LANGUAGE PRODUCTION AND COMPREHENSION IN VERBALLY ABUSED AND NON-ABUSED CHILDREN: A PSYCHOLINGUISTIC COMPARISON

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ABSTRACT

Title: Language Production and Comprehension in Verbally Abused and Non-Abused Children: A Psycholinguistic Comparison

There are different types of child abuse, such as physical, emotional, psychological, and verbal. Verbal abuse is the type of child abuse that is considered as the least significant or minor abuse. However, in reality, it not only affects the behavioral development of children, but may also leave permanent impression on their cognitive processes of language comprehension and production. The current study aimed at finding out the differences in the language production and comprehension of verbally abused and non-verbally abused children. The study applied 'an integrated theory of language production and comprehension' by Pickering and Garrod (2013) as theoretical framework and collected quantitative and qualitative data with the help of three tests, viz. Conflict Tactic Scale by Straus (1996), Picture Description and Word Association Tests. The analysis of the data revealed that verbally abused children used abusive language more often as they were more inclined towards choosing negatively associated linguistic choices as compared to non-verbally abused children, who used abusive language less often and they were less inclined towards choosing negatively associated linguistic choices.

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DEDICATION

I dedicate this research work to my dear Parents and Husband for their endless love, support and encouragement. I also dedicate my research to my Aunt for her love and continuous support.

CHAPTER 1

INTRODUCTION

Psycholinguistics is the study of psychological and neurological factors that enable humans to acquire, use, comprehend and produce language. It mainly deals with the cognitive processes of language production and comprehension. Language production is the act of producing written or spoken language structures, whereas language comprehension is the act of understanding these written or spoken linguistic forms.

The cognitive process of language production consists of four sub-processes including conceptualization, formulation, articulation and self- monitoring. Whereas, the cognitive process of language comprehension consists of three sub-processes, viz. identification, association and memorization. The cognitive process of language comprehension is supplemented by different sources of information, such as linguistic input (which consists of phonological, semantic and grammatical structures), contextual and content knowledge. These sources of background information are called schematic structures or schemas. Schemas are stored in memory and help people to comprehend and produce language when retrieved (Jodai, 2011; Altman, 2001; Izumi, 2001).

In his research, Ann (2013) specified different types of schemas, such as: linguistic, formal and content schemas. Content schemas entail the background knowledge of a certain situation of the text; whereas, formal schemas entail the formal information of structural organization. However, linguistic schemas consist of the knowledge of vocabulary words and grammatical structures (Carrel & Eisterhold, 1983; Eskey, 1988). They are stored in and retrieved from memory and have a significant role in the cognitive processes of language comprehension and production. In mental lexicon, the vocabulary words are stored in different patterns of form and meaning such as: coordination, collocation, synonyms, antonyms, phono logics and nonsense (Séguin, 2017). These patterns reveal the nature of association between stored words. For analyzing, the processes of comprehension and production, it is necessary to assess in which relation the words are stored and associated with each other in the human brain. For the purpose of

this inquiry, psycholinguistics offers many tests and techniques (Field, 2006; Ferrand & New, 2003).

Including linguistic schemas, verbal abuse is another significant phenomenon related to the cognitive processes of language comprehension and production. According to Eriyanti, "Verbal abuse is the use of language (words, phrases, metaphors) that implies ignoring, humiliating, mocking, condescending, dwarfing, harming, humiliating, threatening, belittling the ability of a spokesperson, so that it can cause dislike" (2018, p. 364). In an explanation of abusive language, Oxford (2018) defines it as a use of "extremely offensive and insulting language".

Evans (2009) stated that there are different types of verbal abuse (as cited in Brogaard, 2015). These different types of verbal abuse are further elaborated by Anderson (2002), for instance, the use of insulting names for children, sarcastic remarks, and comparison with their peers. It also includes to say to a child, "You are a shame for us" or "You are a donkey" or "You cannot do anything right." Verbal abuse is usually committed by any abuser to control his victim and to lower down his self-esteem. For example, use of abusive language by an employer to his employees, by a teacher to his students or by a parent to his children (Noh & Talaat, 2012, p. 224).

Unfortunately, people in general are unaware of the adverse effects of verbal abuse particularly on children's cognitive processes of language comprehension and production. They consider verbal abuse as an insignificant form of abuse and not as harmful as physical or sexual abuse. Most of the time, they use harsh language with children only to train them and to control their unwanted behavior, nothing more than that. But, in reality, verbal abuse can be such a devastating pain that can ruin a person's personality and sometimes his/her whole life (Streep, 2016).

Considering the use of abusive language as a particular type of linguistic schema, the current study intends to investigate the role of verbal abuse in the processes of language comprehension and production of verbally abused and non- abused children. This study further aims at exploring the nature of relationship between the cognitive processes of language comprehension and production. Moreover, the current study intends to draw a comparison between the level of verbal abuse faced by a child and his use of

abusive language with others as the study hypothesizes that there is a direct correlation between verbal abuse faced by a child and the abusive language produced by him/her.

1.1 Background of the Study

Human intelligence, being one of the cognitive skills, helps an individual in processing the data received from the surroundings. However, the cognitive skills not only get affected by the motor skills but can also be improved, modified and controlled due to environmental factors such as training, socioeconomic status and literacy level of parents or care takers. (Drigas, 2017). According to Rokem & Silver (2009), it is a burning question of cognitive sciences that how cognitive skills particularly the cognitive skills of intelligence and comprehension get affected either due to environmental factors or due to innate abilities which polish the intelligence and comprehension skills of an individual. In the view of Hart and Risley (1995), among different environmental factors, linguistic environmental factor is not only a factor that affects linguistic skills but it can also bring substantial differences in the cognitive skills of an individual. Linguistic environment, as pointed out by the researchers, can be poor or rich that can facilitate or hinder language learning accordingly.

However, linguistically rich environment is an environment which stimulates learners and provides more opportunities of language learning, such as: natural linguistic environment, comprehensible input, variety of vocabulary words and grammatical structures. On the other hand, poor linguistic environment entails less or limited opportunities for language learning, such as: artificial linguistic environment, limited interaction, inadequate or improper use of vocabulary words and grammatical structures. Frazier (1995) is also of the view that the linguistic experiences shape linguistic abilities of an individual. However, whatsoever the nature or characteristics of a language, an individual have it may depend on his linguistic exposure and experiences. Linguistic exposure is referred to as an experience, interaction or contact with language that should be adequate and proper.

In the same vein, Allen and Wasserman (1985) investigated that the cognitive skills of children get affected when they happen to be the subject to abusive language by their

parents, teachers or someone else from their surroundings. Later on, this situation may become a major cause of late language development and production in such children. The study concluded that verbal aggression might cause language delay and emotional dissociation from the environment. During the neurological scans of brain, Teicher et al. (2011) also found the harmful effects of verbal abuse on children's cognitive skills of language development. The researchers observed damaged corpus callosum and arcuate fasciculus in some of the participants. This mental neurological damage was later on disclosed as a major cause of language delays and disorders in verbally abused children (Amin & Gadit, 2011). In order to emphasize on the complications of verbal abuse, Pagelow (1984) pointed out that the use of abusive or hurting language with children was quite harmful and destructive as it caused a lot of psychological complexities, such as: self-critique and poor self –esteem.

Additionally, Precosky (2011) stated that the mental lexicons are the vocabulary items stored in a person's mind that have a particular role in the cognitive processes of language comprehension and production and these stored vocabulary items have different types of association between them, such as semantic, formal and encyclopedic. Wang (20015) opined that during the cognitive process of language comprehension, these vocabulary items are identified, associated and memorized on the basis of prior knowledge.

Another important concept in the study of language production and comprehension is the association between mental lexicons. Children acquire language by associating linguistic items with their probable meanings; such association between linguistic items and their meanings is called semantic association. An individual's cognitive skills have a vital role in the development of linguistic abilities through semantic association, which can result into negative or positive semantic association (Wagner, 2015). However, the use of offensive, destructive or negative language may also cause negative semantic association and bring negative effects on an individual's cognitive skills or vice versa. Such negative semantic association may be due to an exposure to negative language, which may lead a child to start using the same hurting language with others. It has been

pointed out that such hurting or abusive language can also cause deformities and delays in the process of language development of children.

The above mentioned researches investigated the effects of abusive language on the cognitive, psychological and linguistic development of children highlighting the issue of delayed speech, anxiety, poor self-esteem. Moreover, some of the above mentioned research studies have elaborated different models of language production and language comprehension. However, the cognitive processes of language production and comprehension in verbally abused and non-abused children have not been explored, to the best of the researcher's knowledge. This gap in the already existing body of knowledge instigated the researcher to compare the language production and comprehension differences of verbally-abused and non-abused children.

1.2 Statement of the Problem

Parents, teachers, psychologists and children are unaware of the fact that the cognitive processes of language production and comprehension are interconnected and the language encountered by an individual from his/ her surroundings has a significant impact on his/ her language development. People in general are not appreciative of the fact that in response to shaming or insulting language, children also start producing such language when interacting with their classmates and siblings. Unfortunately, parents and teachers find it easy to blame the child for using foul language instead of probing into the root cause. This issue motivated the researcher to explore the cognitive processes of language production and comprehension in verbally abused and non-abused children.

1.3 Research Objectives

The basic objectives of this research study are:

1. To investigate the role of verbal abuse, as a certain type of linguistic schema, in the language production and comprehension of verbally abused and non- verbally abused children.
2. To find out the nature of relationship between language production and comprehension in verbally abused and non- verbally abused children.

3. To draw a comparison between the language production and comprehension of verbally abused and non-verbally abused children.

1.4 Research Questions

Linguistic schemas consist of vocabulary and grammatical structures and have a significant role in the cognitive processes of language production and comprehension. Considering abusive language as a certain type of linguistic schema, the current study aims to find out the cognitive processes of language production and comprehension in verbally abused and non- abused children. Keeping in view the foregoing discussion, the study seeks answers to the following research questions:

1. What is the degree of correlation between children's exposure to verbal abuse and their production and comprehension of abusive language?
2. What is the nature of correlation between the cognitive processes of language comprehension and production in verbally abused and non-verbally abused children?
3. How are the cognitive processes of language comprehension and production similar/ different in verbally abused and non- verbally abused children?

1.5 Significance of the Study

This study intends to create awareness among parents, teachers and caretakers regarding the adverse impact of using abusive language on children's linguistic, and emotional development. Teachers or parents who are inclined to use shaming or insulting words, phrases or sentences with children as an excuse to discipline or correct them would come to know of the extent to which verbal abuse is harmful for the cognitive processes of language production and comprehension. This study is significant as it hopes to be helpful to the teachers in understanding and controlling challenging classroom situations where some students may become problematic for them, thus making them use abusive language with other students. Furthermore, the current study hopes to be helpful to psychologists in identifying the underlying phenomenon of verbal abuse in the present milieu where psychological complications among children and teenagers are on a rise. At an individual level, this research study will be helpful for children in overcoming their problems of being a victim of verbal abuse whether at home or at school. For the society

at large, this research study hopes to be a guideline to parents, teachers and caretakers in bringing up linguistically, morally and psychologically healthy generations. The current study intends to be a starting point for the future researchers for investigating the very vital phenomena of language comprehension and production. This study also hopes to be able to capture the attention of governmental authorities for making child protection policies against all types of abuse including verbal abuse.

1.6 Theoretical Framework

Pickering and Garrod's (2013) theory of language production and comprehension is used as the theoretical framework for this study. According to this theory, the cognitive processes of language production and comprehension are tightly interwoven and this interweaving underlies people's ability to predict and imitate others' and their own language production. This prediction and imitation is based on the prior linguistic experiences of language production and comprehension. Pickering and Garrod have further defined this interconnectedness as:

"a production process is a process that maps from a 'higher' to a 'lower' linguistic level (e.g. syntax to phonology) and a comprehension process as a process that maps from a 'lower' to a 'higher' level. This means that producing utterances must involve production processes, but can also involve comprehension processes; similarly, comprehending utterances must involve comprehension processes, but can also involve production processes" (p. 3-4).

According to the theorists, language production is a form of action, and language comprehension is a form of perception, more accurately, action perception—perception of other people's actions. They assume that actors predict forward models of their actions before they execute those actions. The perceivers of others' actions covertly imitate and then construct forward models of others' actions that are based on their prior experiences of language production and comprehension. In this way, language production and language comprehension facilitate each other and go side by side.

1.6.1 *Stimulus Response Relationship between the Cognitive Processes of Language Production and Comprehension.*

The nature of relationship between language production and comprehension is stimulus response relationship that helps us to produce and predict others' linguistic actions. The example given in this regard is the prediction of some danger that works like a stimulus whereas the action of taking hands away is a response. This prediction is based on our prior linguistic experiences of language production and comprehension. The researchers have declared the prior linguistic experience of understanding others' utterances as 'association' and the prior linguistic experiences of producing utterances as 'simulation'. The example given in this regard is the exercise of predicting the story of a film. This prediction is based on the linguistic experiences of comprehension and production.

1.6.2 Covert Imitation

The 'Integrated Theory of Language Production and Comprehension' explains the concept of covert imitation that facilitates the processes of language production and comprehension. Garrod and Anderson (1987) have explained it further (as cited in Pickering and Garrod, 2004, pg.34) and stated that the producer of an action constructs or plans 'Forward Model' of his/her own speech, before executing their actions. However, the receiver covertly imitates and predicts those actions and plans 'Forward Models' of their actions at different linguistic levels such as syntax, semantics and phonological levels. In the below given example A interrupts while B is asking a question. The interruption of A is for completing the statement in the same style though the message is not fully produced but still A is predicting due to covert imitation.

A: I am afraid, I burnt the kitchen ceiling.

B: But have you?

A: burnt myself, fortunately not.

Another example given by the researchers is of 'Picture Naming Experimental Test' (Schriefers et al. 1990). People can easily predict or comprehend an object (dog) in a picture, if it is accompanied by the phonological clue of 'dot'. The researchers also

referred to an experimental test of ‘sentence Completion’ (Bock, 1996) to investigate the interrelatedness between the processes of language production and comprehension at different linguistic levels.

1.6.3 Prior Linguistic Experiences of Language Production and Comprehension

Pickering and Garrod have stated that the covet imitation of perceiver’s speech produces ‘Forward Models of Action- Perception' based on ‘association’; however, the ‘Forward Models of Action-Perception’ are based on ‘simulation’. The researchers have further explained ‘association’ as the linguistic experience of language comprehension and ‘simulation’ as the linguistic experience of language production. On the basis of the above discussion, the researcher considers ‘simulation’ and ‘association’ as linguistic schemas or prior experiences of language production and comprehension. It can also be concluded that the cognitive processes of language production and comprehension are supplemented by linguistic schemas at different levels.

Now applying the particular framework on the language production and comprehension of children, it can be concluded that linguistic schemas (prior linguistic experiences of comprehension and production) may affect the cognitive processes of language production and comprehension of children. Resultantly, children covertly imitate the linguistic patterns/ structures they encounter during the process of language comprehension. Therefore, due to the overlapping nature of thinking processes, the characteristics of encountered linguistic schemas can be observed in children’s overt speech/ language production. On the basis of this theory, the researcher assumes that in verbally abused and non-abused children, the cognitive processes of language production (action) and language comprehension (action perception) go side by side. As a result, they covertly imitate others’ linguistic utterances (in terms of choice of words, phonological, syntactic and semantic structures), during the process of comprehension, and produce language closer in nature to the language they experience. Therefore, the framework proposed by Pickering and Garrod (2013) seems to offer a reliable model to investigate the differences in the cognitive processes of language production and comprehension in verbally abused and non- abused children due to experiencing certain type of linguistic schema.

1.7 Research Methodology

All the students of grade 8 and 9 from BenchMark School Islamabad were selected as a population of this research study. Later on, only 30 students were selected as a research sample. For the current research study, the researcher used two psycholinguistic tests as data collection tools, Picture Description and Word Association tests, along with Conflict Tactic Scale (CTS).

The research study was conducted in two stages:

At the first stage, the researcher administered Conflict Tactics Scale (henceforth, CTS), developed by Straus (1996) to investigate whether the participants were genuinely getting verbally abused or not. For making the collection of data more authentic and genuine, the researcher also provided a list of abusive words to the participants. These abusive words were 14 in number and the participants were asked to select the words they usually encountered by their abusers. On the basis of the results of this test, 30 participants were divided into two equal groups. Group A consisted of 15 participants who secured more than 50% scores on CTS and this group was considered the group of verbally abused participants. Group B consisted of 15 participants who secured less than 50% scores on CTS and this group was considered as the group of non- abused participants.

At the second stage of the research study, the researcher applied Picture Description Test to investigate the language production in verbally abused and non-abused children. Another test applied at this stage was Word Association Test, which investigated the process of language comprehension in verbally abused and non- abused children.

The results of these tests were recorded on separate record sheets for further analysis and comparison. The collected data was further assessed and compared through percentages calculated using SPSS and later on presented with the help of tables, pie charts, and graphs.

1.8 Data Analysis

All the data collected through different tests along has been analyzed with the help of SPSS tool. The results of all the tests have also been discussed and compared with each

other at length to provide a detailed and comprehensive understanding of the under discussion phenomena. The level of facing verbal abuse was judged through CTS was compared with the level of negative or positive semantic association. The results of CTS were compared with the results of Picture Description for the purpose of clear understanding of the phenomena. Moreover, individual and group performance percentages and correlations of these tests have also been presented through graphs, tables and pie charts that ultimately helped to draw logical conclusions for the study.

1.9 Delimitation of the Study

The current study has been delimited to the study of similarities/differences in the language comprehension and production of verbally abused and non- abused children. The study took only male participants into consideration because the female participants were reluctant in sharing their personal information. The current study has further been delimited to the students of grade 8 and 9 (ages 12 to 14) of BenchMark School System, Islamabad. The reason for selecting participants of ages 12 to 14 years was that the researcher found them mature enough for understanding and interpreting the questionnaires being asked during the pilot study. The current research study has further been delimited to the students of BenchMark school system Islamabad because the researcher was herself employed there and it was easy for her to collect the data from that school. Another reason of selecting this particular school was that it was the only school which gave approval for conducting this research.

1.10 Organization of the Study

The current study has been divided into 5 chapters. Chapter 1 – Introduction provides an overview of the research dissertation. It is further divided into 8 subsections that discuss research questions, objectives and significance of the study, research methodology, data analysis, delimitations of the study and research organization.

Chapter 2 - Literature Review provides an overview along with a detailed discussion on already conducted researches in the chosen field of study. It also identifies the research gap, which the current study is based on. This chapter also discusses Pickering and

Garrod's (2013) theory of language production and comprehension as a theoretical framework of this study.

The step by step methodology has been discussed in Chapter 3. It also discusses, the targeted population and selected sample for the current research study. All the data collection tools have also been discussed at length in the same chapter.

Chapter 4 - Data analysis chapter provides a detailed analysis of the collected data. The findings of the study are presented through tables, graphs and pie charts. This particular chapter presents individual and group percentages with their comparisons. These comparisons also help to arrive at candid and genuine results.

Chapter-5 draws step by step conclusion on the basis of data analysis and findings of the study. It also provides suggestions and recommendations for future researches.

1.11 Operational Definitions

The terms which are highly relevant to this thesis are defined below:

1.11.1 Cognition: It is a mental ability or skill, which helps us to process data that we receive from our surroundings, through our senses and our experiences. These abilities are analytical, mathematical, data storage and memory related abilities (Drigas, 2017).

1.11.2 Cognitive process of language production: It refers to the mental processes that are involved and are responsible for the language acquisition and production**.**

1.11.3 Language development process: This process consists of linguistic input and output. Through the language development process, a person receives language from the surroundings by hearing and producing speech.

1.11.4 Linguistic input: Linguistic input is a language feedback that we receive from other people by hearing their conversations. Linguistic input includes vocabulary words, grammatical and phonological structures that we learn from different resources (Stephen, 1985).

1.11.5 Linguistic output: The results of cognitive process as when the language has been produced in the form of speech/verbal communication is called linguistic output. It includes learnt linguistic, grammatical and phonological structures (Zhang, 2009).

1.11.6 Abuse: It is a misuse or maltreatment. It can be of different types: physical, emotional, verbal, psychological and verbal.

1.11.7 Verbal abuse: It is a use of humiliating, discourteous or disrespectful language (Eriyanti, 2018, p. 364).

1.11.8 Abused: Is a person who faces abusive attitude (Mariam Webster, n.d.).

1.11.9 Verbally abused: Is a person who faces verbal abuse or abusive language.

1.11.10 Schema: It is the background knowledge or conceptual structure of language (Ann, 2013).

1.11.11 Linguistic Schemas: linguistic schemas consist of the knowledge of vocabulary items and grammatical structures (Carrel & Eisterhold, 1983; Eskey, 1988).

1.11.12 Mental Lexicon: It is defined as a mental dictionary that contains information about words, their meanings, pronunciation and grammatical category they belong to (Field, 2006).

CHAPTER 2

LITERATURE REVIEW

This chapter is divided into two subsections. The first section of this chapter provides an extensive and detailed review of existing researches on related topics. On the other hand, the second section provides an introduction of theoretical framework of the current research. In the forthcoming sections, the researcher has discussed some of the existing researches conducted on different types of child abuse such as physical, sexual, verbal and emotional. These researches provide that verbal and physical abuse is the most frequent type of abuse faced by the children. Further, these researches concluded that different types of abuses cause psychological deformities and delay in language acquisition. However, none of the research investigated verbal abuse in relation to language production and comprehension.

2.1 Cognitive Models of Language Production and Comprehension

In the cognitive model of language comprehension, Wang (2009) opined that the process of language comprehension changes language into conceptual structures for grammatical, phonological and lexical encoding. The researcher also explained three sub processes of language comprehension that are: identification, association/finding relationship with the prior knowledge and the process of memorization. During the comprehension process of identification, the brain identifies any linguistic object/ virtual entity/ concept/shape/picture/formula. After the identification, it associates or finds the relationship of this new linguistic object with the prior linguistic experience/knowledge in the OAR (Object Attribute Relation) model of Long Term Memory (LTM). Then, it further searches for association of the closest attributes/ features between latest and prior knowledge. Once the relationship is found, the information is stored either in short term or long term memory in different conceptual patterns of similarity and difference. This information is retrieved from long term memory when a stimulus (e.g. object, picture, linguistic entity.) is provided to produce linguistic /sensory, utterances/ responses respectively.

The model of speech production describes the cognitive process of language production. According to this model the process of speech production is consist of a set of grammatical and phonological encoding. Grammatical encoding is based on grammatical and lexical structures that are vocabulary items. In contrast to grammatical encoding, phonological encoding consists of sounds structures and intonation. These grammatical and phonological encodings help in the production and comprehension of speech utterances. In the process of comprehension and production, encoding of message occurs at four levels: message level, functional level, positional level and phonological level. Message level is the speaker's intention that further adds to grammatical encoding. Functional level is the selection of suitable words and grammatical structures for generating effective meanings. Positioning level is the order and inflection of words in a sentence. Phonological level is the spellings of words in a phonological structure. A grammatical sentence follows all these levels for a better understanding; however, these different levels work as parameters (rules) for the identification of speech errors and different interpretations of speech utterances. The researchers concluded that the different types of speech errors are evident of grammatical and phonological encoding. The concepts of grammatical and phonological encoding and prediction are alike in a way that both of them helps to understand and predict language structures (Bock & Levelt, 1994).

For highlighting the role of semantic association in understanding lexical and semantic structures, Ferrand and View (2006) stated that there are different types of semantic association between linguistic choices that helps us to understand the cognitive and linguistic processes of semantic memory. Explaining the term semantic association, the researchers stated that the semantic association shows word meaning relationship, it is a faster recognition of related word, e.g., bread and butter. However, associative relatedness is a faster recognition of unrelated words, e.g., doctor –butter; it further shows word use relationship. Associatively related words are semantically unrelated but highly associated or related with each other. The results of this study were interpreted within the framework of spreading activation theory and interactive activation model.

