	40
143	40	-0.390	40	-0.538	30	-0.899	60	1.046	170	42.5
144	66	1.297	35	-0.815	40	-0.182	40	-0.149	181	45.3
145	78	2.076	60	0.572	50	0.536	40	-0.149	228	57
146	46	-0.001	50	0.017	50	0.536	16	-1.584	162	40.5
147	45	-0.066	35	-0.815	25	-1.258	40	-0.149	145	36.3
148	89	2.790	33	-0.926	20	-1.617	40	-0.149	182	45.5
149	49	0.194	37	-0.704	60	1.254	33	-0.568	179	44.8
150	60	0.908	66	0.905	60	1.254	25	-1.046	211	52.8
151	45	-0.066	45	-0.260	45	0.177	40	-0.149	175	43.8
152	45	-0.066	45	-0.260	44	0.106	38	-0.269	172	43
153	60	0.908	58	0.461	35	-0.541	26	-0.986	179	44.8
154	40	-0.390	60	0.572	25	-1.258	40	-0.149	165	41.3
155	78	2.076	45	-0.260	60	1.254	26	-0.986	209	52.3
156	45	-0.066	46	-0.205	35	-0.541	40	-0.149	166	41.5
157	46	-0.001	35	-0.815	40	-0.182	38	-0.269	159	39.8
158	78	2.076	35	-0.815	25	-1.258	40	-0.149	178	44.5

159	45	-0.066	35	-0.815	30	-0.899	40	-0.149	150	37.5
160	36	-0.650	35	-0.815	43	0.034	45	0.149	159	39.8
161	90	2.855	35	-0.815	44	0.106	48	0.329	217	54.3
162	32	-0.909	45	-0.260	45	0.177	40	-0.149	162	40.5
163	45	-0.066	35	-0.815	40	-0.182	40	-0.149	160	40
164	30	-1.039	35	-0.815	50	0.536	20	-1.345	135	33.8
165	88	2.725	35	-0.815	43	0.034	40	-0.149	206	51.5
166	45	-0.066	45	-0.260	41	-0.110	30	-0.747	161	40.3
167	90	2.855	45	-0.260	35	-0.541	15	-1.644	185	46.3
168	45	-0.066	36	-0.760	42	-0.038	30	-0.747	153	38.3
169	69	1.492	20	-1.648	26	-1.187	30	-0.747	145	36.3
170	89	2.790	35	-0.815	40	-0.182	45	0.149	209	52.3
171	67	1.362	45	-0.260	45	0.177	40	-0.149	197	49.3
172	78	2.076	40	-0.538	60	1.254	45	0.149	223	55.8
173	64	1.167	25	-1.370	40	-0.182	50	0.448	179	44.8
174	50	0.259	30	-1.093	20	-1.617	40	-0.149	140	35
175	40	-0.390	60	0.572	50	0.536	30	-0.747	180	45
176	40	-0.390	56	0.350	40	-0.182	60	1.046	196	49
177	40	-0.390	37	-0.704	38	-0.325	44	0.090	159	39.8
178	50	0.259	67	0.961	60	1.254	58	0.926	235	58.8
179	50	0.259	30	-1.093	40	-0.182	40	-0.149	160	40
180	50	0.259	50	0.017	30	-0.899	42	-0.030	172	43
181	89	2.790	45	-0.260	20	-1.617	44	0.090	198	49.5
182	90	2.855	40	-0.538	50	0.536	49	0.389	229	57.3
183	44	-0.130	40	-0.538	50	0.536	48	0.329	182	45.5
184	60	0.908	63	0.739	60	1.254	54	0.687	237	59.3
185	78	2.076	48	-0.094	42	-0.038	45	0.149	213	53.3