The cognitive processes involved in speech production are discussed by Schriefers & Vigliocco (2001) as the conceptual structures. In the process of language production,

these conceptual or non-linguistic structures (i.e. concepts) are converted into linguistic structures (i.e. speech utterances), via encoding processes, and are further articulated. The linguistic structures comprise of words stored in the memory of a person. At the first stage, they are retrieved from the memory and then combined to form well-connected sentences. The researchers have presented a conceptual preparation model for describing different processing levels in speech production. The features of this model are shared by various other recent psycholinguistic models (e.g., Dell, 1986; Garrett, 1988 and Levelt, 1989). This model explains the transformation of thoughts or conceptual structures into verbal messages or utterances and consists of grammatical, phonological and lexical encoding processes. It also entails the process of articulation. Grammatical encoding is mentioned as a process that converts message into a well- constructed grammatical sentence. Phonological encoding is the process that adds phonological elements with these grammatical sentences whereas the mental lexicon are the words retrieved from the long term memory. The final process is of articulation when these meaningful sentences are articulated.

Finding out the relationship between comprehension and production, Dipper, Black and Bryan (2005) substantiated the relationship between thought and language. In this regard, the authors regarded thinking processes involved in listening and speaking as ‘thinking for speaking’ and ‘thinking for listening’ respectively. Both the thinking processes related to speaking and listening are also the part of speaking as both of them share same linguistic schemas. These linguistic schemas are not merely the words meanings structures but more than that as they carry conceptualized meanings with them. These conceptualized meanings contain different sources of information such as perceptual, graphical or visual and encyclopedic. From these schematic structures, linguistic information is processed with the help of encoding. The process of encoding is an intermediate process that links two systems of language comprehension and production by associating meanings to their existing vocabulary items in the brain. Any disorder in the linguistic process of sharing schemas for language production and comprehension can result into speech impairments and different types of aphasias.

2.2 Verbal Abuse and its Impact on Children

In an investigation of the language skills of verbally abused children, Allen & Wasserman (1985) selected 12 participants with an average age of 14 months. These selected participants were already proven as verbally abused by their mothers in an earlier research by Wasserman Green and Allen. In the previous research, most of the mothers were single parent or facing psychiatric problems. The data was collected through video recordings of children and their mothers, during a play activity. Later on, the results were analyzed with the help of two scales including Bayley Mental Development Scale and Maternal Style Scale 12 which was used to measure maternal style of these children. The Maternal Style Scale consisted of two subscales: Verbal and physical scale. The verbal scale analyzed the verbal efforts of mothers to support their children's play such as naming different things, explanation and interpretation, whereas the physical subscale analyzed the physical efforts of these mothers to encourage their children. The second scale used in this study was Bayley Mental Development Scale (BMDS) that measured the cognitive skill of intelligence in verbally abused children.

On the basis of the data gathered with the help of these scales, it was observed that abusive mothers were less explanatory and quieter with their children. Such maternal behavior affected the language acquisition process of the children and resulted in slow and delayed language development. However, mothers who had non-verbal abusive style were found more explanatory and exhausting more linguistic resources to explain their children about worldly things. This behavior was found beneficial for the children to acquire language without any delay. It was also concluded that in the case of children who were subject to verbal abuse and had less emotional association with their mothers happened to suffer from delayed language skills.

A similar study has been conducted by Brendgen & Vitaro (2006), for the investigation of the consequent results of childhood verbal abuse faced by the teachers. In their research, the researchers also investigated the impact of such verbal abuse on students' grades and school performances. They also found differences in results of children who were only facing verbal aggression from their teachers and those who were facing verbal abuse from their parents as well. This research study was conducted among 399 students of grade 4 out of which 177 were female students whereas rest of the students

were male. It was a longitudinal study for which children were observed for a period of seven years. Data collection tools for this research study were self-reports which were filled by children, their parents and teachers. This tool proved to be very helpful and effective for the purpose of data collection.

According to the findings of this study, children who were facing more verbal abuse were consequently facing more psychological problems such as depression, aggression and low attention problems. The statistical results show that 85% of the children were not facing verbal abuse from their teacher whereas remaining 15% were facing high verbal aggression from their teachers. Through a longitudinal study of 55 months, Brendgen & Vitaro also investigated the impact of harsh parenting for disciplining and to get a better control over their children. The findings of this research study proved to be quite helpful for upcoming researches including the previously mentioned research.

A commonality between the prior and the following study is that both the research studies investigated psychological phenomenon related to verbal abuse. In this regard, Sylvestre & Mérette (2010) investigated how the language production in children is affected by different behavioral and social factors. The basic purpose of this research study was to analyze the most influential factors behind language delay in children under three years such as emotional and psychological etc. This research study also highlighted emotionally cold and neglecting mothers who also happened to be neglected and abused during their childhood. For the purpose of investigation, sixty eight children of 2 to 3 years old were selected along with their mothers. Later on, the collected data was analyzed through the Cumulative Risk Model. On the basis of the findings, it was concluded that environmental factors have a significant impact on children's language development. Among these environmental factors, good social, linguistic and psychological environmental factors were found facilitating in language development of children, whereas poor social, linguistic and psychological environmental factors was found a major reason of language deformities and delays. They were also found equally effecting children's linguistic production and causing language delay.

In contrast to some of the previously stated researches, Tan (2013) investigated the psychological deformities caused by verbal abuse in early adolescence particularly in Asian context. For the purpose of research, 324 participants of 11 to 13 years old were

selected through clustering (cluster sample method) and self-administered questionnaires. In order to investigate seven different types of verbal abuse, viz. snubbing, belittling, teasing or mocking, cursing, frightening, condemning and wounding, the researcher applied the Children's Perception of Parental Verbal Aggression (CPPVA) test, which was designed by Solomon & Serres (1999) and consisted of 27 questionnaires. Another data collection tool used in this research study was the Children's Attributional Style Questionnaire (CASQ). CASQ 1984 test was designed by Seligman to analyze emotional tendencies in children due to verbal abuse. CASQ test was consisted of total 48 hypothetical questions having positive and a negative options against each particular situation. Among these questions 24 were negative whereas 24 were positive. The participants were supposed to select any one of the best suited option. The higher scores on a particular scale for this test indicated the higher rate of emotional aggression.

The third and final data collection tool used in this research study was Internalizing Symptoms Scale for Children. ISSC (1998) scale developed by Merrell & Walters, was used to analyze internal problems of the victims such as depression, anger and stress. After analyzing the data through Baron and Kenny's (1986) statistical tool, it was concluded that children who were facing more verbal abuse from their parents or teachers suffer more from psychological issues whereas those who were facing less verbal abuse had less internal problems.

In a recent research study, Kochar (2015) explored the possible effects of verbal abuse on the cognitive abilities of an individual. For the inquiry of this particular issue, the researchers conducted a Cognitive Development Test on 90 verbally abused and 90 non-abused participants. The CD test examined attention span and simultaneous planning abilities. The findings of this study highlighted that participants who were facing more verbal abuse secured less points in the tests, whereas those who were facing less verbal abuse scored more points in the same tests. It was also observed that young highly verbally abused children performed better in all these cognitive tasks as compared to older participants of the same group. It was concluded that verbal abuse had a negative impact on the cognitive development of children as it turns into psychological complications in the later stages of their ages.

In an investigation, Choi (2008) examined if there was any relationship between verbal abuse and white matter tract abnormalities or not. For the purpose of this investigation, the researchers took Diffusion Tensor Imaging (DTI) of a sample of 1271 healthy participants for evaluating their white matter. Out of this sample of DTI scans, they found 16 victims of high parental verbal abuse 4 males and 12 females. These DTI scans were then further compared with the DTI scans of non-verbally abused children, who had never been a victim of any type of abuse. The results of this comparison showed significant differences in the DTI scans of both the groups as participants subject to verbal abuse had more white matter deformities. Further investigation revealed that some other external variables such as education and income level of parents also intensified this situation. These external factors were measured and assessed through tract-based spatial statistics tool (TBSS).

In a similar study conducted by Tomoda et al. (2011), it was found that the verbal abuse may become a major cause of increasing gray matter in superior temporal lobe in children. Such increase in gray matter brings brain structural changes and psychological symptoms of mood in children, such as: increase in anger, anxiety and depression etc. For the purpose of investigation, 21 children suffering from parental verbal abused were selected in group 'A', whereas 19 healthy children were selected as a controlled group 'B'. These children were investigated through a test of optimized vocal-based morphometry. The results of both the groups showed a substantial difference in the volume and weight of gray matter. Later on, these machine results were compared with some external variables such as age, gender, education of children's parents and financial status. The graph between both the groups finally proved that children who were subject to high verbal abuse from their parents, were found with high level of gray matter due to stress and anxiety. Such emotional anxiety and stress later becomes the major reason of improper connection between arcuate fasciculus and results into speech and hearing disorders. This particular research study has a logical flaw as it merely emphasizes on finding a correlation between verbal abuse and an increase in gray matter without probing into the phenomenon of psychological complications that are related to verbal aggression. However, a correlation between psychological issues, such as: anger, anxiety and depression with verbal aggression might have led this study to a better understanding of

the phenomenon. In addition, the number of participants in each group was not equally divided that probably might have affected the results.

2.3 Psychological and Social Deformities due to Verbal Abuse

A large number of research studies have investigated psychological and social issues related to verbal abuse. One of these researches was conducted by Teicher et al. (as cited in Amin & Gadit, 2011), who this investigated the harmful impact of verbal abuse on children's mental health. For the purpose of investigation, 707 participants aged 18-25 were selected. Initially, the participants were asked to fill a questionnaire designed to investigate different types of verbal abuse. This questionnaire consisted of 15 questions. Other data collection tools, such as Kellner Symptom Questionnaire, the Dissociative Experiences Scale, neuro-imaging scans and Limbic Symptom Checklist-33, also helped to collect data for the research. It was concluded that children facing more verbal aggression were more arrogant and depressive along with higher tendencies of drug addiction. This study also investigated brain damages that eventually caused speech delays and disorders. The findings from the neuro-imaging scans of verbally abused participants proved that damaged corpus callosum and arcuate fasciculus led to different types of aphasias during early stages of language development. Whereas at later stages of life, these factors could result in psychological complications. A variety of collected data helped to make this very study more comprehensive and reliable as compared to some other researches.

In order to investigate if there was any relationship between parental verbal aggression, children's self-esteem and their academic performances, Solomon & Serres (1999) investigated the effects of parental verbal abuse on children's academic performance. For the purpose of this investigation, 144 children of the same age were selected to be investigated for the parental verbal and physical abuse. Initially, these children were selected through Harter Self- Perception questionnaire. Harter's Self-Perception test consisted of questions that helped investigating different types of abuse faced by children such as physical, emotional or verbal. This test helped the researchers to analyze whether these children were genuinely facing physical or verbal abuse by their parents or not. Later on, the academic records of the students particularly their scores in French (which was their mother language) and Mathematics were compared with their

performances in Self-Perception Test. These scores also helped to correlate the level of verbal and physical abuse faced by the children with the level of self-esteem and academic scores.

The study found out that thirty four participants were found verbally and physically abused by their parents; whereas, only six participants were those, who had never been a victim of neither verbal abuse nor physical abuse. It had also been concluded that verbally abused children had low self-esteem and poor academic records as compared to non-verbally abused children, who had never been a victim of verbal aggression. All the above findings proved a direct correlation between verbal aggression and self-esteem/ academic records. It was also concluded that verbal abuse was found more harmful as compared to physical abuse in lowering children's self-esteem. The researcher suggested educating people for not using non-abusive language with children that caused serious psychological and social issues. In his research, he also introduced positive and effective ways of raising children.

A closer look at the previously discussed research study reveals a methodological gap. As self-perception and academic scores are two distinct and separate things, self-perception is a personality trait but it has nothing to do with cognitive skills that help students in scoring good or bad academic positions. It would be more beneficial if the researchers would have investigated any cognitive skills in order to establish a relationship between verbal abuse and academic performance of students.

For the interrogation of psychological and social impact of parental verbal aggression in children Vissing (1991) selected 30 (under 18) American children, while the data was collected with the help of Conflict Tactic Scale. On the basis of the findings, it was concluded that children who were facing more verbal abuse by their parents at home became more aggressive, violent and had more psychological issues as compared to those who had faced less or minor verbal aggression at home.

In a research study conducted by Love (2009), it was identified that there is a strong correlation between maternal verbal abuse and the development of psychological and emotional issues in children, such as: depression, drug addiction, low self-esteem and abusive behaviors or language. In this research, it was concluded that more verbal aggression along with less verbal affection or appreciation also resulted in mood tantrums.

Such psychological dissociation of children from their parents later caused multiple social issues. The researcher applied "Attachment and Social Learning Theory" (Bandura, 1973; Bowlby, 1988), as a theoretical framework for this research study. The data collection tools were Conflict Tactics Scale (Straus & Douglas, 2004), Outcome Questionnaire- 45.2 (Lambert & Burlingame, 1996), and the Inventory of Parental and Peer Attachment (Armsden & Greenberg, 1987). The selected methodology and data collection tools proved helpful to investigate the significance of relationship between the victims and their mothers. The researcher found a null hypothesis and concluded that maternal verbal abuse neither caused psychological issues nor emotional dissociation between daughters and their mothers.

Both the previously discussed studies investigated the impact of verbal abuse on the psychological development of children, for which both the research studies used CTS as data collection tool. The studies that show CTS is an effective, renowned, and a reliable data collection tool for the inquiry of psychological issues related to verbal aggression.
Other than Conflict Tactic Scale, Verbal Abuse Scale is also used to collect data for the investigation of verbal abuse. Michelle et al. (2005) investigated different types of verbal abuse faced by nurses from their patients, colleagues or senior doctors by using the same scale and survey method. In this research, it was concluded that due to facing various types of verbal abuse, these nurses suffered from psychological complications. The results of this study proved that 2% nurses were facing verbal abuse by trainees, 27% nurses were subject to verbal aggressions by their patients, 25% nurses were facing verbal abuse by the families of their patients and 22% nurses were verbally abused by their senior doctors. On the basis of the findings, it was concluded that those who were facing long term verbal aggression soon became a victim of different psychological complexities such as lack of attention and lack of motivation that affected their service quality. It was also reported that nursing staff who was receiving more verbal abuse suffered more from depression and lack of inspiration.

The consequences of teacher's verbal abuse on children's emotions, behaviors and their academic results has been investigated by Brengden et al. (2006) in a research study. The researcher selected 399 children from grade 2-4 out of which 177 participants were girls who had been investigated for 7 years since they were in kindergarten. These children

were investigated through teacher's evaluation, observation and self-reporting methods used for measuring anxiety, stress and anti-social tendency in early adolescence. The results showed that 85% children were at 0% risk of verbal abuse by the teachers, whereas only 15% children were at a greater risk of verbal abuse by their teachers and were also facing more difficulties in their studies as well as in maintaining healthy social relationships with other members of their social group.

A research study by Ericsson et al. (2006) found the psychological impacts of different types of abuse (physical, sexual and verbal abuse) on children and found self-criticism and dependency as the most common outcome of parental abuse. The level of self-criticism was measured through Descriptive Experiences Questionnaire. On the basis of dependency test, it was concluded that children subject to high verbal abuse had more reliance on their parents due to their internal fear and lack of confidence on their own abilities. It was also concluded that these minor psychological issues of self- criticism and less dependency turned into different psychological issues at later stages of life like psychological disease of psychopathology.

2.4 Physical Abuse and its Related Linguistic and Psychological Issues

Physical abuse is a type of abuse that can leave invisible scars on its victim like some other types of abuse can also do. There are a number of research studies that investigated and established a relationship between physical abuse and psychological and linguistic issues. McFadyen & Kitson (1996) compared the differences between the language comprehension and production of adolescents who were abused during their childhood, with the adolescents who had never faced any abusive situation and enjoyed an abuse- free childhood. All the participants were divided into two groups. Group A consisted of adolescents abused during their childhood, whereas group B consisted of adolescents not abused during their childhood. The distribution of participants into two groups was done on the basis of a simple language test. This language test consisted of basic language questions that investigated the type of vocabulary items, grammatical structures and comprehension used by the participants.

On the basis of the results, the differences were found in grammatical or syntagmatic structures used by both the groups. Group A, which was verbally and physically abused, used less personal pronouns as compared to Group B. The participants

of Group A also avoided making opinions, which proved that their speech was less self-centered. In contrast to group A, the participants of Group B used more personal pronouns and shared more opinion, and personal experiences. It was also found and concluded in the research that early childhood verbal or physical abuse later on resulted into linguistic deformities such as incomplete and improper use of sentences, use of inferior vocabulary items and poor comprehension or intellectual abilities.

2.5 Consequences of Maltreatment on Children's Linguistic, Social and Psychological Development

There are various types of child abuse such as verbal, physical, sexual or emotional which seldom appear in isolation but often appear in combination that calls maltreatment. Maltreatment brings dreadful impacts on children's life and their self-esteem. For the inquiry of the very phenomenon of maltreatment, Ney & Wickett (1994) claimed that no one had ever investigated the effects of multiple abuses on a child's mental or physical development. For the purpose of this research, 167 participants of 7 to 18 years old were selected from different schools and centers. These children were selected on the basis of the results of Child Experience Questionnaires (CEQ). Through these questionnaires, data regarding experiences of children of their childhood, their views regarding marriage, their future plans as parents and their overall perspective about different issues of life were gathered. All the answers to the questions were weighed with a VAS (visual analog scale) with different options. This questionnaire investigated the level, intensity, and the rate of recurrence of each type of abuse along with other factors such as age of victim and relationship with the abuser. CEQ further interrogated the factors related to the parent's marriage as to whether it was happy or sad. Younger participants who were unable to fill these questionnaires were interviewed whereas those who were able to answer by themselves solved these questionnaires by themselves quite easily. The result of these questionnaires investigated the signs of different types of abuse in these children such as verbal, physical, neglect, sexual, emotional which were defined as follows:

Physical abuse is to hurt a child physically by beating, slapping or punching. Verbal abuse is to hurt someone by cursing, abusing or by calling shame words. Physical neglect which is another type of abuse is to neglect a child by not taking care of his/ her physical needs such as nutrition, hygiene and protection. To neglect a child by not paying attention

or by not encouraging his/ her efforts falls under emotional neglect. However, child sexual abuse is where a child is sexually exploited. The results proved physical and verbal abuse as the most common and associated types of abuse which occurs simultaneously, whereas sexual abuse was the least common type of abuse among children which was often accompanied by physical and emotional neglect type of abuse (Ney & Wickett, 1994).

The research under discussion also investigated that what could be worst combination of abuse that might gravely impact a child's self-esteem and future. It was concluded that physical and verbal abuse in combination to each other could be the most awful and dreadful motifs harmful to a child's self-perception. In this regard, the correlation between different types of maltreatment was represented with the help of a table whereas another table indicated the dreadful impacts of maltreatment on the psychological development. Such maltreatment causes personality disorders of the participants. These results were obtained by analyzing the data gathered through interviews of children and their parents. Results were concluded with the help of different numerical scales.

In order to explore the correlation between child abuse and linguistic irregularity or abnormalities in preschoolers at syntax level, Eigsti (2004) selected 19 non-abused and14 abused children. For the data collection during a play activity, mothers were asked to get involved with their children. When mothers and their children got involved in their play, their conversations were recorded. Later on, the recorded conversations were transcribed and scored for analysis. On the basis of results, the researchers not only found morph-syntactic, grammatical and morphological similarities between mothers and their children's speeches but also found linguistic, grammatical and morphological differences in the speech of abused and non-abused children. It proved that the language used by the parents has a significant role in the linguistic development of their children. Furthermore, the children from abused group were found with deficit vocabulary and deformed grammatical structures, whereas children from non-abused group were found with enriched vocabulary words and grammatical structures. It was also concluded that any type of maltreatment whether verbal, physical or emotional does not only cause delay in the language production but also results into morph-syntactic deformities in the early stages of language development of a child.

Psychological and physical abuse that may affect children's psychological health by causing depression, low confidence and pessimism are explored by Gross et al. (1992) in a research study. For the purpose of investigation, the researchers selected 260 Children who were facing physical abuse by their parents. These children were also identified as psychologically abused with the help of Attributional Style Questionnaire (ASQ). Later on, these children were examined with the help of Beck Depression Inventory (BDI) for depression, the Rosenberg Self-Esteem Scale (RSE) for self-esteem and the Attributional Style Questionnaire (ASQ) for aptitude. The results of all the tests indicated that the children who were abused in both ways physically and psychological, obtained higher scores than the non-abused children.

In addition to the above scores, children who were victims of physical and psychological abuse also showed poor self-esteem as compared to non-abused children. The researcher also examined as to which one of the two types of abuses, physical or psychological is more severe for a child in causing depression and reducing self-esteem. In this regard, when the first variable of physical abuse was controlled during the experiment, it did not affect the results. Whereas when the second variable which was psychological abuse was increased, it affected the results and caused more depression and low self-esteem. Finally, it was concluded that the physical abuse does not effect as badly as the psychological abuse does.

Snow (1977) was of the view that language does not only develop emotional attachment between a mother and her child but it also helps in his/ her development of linguistic and cognitive abilities. Maternal speech also has a significant role in the development of semantic, phonological and syntactic structures of children's speech. Initially, it was hypothesized by the researcher that the type of input a child encounters, affects their linguistic output in terms of speech redundancy, prosodic and complexity features. This hypothesis was based on the notion of language acquisition device paradigm. For the purpose of investigation, redundancy of speech was also investigated through the story telling technique and free play. The data was initially recorded and transcribed for the investigation of speech characteristics such as nouns, types of sentences, phrases, rate of speech, amount of speech, use of conjunctions, grammatical structures, modifiers, same types of tenses, vocabulary items, types of declaratives,

interrogatives, adjectives and so on. The collected data was then compared and analyzed with the characteristics of maternal speeches in terms of prosody and redundancy.

The results of this investigation were presented through different tables in comparison between children's and their mother's speeches. These results proved that there were grammatical, linguistic, semantic, phonological and syntactic similarities between children and their mother's speeches. In the end, it was concluded that there is a substantial impact of linguistic input received by mothers on the linguistic output of their children.

There was a misconception that children in Labanon were not facing any type of abuse at all in their schools; however, *Bcheraoui* et al. (2009) found different types of abuse such as verbal, physical and emotional, faced by teen agers in Labanon's schools. The researcher selected 1177 students of 10 to 18 years of age from different schools for investigation and data collection. These participants were analyzed with the help of self-reporting questionnaire. The results of the collected data helped forming the conclusion that only 49.6 percent of the participants were able to complete the test out of which, 81.2 percent were facing verbal, physical and emotional abuse by their teachers in their schools.

The possible effects of child maltreatment such as emotional neglect, verbal and psychological abuse on children's language development have been also inquired by Allen & Oliver (1982). The researchers selected 79 maltreated participants from a day care center and divided them into four groups. Group one of 13 abused children, group 2 of 7 neglected children, group 3 of 28 non-maltreated children and group 4 of 31 abused and neglected children. The collected data indicated that all maltreated children showed poor cognitive performances on comprehension scale. On the basis of the findings, it was concluded that the child neglect is one of the most affecting and major reason among children which brings not only comprehension deformities but also brings linguistic delays.

2.6 Role of Caretaker Speech in Language Development

According to Oxford reference (2019), the care taker speech is the use of simple and comprehensive language with young children to facilitate the process of language acquisition during the early years of their lives. Care taker speech contains simplified

vocabulary and short grammatical structures. It is also called child directed speech or baby talk.

The effects of maternal depression on children's language development during the early days of their lives have been examined by Stein et al.(2008). For the purpose of his examination, the researchers selected 1201 mothers along with their babies from maternity hospitals of England. These babies were closely observed from their birth till three years of their ages.Data was then collected through interviews and observation. Questionnaires also helped the researcher for further investigation and collection of required data. The data helped forming the observation that only 55 children, mothers of whom faced post-natal maternal depression, suffered from late or poor language development during their first year. Whereas, rest of 999 children, mothers of whom did not face post-natal maternal depression, had normal language development due to good care and affection received by their mothers. Another influential variable assessed for this research study was socio-economic status of mothers. During the investigation, it was found that the risk of post-natal maternal depression was higher in lower socio economic classes. The findings proved that as socio economic status of a mother improves, level of depression and anxiety decreases.

Apart from maternal speech, care taker speech also has a significant role in children's language development. Therefore, McCartney (1984) examined how the children's language development gets affected by the caretaker's speech in daycare centers. For investigation purposes, 166 children of 36 to 68 months from 9 daycare centers were selected. The particular data was collected through daycare inventories as well as through Preschool Language Assessment Instrument (PLAI). These tests and inventories not only assessed the language skills of caregiver speeches at daycare centers but also assessed linguistic skills of parents and their children. This assessment found similar grammatical and vocabulary structures between the children and their care giver's speeches. It was concluded that the children, who were spending more time in daycare centers had more similar speech qualities as of their caregivers as compared to those who were spending less time in daycare centers .This research shows that the type of linguistic input, a child receives from his/ her environment, has significant impact on his/ her language development.

In a similar study conducted by Hoff (2003), it was found that there is a significant role of caretaker's socio-economic status on the language development of children. Initially, it was hypothesized that children having rich socio-economic background, experience better learning environment. The researcher investigated the language skills particularly the vocabulary words of 33 children who belonged to rich economic status whereas, 30 children from middle class were investigated. For investigating use of vocabulary words, speeches of these children were recorded, transcribed, and further compared with the recorded and transcribed speeches of their mothers. The result of this investigation proved that the children with rich socio-economic environment, were producing more vocabulary words as compared to children who had poor socio-economic background. It was concluded that the children's early linguistic development is affected by their socio-economic status.

In order to emphasize on the role of linguistic environment on children's language development, Adam et al. (1994), examined the frequency of children's visit to libraries, reading graphical books, book reading as play, and caretaker's book reading habits. The researchers selected 323 children of age four and investigated them with the help of a questionnaire which were filled by their caretakers. The second data collection tool used for this research study was a simple language skill tests. Later on, the results of this test were correlated and compared with the previously discussed variables. This comparison proved a significant positive relationship between children's linguistic skills and their linguistically rich environment. A similar study was also conducted among 85 students that observed the same results in which different variables were compared with the language skills of participants through the aid of a simple language test such as caretaker's income, I.Q and education levels.

2.7 Effects of Emotional Abuse on Linguistic, Cognitive and Behavioral Functioning of Children

A large number of existing studies have investigated various issues related to verbal abuse other than social and psychological, such as: linguistic, cognitive and behavioral. Spratt et al. (2013) investigated the consequences of childhood neglect on the language development and cognitive abilities of children. In order to conduct the investigation, the researchers selected 60 children from U.S. of ages 3-10, who were facing emotional abuse.

These participants were selected with the help of different tests such as child behavior checklist, early language development test, and cognitive abilities scale Test. After the selection of participants, the researcher conducted Barnett Child Maltreated Classification Test (BCMC). On the basis of the findings of BCMC, the researcher divided all the participants into two groups. Group A comprised of emotionally abused children whereas Group B was comprised of non-emotionally abused children.

The researchers first investigated individual attitudes of the children in each group and then calculated the group performances to draw a comparison between both the groups. For the investigation of behavioral problems, such as: anger, stress or anxiety levels of children, Child Behavior Checklist test (CBCL) was applied; whereas, the Test of Early Language Development (ELD), third edition, investigated the linguistic abilities of participants having 2 to 7 years of age. The linguistic skills of the participants having 7 to 9 years of ages were assessed with the 'Test of Language Development' (TOLD). Participants from 9 till 18 years of ages were assessed with the help of TOLD Intermediate. Another test was also used for the assessment of cognitive skills which helped investigation of I.Q level of children. The Differential Abilities Scale (DAS) third edition was used for the assessment of Cognitive skills, which assisted in assessment of general mental abilities such as comprehension, understanding and reasoning abilities.

For the under discussion research study, all the collected data was analyzed through SPSS 9.2 version. It was concluded that the children who were facing more emotional, physical or sexual neglect during their early childhood, were found with low I.Q and with more behavioral aggression. These emotionally abused low I.Q children were also found with poor linguistic abilities during early language development test (ELD). The researchers concluded that the neglected and abused children were suffering from comprehension deficiencies. It was also concluded that linguistic and cognitive patterns were different in abused, neglected and non-abused children, which directly affected their speaking and hearing skills. This research was published in a journal of speech and hearing disorder. It explained that the children who were suffering from hearing and speech disorders was found physically or emotionally abused by their parents or caretakers. It grossly affected their comprehension and linguistic skills. For the data collection and for a better and profound knowledge of the phenomenon, this study applied a number of tests,

such as: CBCL, ELD, TOLD and DAS for investigating linguistic, behavioral and cognitive attitudes of the participants.

2.8 Word Association and the Cognitive Process of Language Production and Comprehension

In his research, Precosky (2011) stated that mental lexicons were the vocabulary items stored in a person's mind that had a particular role in language comprehension and production. These stored vocabulary items had different types of association between them, such as semantic, formal and encyclopedic. The researcher suggested 'word association test' as the most effective and widely used test to investigate the nature of links between words in mental lexicons. He rephrased the name of the previously mentioned test as a 'word association game' to decrease the anxiety related to the term 'test'. For this research study, a total of 47 participants were selected, those were later divided into 2 groups of native and second language speakers. The results showed that the native speakers produced more synonyms as compared to SL speakers when a stimulus word was provided to them. However, SL speakers used phonologically related responses when they were provided with a stimulus word, such as bat- rat- cat.

For Richards (1991), the responses to free association tests provided much information about the conceptual structures of vocabulary by investigating syntactic and semantic relationships among words. Different researchers have also classified word associations at different levels such as lexical, semantic and phonological. Kess (1992) divided word associations into three types: 1. Members of the same part of speech class; a) paradigmatic responses (responses which fall in the same syntactic category, such as: synonyms or antonyms such as thin-skinny, black-white) b) syntagmatic responses (responses which fall into other categories, such as: dig/hole); 2. Members of the same taxonomy a) Subordinate (dog/retriever); b) Superordinate (dog/animal); 3. Rhyming responses (sister/blister, yellow/fellow).

Rampton's (2016) provided a list of negative and abusive words. He enlisted 25 abusive words which were commonly used in verbal communication. Generally, people use these abusive words without realizing the fact that these words can be very hurting for the subject. These belittling or hurting words may affect the psychological processes of

the subject and gradually become a part of their verbal communication. According to the researcher, there are a number of negative words and positive words used in every language. The list of such hurting or bad words provided by the researcher includes: ‘foolish’, ‘donkey’, ‘fool’, ‘non-sense’, ‘bastard’, ‘mental’, ‘careless’, ‘nope’, ‘disappointment’, ‘not at all’, ‘embarrassed’, ‘bad’, ‘incomplete’, ‘disgusting’, ‘shit’, ‘shameless’, ‘hateful’, ‘dissatisfied’, ‘odd’, ‘strange’, ‘fearful’, ‘afraid’, ‘idle’, ‘inferior’, ‘bitch/dog’, ‘idiot’, ‘furious’, ‘unpleasant’, ‘ridiculous’, ‘useless’ and ‘ugly’.

In a research on word association responses, Istifci (2010) stated that word association is one of the major subjects studied in linguistics, psychology and psycholinguistics. He investigated that the nature of word association affects the general proficiency of understanding in the cognitive process of comprehension due to highly associated and developed mental lexicon. This study aimed at investigating word associations of elementary and advanced level English language learners (EFL) through a 20-item Word Association Test. In order to investigate the differences or similarities in results, the participants were divided into two groups. Group A consisted of 25 high proficiency level students and Group B consisted of 25 low proficiency level students. Later on, the researcher designed a word association test that consisted of 20 random and most frequent English language words among which 10 words were concrete nouns and 10 were abstract nouns. At first, the researcher counted and categorized all the responses according to their frequencies. Later on, the types of students’ responses’ of each level/group were classified separately in order to compare the responses of each group. The results of the study showed that high level EFL learners used a wide and complex range of word association techniques, such as: love-affection, romanticism; mother-confidence, safety, beauty; life-expectancy and responsibility. However, low level EFL learners used simple adjectives such as love-necessary, harmful, mother- friendly, life-good, beautiful. The results of the under discussion study suggested that EFL learners used a wide range of word association techniques and the proficiency level of the students had a partial effect on their use of word associations.

One of the most remarkable research studies on word association was conducted by Read (1993), who found out that the native speakers had remarkably stable patterns of

word association that showed strong lexical and semantic association during language acquisition. However, second language learners produced associations that were more diverse and week as their responses were purely based on phonological, rather than semantic, links with the stimulus words. (p.358).

Most of the above stated researches have explored the relationship between the nature of word association and language production and concluded that native language speakers used a variety of semantically associated words as compared to L2 learners who were found using limited, inferior and phonologically associated words in response to different stimulus. These researches also highlighted that the high level English language learners used a variety of synonyms; however, low level English language speakers used inferior synonyms. It can be concluded on the basis of the literature review that there is a direct relationship between the type of word association and language production.

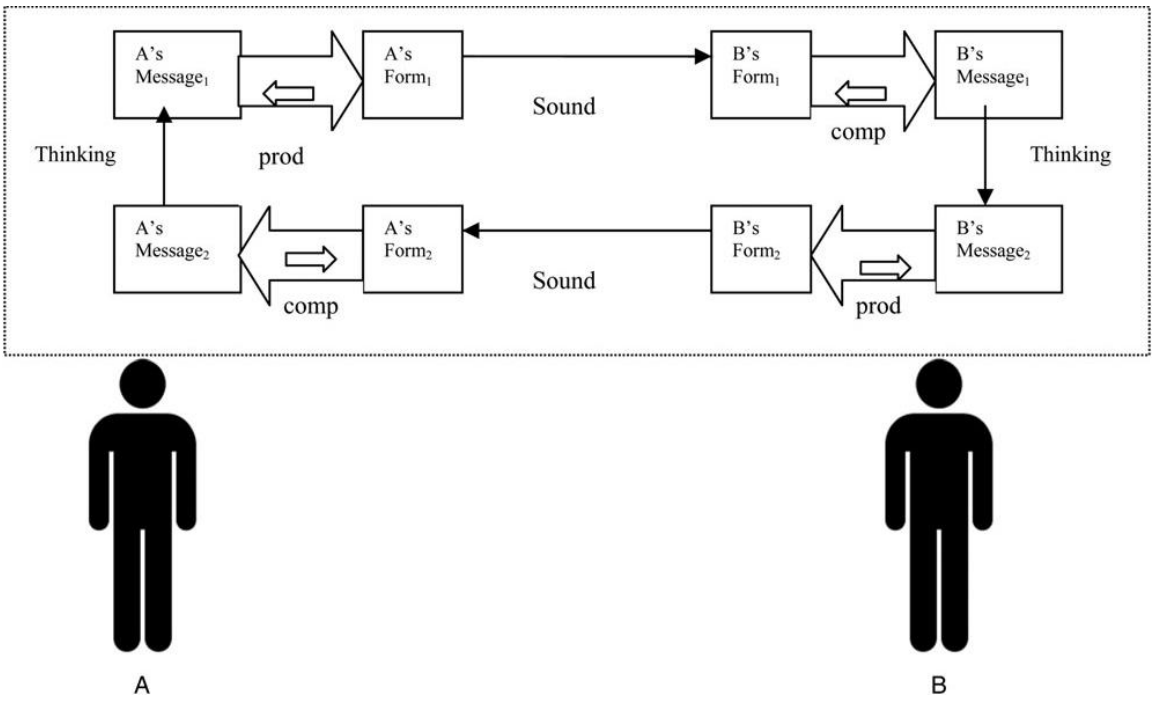
In order to emphasize on the importance of lexical structures, Davis (2006) stated that if a child did not have good lexical structures s/he could not comprehend the language even if s/he attended the best of the best phonics-based skills program.

2.9 Section Summary

The series of above mentioned research studies have thrown light on the grave effects of verbal aggression on mental, social and behavioral development of children. Moreover, these researches highlighted the issue of delayed speech which is another consequent result of the use of abusive language with children by their own parents. Some of these researches also described the cognitive processes of language production and comprehension with the help of different models. However, the differences in language production and comprehension of verbally abused and non-abused children have not been explored, to the best of the researcher's knowledge. This gap in the already existing body of research instigated the researcher to compare the language production and comprehension of verbally abused and non-abused children in order to find out the differences in the linguistic processes of language production and comprehension. The researcher found Pickering and Garrod's (2013) framework of language production and comprehension the most appropriate framework for investigating the relation in the cognitive processes of language production and comprehension of verbally abused and non- verbally abused children.

2.10 Theoretical Framework

Pickering and Garrod's (2013) theory of language production and comprehension has been used as a theoretical framework for this study. The said theory is a conceptual framework, which provides notional explanation and logical justification. It also provides explanation on the interrelatedness of linguistic comprehension and production. In order explain the cognitive processes of language production and comprehension, the researchers have provided a traditional model of communication which has been provided below:



A traditional model of communication between A and B (comp: comprehension; pro: production).

The above mentioned model is consisted of two participants: speaker and listener, whereas two processes are involved in the under discussion model: action (production) and action perception (comprehension). After a message has been successfully conveyed between speakers, it initiates the thinking process which has been represented through thin arrows in the same mode. This thinking process is different in every individual and helps speaker and receiver to think and understand in an entire different and sometimes unlike ways. And as a result of this cognitive differences, each speaker gets unique and distinct

message. In this model vertical lines show comprehension and production processes between individuals whereas horizontal lines show the same processes within an individual. The first arrow shows exchange of message through sound, gestures and expressions within two interlocutors in which A is producing message and B is receiving and comprehending it. This verbal and nonverbal communication between the interlocutors has a significant impact on comprehension and production as both the elements are important for any verbal communication and can change the message altogether. However, interrelationship between production and comprehension plays a vital role and both factors cannot be separated from each other for an effective communication.

The current theory of language production and comprehension is based on the interactionist view that claims that the language and cognition are interconnected and goes side by side, however this theory rejects the modular view of language production and comprehension. However, the modular view of language production and comprehension claims that the language and comprehension are stored in separate modules/faculty. Though they are supported by cognitive processes but not dependent upon each other. In contrast to it, Pickering and Garrod 'Integrated Theory of Language Production and Comprehension' claims that the cognitive processes of production and comprehension are tightly interconnected at different linguistic levels (e.g. semantic, phonological and syntactic). The interconnectedness between both the processes enable human to predict and imitate others models of language production and comprehension. Therefore, this discussion revolves around the role of linguistic experiences/schemas and prediction in the processes of language production and comprehension. This debate also entails the discussion of covert imitation and stimulus response relationship between both the processes, discussed under the terms of association and simulation.

Various aspects of 'the theory of language production and comprehension' have been discussed at length with the help of different examples, theories and researches. The summaries of these researches have been provided as below for a better understanding of the under discussion topic:

2.10.1 Forward Models of Actions and Action Perception

According to the theorists, language production is a form of action, and language comprehension is a form of perception. More accurately, action perception is perception of other people's actions. They assumed that actors predict and imitate forward models of their actions before they execute those actions, and that perceivers predict and imitate forward models of others' actions that are based on their own potential actions. In this way, the cognitive processes of language production and language comprehension go side by side. The term 'forward modelling' has been used in computational neurosciences and neurolinguistics, in order to explain human reactions adopted from personal observations or experiences.

Both the processes of language production and comprehension involves prediction that is to guess what you yourself and your interlocutor are going to say. When we plan our speech for what we have to say on the basis of prediction, it is called 'Forward Models of Actions', whereas the 'Forward Models of Actions Perception'' is to predict and understand your interlocutors' speech. The researchers have given an example when we perceiving something harmful or dangerous, we quickly take action by taking our hands away from danger. In this example perceiving of danger is the 'Model of an Action Perception' whereas taking your hand away from danger is the 'Forward Model of Action'. Another example of Forward Models of Action and Action- Perception is to listen, comprehend and predict the linguistic behavior of interlocutor at different levels (e.g. Phonetic, syntactic and semantic) during a verbal communication. This prediction is called 'Forward Model of Action-Perception', however bringing change in your speech on the basis of this prediction is called 'Forward Model of Action-Perception'. The nature of relationship between the cognitive processes of language production and comprehension from various related perspective has been discussed under:

2.10.2 Interrelatedness at Different Linguistic Levels

According to this model, language production and comprehension are two distinct and diverse functions of human brain which are integrated and tightly interwoven. This association between language production and comprehension enables humans to understand and predict not only their own language production but also helps to predict

cognitive and linguistic actions, and reactions of their interlocutors. The researcher stated in their research that association can be assessed through linguistic and comprehension activities and also described as follows:

"a production process as a process that maps from a 'higher' to a 'lower' linguistic level (e.g., syntax to phonology) and a comprehension process as a process that maps from a 'lower' to a 'higher' level. This means that producing utterances must involve production processes, but can also involve comprehension processes; similarly, comprehending utterances must involve comprehension process, but can also involve production processes" (p. 3-4).

The researchers claimed that the interactive processes of language production and comprehension are interwoven at different linguistic levels such as semantics, syntactic and phonological. When a message is sent by a sender to its receiver, it carries phonological, semantic and syntactical signals. After the process of receiving and comprehending of the message by its receiver, the same process happens when its receiver becomes a sender of a sound. This sound carries phonological, syntactic and semantic signals/meanings, when it is received by the previous sender. It has also been claimed that the process of language production occurs from higher to lower (e.g. semantics, syntax, phonology) levels whereas the process of language comprehension occurs from lower to higher linguistic levels (phonological, syntax and semantics). The producer of an action constructs or plans 'Forward Model' of his/her own speech, before executing their actions. However, the receiver covertly imitates and predicts those actions and plans' Forward Models' of their actions at different linguistic levels such as syntax, semantics and phonological levels. Clark (1996) stated that during the process of prediction and imitation, interlocutors comprehend and produce the message (as cited in Pickering and Garrod, 1993). In a below example A interrupts while B is asking a question. The interruption of A is for completing the statement in the same style though the message is not fully produced but still A is predicting due to covert imitation.

A: I am afraid, I burnt the kitchen ceiling.

B: But have you

A: burnt myself, fortunately not.

Another example given by the researchers is of 'Picture Naming Experimental Test' (Schriefers et al. 1990). People can easily predict or comprehend an object (dog) in a picture, if it is accompanied by the phonological clue of 'dot'. The researchers also referred an experimental test of 'sentence Completion' (Bock, 1996) to investigate the interrelatedness between the processes of language production and comprehension at different linguistic levels.

2.10.3 Stimulus Response Relationship between the Cognitive Processes of Language Production and Comprehension.

Pickering and Garrod (2013) have called production as 'action' and comprehension as 'perception', they are of the view that both action and perception have strong effects on each other e.g. when we perceive something harmful or dangerous, we quickly take action by taking our hand away from danger. This action shows an interconnectivity or stimulus response relationship between action (production/response) and perception (comprehension). In addition, the perception helps for predicting story of a film or a game. This prediction is based on the prior experience or relationship between interlocutors which may have a significant impact on the comprehension and speech production processes of interlocutors.

According to this concept, actions depend on perception. When, a child or an adult, perceives some danger ahead e.g. fire or gets hurt from any sharp or pointed surface, takes his hand away from it, is due to neurological system, which is responsible for taking an action and causes hand movement. However, the concept of forward modelling has a significant role for the development and enrichment of motor learning skills. These motor learning skills are conscious and unconscious actions of human brain those help us to perform various body functions such as walking, talking, to eat, to sallow, to recall our memories etc.

On the basis of forgoing discussion, the researcher perceived that there is a stimulus response relationship between the models of action and action-perception that enables interlocutors to predict, understand and produce their own and others' utterances. Considering the first example of danger, the prediction of some danger, works like a stimulus whereas the action of taking hands away can be considered as response.

Similarly, in the next example of predicting someone's linguistic behavior works like stimulus, whereas brings changes in our speech on the basis of prediction can be considered as a response that causes changes in the language production of a speaker.

2.10.4 Self-Monitoring and Interrelatedness

According to Pickering and Garrod, some researches show that the comprehension helps the producer of linguistic utterances in monitoring and refining his/her speech. This refinement of speech during the comprehension process brings significant changes in speech production at different levels, particularly, when the speaker thinks that some of his/her words and expressions are inappropriate, sarcastic or not up to the mark. Yet, such refinement through self-monitoring develops an effective, purposeful and rational communication. Different conventional theories and models of lexical and sentence processing explain the significant role of self-monitoring in the processes of linguistic production and comprehension which helps an individual to assess and refine his own speech, and develop two way communication process. The refinement of speech not only helps to create a better and an effective communication but it also shows a strong, effective and influential bond between linguistic production and comprehension. Self-monitoring takes place at different linguistic levels and helps interlocutors to comprehend each other's speech effectively. It also shows interconnectedness between language production and comprehension.

Levelt (1989) & Dell (1988) stated that during converting sounds into message, monitoring is considered as a common action and nodes between the processes of language production and comprehension. The speaker monitors his own speech during the process of language production (external monitoring), similarly monitoring is involved during the comprehension process, when the listener comprehends others' speech (internal monitoring) at different linguistic levels (i.e. phonology, syntax and semantics).Such type of monitoring is acknowledged as feedback.

On the basis of these grounds it has been assumed by the researcher that external and internal monitoring at different linguistic levels are the common grounds between the processes of language production and comprehension and they effect each other as a result

of which children produce the same type of language they encounter (i.e. vocabulary or words, phonemes and grammatical structures) during language comprehension.

In the light of the above discussion, it has been assumed by the researcher that the nature of relationship between language production and comprehension is stimulus- response relationship that helps to produce and predict others' language at different linguistic levels. Furthermore, internal and external monitoring are common grounds that facilitate both the processes and show interconnectedness between them.

2.10.5 Covert Imitation

The theory of Language Production and Comprehension explains the concept of overt and covert imitation that facilitate linguistic processes of comprehension and production. Garrod and Anderson (1987) explaining it further (as cited in Pickering and Garrod, 2004, pg.34) stated that during comprehending someone's speech while they prepare to produce their own speech, people covertly imitate their interlocutors' choice of words, syntactic and semantic structures that is specifically calls 'covert imitation' .The covet imitation of perceiver's speech, produces 'Forward Models of Action- Perception' that are based on 'association', however' the 'Forward Models of Action-Perception' are based on 'simulation'.

2.10.6 Linguistic Experiences of Language Production and Comprehension

The researcher have declared that 'association' is the prior linguistic experience of understanding others' utterances, however 'simulation' is the prior linguistic experiences of producing utterances. Both types of linguistic experiences supports the cognitive processes of language production and comprehension. The example given in this regard is the exercise of predicting a story of a film. This prediction is based on the linguistic experiences of comprehension and production. Another example is the act of better understandings and misunderstandings during verbal communication that are based on our linguistic experiences of language production and comprehension, and the linguistic environment we live in.

On the basis of above discussion, the researcher considers 'stimulation' and 'association' as linguistic schemas or prior experiences of language production and comprehension. It can also be concluded that the cognitive processes of language

production and comprehension are supplemented by linguistic schemas at different levels. Now applying the particular framework on language production and comprehension of children, it can be concluded that linguistic schemas (prior linguistic experiences of comprehension and production) can affect the cognitive processes of language production and comprehension of children. Resultantly, children covertly imitate the linguistic patterns/ structures they encounter during the process of comprehension. Therefore, due to the overlapping nature of thinking processes, the characteristics of encountered linguistic schemas can be observed in children's overt speech/ language production.

2.11 Section Summary

Pickering and Garrod's (2013) model of language production and comprehension, is used as a theoretical framework of this study that explains the interconnectedness between language production and comprehension. It also elaborates the vital role of linguistic schemas in the linguistic process of language production and comprehension that helps a producer to generate a message, while on the other hand, it helps the receiver to understand or predict before it is produced. The interconnectedness between language production and comprehension was explained with the help of different concepts, terms and models such. These includes the concepts of 'self -monitoring' and 'stimulus response' that help to understand the relationship between action and perception. This model also introduced the term 'Forward Modeling' and 'Forward Action Model' that mentioned 'action perception' and the relationship between language production and comprehension.