186	88	2.725	35	-0.815	45	0.177	40	-0.149	208	52
187	98	3.374	28	-1.204	30	-0.899	50	0.448	206	51.5
188	89	2.790	25	-1.370	60	1.254	30	-0.747	204	51
189	59	0.843	30	-1.093	45	0.177	30	-0.747	164	41
190	70	1.557	10	-2.203	55	0.895	15	-1.644	150	37.5
191	78	2.076	30	-1.093	50	0.536	50	0.448	208	52
192	78	2.076	55	0.295	40	-0.182	30	-0.747	203	50.8
193	69	1.492	30	-1.093	55	0.895	16	-1.584	170	42.5
194	45	-0.066	40	-0.538	26	-1.187	30	-0.747	141	35.3
195	60	0.908	30	-1.093	55	0.895	28	-0.867	173	43.3
196	67	1.362	70	1.127	40	-0.182	10	-1.943	187	46.8
197	78	2.076	30	-1.093	60	1.254	30	-0.747	198	49.5
198	78	2.076	78	1.571	30	-0.899	40	-0.149	226	56.5
199	89	2.790	67	0.961	40	-0.182	40	-0.149	236	59
200	90	2.855	76	1.460	30	-0.899	42	-0.030	238	59.5
201	69	1.492	40	-0.538	40	-0.182	30	-0.747	179	44.8
202	78	2.076	59	0.517	30	-0.899	44	0.090	211	52.8
203	67	1.362	56	0.350	40	-0.182	40	-0.149	203	50.8
204	78	2.076	49	-0.038	50	0.536	30	-0.747	207	51.8
205	78	2.076	56	0.350	50	0.536	49	0.389	233	58.3
206	99	3.439	40	-0.538	48	0.393	45	0.149	232	58
207	89	2.790	56	0.350	60	1.254	50	0.448	255	63.8
208	89	2.790	56	0.350	49	0.464	50	0.448	244	61
209	78	2.076	58	0.461	48	0.393	45	0.149	229	57.3
210	87	2.660	30	-1.093	49	0.464	40	-0.149	206	51.5
211	87	2.660	56	0.350	45	0.177	50	0.448	238	59.5
212	78	2.076	59	0.517	45	0.177	45	0.149	227	56.8

213	89	2.790	57	0.406	48	0.393	35	-0.448	229	57.3
214	89	2.790	54	0.239	53	0.752	56	0.807	252	63
215	67	1.362	40	-0.538	45	0.177	48	0.329	200	50
216	89	2.790	49	-0.038	49	0.464	48	0.329	235	58.8
217	76	1.946	56	0.350	49	0.464	35	-0.448	216	54
218	59	0.843	49	-0.038	45	0.177	49	0.389	202	50.5
219	68	1.427	40	-0.538	48	0.393	45	0.149	201	50.3
220	59	0.843	40	-0.538	49	0.464	47	0.269	195	48.8
221	56	0.648	59	0.517	51	0.608	49	0.389	215	53.8
222	78	2.076	50	0.017	48	0.393	48	0.329	224	56
223	89	2.790	45	-0.260	51	0.608	46	0.209	231	57.8
224	78	2.076	64	0.794	50	0.536	48	0.329	240	60
226	90	2.855	58	0.461	60	1.254	50	0.448	258	64.5
227	48	0.129	55	0.295	51	0.608	40	-0.149	194	48.5
228	69	1.492	50	0.017	54	0.823	56	0.807	229	57.3
229	40	-0.390	60	0.572	49	0.464	49	0.389	198	49.5
230	89	2.790	49	-0.038	58	1.111	51	0.508	247	61.8
231	30	-1.039	50	0.017	49	0.464	51	0.508	180	45
232	30	-1.039	40	-0.538	40	-0.182	40	-0.149	150	37.5
233	89	2.790	40	-0.538	53	0.752	46	0.209	228	57
234	89	2.790	60	0.572	62	1.398	49	0.389	260	65
235	60	0.908	40	-0.538	50	0.536	50	0.448	200	50
236	89	2.790	55	0.295	59	1.182	50	0.448	253	63.3
237	89	2.790	40	-0.538	55	0.895	56	0.807	240	60
238	10	-2.337	60	0.572	63	1.469	47	0.269	180	45
239	89	2.790	69	1.072	57	1.039	30	-0.747	245	61.3
240	60	0.908	40	-0.538	52	0.680	40	-0.149	192	48