Having investigated the language production and comprehension of children, this theory concluded that linguistic schemas (prior linguistic experiences of comprehension and production) may affect the cognitive processes of language production and comprehension of children. Resultantly, children covertly imitate the linguistic patterns/ structures they encounter during the process of comprehension. Therefore, due to the overlapping nature of thinking processes, the characteristics of encountered linguistic schemas can be observed in children's overt speech/ language production. On the basis of this theory, the researcher assumes that in verbally abused and non-abused children, the cognitive processes of language production (action) and language comprehension (action

perception) go side by side. As a result of which, they covertly imitate others' linguistic utterances (in terms of choice of words, phonological, syntactic and semantic structures), during the process of comprehension, and produce language closer in nature to the language they experience. Therefore, the framework proposed by Pickering and Garrod (2013) seems to offer a reliable model to investigate the differences in cognitive processes of language production and comprehension in verbally abused and non-abused children at semantic and lexical levels due to experiencing certain type of linguistic schema. This framework also seems suitable to examine the role of linguistic schemas in the cognitive processes of language production and comprehension of verbally abused and non-verbally abused children.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter explains the nature of the study and discusses the approaches applied for the collection of data. It provides a detailed discussion on the research methodology and recapitulates different research methods used in psycholinguistic researches. The current chapter outlines the data collection tools, research population and sample of the study. It also describes different variables, limitations, delimitations and difficulties faced during the whole interval of the research. The whole chapter seeks to find out answers to the following research questions:

1. What is the degree of correlation between children's exposure to verbal abuse and their production and comprehension of abusive language?
2. What is the nature of correlation between the cognitive processes of language comprehension and production in verbally abused and non-verbally abused children?
3. How are the cognitive processes of language comprehension and production similar/ different in verbally abused and non- verbally abused children?

3.1 Research Methods in Psycholinguistics

Psycholinguistics is the study of language psychology as it is deeply rooted in linguistics and psychology, and studies the relationship between the structure of brain and the type of language used and produced. Psycholinguistics aims at investigating and measuring the cognitive processes involved in the acquisition, comprehension and the production of language. During the midst of twentieth century due to a remarkable shift in psychology towards behaviorism, which considers language as a learned behavior, a change has been followed in psycholinguistic methods and approaches. Nowadays, modern psycholinguistic studies provide a wide range of methods and techniques, such as computer simulations, observations and experimental approaches, to investigate different processes involved in the language production, comprehension and acquisition. Moreover,

picture Naming, picture description, questionnaires, conversation recordings and analysis, eye-tracking, analysis of speech errors, priming techniques and self-reporting are frequently used psycholinguistic methods to investigate the cognitive processes of language production and comprehension. Psycholinguistics also provides experimental methods which deal with the manipulation and measurement of an independent linguistic variable that usually has a significant impact on another dependent linguistic variable/s. There are different studies in the field of psychology and linguistics that have investigated the linguistic and cognitive phenomenon separately with the help of different data collections tools and methods. The methodologies adapted by these studies along with the pilot study proved helpful in outlining an effective and useful research methodology for the current research. Upon which the details have been provided below.

Tan (2013) applied the perception of parental verbal aggression test (1999) to investigate different types of verbal abuse faced by children. He also applied Children's Attributional Style Questionnaire (1984) to investigate emotional tendencies related to verbal aggression. Internalizing Symptoms Scale for children (1998) was the third data collection tool that investigated depression, anger or stress related to verbal aggression. There are a number of similarities between CTS scale and CASQ as both of them comprised of different questionnaires. These questionnaires investigated the symptoms of verbal and emotional abuse related to verbal aggression. A notable difference between both the tests is that CTS test investigates different types of abuse such as physical, verbal, emotional and psychological whereas CAQS investigates only verbal and emotional abuse whereas it neglects psychological peculiarities related to verbal aggression for which Tan applied another test that was ISC scale.

Kochar (2015) investigated the effects of verbal aggression on the cognitive skills of attention span in children for which he applied Cognitive Development (CD) test. There is considerable difference between CD test and Associative Priming test, which was primarily used to investigate the cognitive skill of comprehension. Keeping this in view, for the current research, Cognitive Development test was not found suitable for the investigation of the phenomena under study.

Solomon and Serres (1999) investigated the effects of parental physical and verbal abuse through Harter Self-Perception questionnaires. This questionnaire consisted of 10 descriptive questions that investigated different types of verbal and physical abuse faced by the children. The scores were calculated in simple percentages and compared with the percentages of the academic

performances of the participants to find out the correlation between both the variables. For the data analysis of the current research, the same strategy was adopted, which helped to find out the correlation in percentages between facing and using abusive language. The current research has also analyzed the collected data through SPSS tool for the validity and reliability of results.

Vissing et al. (1991) applied Conflict Tactic Scale (1979) to investigate the verbal abuse and its related emotional, psychological, social and behavioral issues. For the current research study, the researcher found this questionnaire the most suitable to investigate verbal abuse and its related emotional tendencies. For the investigation purpose, only 10 questions were selected that were enough to investigate verbal abuse and its related emotional tendencies faced by children.

McFadyen & Kitson (1996) compared the language differences of verbally and physically abused and non-abused children with the help of a simple language test. This test consisted of vocabulary items, grammatical structures and comprehension questions. Later on, the language differences of the participants were compared by dividing them into two groups. Group A consisted of verbally and physically abused participants; whereas Group B consisted of non-verbally and physically abused participants. The division between the participants helped to compare and contrast the language differences of both the groups. The methodological approach used by McFadyen and Kitson was adopted for the current research by dividing the participants into two groups of verbally abused and non-abused children. This division between the participants helped to investigate the linguistic and comprehension differences of both types of participants. In contrast to a simple language test, Picture Description Test helped the researcher investigating and comparing the language produced by the participants in a particular situation that could not be measured with the help of a simple language test. However, word association test used by Istifci (2010) was found more appropriate and effective for investigating the comprehension differences between both the groups as compared to a simple comprehension test. Another considerable difference between both the tests is that the word association test investigated patterns of semantic association between mental lexicons; whereas, a simple language test can only investigate general comprehension skills of participants. Therefore, the word association test was considered as the most suitable data collection tool for this study to understand the comprehension differences of both verbally abused and non-abused children.

In the research on word association response, Istifci (2010) stated that Word association is one of the major subjects studied in linguistics, psychology and psycholinguistics. The researcher also stated that the nature of association between stored

words affects the general proficiency of the cognitive process of comprehension. This study aimed at investigating word associations of elementary and advanced level English language learners (EFL) through a 20-item Word Association Test. In order to investigate the differences or similarities in results, the participants were divided into two groups. Group A was of 25 high proficiency level students and Group B consisted of 25 low proficiency level students. Later on, the researcher designed a word association test that consisted of 20 random and most frequent English language words. This research study was found to provide the most suitable methodology to investigate the differences of comprehension processes in verbally abused and non-verbally abused children through the investigation of word association. The current research study adapted the data collection tool (Word Association Test) used by Istifci (2010) for investigating the nature of word association in verbally abused and non-abused children. This test also helped to investigate if there was any stimulus response relationship between language comprehension and production or not.

3.2 Difficulties Faced During Data Collection

Difficulties faced during the pilot study brought few changes in the methodology of the current research. The female participants were reluctant to provide any type of data neither in questionnaire nor in recorded form due to their privacy concerns. Therefore, only male participants were selected as a sample for the current study. Another issue that enforced the methodology to be modified was of data recording. During the Picture Description Activity, a number of participants were not willing to provide the recordings; they also demanded privacy for the recording of the dialogues. In this situation, the researcher gave them assurance that their data would be kept in confidentiality and the recordings would be coded according to the participant's number instead of their names. The researcher also allowed the participants to record the dialogues in isolation.

Limited financial resources also brought changes in the methodology portion. Due to the cost of voice pitch analyzer, a data analysis tool, it was difficult to analyze the prosodic features of the recorded dialogues. However, it has been recommended for the upcoming researches to analyze the prosodic/suprasegmental differences/similarities of verbally abused and non-abused children.

The time duration of the data collection was another challenge, which took approximately three to four months. Furthermore, it was difficult for the researcher to collect recorded and written data at the same time from the same participants. However, few initial participants helped the researcher to locate and find out all the participants for the recording of dialogues in Picture Naming activity. The participants' numbers were tallied with the number of their recordings, for further analysis and comparison of the collected data. Finally, with all the effort and hard work, it became possible for the researcher to arrange and assess all the data in an organized, systematic and an efficient way. The whole research was organized in different stages, upon which the details have been provided below.

3.3 Research Design

The current study is an experimental correlational psycholinguistic study, which seeks to understand the cognitive processes involved in the language production and comprehension of verbally-abused and non-abused children by examining linguistic and comprehension differences of both type of children. A mixed method approach was applied that proved helpful in collecting qualitative and quantitative types of data. This approach also helped in delineating an effective research methodology, which was conducted in two stages.

STAGE # 1:

At the first stage, the researcher administered Conflict Tactics Scale (henceforth, CTS), developed by Straus (1996). The CTS was conducted among 132 participants; it consisted of only 10 questions which investigated verbal and its related emotional abuse. The basic purpose of conducting this test was to assess the participants, whether they were actually facing verbal abuse or not. The particular questionnaire also investigated by whom these children were generally facing verbal aggression, for instance by their parents, teachers, friends, cousins or someone else. Afterwards, the results of this investigation were provided in percentages. After conducting Conflict Tactic Scale among 132 participants, the researcher selected only 30 participants. 15 participants were those who secured more than 50 % scores and was considered as verbally abused, whereas 15

participants were those, who secured less than 50% scores and was considered as non-verbally abused. These participants were divided into two groups. Group A consisted of verbally abused participants, whereas Group B consisted of non-verbally abused participants. The division of participants into two groups helped the researcher to investigate and compare the linguistic production and comprehension differences of both the groups.

The results of the CTS helped in the numbering and equal distribution of participants in different groups. Initially, the participants were numbered and recorded with consecutive serial numbers i.e. 1, 2, 3. Later on, on the basis of the results, the researcher allotted new numbers to the same participants according to their groups. The allotment of the new numbers helped in the comparison of CTS' results with the results of other tests, which further helped to draw a fruitful conclusion. At the end of the Conflict Tactic Scale, a list of 14 abusive words was also provided as question number 2. These enlisted abusive words were adapted from Rampton's (2016) List of abusive words. The participants were asked to select words from the provided list, if they had been encountering any one of them. Later on, the selected abusive words were compared with the language produced by the participants in Picture Description Test. The comparison of data collected from both the tests helped to investigate whether the participants themselves use the abusive language in their verbal communication or not. In their research Straus et al. (1996) stated that the verbal abuse is the most difficult type of abuse for the investigation purpose that cannot be investigated in isolation without the investigation of emotional tendencies related to it. Therefore, it is worth mentioning that CTS not only investigates the evidences of verbal abuse but it also investigates its related emotional consequences such as feelings of loneliness, depression, irritation etc. For the current research study, CTS helped a lot in investigating the differences in the language production and comprehension of verbally abused and non-abused participants. The results of this test were also compared with the results of Word Association Test in order to find the correlation between the two variables. In the title of the study, the term non-abused is used only for the sake of brevity; however, throughout the thesis the term non-verbally abused has been used which is a more specific term to refer the particular type of verbal abuse.

STAGE # 2:

This stage investigated the differences of language production and comprehension in verbally abused and non- abused children with the help of different tests, such as Picture Description and Word Association. The Picture Description Test helped collect qualitative data and to evaluate the type of language produced by the participants. For this test, the participants were provided with different pictures and were required to look into those pictures and produce dialogues according to their understanding. These dialogues were recorded and transcribed for the purpose of investigating the language produced by the participants. Later on, the researcher compared the percentages of using abusive language by each participant with the percentages of selected abusive words. This comparison proved effective for understanding the relationship between the abusive language faced and used by a victim.

Another data collection tool used at the second stage was Word Association Test (APT), which helped to assess the cognitive process of language comprehension. AP test consisted of 10 statements, each statement was provided with two phonologically associated words. One word had a negative connotation and the other had a positive or neutral connotation, for example, generous/grumpy. Both the words have opposite meanings though both of them are phonologically associated by having same initial sounds. The word generous shows positive association whereas the word grumpy shows negative association of a child with her/his mother in the provided situation. Each positive reply was rewarded with one point whereas negative response had no score at all. The participants with more than 5 scores in this test were considered having positive phonological association whereas the participants with less than 5 scores were considered with negative phonological association. Later on, these marks were compared with the results of CTS and Picture Description Tests. This comparison showed the effects of facing abusive language on the cognitive processes of language comprehension and also helped to find out the correlation between the negative/positive phonological association and the abusive language faced by a victim. For clarity and better understanding, the results of both the tests have been presented through graphs and tables.

3.4 Variable/s of the Study

3.4.1 Dependent Variable/s

For the present research study, the dependent variable, the one which is effected by the use of abusive language, is the language production of verbally abused and non-abused children. The other dependent variable of the current research is the comprehension processes involved in the language production of the selected children.

3.4.2. Independent Variable

The independent variables of the current study is the type of language faced by the children.

3.4.3 Extraneous/ Controlled Variables

There were few extraneous variables that were smartly handled and controlled by the researcher, such as: age and gender. In order to avoid heterogeneous sample and to control the formerly stated variables, the research selected the participants of same age and gender. There was another possibility of the participants facing verbal abuse by their parents, teachers, siblings or from watching violent video games or cartoons. This variable was controlled by selecting only those participants who were facing verbal abuse either by their parents, teachers, friends/classmates, siblings, cousins or aunts/uncles. Furthermore, these options were provided in CTS. Apparently, there were no other serious extraneous variables that could have affected the results of the current study.

3.5 Pilot Study

Initially, it had been observed that the students used abusive language with their class fellows during class and play time when the teachers were not around. In order to investigate the factors behind using abusive language, the researcher conducted Conflict Tactic Scale among five female and five male students. These students were of the same school and of the same grade. The results of the pilot study indicated that most of the students were facing abusive language either by their parents or by their class-fellows. It also came into notice that the boys used more abusive and hurting language in comparison to girls. During the pilot study, it was also observed that the female participants were more

reluctant in providing data as compared to the male participants. Therefore, the researcher selected only male participants as a sample.

3.6 Population

The researcher selected all the male students of Grade 8 and Grade9 from BenchMark School System Islamabad as a population for the current research study. Among them, 77 male students were from grade 9 and 55 students were from grade 8. So, altogether they were 132 male students. The reason behind selecting the students from grade 8 and 9 was that these students were more willing to participate as compared to the students from junior grades. The reason for selecting BenchMark school system Islamabad was that the researcher was herself employed there and it was the only school that gave approval for conducting this research study on its premises with its students.

3.7 Sample

The researcher selected only 30 participants as a sample for the current study. The selection of sample was purely based on the results of CTS test. Among those 30 participants, 15 were verbally abused and 15 were non- verbally abused. For the sampling purpose, the researcher applied stratified random sampling techniques. Stratified sampling is a type of sampling technique in which the sample is divided into two or more special groups as per a certain criteria; such as, age, gender, etc. These groups are called strata and the sample chosen from each strata is on random basis for avoiding any chances of biasness (Kim et al., 2013).

As per the specified sampling technique, the initial 15 participants from top to down were taken as Group ‘A’. These were the participants, who secured more than 50% scores in CTS, therefore, they were considered verbally-abused.

The final 15 participants from down to top were taken as Group ‘B’. This group was considered as non-verbally abused group, which consisted of those participants, who secured less than 50% scores and were assessed on CTS as non-verbally abused. Moreover, all the selected participants from both the groups were male who were from 12 to 14 years of age.

3.8 Data Collection Tools

The researcher used three data collection tools for the present research study, which are: Conflict Tactic Scale, Word Association Test and Picture Description. Conflict Tactic Scale helped to select the sample for the current study. Among the rest of the two data collection tools, Picture Description Test helped to collect qualitative data, whereas Word Association Test helped to collect quantitative data on language production and comprehension. Both types of qualitative and quantitative data helped to find out the correlation between the two variables, which was estimated by assessing and comparing linguistic and comprehension differences among the participants.

3.9 Conflict Tactic Scale (CTS)

Conflict Tactics Scale (CTS) developed by Straus et al. (1996, pp. 283-316), is used to measure and investigate different family issues such as the use of verbal aggression, physical violence or emotional abuse. According to Straus, it is really difficult to investigate verbal abuse in isolation; however, it is less difficult to identify it, when it is accompanied by emotional abuse. Therefore, emotional and verbal abuse are inseparable and always accompanied by each other. On the basis of this argument by Straus (1996), the researcher included some questions in the main questionnaire of the current research from CTS that investigated emotional aspects related to verbal abuse. The researcher selected these questions from Straus et al. (1996). These questions helped to measure verbal aggression faced by the children such as “Is there anyone who rebukes you all the time?” Or “does anyone say to you ‘duffer’ or ‘stupid’?” The responses to these questions also helped the researcher to investigate whether those children were genuinely verbally abused or not. In order to further improve the validity of the collected data, the researcher provided the required privacy and assurance on the secrecy of the collected data to the participants. This assurance improved their confidence and helped in collecting genuine data for the current research. Furthermore, a pilot study was conducted to verify the purposefulness and effectiveness of the under discussion data collection tool. In order to calculate the results of the CTS in percentages, the researcher used a scale in which all the responses were rated on a four point scale against each answer. The scale

used for CTS has been taken from Straus et al. (1996), which has been discussed below at length:

Never= 0%

Sometimes=50%

Often=75%

More often=100%

The responses against each question were first assessed according to the above provided scale. Later on, the total obtained marks were divided by the number of questions and multiplied by 100 to find out the results in percentages. These findings were further compared with the results of Picture Description and Word Association Tests. This comparison helped the researcher to find out the relationship between the abusive language faced and used by children.

A list of abusive words had also been provided at the end of CTS Test to verify whether the participants were really facing abusive words or not. This list of abusive words was adapted from Rampton's (2016)list of bad words. For the purpose of adaptation, the researcher translated the previously mentioned list of bad words into Urdu and chose only sixteen belittling or abusive words. Later on, when the researcher asked the common people to provide their opinion on those words, they also agreed that those words were belittling and humiliating. This list of bad words helped to compare the words selected by the participants with the abusive words used by them during Picture Description activity. This comparison helped in finding out the relation between facing and using abusive language.

3.9.1 Rampton's List of Abusive Words

In his research Rampton's (2016) provided a list of abusive words, which are commonly used in verbal communication. Generally, people use these abusive words without realizing the fact that these words can be very hurting for the subject. These belittling or hurting words also affect the psychology of the subject and gradually become part of their verbal communication. The list of such hurting or bad words provided by the

researcher includes: ‘foolish’, ‘donkey’, ‘fool’, ‘non-sense’, ‘bastard’, ‘mental’, ‘careless’, ‘nope’, ‘disappointment’, ‘not at all’, ‘embarrassed’, ‘bad’, ‘incomplete’, ‘disgusting’, ‘shit’, ‘shameless’, ‘hateful’, ‘dissatisfied’, ‘odd’, ‘strange’, ‘fearful’, ‘afraid’, ‘idle’, ‘inferior’, ‘bitch/dog’, ‘idiot’, ‘furious’, ‘unpleasant’, ‘ridiculous’, ‘useless’ and ‘ugly’.

The researcher translated only 14 words from Ramptons’s (2016)) list of abusive words in Urdu language that are observed as a commonly used abusive words in our society. The basic purpose of including this list of abusive words was to confirm whether the participants were genuinely facing any abusive language or not. Furthermore this list helped to find out the similarities between the words faced and used by the participants during picture description test. For which, the number of abusive words selected from this list were compared in percentages with the number of abusive words used by each participant, during the dialogue production of picture description test. This comparison helped to investigate stimulus response relationship between language comprehension and production and also helped to find out any evidence of imitation. The list of abusive words has been included at the end of CTS as question number 2 and provided in ‘Appendix A’.

3.10 Picture Description Test

Picture Description is a widely used psycholinguistic test to study the cognitive process of language production (Glaser, 1992). This test consists of pictures that reflect different situations. These pictures were shown to the participants, who were asked to predict the situation going on as per their understanding. These predictions in form of dialogues were recorded and further helped the researcher to evaluate the cognitive processes of language production and comprehension in verbally abused and non-abused children. It was assumed that the ones who were facing more abuse would predict the situation negatively by using negative or abusive words. Whereas, the ones who were facing less verbal abuse would use less intense or abusive words. The predictions made by the participants helped the researcher to evaluate the cognitive processes of language production and comprehension in verbally abused and non-abused children as the participants who were verbally abused used more informal and abusive words as

compared to those who were not abused at all or were facing less verbal abusive language by their parents or by their surroundings.

The data collected with Picture Description Test was qualitative in nature. It was in the form of dialogues that were produced by the participants for predicting the provided situation. These dialogues were first recorder then transcribed and evaluated for the use of abusive words, if any. Due to this quantification of data (the quantification of qualitative data was done by calculating only the number of abusive words produced by the participants if any) the dialogues have not been discussed, but only the percentages of using abusive words have been mentioned and analyzed at length in Data Analysis chapter. The written transcriptions of the dialogues elicited in 'Picture Description' have been attached in Appendix D. Moreover, for calculating the percentages of using abusive language against each participant, the number of abusive words used in Picture Naming, was divided with the number of abusive words provided in the list of abusive words and multiplied by 100. The collected data has further been analyzed and correlated with the help of SPSS statistical tool.

The written transcriptions of the dialogues elicited in Picture Description have been attached in Appendix D. However, the data collected during the test was quantified by calculating only the number of abusive words produced by the participants (if any). Due to the quantification of data, the dialogues have not been discussed, but only the percentages of using abusive words are mentioned and analyzed at length in Data Analysis chapter. For calculating the percentages of using abusive language against each participant, the number of abusive words used in Picture Description, was divided with the number of abusive words provided in the list of abusive words and multiplied by 100. The collected data has further been analyzed and correlated with the help of SPSS statistical tool.

3.11 Word Association Test

Word Association test is basically a psycholinguistic test used as a stimulus-response method for which, the responses are recorded after the stimulus is given to the participants. The linguistic relationship between stimulus and response is based on

semantic, phonological or conceptual levels. For example, when a person is asked to provide an answer for mango; the answer can be a 'fruit' or 'banana'. In the same way, if one says 'ascending', someone can answer 'descending', which is the opposite of ascending. These examples show that sometimes the words are associated semantically and sometimes they are associated phonologically. Word Association Test helped to assess positive or negative association between the linguistic items at phonological level. The relationship between the linguistic items was assessed through providing negative and positive phonologically related linguistic options. This technique was also used to analyze the cognitive process of language production at semantic level.

In their research of 'Experimental and Psycholinguistic Approaches', Finardi & Prebianca (2006), stated that 'word association test' is widely used in comprehension researches to investigate the nature of semantic association between stored words. This test was first developed and introduced by Francis Galton as a data collection tool for psychological and psycholinguistic researches. He also introduced survey method for data collection. Galton used a list of 75 stimulus words and noted their responses. In a word association test, the researcher presents a series of words to individual respondents. For each word, participants are instructed to respond with the first word (i.e., associate) that comes to their mind without the manipulation of time. Later on the researcher examines these responses that help to explore the nature of semantic association between stored mental lexicons.

John Field (2006), also found 'word association test' as one of the most effective experimental psycholinguistic test to investigate comprehension process of semantic association between stored words/ lexicon. Word Stimuli can be provided in visual (e.g. written) or verbal form. For the responses of these visual or verbal stimuli, participants are asked to say the first word come to their mind when they read or listen these words.

For the current research study, the Word Association Test was adapted by the researcher to assess the nature of semantic association between the stored words. It consisted of ten statements which were pertaining to different situations shown in Picture Description Test. These statements provided with homophonic synonyms and antonyms given right under the questions. The synonyms were all positive and optimistic words

related to the situation shown in the picture Description Test. For example, attracted, delighted, fascinated, excited, generous, interested, happy, peaceful, tender and glad. However, the antonyms were all pessimistic and negative words such angry, depressed, furious, embarrassed, grumpy, insulted, hurt, painful, tense and guilty. This technique helped to assess the language comprehension differences in verbally abused and non-abused children.