241	30	-1.039	50	0.017	56	0.967	40	-0.149	176	44
242	89	2.790	60	0.572	59	1.182	30	-0.747	238	59.5
243	60	0.908	40	-0.538	40	-0.182	40	-0.149	180	45
244	89	2.790	59	0.517	40	-0.182	40	-0.149	228	57
245	33	-0.844	34	-0.871	56	0.967	28	-0.867	151	47.8
246	40	-0.390	40	-0.538	40	-0.182	40	-0.149	160	40
247	50	0.259	40	-0.538	50	0.536	50	0.448	190	47.5
248	40	-0.390	30	-1.093	39	-0.253	20	-1.345	129	42.3
249	50	0.259	30	-1.093	40	-0.182	40	-0.149	160	40
250	40	-0.390	50	0.017	40	-0.182	40	-0.149	170	42.5
251	34	-0.779	40	-0.538	50	0.536	50	0.448	174	43.5
252	89	2.790	67	0.961	49	0.464	30	-0.747	235	58.8
253	35	-0.714	30	-1.093	40	-0.182	30	-0.747	135	33.8
254	30	-1.039	25	-1.370	20	-1.617	30	-0.747	105	26.3
255	40	-0.390	30	-1.093	25	-1.258	30	-0.747	125	41.3
256	30	-1.039	20	-1.648	20	-1.617	40	-0.149	110	57.5
257	20	-1.688	25	-1.370	30	-0.899	25	-1.046	100	55
258	25	-1.363	20	-1.648	30	-0.899	30	-0.747	105	64.3
259	20	-1.688	30	-1.093	20	-1.617	20	-1.345	110	42.5
260	25	-1.363	20	-1.648	30	-0.899	30	-0.747	125	46.3
261	40	-0.390	30	-1.093	30	-0.899	30	-0.747	150	42.5
262	30	-1.039	56	0.350	40	-0.182	20	-1.345	166	46.5
263	35	-0.714	55	0.295	30	-0.899	30	-0.747	170	47.5
264	30	-1.039	56	0.350	20	-1.617	20	-1.345	146	51.5
265	89	2.790	90	2.237	40	-0.182	95	3.138	314	78.5
266	89	2.790	90	2.237	45	0.177	40	-0.149	264	66
267	85	2.530	80	1.682	50	0.536	45	0.149	260	65

268	89	2.790	90	2.237	56	0.967	35	-0.448	270	67.5
269	89	2.790	70	1.127	55	0.895	40	-0.149	254	63.5
270	40	-0.390	50	0.017	34	-0.612	35	-0.448	179	59.8
271	50	0.259	80	1.682	67	1.757	45	0.149	242	60.5
272	34	-0.779	34	-0.871	50	0.536	40	-0.149	178	59.5
273	70	1.557	80	1.682	57	1.039	50	0.448	257	64.3
274	50	0.259	82	1.793	57	1.039	50	0.448	239	59.8
275	37	-0.585	45	-0.260	20	-1.617	35	-0.448	157	54.3
276	90	2.855	85	1.959	59	1.182	10	-1.943	244	61
277	40	-0.390	95	2.514	23	-1.402	50	0.448	208	52
278	89	2.790	70	1.127	40	-0.182	20	-1.345	219	54.8
279	50	0.259	50	0.017	95	3.767	95	3.138	290	72.5
280	51	0.324	80	1.682	30	-0.899	30	-0.747	191	47.8
281	90	2.855	65	0.850	40	-0.182	40	-0.149	235	58.8
282	34	-0.779	20	-1.648	48	0.393	25	-1.046	147	51.8
283	28	-1.169	49	-0.038	10	-2.335	48	0.329	155	53.8
284	45	-0.066	34	-0.871	50	0.536	50	0.448	159	44.8
285	40	-0.390	42	-0.427	35	-0.541	60	1.046	177	44.3
286	50	0.259	50	0.017	35	-0.541	34	-0.508	169	42.3
287	40	-0.390	28	-1.204	30	-0.899	45	0.149	163	55.8
288	36	-0.650	50	0.017	30	-0.899	10	-1.943	146	51.5
289	50	0.259	80	1.682	50	0.536	44	0.090	224	56
290	40	-0.390	50	0.017	30	-0.899	40	-0.149	160	40
291	48	0.129	40	-0.538	40	-0.182	20	-1.345	168	57
292	30	-1.039	50	0.017	26	-1.187	50	0.448	126	59
293	45	-0.066	45	-0.260	30	-0.899	29	-0.807	149	57.3
294	50	0.259	80	1.682	50	0.536	40	-0.149	220	55

295	30	-1.039	20	-1.648	12	-2.192	34	-0.508	177	44
296	46	-0.001	20	-1.648	30	-0.899	40	-0.149	136	34
297	27	-1.234	48	-0.094	40	-0.182	45	0.149	160	40
298	10	-2.337	34	-0.871	40	-0.182	20	-1.345	104	26
299	50	0.259	50	0.017	40	-0.182	29	-0.807	169	42.3
300	36	-0.650	55	0.295	45	0.177	40	-0.149	176	44
301	50	0.259	50	0.017	50	0.536	40	-0.149	190	47.5
302	40	-0.390	50	0.017	24	-1.330	45	0.149	159	39.8
303	47	0.064	60	0.572	50	0.536	40	-0.149	197	49.3
304	40	-0.390	38	-0.649	40	-0.182	34	-0.508	152	38
305	66	1.297	39	-0.593	31	-0.828	48	0.329	184	46
306	70	1.557	70	1.127	45	0.177	95	3.138	280	70
307	89	2.790	90	2.237	40	-0.182	35	-0.448	254	63.5
308	89	2.790	70	1.127	40	-0.182	20	-1.345	219	54.8
309	43	-0.195	37	-0.704	26	-1.187	27	-0.926	133	33.3
310	70	1.557	80	1.682	45	0.177	26	-0.986	221	55.3
311	60	0.908	80	1.682	30	-0.899	40	-0.149	210	52.5
312	89	2.790	80	1.682	50	0.536	10	-1.943	229	57.3
313	70	1.557	60	0.572	35	-0.541	57	0.867	222	55.5
314	60	0.908	60	0.572	40	-0.182	75	1.943	235	58.8
315	43	-0.195	40	-0.538	18	-1.761	29	-0.807	130	32.5
316	60	0.908	70	1.127	35	-0.541	40	-0.149	205	51.3
317	55	0.583	50	0.017	40	-0.182	40	-0.149	185	46.3
318	45	-0.066	78	1.571	50	0.536	40	-0.149	213	53.3
319	70	1.557	35	-0.815	40	-0.182	60	1.046	205	51.3
320	23	-1.493	41	-0.482	23	-1.402	36	-0.389	123	30.8
321	90	2.855	55	0.295	40	-0.182	95	3.138	280	70