For the analysis of the data collected from 'Word Association Test', the researcher used Levelt's Scale of semantic association (as cited in Dell et al., 1999). This scale consists of '0' and '1' values and used to investigate the nature of association between mental lexicons. For the current research, the value of '0' is associated with synonym/ positive words, however the value of '1' is associated with antonyms/ negative words. The under discussion scale investigated the tendency of selecting negative/ pessimistic words in both the groups of verbally abused and non-abused participants. Participants who secured more than 50% scores in word association test were considered having negative linguistic comprehension whereas those who secured less than 50% marks were considered having positive linguistic comprehension. Later on, the results of word association test were compared with the results of CTS Test in order to find out the correlation between verbal abuse faced by the participants and its impact on their semantic association of words.

3.12 Procedure

The current study was divided into two major stages.

At the first stage, the researcher conducted 'Conflict Tactic Scale Test' (CTST) by Straus, to assess whether the participants were genuinely facing verbal aggression or not. On the basis of the results from CTS, the participants were divided into two groups. Group A consisted of verbally abused participants whereas Group B consisted of non- verbally abused participants. The participants who secured more than 50% scores in CTS were considered verbally abused, whereas those who secured less than 50% were considered non -verbally abused participants. Later on, the division between the participants helped to assess and compare the linguistic production and comprehension differences of both

the groups. At the second stage, Picture Description task was conducted to analyze the processes of language production and comprehension of both the groups. For this purpose, the researcher asked the participants to produce language by looking into the situation shown through a step by step picture. Initially, the dialogues were recorded during the Picture Description activity. Later on, these recordings were transcribed and assessed, in order to analyze and compare the linguistic and comprehension differences of both the groups.

3.13 Data Analysis Tool/s

All the collected data was analyzed through individual and group percentages. These percentages were further compared and represented with the help of tables, graphs and pie charts. Furthermore, the correlation between different variables was found with the help of SPSS data analysis tool. Finally, the researcher provided descriptive explanations of all the results their comparisons and correlations. This discussion was based on the theoretical framework used for the current research, which further helped to understand the relationship between different variables.

3.14 Ethical Issues

One of the major ethical concern of the current study was the privacy issue of the participants. To show respect for their privacy, the participants were provided with a chance to record the dialogues in isolation; furthermore, they were not recorded without bringing it into their notice. To further ensure their privacy, their identities were not revealed at any stage of the research. Instead, the participants were allotted codes in order to identify the data provided by each participant.

3.15 Limitations and Delimitations

This research study has been delimited to the participants of grade 8 and 9 of BenchMark School System. It has also been delimited to the male participants, as the researcher found female participants reluctant in providing data during the pilot study. The research study has further been delimited to the study of linguistic differences of verbally abused and non- abused children at semantic level. Moreover, the study of comprehension differences of verbally abused and non-abused children proved another

delimitation of the current research. In addition with, due to financial limitations, the researcher could not study the phonological and syntactic features of the verbally abused and non-abused children. Furthermore, due to ethical concerns, it took a lot of time in collecting data which proved a major hindrance and limitation of the present study.

3.16 Validity and Reliability

To avoid any chances of collecting fake data and to make the results more reliable, the participants who were not willing to participate were not forced at all to provide the data. Furthermore, those who were hesitant to participate due to the privacy reasons were given assurance of not providing their details to anyone during or after the research. These participants were also provided privacy, so that they could record genuine data during the Picture Description activity. To improve and assure the originality of the collected data, all the participants were guided beforehand with necessary instructions about questionnaires, without disclosing the objectives of the research study. The pilot study not only helped in the selection of the appropriate data collections tools, but it also helped to validate the effectiveness of the collected data and brought forth a few necessary changes that helped in coming up without an effective and useful research methodology for the current study. Validity and reliability of the present study has been assured not only by conducting pilot study but also by performing statistical analysis of the collected data with the help of SPSS (2.0) statistical tool. Conflict Tactic Scale is also a standardized data collection tool that helped in the collection of valid and reliable data for the current research study. Furthermore, the most renowned and well-practiced psycholinguistic tests such as Word Association and Picture Description tests also helped in this regard.

3.17 Chapter Summary

The research was conducted in two stages. At the first stage, the researcher conducted Conflict Tactic Scale (CTS) designed by Straus in 1996. The particular test was administered with all the students of Grade 8 and Grade 9 from BenchMark School System Islamabad. The basic purpose of conducting this test was to identify the participants who were genuinely facing verbal abuse. On the basis of the findings, only 30 participants were selected. Later on, these participants were divided into two groups. Group A consisted of

15 verbally abused children and Group B consisted of 15 non- verbally abused children. At the second stage of the research study, the researcher investigated and compared the linguistic and comprehension differences of both the groups with the help of different tests. The researcher conducted Picture Naming activity for which the participants were required to produce dialogues by looking into a particular situation. Later on, these dialogues were recorded and transcribed for investigating the language produced by the participants. The Word Association Test was also conducted at the second stage of the research study to investigate the cognitive skills of language comprehension.

The statistical findings from all the tests along with their comparisons and graphical descriptions have been provided in the next chapter.

CHAPTER 4

DATA ANALYSIS

This chapter provides graphical descriptions of the collected data with the help of pie charts, tables and graphs. It also includes a detailed discussion of individual and group performance percentages along with their comparisons under the three major sub headings, which deal with the results, descriptions and percentages of Conflict Tactic Scale, Picture Description and Word Association Tests respectively.

The results of all the above mentioned data collection tools helped to address the research questions of the study and also helped to investigate the role of linguistic input in the process of language production and comprehension. The second research question inquired the specific differences in the language production of verbally abused and non - abused children with the help of Picture Description Test. The third research question explored the comprehension differences in the language comprehension of verbally abused and non- abused children with the help of Word Association Test. The fourth and the last question investigated the correlation between the abusive language faced and used by a child with comparing the results of all the psycholinguistic tools used for the current study.

The results of CTS show that Group A was facing 67.33% verbal abuse whereas Group B was facing 17.33% verbal aggression. Similar differences were noticed in the results of Picture Description Test, in which Group A produced 54% abusive language and Group B produced 0% abusive or offensive language. The differences in the results of Word Association Test were also noticed, as Group A showed 71% and Group B presented 31% negative linguistic association which showed their comprehension differences. These findings have been outlined, examined and discussed below in detail under various section- headings.

4.1 Conflict Tactic Scale

CTS consisted of ten questions, each question carried 1 mark and the total performance percentage was considered as 100%. The scale selected for this questionnaire

was: Never, sometimes, often and more often. The mark allocation against each selected option is provided below:

Never= 0%

Sometimes=50%

Often=75%

More often=100%

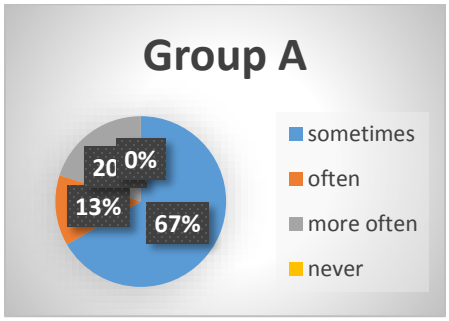
For calculating an individual's performance percentage, all the selected options against each question were added according to the given criteria. These added marks were further divided and multiplied by 100 to find out an individual's accurate performance percentage. The participants who secured less than 50% marks in CTS test were considered non-abused participants whereas those who secured more than 50% were considered verbally abused. On the basis of the previously mentioned criteria, all the participants were further divided in verbally abused and non-abused groups. The division of the groups helped to compare the performance percentages of both the groups in all the tests including Conflict Tactic Scale; it also helped to draw candid outcomes. From the results, it was noticed that most of the participants were facing verbal abuse by their parents or by their classmates, however the percentages were not calculated. It was also observed that the participants used abusive language either with their friends, class fellows or with their siblings.

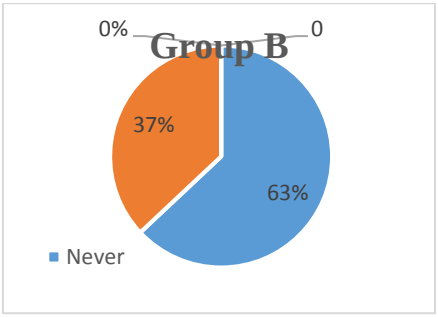
4.1.1 Individuals' Performance percentage Analysis

All the questions of Conflict Tactic Scale with their results in percentages have been discussed one by one below:

Q.1 How often do you feel rebuked?

The result percentages of the above stated question have been displayed below with the help of a pie chart:





Analysis Group A:

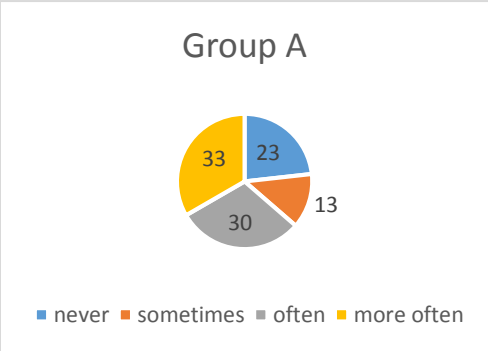
The above mentioned question investigated the feelings of being rebuked 66.6% participants selected the option: sometimes, 13.4 % participants selected option: often, whereas 20% participants answered as more often. It has been noticed that the large number of participants from Group A, felt rebuked with the frequency of sometimes and more often.

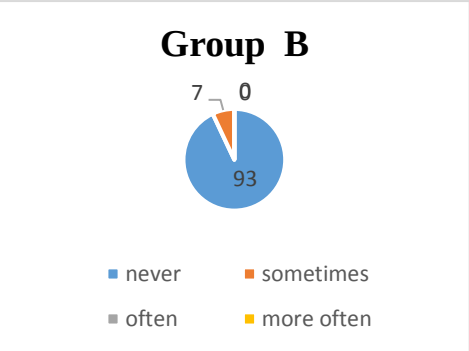
Analysis Group B:

For the above mentioned question, only 33% participants selected the option: often, 5% participants selected the option: more often. So the total performance percentage of group B, is 38% which is less than 50 percent. On the basis of performance percentage Group B was marked as non –verbally abused group.

Q.2 Do they use insulting words for you?

The below provided pie chart shows performance percentages of both the groups.





Analysis Group A:

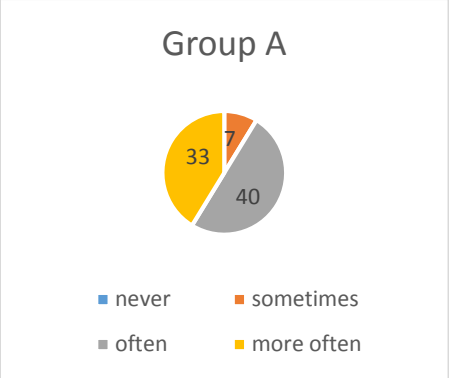
The above mentioned question verified whether the participants were genuinely encountering insulting words or not, that made the study authentic. The provided list of abusive words, also improved the authenticity of the study by verifying the abusive words faced by the children. The results of this question show that five out of fifteen participants selected option 'Sometimes' which signifies 33.3% occurrence of the event, five out of fifteen participants selected the third option 'often', which has the same percentage of 33.3 whereas 33.4% participants selected the last option 'more often'.

Group B Analysis:

From the results of group B, it was evident that only 37% participants selected option 'sometimes' for facing hurting words, whereas the rest of 63 % participants show that they do not face verbal abuse at all. As the above mentioned percentage is less than 50 percent, so the group B is considered as non-abusive group.

Q.3 How often do they shout at you?

The result percentage against this question has been displayed through a pie chart below:



Analysis Group A:

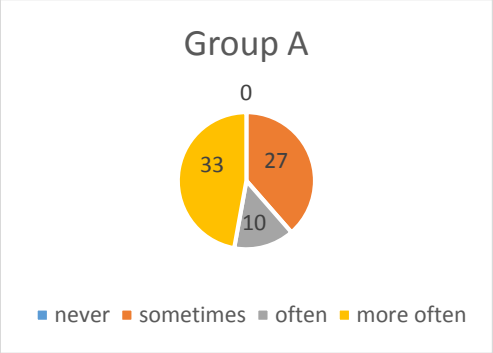
Since shouting is also considered as a part of verbal abuse, which has emotional and psychological side effects on its victim, so this question also measured, how often participants faced shouting. The result percentage of the above mentioned question shows that 53.4% participants selected option 'sometimes', 13.3 % participants selected option 'often', whereas 33.3% answers were provided by selecting option 'more often'. It shows a large number of participants from group A faced shouting 'sometimes' or 'more often'.

Analysis Group B:

Only 23% participants gave consent that they were sometimes facing shouting, as only 23% participants selected option 'sometimes'. However, an overall percentage of the group was 23% which was less than 50% and considered as non- abusive tendency.

Q.4 How often do you feel lonely?

Consult the under provided pie chart carefully for performance percentages of both the groups.



Analysis Group A:

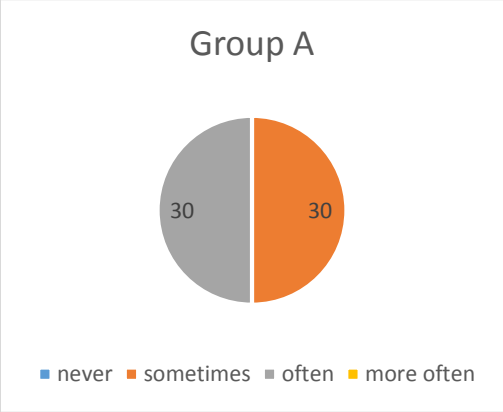
The above stated question was basically selected to measure the level of depression, (if found) among the participants. The result percentage shows that 60% participants were feeling lonely 'sometimes', whereas 40% participants were going through the same feelings 'more often'.

Group B:

The result shows that only 3% participants selected option 'sometimes' that shows less tendency of depression due to facing less verbal aggression. Overall 5% participants selected option 'often', whereas only 7% participants selected option 'more often'. The total performance percentage of group B is 15% consequently Group B is non- verbally abused group.

Q.5 Do you feel that someone teases you by saying bad words or calling you names?

The result percentage against the above stated question has been displayed through a pie chart below:



Analysis Group B:

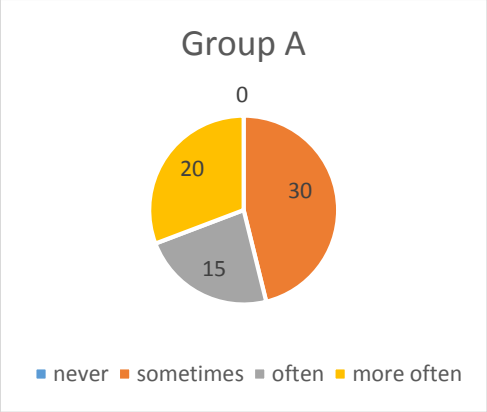
The above stated question does not only take consent on facing abusive, bad and hurting language but it also measures an interrelated and associated psychological phenomena of feeling being teased. The result percentage shows that 60% participants agreed that their parents 'sometimes' tease them, 20 % participants selected option 'often', whereas 20% participants face abusive language and goes through feelings of loneliness 'more often'.

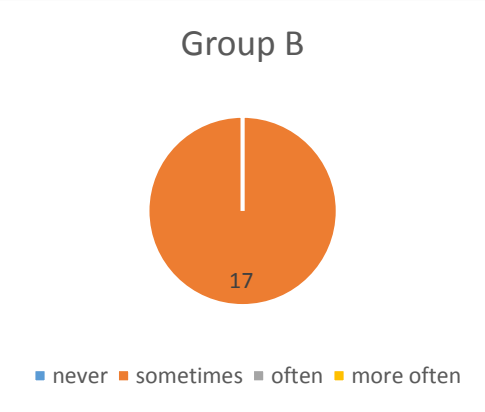
Group B:

Only 7% participants from group B gave consent that they feel teased when they heard hurting words from someone, whereas the rest of 93% were not facing abusive language at all.

Q.6 How often do you feel you are not enjoying your life?

The below given pie chart shows performance percentages of both the groups.





Analysis Group A:

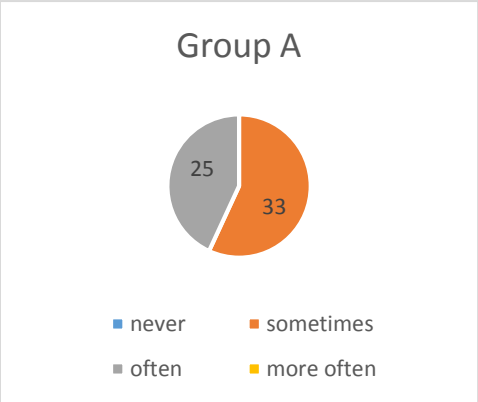
The above stated question helped to measure depression caused by verbal abuse. The outcome shows that 8 out of 15 participants selected option ‘sometimes’ that is 30 % of the participants, 15% participants selected option ‘often’, whereas 20 % participants ‘more often’ had not being enjoying their lives.

Analysis Group B:

Only 17% participants were of the view that they were often not enjoying their lives, whereas the rest of 83% participants answered that they never felt so.

Q.7 When you do something wrong and your parents interrogate, do you tell lies?

The result percentage has been displayed through a pie chart below:



Group A Analysis:

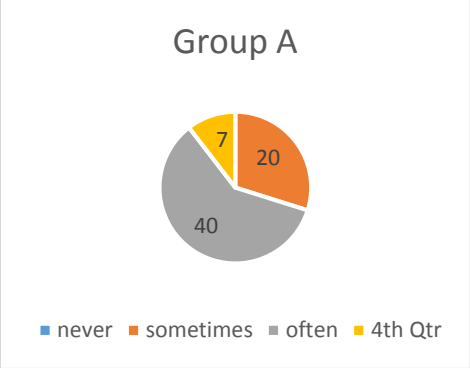
Children who face verbal aggression from their parents, they start telling lies to protect and save themselves from their parent's wrath. This situation brings moral, emotional and psychological abnormalities and builds unbalanced personalities. The above mentioned question basically investigated evils related to verbal abuse in terms of depression, moral and ethical vices. The result percentage shows that 33% participants 'sometimes' tell lie, 25% participants 'often' tell lie. Overall percentage which is 58% marked group B as verbally abused group.

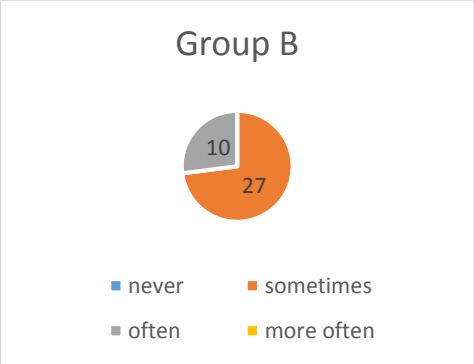
Group B Analysis:

It has been ascertained in many researches that people who are victims of verbal abuse, make it a habit to tell lies. They do it in order to save themselves from torture or verbal abuse. The above stated question measures ethical issue of lying in verbally abused and non- abused children. The result that is calculated in percentage shows that only 20% participants from group B 'sometimes' tell lie whereas the rest of 80% participants do not tell lie. As the total percentage is less than 50% so this group is considered as non- verbally abused group.

Q.8 Do you argue a lot with other people?

The result percentage for the above mentioned question has been displayed through a pie chart below:





Group A Analysis:

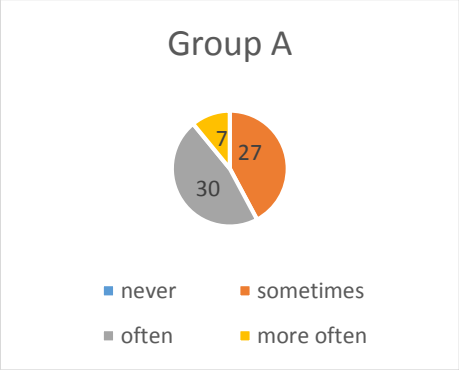
Verbal abuse brings different behavioral irregularities in children such as children who face more verbal aggression they make more arguments with others. The above selected question from CTS test helped to probe into the matter whereas the results show that 20% participants ‘sometimes’ do arguments and 40% participants ‘oftenly’ do arguments with others. The under discussion group is verbally abused because its total performance percentage is 60% that is higher than 50%.

Group B Analysis:

Only 27% participants from group B, agreed that they ‘sometimes’ argue, whereas only10% participants agreed that they ‘often’ argue with others. The total percentage scores of the group is 37% which is less than 50%.

Q.9 Do you cry a lot when your parents say something bad to you?

The result percentage of the above stated question has been displayed through a pie chart below:



Group A Analysis:

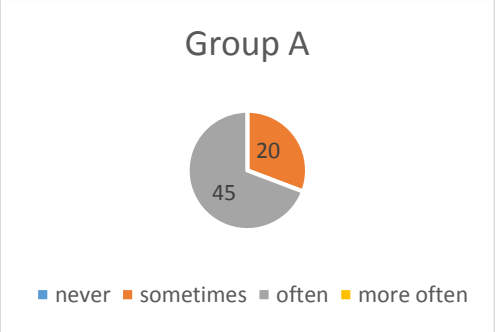
Verbal abuse is not only suspected as a major factor for bringing language related problems but it also considered significant for causing behavioral, psychological and emotional instability among children. Children who face more abusive and hurting language, they do not only start using offensive language with others but they also suffer through mental depression. Mental depression is often expressed through crying out more. Therefore, children who cry more their crying could be an indication of facing verbal abuse. The result for the above stated question shows that 27% participants cry 'sometimes' when they face hurting words from someone, 30% participants cry 'often' whereas 7% participants cry 'more often' on facing abusive or bad words. The total percentage of verbal abuse faced by this group is 64% making the group verbally abused.

Group B Analysis:

The result shows that 17% of the participants from group B selected option 'sometimes', whereas rest of the 83% participants selected option 'never'. The total result percentage made the group fall under non -verbally abused group.

Q.10 How often do you use abusive language with your siblings/cousins or friends?

The result percentage has been displayed through a pie chart below:



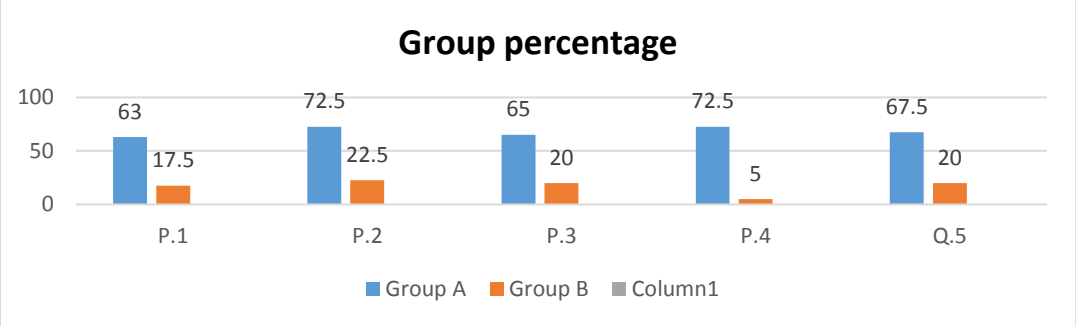
Group A Analysis:

The above stated question investigated the chances of using abusive language, it also helped to investigate the correlation between facing and using abusive language. The calculated responses against the particular question proved that 20% participants from group "A" agreed on using abusive language with their siblings/cousins or class fellows, whereas 45% of the participants from the same group accepted that they 'often' use abusive language with others. The total performance percentage of the group is 65%, for which the researcher calculated and divided the number of participants, who answered: more often, with the total number of participants of the group which is 15 and finally multiplied it with 100.

Group B Analysis:

The performance percentage analysis of group B shows that only 10% participants selected option 'sometimes' whereas rest of 90% participants do not use abusive language with anyone.