322	34	-0.779	40	-0.538	40	-0.182	29	-0.807	143	35.8
323	0	-2.986	80	1.682	35	-0.541	75	1.943	190	47.5
324	60	0.908	77	1.516	60	1.254	40	-0.149	237	59.3
325	66	1.297	65	0.850	40	-0.182	20	-1.345	191	47.8
326	51	0.324	55	0.295	40	-0.182	35	-0.448	181	45.3
327	48	0.129	38	-0.649	46	0.249	31	-0.687	163	40.8
328	89	2.790	65	0.850	67	1.757	95	3.138	316	79
329	55	0.583	55	0.295	45	0.177	40	-0.149	195	48.8
330	76	1.946	40	-0.538	95	3.767	32	-0.628	243	60.8
331	33	-0.844	38	-0.649	50	0.536	35	-0.448	156	39
332	36	-0.650	55	0.295	40	-0.182	40	-0.149	171	42.8
333	38	-0.520	55	0.295	60	1.254	46	0.209	199	49.8
334	43	-0.195	55	0.295	40	-0.182	34	-0.508	172	43
335	67	1.362	38	-0.649	63	1.469	61	1.106	229	57.3
336	99	3.439	85	1.959	40	-0.182	60	1.046	284	71
337	55	0.583	58	0.461	50	0.536	40	-0.149	203	50.8
338	39	-0.455	35	-0.815	39	-0.253	20	-1.345	133	33.3
339	54	0.518	50	0.017	25	-1.258	20	-1.345	149	37.3
340	66	1.297	37	-0.704	35	-0.541	52	0.568	190	47.5
341	37	-0.585	37	-0.704	37	-0.397	50	0.448	161	40.3
342	89	2.790	50	0.017	35	-0.541	26	-0.986	200	50
343	48	0.129	58	0.461	45	0.177	60	1.046	211	52.8
344	54	0.518	20	-1.648	40	-0.182	47	0.269	161	40.3
345	60	0.908	80	1.682	20	-1.617	45	0.149	205	51.3
346	89	2.790	58	0.461	35	-0.541	54	0.687	236	59
347	50	0.259	40	-0.538	50	0.536	40	-0.149	180	45
348	24	-1.428	35	-0.815	38	-0.325	20	-1.345	117	29.3

349	89	2.790	70	1.127	50	0.536	55	0.747	264	66
350	54	0.518	37	-0.704	40	-0.182	40	-0.149	171	42.8
351	26	-1.299	30	-1.093	50	0.536	40	-0.149	146	36.5
352	98	3.374	58	0.461	35	-0.541	26	-0.986	217	54.3
353	30	-1.039	38	-0.649	35	-0.541	49	0.389	152	38
354	40	-0.390	45	-0.260	40	-0.182	59	0.986	184	46
355	22	-1.558	30	-1.093	52	0.680	35	-0.448	139	34.8
356	43	-0.195	35	-0.815	35	-0.541	28	-0.867	141	35.3
357	53	0.454	58	0.461	57	1.039	48	0.329	216	54
358	54	0.518	38	-0.649	38	-0.325	49	0.389	179	44.8
359	64	1.167	30	-1.093	35	-0.541	50	0.448	179	44.8
360	65	1.232	55	0.295	31	-0.828	48	0.329	199	49.8
361	53	0.454	70	1.127	20	-1.617	50	0.448	193	48.3
362	43	-0.195	35	-0.815	20	-1.617	55	0.747	153	38.3
363	52	0.389	25	-1.370	28	-1.043	50	0.448	155	38.8
364	45	-0.066	30	-1.093	35	-0.541	55	0.747	165	41.3
365	60	0.908	64	0.794	50	0.536	47	0.269	221	55.3
366	45	-0.066	45	-0.260	50	0.536	46	0.209	186	46.5
367	35	-0.714	40	-0.538	75	2.331	40	-0.149	190	47.5
368	52	0.389	30	-1.093	30	-0.899	26	-0.986	138	34.5
369	69	1.492	45	-0.260	40	-0.182	20	-1.345	174	43.5
370	40	-0.390	55	0.295	50	0.536	75	1.943	220	55
371	58	0.778	40	-0.538	40	-0.182	58	0.926	196	49
372	37	-0.585	48	-0.094	35	-0.541	48	0.329	168	42
373	50	0.259	20	-1.648	30	-0.899	32	-0.628	132	33
374	54	0.518	28	-1.204	35	-0.541	45	0.149	162	40.5
375	35	-0.714	40	-0.538	35	-0.541	40	-0.149	150	37.5

376	52	0.389	30	-1.093	30	-0.899	19	-1.405	131	32.8
377	-	-	-	-	-	-	-	-	-	0

APPENDIX 4

Letter of Introduction