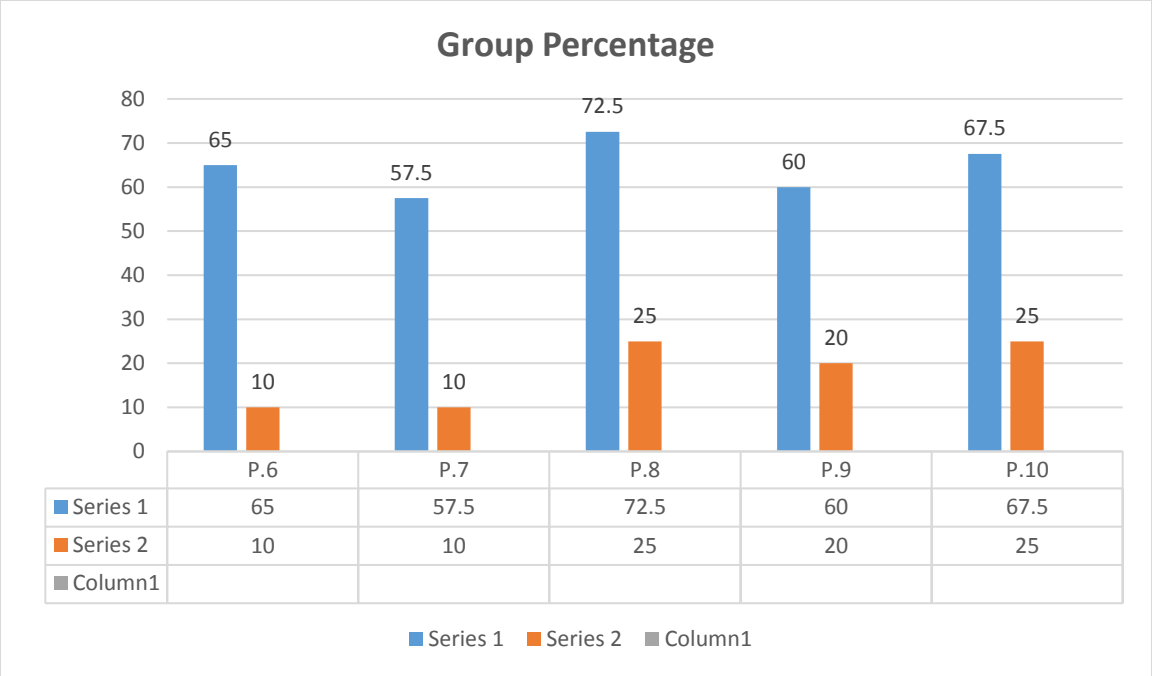
4.1.2 Group Comparison on Conflict Tactic Scale



Group Comparison Analysis:

Participants who secured more than 50% scores were considered as verbally abused, whereas the participants who secured less than 50% scores were considered as non- verbally abused participants. These participants were further divided under two groups of verbally abused and non-abused groups namely group 'A' and group 'B'. The results show that most of the members from group "A" secured more than 50% scores whereas the first participants of both the groups are in contrast to each other. The percentages secured by first participants of group A and group B are 63% and 17.5% respectively. The result of Second participants of both the group also show contrast by getting 72.5% and 22.5% scores. Third participants from group "A" was found 65% abused whereas his counterpart from Group "B" was found only 20% verbally abused. Forth participant from Group "A" was found 72.5 % verbally abused while his counterpart from Group "B" was found only 5% verbally abused which shows a visible contrast in the results of group A and group B.

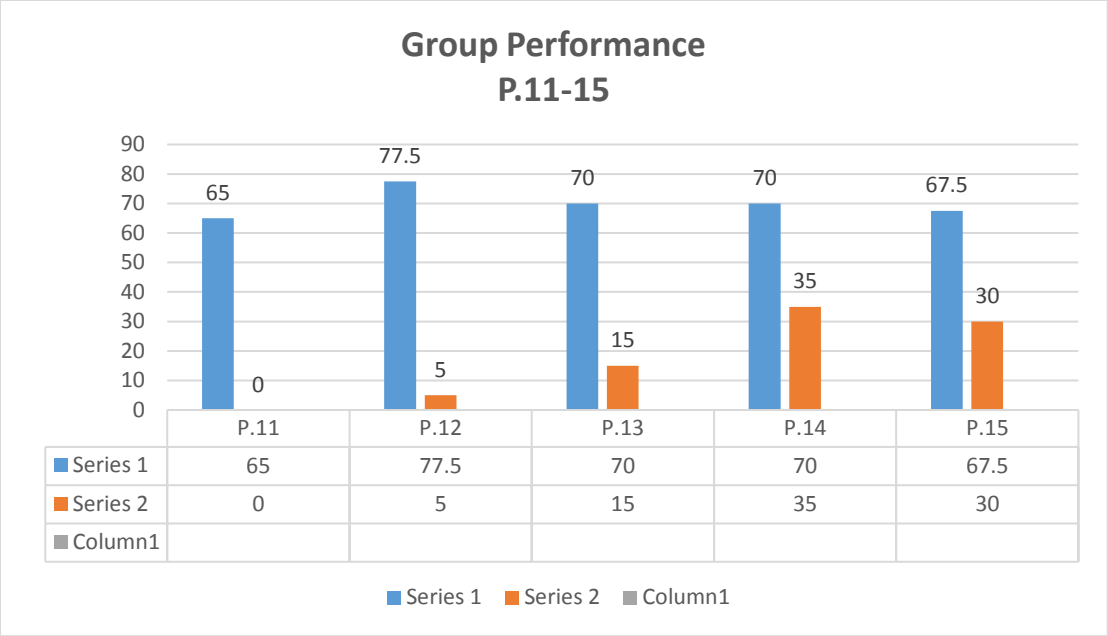
The result percentages of fifth participants from both the groups also show a noticeable distinction. Participant number five from Group "A" was 67.5% verbally abused whereas participant number five from Group "B" was only 20% verbally abused. The difference is not only observed in the comparative performances of initial five participants of both the groups but it is also noticed in the performances of the rest of the participants from both the groups.



Analysis:

The above mentioned data table has provided all performance percentages at a glance. It shows that the sixth participants from both the groups are in marked divergence, as the participant from group "A" is found 65% abused, whereas his counterpart is found only 10% verbally abused. Seventh participant from Group "A" is facing verbal abuse which is 57.5% whereas the seventh participant from group "B" is facing only 10% verbal abuse. The differences of performance percentages show constant stirring contrast in the results of both the groups. The constant contrast is also evident from the previously mentioned performance percentages.

Previously mentioned chart also shows that the eighth participant from group "A" is facing 72.5% verbal abuse whereas his counterpart from group "B" is facing only 25% verbal abuse. Participant number nine from Group "A" is facing 60% verbal abuse, whereas the same participant number from Group "B" is facing only 20% verbal abuse that is far lesser than the verbal abuse faced by his counterpart. Participant nine of Group "A" is facing 67.5% verbal abuse whereas his counterpart from group "B" is facing only 25% verbal abuse from his surrounding which is way less than the verbal abuse faced by his counterpart from Group "A".



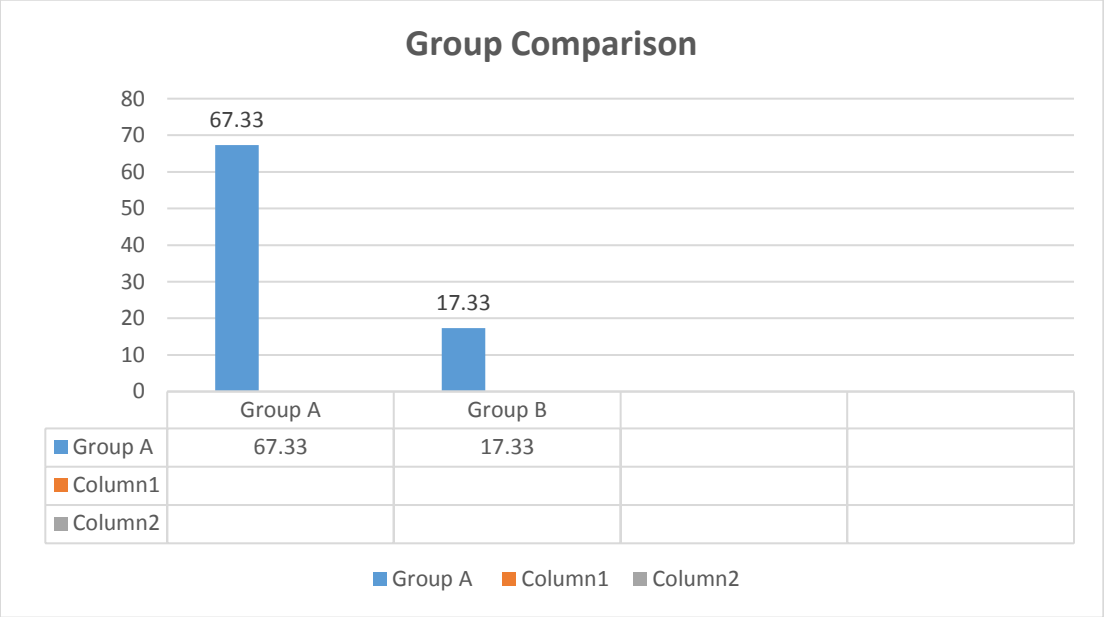
Group Performance Analysis:

The above mentioned chart shows the result percentage of the last five participants of both the groups. It can be clearly noticed that eleventh participant from Group "A" is facing 65% verbal abuse whereas his corresponding participant from Group "B" is not facing verbal abuse at all and the performance percentage scored by him is only 0%. Participant twelfth from Group "A" is facing 77.5% verbal abuse and his counterpart from group B is facing only 5% verbal abuse from the surroundings. The results show that participant thirteen from Group "A" is facing 70% verbal abuse whereas his counter participant from Group "B" is facing only 15% verbal abuse.

The second last participants from Group "A" is facing 70% verbal abuse whereas the second last participant of Group "B" is facing only 35% verbal abuse. From the result percentages, it is quite obvious that the last and the fifteenth participant from Group "A" is facing 76.5% verbal abuse whereas his counterpart from Group "B" is facing only 30% verbal abuse. Most of the participants from 'A' agreed on facing verbal aggression either by their parents or by their classmates. Another worth sharing fact is that the most of the participants agreed on using abusive language with their classmates, friends or cousins.

4.1.3 Groups' Comparison of Conflict Tactic Scale

A comparison between the performances of both the groups has been presented below with the help of a chart:



Group Comparison Analysis:

Participants who secured less than 50% scores in CTS test were considered verbally abused and were fallen under Group A, whereas participants with more than 50% scores were considered as non-verbally abused and were fallen under group B. A Comparison between both the groups shows that Group A was facing more than 50% verbal abuse, whereas Group "B" was facing less than 50% verbal aggression. The method for calculating performance percentage for both the groups, is the same. It was calculated by dividing the number of scores secured by the particular Group, divided by 100 and multiplied by 100. From the above mentioned chart, it is evident that the participants from Group "A" were facing 67.33% verbal abuse whereas the participants from Group "B" were facing only 17.33% verbal abuse. Moreover, the percentage performance of group A was more than 50% whereas performance percentage of Group "B" was less than 50%.

4.2 Picture Description Test

This test consisted of different pictures that reflected somehow different but related situations .These pictures were shown to the participants, who were later on asked to predict the situation as per their understanding. The dialogues produced by the participants were assessed and further compared with the result of CTS test to find out speech similarities/differences of verbally abused and non-abused children.

4.2.1 Individuals' Performance Percentage Analysis of Picture Description Test

The result percentage of all the participants of group A has been displayed below with the help of a table:

Picture Description Test Individuals' Performances Chart Group A							
P.1	P.2	P.3	P.4	P.5	P.6	P.7	P.8
100%	100%	100%	33%	50%	44%	80%	40%

Picture Description Test Individuals' Performances Chart Group A						
P.9	P.10	P.11	P.12	P.13	P.14	P.15
40%	18%	10%	40%	67%	71%	18%

Table 1: Picture Description Test Individuals' Performances Chart Group A

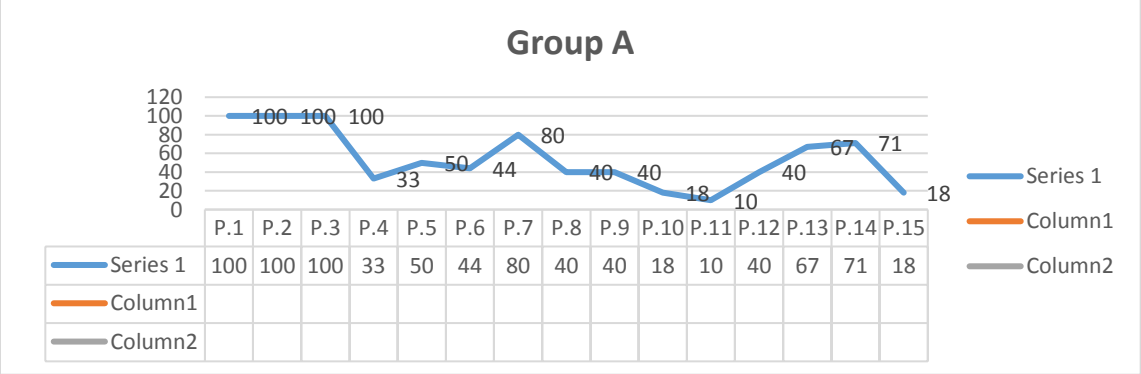
Group A Analysis:

At the end of the Conflict Tactic Scale Test, participants were provided with a list of abusive words. They were instructed to select hurting words that were used for them. These words were 14 in number. The number of words selected by an individual were divided by 14 and multiplied by 100 to calculate the percentage out. The individual

performance percentage of Picture Description Test was compared with the respected individual performance percentage of the Conflict Tactic Scale Test.

From the results of Picture Description Test, it is quite noticeable that the first three participants from group A used 100% words they selected from the provided list of words. In comparison to it, these three participants were facing more than 50% abusive language from their environment. Participant number four was facing 72.5% verbal abuse yet using 33% abusive language, whereas participant number five who was using 50% abusive language, he himself was facing 67.5% hurting language. The next participant secured 65% marks in Conflict Tactic Scale Test yet used 44% abusive words in Picture Description Test. Participant number seven who was facing 57.5% abusive language was found using 80% abusing language in the same activity. Both the percentages of using and facing abusive language were more than 50% and show a strong correlation.

Participant number eight and nine both used 40% abusive language whereas they were found facing verbal abuse with the respective percentages of 72.5% and 60%. The next two participants number nine and ten, who secured 60% and 67.5% respectively in Conflict Tactic Scale Test were also found with using hurting language with the respective percentages of 40% and 18%. Participants number eleven and twelve used 10% and 40% hurting language whereas they were found facing 65% and 77.5% abusive language. Participants number thirteen and fourteen, both were facing 70% abusive language, whereas they used 67% and 71% hurting words from the provided list of abusive words. The last participant of group A, was found facing 67.5 % abusive language in Conflict Tactic Scale Test, yet used 18% abusive words during Picture Description Test.



From the above mentioned table, it can be clearly noticed that group A was facing 67.33% verbal abuse whereas the same group used 54% abusive language in Picture Description Test. The particular mentioned percentage has been calculated on the basis of the selected words from the provided list of abusive words.

Analysis Group B:

From the above stated findings, it is very obvious and surprising that none of the participants from group B used more than 0% abusive language. Scores achieved by the individuals have been presented below in a table:

Picture Description Test Individuals' Performances Chart Group B							
P.1	P.2	P.3	P.4	P.5	P.6	P.7	P.8
0%	0%	0%	0%	0%	0%	0%	0%

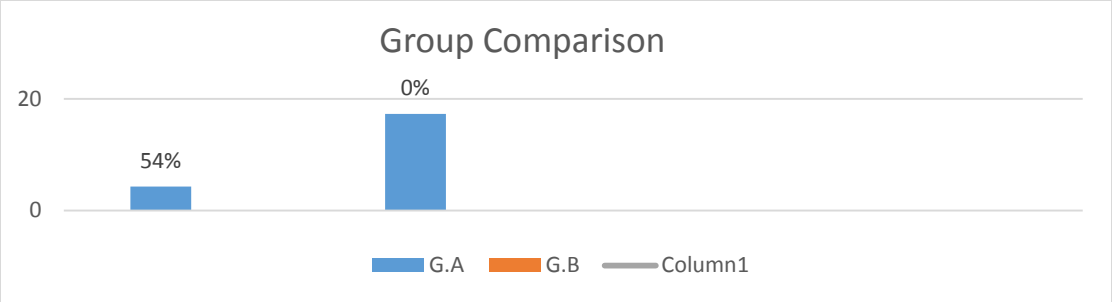
Picture Description Test Individuals' Performances Chart Group B						
P.9	P.10	P.11	P.12	P.13	P.14	P.15
0%	0%	0%	0%	0%	0%	0%

Table 2: Picture Description Test Individuals' Performances Chart Group B

A very important and significant fact that has been observed during the Conflict tactic Scale Test is that most of the participants from group B were facing abusive language by their class fellows but not by their parents. These participants also shared that their parents never rebuked or yelled over them.

4.2.2 Groups' Comparison of Picture Description Test

The comparison between both the groups has been shown below with the help of a graph:



Analysis of Groups Comparison:

The above presented graph shows that group A used total 54% abusive language in Picture Description Test. The same group was found with facing 67.33% verbal abuse during an assessment through Conflict Tactic Scale Test. The above presented graph also shows that group B was facing 17.33%, whereas it used 0% abusive language in Picture Description Test, therefore considered as non- verbally abused group. When out of suspicion, the researcher interrogated the reason from the participants, they replied that their parents never even scolded them. A comparison between both the groups shows that group A used overall more abusive language as compared to Group B.

4.2.3 A Comparison between the results of Conflict Tactic Scale and Picture Description Test

The individual performance percentage of Picture Description Test was compared with the respected individual performance percentage of the Conflict Tactic Scale Test. The comparison helped the researcher to find out the relation (if any) between the type of language faced and the type of language produced by the participants.

The following table is helpful to understand and compare the results of both the test.

A Comparison of Conflict Tactic Scale and Picture Description Test		
Participant No	**Conflict Tactic Scale**	**Picture Description Test**
P.1	60%	100%
P.2	72.5%	100%

P.3	65%	100%
P.4	72.5%	33%
P.5	67.5%	50%
P.6	65%	44%
P.7	57.5%	80%
P.8	72.5%	40%
P.9	60%	40%
P.10	67.5%	18%
P.11	65%	10%
P.12	77.5%	40%
P.13	70%	67%
P.14	70%	71%
P.15	67.5%	18%
Total percentage	67.33%	54%

Table 3: Comparison of Conflict Tactic Scale and Picture Description Test

4.3 Word Association Test

Word Association Test was consisted of ten questions that were about the situation provided in Picture Description Test. Each statement was provided with two phonologically related but semantically unrelated options, as these options were antonyms. The selected choices among both the options helped the researcher to assess and compare the linguistic processes of comprehension of the participants.

4.3.1 Individuals' Performance Percentage Analysis of Word Association Test

Analysis Group A:

The result percentage of Word Association Test for group A has been provided in a table below:

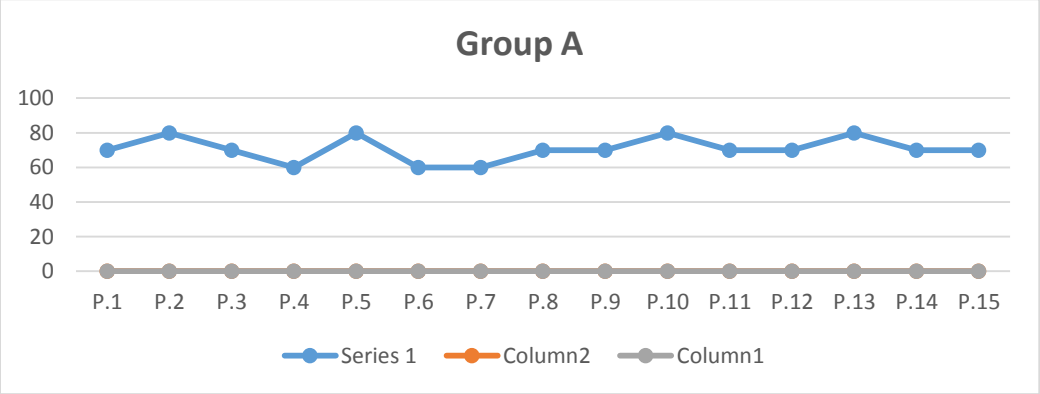
Participant No	Performance Percentage of Conflict Tactic Scale Test	Total No of Negative Answers	Total Percentage of Negative Association
1	60%	7/10	70%
2	72.5%	8/10	80%
3	65%	7/10	70%
4	72.5%	6/10	60%
5	67.5%	8/10	80%
6	65%	6/10	60%
7	57.5%	6/10	60%
8	72.5%	7/10	70%
9	60%	7/10	70%
10	67.5%	8/10	80%
11	65%	7/10	70%
12	77.5%	7/10	70%
13	70%	8/10	80%
14	70%	7/10	70%
15	67.5%	7/10	70%
Group Percentage	**67.33%**		**71%**

Table 4: Word Association Test Individuals' Performances Group A

The above mentioned chart shows that the Participant number one has selected 7 negative options out of ten. Therefore, his total negative association is 70% which is 10% less than the negative association of the second participant who was found with 80% negative association. Participant number three answered seven words with negative meanings secured 70% performance percentage. Participant number four and five secured 60% and 80% respectively. Whereas, participant number six and seven both acquired 60 % performance percentage in the same test. Similarly, participant number nine and ten also acquired the same percentages that is 70%.

Participant number ten, was found with 80% negative association due to selecting 8 negative answers. Participant number eleven and twelve secured 70 % scores in Word Association Test, whereas participant number thirteen secured 80% scores in the same test. The last two participant the group, selected seven words with negative association, so they scored 70% scores. An overall performance percentage of Group A is 71% with negative association.

The graphical description of the results of Word Association Test has been provided below:



From the above presented graphical description of the results, it is quite evident that only four participants from group A secured 80%, eight participants secured 70%, whereas only three participants secured 60% scores in Word Association Test.

Analysis Group B:

The result percentage of Word Association Test for group B has been provided in a table below:

Participant No	**Performance Percentage of Conflict Tactic Scale Test**	**Total No of Negative Answers**	**Total Percentage of Negative Association**
1	17.5%	5/10	50%
2	22.5%	5/10	50%

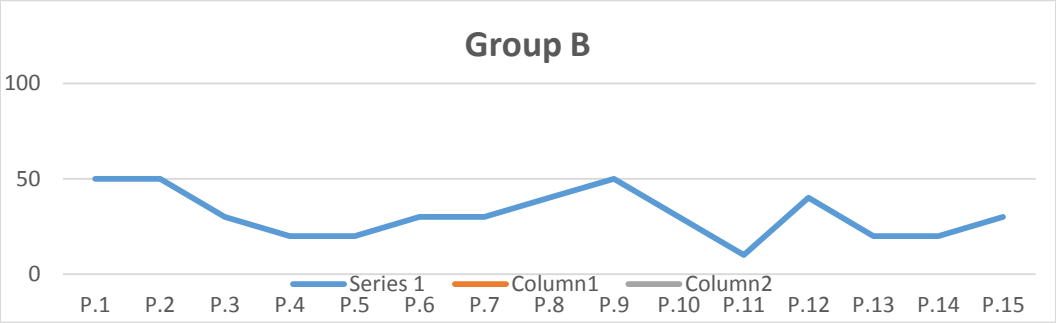
3	20%	3/10	30%
4	5%	3/10	30%
5	20%	2/10	20%
6	10%	3/10	30%
7	10%	3/10	30%
8	25%	4/10	40%
9	20%	5/10	50%
10	25%	3/10	30%
11	0%	1/10	10%
12	5%	4/10	40%
13	15%	2/10	20%
14	35%	2/10	20%
15	30%	3/10	30%
Total Group Percentage	**17.33%**		**32%**

Table 5: Word Association Test Individuals' Performances Group B

The above mentioned table shows that the first two participants of Group B selected five negative answers. Consequently, their performance percentage is 50%. Participant number three and four both selected 30% negative linguistic choices whereas participant number five, selected only 20% options with negative connotation. Participants number six and seven both were found with 30% negative associative in Word Association Test whereas both of them are also facing the same percentage of abusive language from different sources which is 10%. Participant number eight who has selected 4 negative words, are found with 40% negative association whereas the percentage of verbal abuse faced by the same participant is 25%.

The same difference has also been found in the result percentage of participant number nine, who have secured 20% scores in Word Association Test, whereas 50% verbal abuse in Conflict Tactic Scale Test. Participant number ten selected only 3 negative choices out of ten, consequently, he has attained 30% negative association whereas his performance percentage in Conflict Tactic Scale Test is 25% which is less than 50%. Only participant number eleven whose performance percentage is only 0% in Conflict Tactic Scale Test, is found with 10% negative association due to selecting only 1 negative phonological option from the provided list of words. Participant number twelve is like participant number eight as both of them has the same performance percentages, which is 40%. Similarly, participants thirteen and fourteen both have secured 20 percent performance percentage due to selecting only two negative phonological options. The same participants have 15 and 35 percent respective performance percentages in Conflict Tactic Scale Test. The last and final participant number of this group is found with 30% performance percentage in both the tests, which is less than 50%.

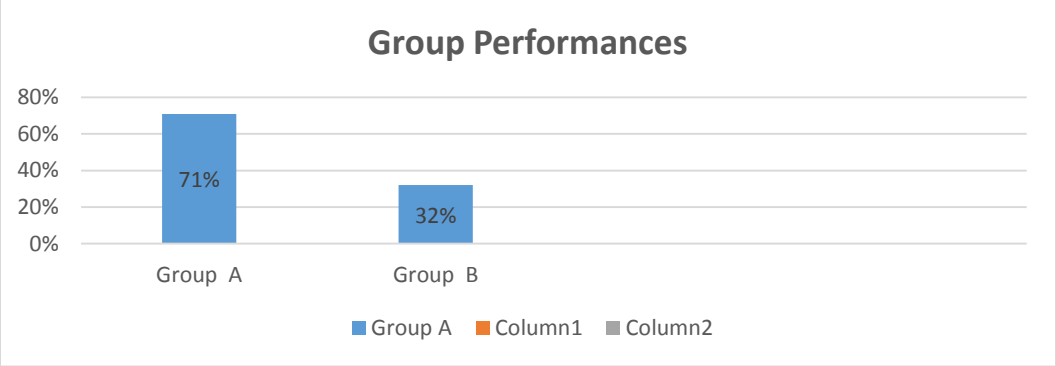
Graphical Description of the results



Analysis:

From the graphical description of the results it is quite evident that only three participants of Group B, are found with 50% performance percentage, whereas the rest of the participants have less than 50% performance percentage.

4.3.2 Groups' Performances Percentage Analysis of Word Association Test



Analysis:

The above displayed graphical description shows Group A is found with 71% negative association which is more than 50%. However Group B is found with 32% negative association which is less than 50%.

4.4 Findings of the Study

There are two major notional components of the theoretical framework of the study. The first notional component of the theoretical framework emphasizes on the role of linguistic input in the processes of language production and comprehension, whereas the second notional component emphasizes on the interrelatedness of language production and comprehension. To put it simple, both the notional components deals with the idea of how the type of linguistic input can affect the language production and comprehension. Relating the theoretical framework with the findings of the study, the percentages show that Group A was facing 67.33% abusive language, however the same group used 54% abusive language during Picture Description Test. Group B was facing 17.33% abusive language, whereas the same group used only 0% abusive language during the Picture Description Test. The comparison between facing and using abusive language lays emphasis on the role of linguistic input in the process of language production.

The percentages of the findings also laid emphasis on the role of linguistic input in the process of language comprehension. It shows that Group A, which was facing 67.33% abusive language showed 71% negative linguistic comprehension, whereas Group B was facing 17.33% abusive language showed only 32% negative linguistic comprehension. It

is quite obvious from the findings that the group which was facing more verbal abuse scored higher than the group that was facing less verbal aggression in linguistic comprehension test.

So far the results of different tests along with individual and group performances and their comparisons have been discussed at length. Summarizing the whole discussion and to give a fruitful comparison, the researcher has presented all the results in the table below:

Group	**Conflict Tactic Scale**	**Picture Description Test**	**Word Association Test**
Group A	67.33%	54%	71%
Group B	17.33%	0%	32%

Table 6: Comparison of CTS, Picture Description and Word Association Tests

4.4.1 Conflict Tactic Scale

The above mentioned table shows that Group A was found facing 67.33% verbal and emotional aggression assessed through Conflict Tactic Scale. In comparison to Group A, Group B was facing less emotional and verbal abuse because the results of Conflict Tactic Scale shows that Group B was facing only 17.33% verbal aggression**.**

4.4.2 Picture Description Test

Group A was found using 54% abusive language while the use of abusive language by Group B was 0%, evaluated during the Picture Description Test.

4.4.3 Word Association Test

The negative association calculated through Word Association Test for Group A is 71%. However, an overall negative association calculated through Word Association Test for Group B is only 32%.

4.5 Linear Regression Analysis

The collected data comprised of two groups labeled as “Group A” and “Group B” having 15 participants in each group. These participants were teenagers of age ranging between 12-14 years. Group A was comprised of participants who were found verbally abused during their childhood. Whereas, Group B was comprised of participants who were not found verbally abused during their childhood. The question of whether a participant could be categorized as abused or non-abused was determined with the help of “Conflict Tactic Test” (CTS) by Straus and questionnaires, and the results were denominated in percentage terms. Any participant who scored more than 50% in the CTS was categorized as “Abused” while those scoring lesser percentage to that were identified as “Non-Abused”. After this, in the second stage, participants were given comprehension and language production tests and their scores were also recorded in percentage terms.

Finally, it was to investigate for each group that whether results of the comprehension and language production tests in each group correspond to the level of abuse faced by the participants i.e. whether any relationship exists between the given variables of the collected data and if yes, how strong is the relationship? For that purpose, the researcher chose the linear regression analysis as the most suitable test that measures the strength of linear relationship between two variables.

The summary of the collected data bifurcated into scores of Group-A and Group-B is reproduced below.

GROUP-A				GROUP-B			
Participant #	Abuse	Comprehension	Language Production	Participant #	Abuse	Comprehension	Language Production
1	60%	70%	60%	1	18%	10%	10%
2	73%	80%	70%	2	23%	10%	10%
3	65%	80%	60%	3	20%	20%	10%
4	73%	80%	70%	4	5%	10%	0%
5	68%	80%	70%	5	20%	10%	20%
6	65%	80%	60%	6	10%	10%	10%
7	58%	70%	60%	7	10%	10%	10%
8	73%	80%	70%	8	25%	20%	20%
9	60%	70%	60%	9	20%	10%	10%
10	68%	80%	70%	10	25%	20%	20%

11	65%	80%	60%	11	0%	0%	0%
12	78%	90%	90%	12	5%	10%	10%
13	70%	80%	70%	13	15%	10%	10%
14	70%	80%	70%	14	35%	20%	20%
15	68%	80%	60%	15	30%	20%	20%

Analysis:

The researcher conducted the analysis part of the above data with the help of graphical bars and linear regression analysis by using the Statistical Package for the Social Sciences tool (SPSS) to calculate the correlation coefficient that measured the strength of linear relationship between the variables of the given data. The purpose was to ascertain whether a relationship of direct proportionality exists between the variables of the collected data?

As per linear relationship, any given change in an independent variable will always produce a corresponding change in the dependent variable. So, in order to determine linear relationship, the researcher identified the variables of the collected data into independent and dependent variables.

The scores of abuse measured by CTS in percentage terms were identified as independent variables (aka as explanatory variables, or the predictors) that might influence the dependent variables. On the other hand, "Comprehension" and "Language Production" scores in percentage terms obtained through "Associated Priming" and "Picture Description" tests were identified as dependent variables (aka criterion variable) as the main factors, the researcher was trying to predict.

The outputs of regression analysis were calculated and analyzed with the help of certain values provided by SPSS. These values included Multiple R (Correlation coefficient), R Square (Coefficient of determination), Standard Error (precision of regression analysis), and regression analysis output: residual (analysis of variance) and scatter plot.

At the end, the researcher also related the findings of the linear regression analysis with the concept of stimulus response relationship which she had elaborated in her

conceptual framework of this research paper. This is given in the conclusion of the current analysis.

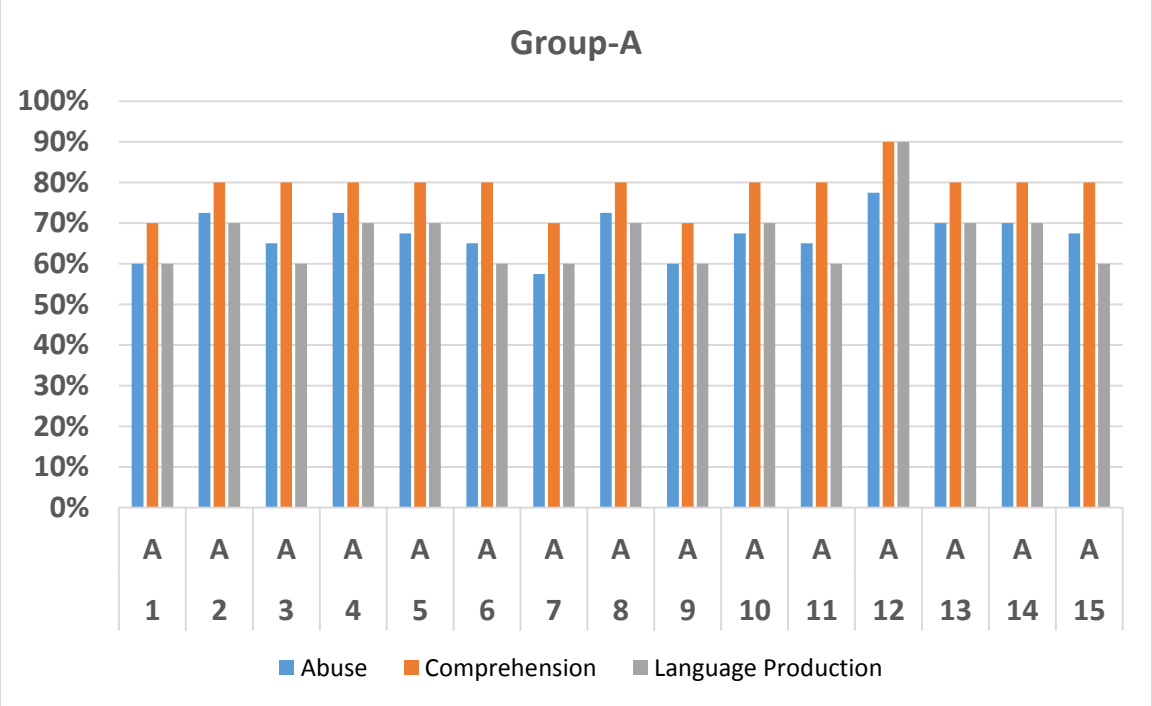
GROUP-A

Graphical Presentation

Before going into the detail of complex statistical data analysis with the help of SPSS tool, the researcher has also presented scores of the three tests of each participant with the help of a bar graph as given below.

It basically shows a comparison of each participant with his peers in the same group. It was helpful in investigating, if a participant was found more abused vis-à-vis any other participant, then what was the relative impact on his comprehension and language production scores? Do they increase or decrease also?

So, in this way, this graphical presentation was actually an effort to see if these bars showed any form of relationship between the variables of the collected data?



Bar Graph 1: Summary Output- Group A

Now by looking at the bars, it was found that a positive relationship exists between the three bars of participants because, as score of abuse test of a participant differs with the result of his peer, there is a corresponding change in his scores of the comprehension and language production tests.

If we draw a trend line on the bars of the graph, it can be seen that as the score of abuse test increases, there is also an increase in the scores of the comprehension and language production tests and vice-versa. This finding provided corroborative evidence regarding existence of a relationship between abuse, language production and comprehension of a verbally abused child. But, well, the strength of this relationship was needed to be found and investigated so that a conclusion could be formed about the existence of direct proportionality relationship between the variables with reasonable assurance.

Now, with this, the researcher moved forward towards the linear regression analysis which calculated the strength of linear relationship or direct proportionality, reliability of the collected data and the standard deviation. It was also aimed that the results of SPSS would further corroborate the above findings.

For each of the group, the researcher analyzed relationship of scores in three different ways as follows:

a) Verbal abuse Vs. Comprehension
b) Verbal abuse Vs. Language Production
c) Comprehension Vs. Language Production

SUMMARY OUTPUT (Group A, Verbal Abuse Vs. Comprehension)

Regression Statistics	
Multiple R	0.87720776
R Square	0.769493455
Standard Error	0.025728729

Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.725896414	-0.025896414	-1.044512492
2	0.829482072	-0.029482072	-1.189137298
3	0.767330677	0.032669323	1.317692682
4	0.829482072	-0.029482072	-1.189137298
5	0.788047809	0.011952191	0.482082688
6	0.767330677	0.032669323	1.317692682
7	0.705179283	-0.005179283	-0.208902498
8	0.829482072	-0.029482072	-1.189137298
9	0.725896414	-0.025896414	-1.044512492
10	0.788047809	0.011952191	0.482082688
11	0.767330677	0.032669323	1.317692682
12	0.870916335	0.029083665	1.173067875
13	0.80876494	-0.00876494	-0.353527305
14	0.80876494	-0.00876494	-0.353527305
15	0.788047809	0.011952191	0.482082688

SUMMARY OUTPUT (Group A, Verbal Abuse Vs. Language Production)

Regression Statistics	
Multiple R	0.826857785
R Square	0.703693796
Standard Error	0.047654132
Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.576095618	0.023904382	0.520558214
2	0.730478088	-0.030478088	-0.663711723
3	0.637848606	-0.037848606	-0.824217172
4	0.730478088	-0.030478088	-0.663711723
5	0.6687251	0.0312749	0.681063663
6	0.637848606	-0.037848606	-0.824217172
7	0.545219124	0.054780876	1.192945907
8	0.730478088	-0.030478088	-0.663711723
9	0.576095618	0.023904382	0.520558214
10	0.6687251	0.0312749	0.681063663
11	0.637848606	-0.037848606	-0.824217172
12	0.792231076	0.107768924	2.346849947
13	0.699601594	0.000398406	0.00867597
14	0.699601594	0.000398406	0.00867597
15	0.6687251	-0.0687251	-1.496604865

SUMMARY OUTPUT (Group A, Comprehension Vs. Language Production)

Regression Statistics	
Multiple R	0.734100171

R Square	0.658903061
Standard Error	0.036389227
Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.755714286	-0.055714286	-1.588861645
2	0.802142857	-0.002142857	-0.061110063
3	0.755714286	0.044285714	1.262941308
4	0.802142857	-0.002142857	-0.061110063
5	0.802142857	-0.002142857	-0.061110063
6	0.755714286	0.044285714	1.262941308
7	0.755714286	-0.055714286	-1.588861645
8	0.802142857	-0.002142857	-0.061110063
9	0.755714286	-0.055714286	-1.588861645
10	0.802142857	-0.002142857	-0.061110063
11	0.755714286	0.044285714	1.262941308
12	0.895	0.005	0.142590148

13	0.802142857	0.002142857	-0.061110063
14	0.802142857	0.002142857	-0.061110063
15	0.755714286	0.044285714	1.262941308

The calculation of the above results was an easier part as it was all done by SPSS automatically. The interpretation of the results was a bit trickier because, for that it needed to be learned what was actually behind each number.

Multiple R

It is the *correlation coefficient* which is the most important indicator and measures the strength of a linear relationship or direct proportionality between two variables. It is denoted by "*r"*. The correlation coefficient can be any value between -1 and 1, and its absolute value indicates the relationship strength. The larger the absolute value, the stronger the relationship.

Its values are reported in each of the first table against "Multiple R". The values of correlation coefficient in "Verbal abuse Vs. Comprehension", "Abuse Vs. Language Production", and Comprehension Vs. Language Production was r=0.877, r=0.827 and r=0.734 respectively. For interpretation of the values, the following scale was used:

- Exactly –1. A perfect downhill (negative) linear relationship
- –0.70. A strong downhill (negative) linear relationship
- –0.50. A moderate downhill (negative) relationship
- –0.30. A weak downhill (negative) linear relationship
- No linear relationship
- +0.30. A weak uphill (positive) linear relationship
- +0.50. A moderate uphill (positive) relationship
- +0.70. A strong uphill (positive) linear relationship
- Exactly +1. A perfect uphill (positive) linear relationship

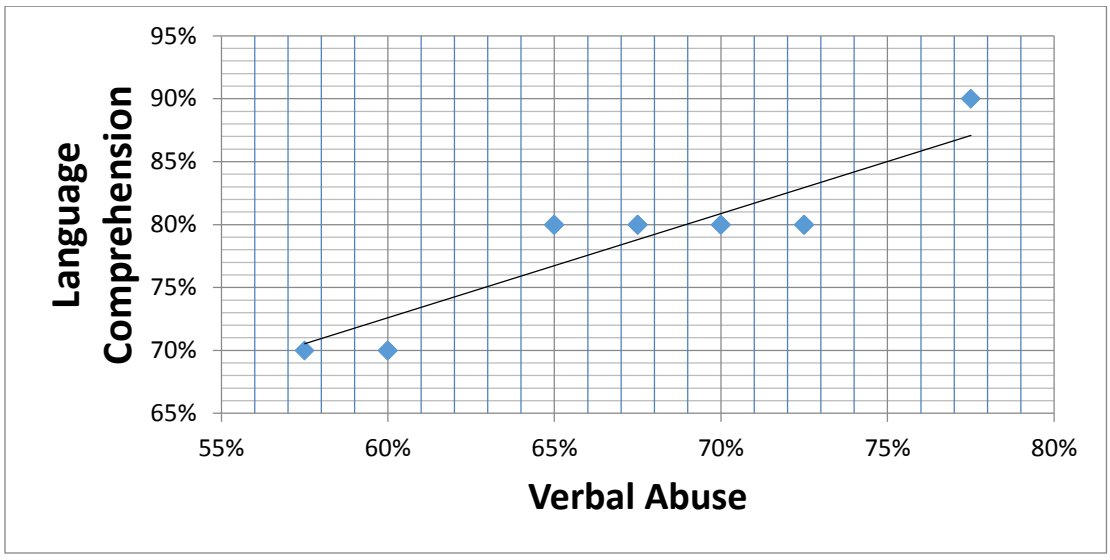
In all of the calculated values of correlation coefficient, the researcher found values greater than +0.70 which shows a strong uphill (positive relationship) between the variables of the collected data and indicate a strong positive linear relationship. Based on foregoing, the researcher was able to reliably evaluate the strength and strong direct proportionality between the variables.

R Square - R^2

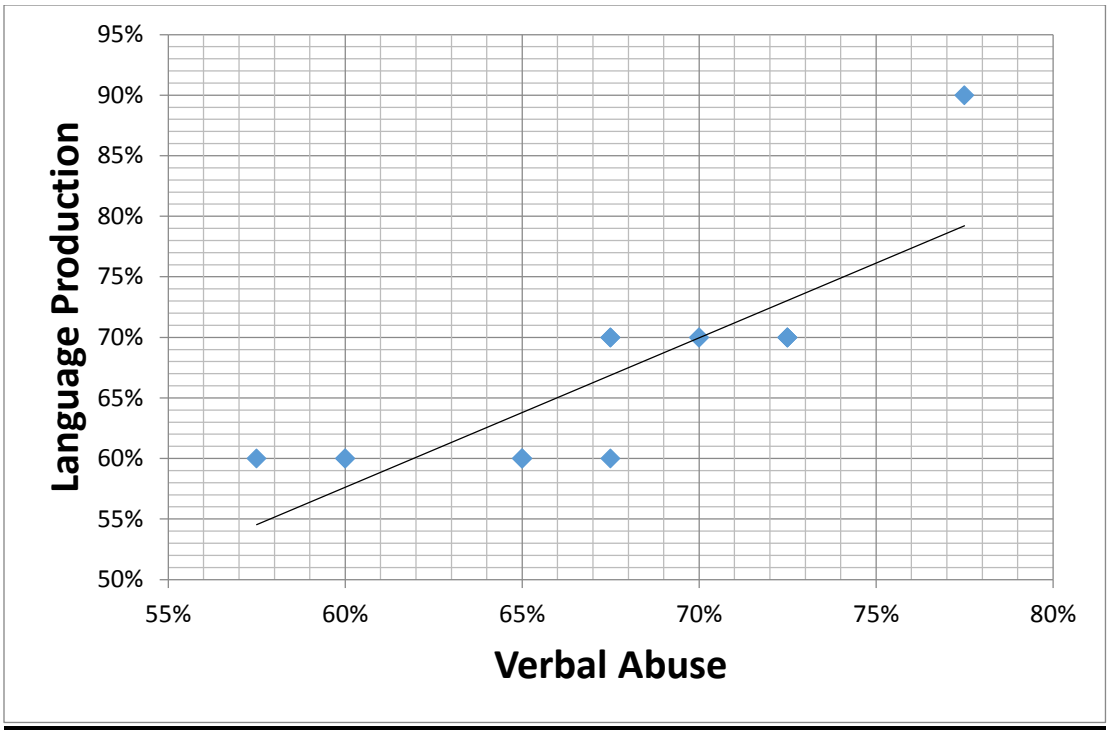
It is the *Coefficient of Determination* which is used as an indicator of the goodness of fit. It shows how many points fall on the regression line? The R^2 value is calculated from the total sum of squares, more precisely, it is the sum of the squared deviations of the original data from the mean.

The value of R^2 in Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production was calculated equal to 0.77, 0.70 and 0.66 (rounded off to two decimals) respectively which is a very good fit. It means that this much of the values fit the regression analysis model. In other words, 66% to 77% of the dependent variables (y-values) were explained by the independent variables (x-values).

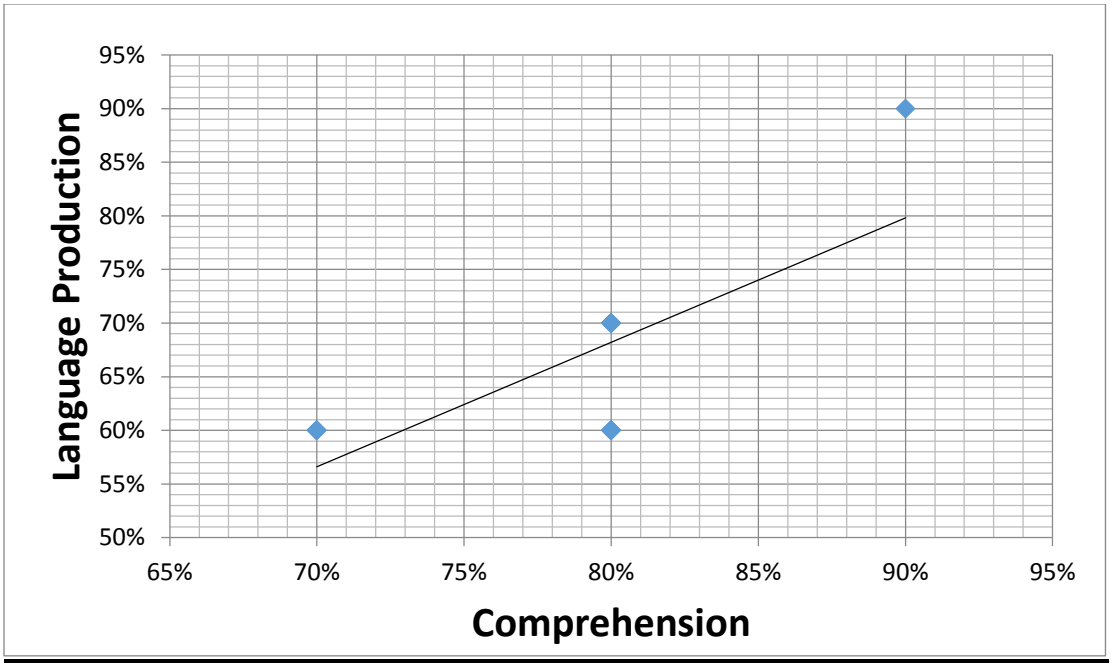
It has been presented with the help of the linear regression lines in both of the situations as follows:



Scattered Plot 1: Verbal Abuse and Language Comprehension Group A



Scattered Plot 2: Verbal Abuse and Language Production Group A



Scattered Plot 3: Language Comprehension and Production Group A

Standard Error

The standard error is used to show the precision of the regression analysis. Basically, the smaller the number, the more certain one can be about the regression

analysis. In all the analysis of Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production, the values of the standard error has been calculated equal to 0.025, 0.048 and 0.036 (rounded off to three decimal places) respectively.

All of the values are quite small and show the strength of the analysis. It also increases the level of confidence of the researcher over the scores. They show low average distance between the values of the data in the set and the mean. The low standard deviation values also indicated that the data points tend to be very close to the mean.

Regression analysis output: residual

The researcher also calculated the values of the predicted scores and the residuals on a participant by participant basis. This basically provides specific information about the components of the analysis. These were calculated to show variances of the predicted scores and the actual or observed scores of the participants. The variances are reported in the residual column.

Again smaller the number, the better it is. The participant wise difference between the predicted scores and the observed/ actual score is very low in all of the situations i.e. Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production. It also increases the reliability of the collected data and substantiates the findings.

GROUP-B

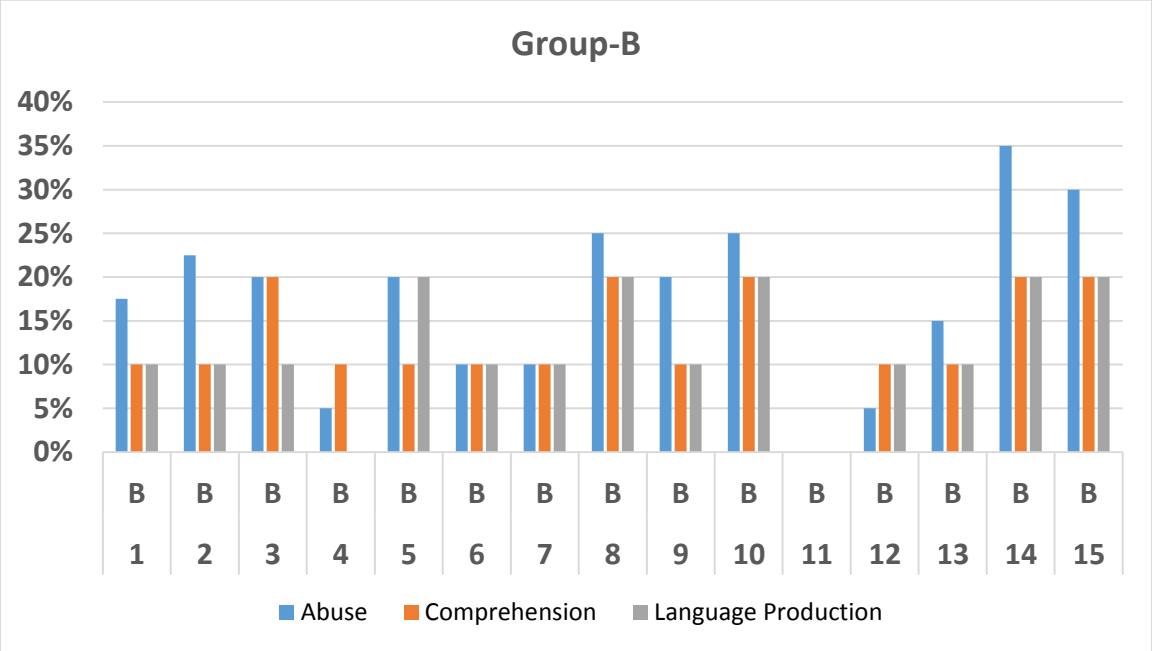
Graphical Presentation

The researcher had first performed data analysis of the verbally abused children and its counterproductive effect on their comprehension and language production with the help of graphical presentation and linear regression analysis using SPSS tool. Both of these tools assisted the researcher to calculate and interpret the relationship of direct proportionality and linear regression. Now after this, the researcher would like to proceed towards data analysis of Group B comprising of non-verbally children to measure their relationship with their comprehension and language production skills. The researcher

would again attempt to seek answers if there is a relationship of direct proportionality between the variables of the collected data. The independent and dependent variables of collected data have already been discussed and explained in the data analysis of Group A which is same for Group B as well.

This data analysis would again starts from the presentation of the scores through the aid of graphical bars and then followed by linear regression analysis conducted with the help of SPSS tool.

The score of each participant is now being produced in the form of bars of the following graph:



Bar Graph 2: Summary Output -Group B

Again the above graph shows a positive relationship between the independent and dependent variables represented by three bars of each of the participant. Because, as bar of abuse witness a variation, it is followed by the variations in comprehension and language production bars in the same direction. It can be seen in case of above graph comprising of non-verbally abuse children that they obtained lesser scores in the comprehension and language production tests as compared to verbally abused children.

This supported the researcher's endeavor to demonstrate this relationship with the help of simple graph.

Now with this, the researcher proceeded towards conducting linear regression analysis of the collected data to calculate the strength of relationship of direct proportionality with the help of Coefficient of correlation (*r*), coefficient of determination (R^2) Standard deviation and, variances (residuals) of predicted and actual values.

SUMMARY OUTPUT (Group B, Verbal Abuse Vs. Comprehension)

Regression Statistics	
Multiple R	0.802918728
R Square	0.744678483
Standard Error	0.036720561
Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.127473878	-0.027473878	-0.776431245
2	0.151690227	-0.051690227	-1.46080241
3	0.139582053	0.060417947	1.707453946
4	0.066933006	0.033066994	0.934496666
5	0.139582053	-0.039582053	-1.118616827
6	0.091149355	0.008850645	0.250125502
7	0.091149355	0.008850645	0.250125502
8	0.163798402	0.036201598	1.023082782

9	0.139582053	0.039582053	-1.118616827
10	0.163798402	0.036201598	1.023082782
11	0.042716656	0.042716656	-1.207202943
12	0.066933006	0.033066994	0.934496666
13	0.115365704	0.015365704	-0.434245663
14	0.2122311	-0.0122311	-0.345659548
15	0.188014751	0.011985249	0.338711617

SUMMARY OUTPUT (Group B, Verbal Abuse Vs. Language Production)

Regression Statistics	
Multiple R	0.837339275
R Square	0.701137062
Standard Error	0.038357858
Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.12095882	-0.02095882	-0.567028419
2	0.149723417	0.049723417	-1.345237511
3	0.135341119	0.035341119	-0.956132965

4	0.049047326	-0.049047326	-1.326946272
5	0.135341119	0.064658881	1.749307616
6	0.077811924	0.022188076	0.600285218
7	0.077811924	0.022188076	0.600285218
8	0.164105716	0.035894284	0.971098525
9	0.135341119	-0.035341119	-0.956132965
10	0.164105716	0.035894284	0.971098525
11	0.020282729	-0.020282729	-0.54873718
12	0.049047326	0.050952674	1.37849431
13	0.106576521	-0.006576521	-0.177923874
14	0.221634911	-0.021634911	-0.585319659
15	0.192870313	0.007129687	0.192889433

SUMMARY OUTPUT (Group B, Comprehension Vs. Language Production)

Regression Statistics	
Multiple R	0.747461922
R Square	0.655869932
Standard Error	0.040922848
Observations	15

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*	*Standard Residuals*
1	0.113541667	-0.013541667	-0.343398671
2	0.113541667	-0.013541667	-0.343398671
3	0.113541667	0.086458333	2.192468441
4	0.047916667	0.052083333	1.320764121
5	0.179166667	-0.079166667	-2.007561464
6	0.113541667	-0.013541667	-0.343398671
7	0.113541667	-0.013541667	-0.343398671
8	0.179166667	0.020833333	0.528305648
9	0.113541667	-0.013541667	-0.343398671
10	0.179166667	0.020833333	0.528305648
11	0.047916667	-0.047916667	-1.215102991
12	0.113541667	-0.013541667	-0.343398671
13	0.113541667	-0.013541667	-0.343398671
14	0.179166667	0.020833333	0.528305648
15	0.179166667	0.020833333	0.528305648

Now after calculation of different values of regression analysis by the SPSS tool, researcher went on to the interpretation part of Group B comprising of non-verbally

children. It was done with the help of coefficient of correlation (denoted by "*r")* Multiple R, coefficient of determination denoted by **R Square -** $R^{2,}$ standard deviation and regression analysis output-residual. All these values have immense significance in linear regression analysis and have already been elaborated in data analysis of Group A.

As a quick reminder of the findings of data analysis of Group A, the researcher found a strong uphill correlation (direct proportionality) between scores of verbal abuse and comprehension, verbal abuse and language production and, comprehension and language production of the participants. Goodness of fit (R^2) of the data was found adequately reliable, standard deviation was reasonably less and, variances between predicted and actual values were also negligible. The interpretation part of Group B is now presented below.

Multiple R

The values of the *correlation coefficient* of verbal abuse and comprehension and verbal abuse and language production have been found equal to 0.80, 0.83 and 0.70 respectively. As per the scale provided in the data analysis of Group A "Multiple R", it depicts a strong uphill (positive) relationship between the variable components of the data. Now as the values of both the Groups were in hand, it helped the researcher to come up with the view that comprehension and language production of a child are in-fact directly proportional to the verbal abuse faced by him. Because, in Group A where score of verbal abuse was high in all participants, the scores of comprehension and language production tests were also found high in reciprocity with a strong uphill correlation coefficient.

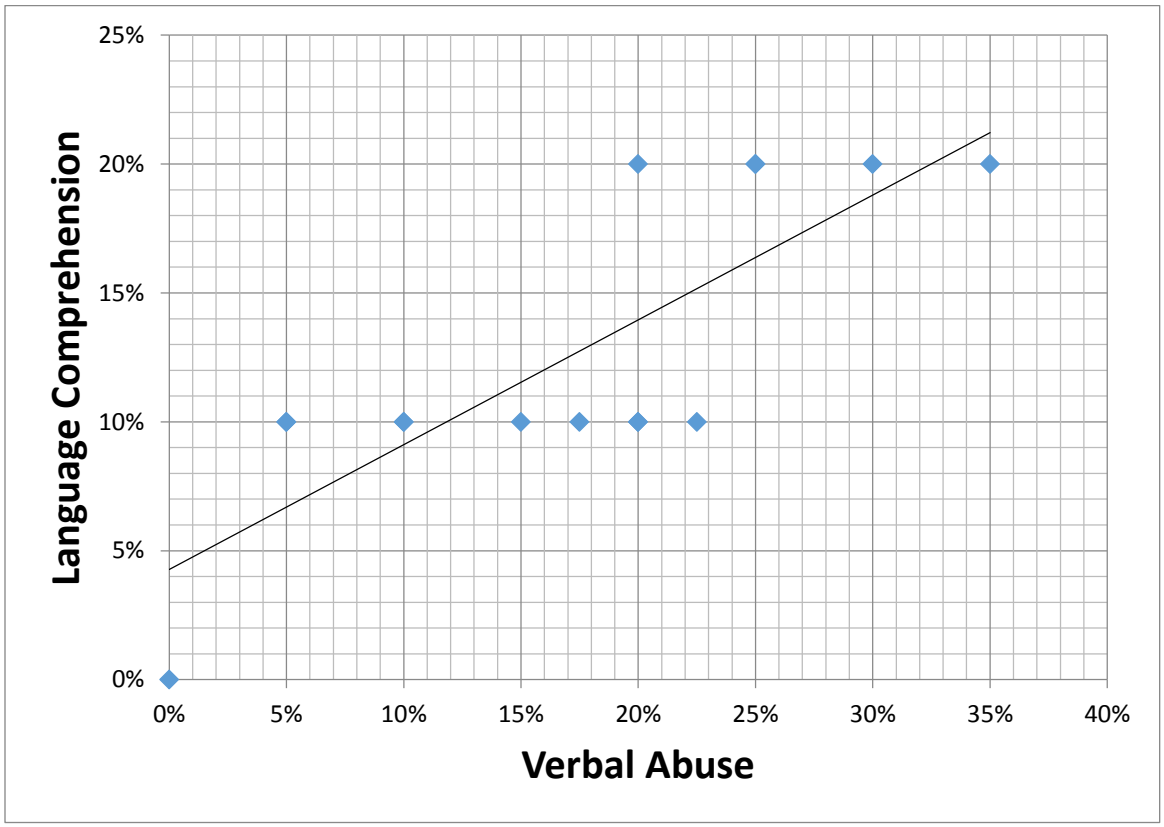
Now, in case of Group B comprising of non-verbally abuse children, scores of comprehension and language production depicting abuse are also low and again the values are correlated with each other with strong uphill positive relationship.

R Square - R^2

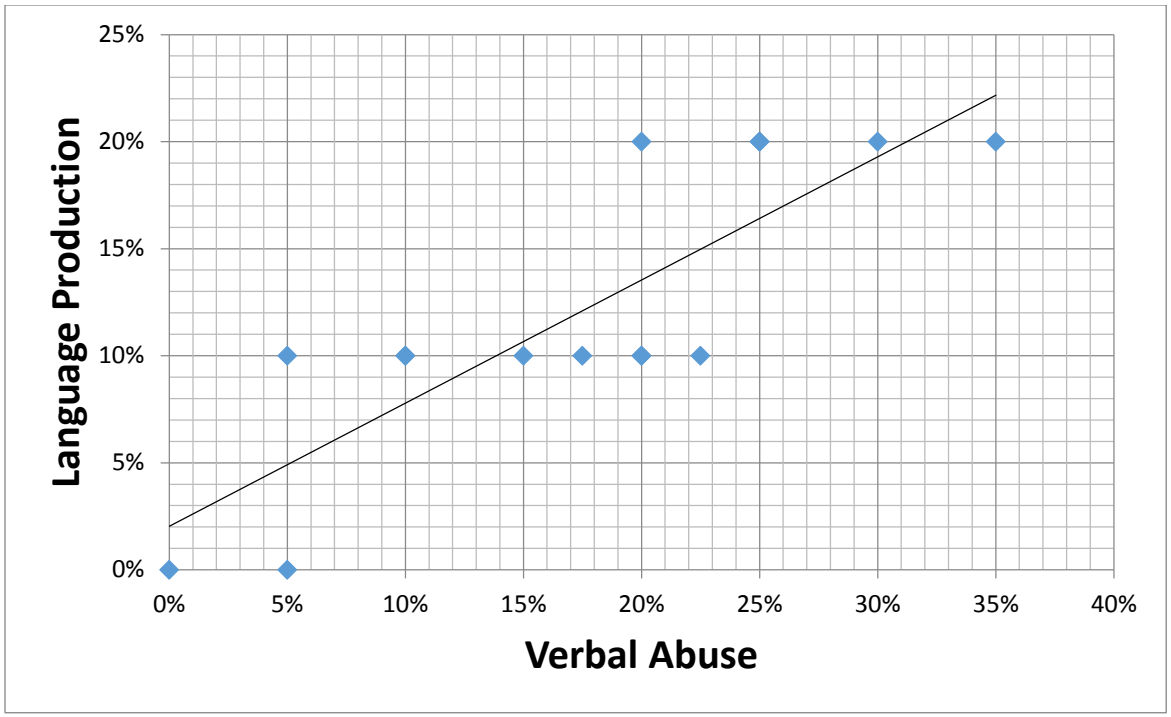
The *Coefficient of Determination* is used as an indicator of the goodness of fit. It shows how many points fall on the regression line? R^2 value is calculated from the total sum of squares, more precisely; it is the sum of the squared deviations of the original data from the mean.

Values of R^2 in verbal abuse Vs. Comprehension, verbal abuse Vs. Language Production and comprehension Vs. Language Production were calculated equal to 0.74, 0.70 and 0.66(rounded off to two digits) which is a very good fit. It means that 66% to 74% of the values fit the regression analysis model. In other words, 66% to 74% of the dependent variables (y-values) are explained by the independent variables (x-values).

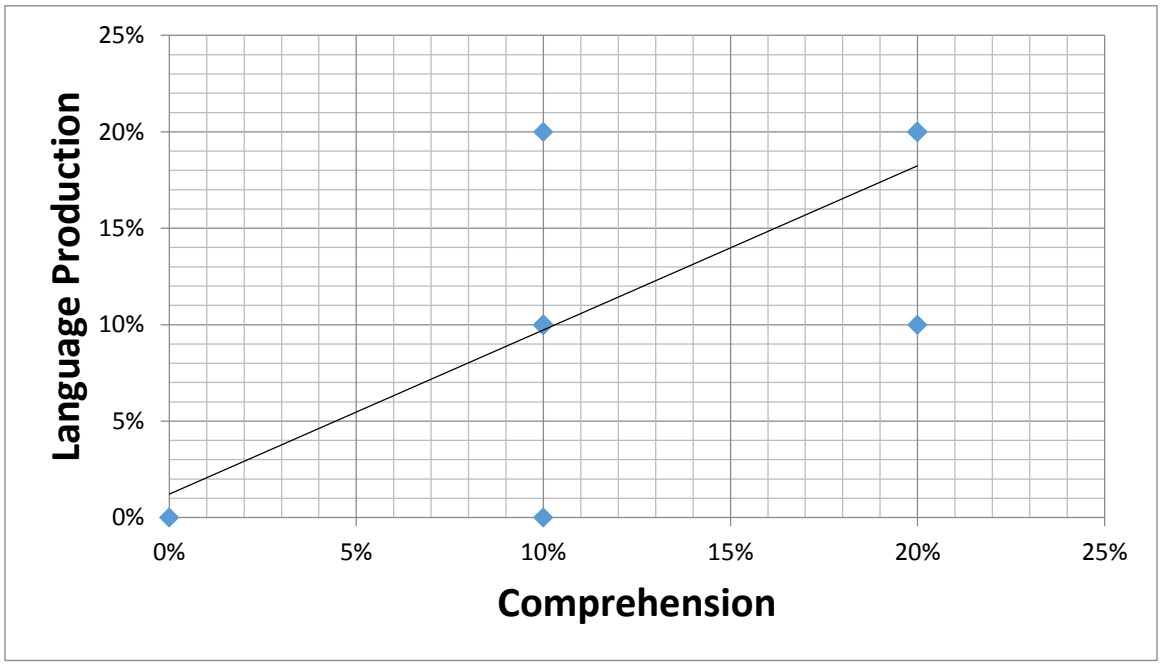
It has been presented with the help of the linear regression lines in both of the situations as follows:



Scattered Plot 4: Verbal Abuse and Language Comprehension Group B



Scattered Plot 5: Verbal Abuse and Language Production Group B



Scattered Plot 6: Language Comprehension and Production Group B

Standard Error

The standard error is used to show the precision of the regression analysis. Basically, the smaller the number, the more certain one can be about the regression analysis. In analysis of Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production, the values of the standard error has been calculated equal to 0.036, 0.038 and 0.041 (rounded off to three decimal places) respectively.

All values are quite small and show the strength of the analysis. It also increases the level of confidence of the researcher over the scores. They show low average distance between the values of the data in the set and the mean. The low standard deviation values also indicated that the data points tend to be very close to the mean.

Regression analysis output: residual

The researcher also calculated the values of the predicted scores and the residuals on a participant by participant basis. This basically provides specific information about the components of the analysis. These were calculated to show variances of the predicted scores and the actual or observed scores of the participants. The variances are reported in the residual column.

Again smaller the number, the better it is. The participant wise difference between the predicted scores and the observed/ actual score is very low in all three situations i.e. Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production. It also increases the reliability of the collected data and substantiates the findings.

CONCLUSION OF THE LINEAR REGRESSION ANALYSIS

Objective of the data analysis:

- The researcher aimed to basically investigate for each of the two groups that whether scores of the comprehension and language production tests in each group correspond to the level of abuse faced by the participants?

- It was the researcher's pursuit to investigate that if a participant is found more abused vis-à-vis any other participant, then what is the relative impact on his comprehension and language production scores? Do they increase or decrease also?
- The researcher attempted to ascertain whether any relationship exists between the given variables of the collected data and if yes, how strong is the relationship?
- The purpose of the investigation was to ascertain whether a relationship of direct proportionality exists between the variables of the collected data?
- The researcher endeavored to also assess whether the collected data of both the groups was reliable and accurate enough to be relied upon for the purposes of forming an opinion about relationship between the variables of the collected data?

Methodology and Findings

- The researcher first conducted the analysis with the help of simple bar graphs to show the relationship of three of the components of each participant in Group A and Group B. These three components were scores obtained in verbal abuse, comprehension and language production tests.
- The above approach of data analysis conducted through the aid of simple bar graphs assisted the researcher to look into the comprehension and language production of verbally and non-verbally abused children at varying degrees of abuse. The bars showed the researcher that there were corroborative evidences depicting existence of a relationship between abuse, comprehension and language production of verbally and non-verbally children. But, well, the strength of that relationship was needed to be found numerically and warranted further investigated for which purpose researcher proceeded to conduct linear regression analysis so as form an opinion with reasonable assurance.
- The researcher then conducted her data analysis with the help of one of the most popular and imminent linear regression analysis with the help of Statistical Package for the Social Sciences (SPSS) tool.
- This tool calculated the values of correlation coefficient, coefficient of determination, linear regression line, scatter plots, standard deviation and variances between the predicted and actual values. It answered the facets of direct proportionality between the variable components of the data and also helped exploring reliability of the data with the help of

coefficient of determination, standard deviation and variances between predicted and actual values.

Conclusions

- The researcher found enough evidences to support relationship of direct proportionality between verbal abuse and its counterproductive negative consequences over the victim's comprehension and language production skills.
- The researcher found in case of all 15 verbally abused children of Group A that they scored high values in the comprehension and language production tests which were designed to measure negative impacts of verbal abuse on a child.
- Above opinion was formed on the basis of strong uphill relationship showed by the correlation coefficient calculated for the Group A. The values of three of the comparisons of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to r=0.877, r=0.827 and r=0.734 respectively. It proved that a strong relationship exists between verbal abuse and its effects on the comprehension and language production skills of a child. So, the correlation coefficient strongly signifies that as verbal abuse increases so do its bad impacts on the comprehension and language production skills of a child.
- The results of the bar graphs and linear regression analysis supported and testified the researcher's hypothesis that for every action, there is an equal and opposition reaction. Meaning that verbal abuse has direct proportionality with the comprehension and language production skills of an individual. Because, as it has been seen in case of children of Group A who were found verbally abused during their childhood that it was badly reflected in their comprehension and language production skills.
- Apart from the correlation coefficient, the coefficient of determination provided goodness of fit which determines the reliability and goodness of the data and its distance from the mean. Its values in all of the three comparisons of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to R^2=0.77, R^2= 0.72 and R^2=0.66 (rounded off to two digits) respectively which is a very good fit. It means that this much of the values fit the regression analysis model. In other words, 66% to 77% of the

dependent variables (y-values) are explained by the independent variables (x-values). The researcher also showed this with the help of scatter plot graphs and linear regression lines. It enhanced the researcher's confidence level over the collected data and so on the conclusion part.

- The last two characters of the linear regression analysis of Group A "Standard Deviation" and "Variance between Predicted and Actual Values: Residuals" were also meant to show the precision of the collected data. The values of the standard deviation in all of the three situations of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to 0.025, 0.048 and 0.036 (rounded off to three decimal places) respectively. Measurement of the reliability of the data was of paramount importance to the researcher because all interpretation and analysis part depend upon its correctness and could go in vein if it was incorrect. The coefficient of determination, standard error/ deviation and the analysis of variances (predicted and actual values) provided sufficient evidences about goodness of fit and accuracy of data.
- On the other hand, in case of all 15 non-verbally children of Group B, their scores in the comprehension and language production tests were also low. The value of correlation coefficient in all of the three situations of Group B were r=0.80, r=0.83 and r=0.70 again showing strong uphill relationship of direct proportionality. The values of the coefficient of determination in all of the three situations were R^2=0.74, R^2=0.70 and R^2=0.66 (rounded off to two digits) which is a very good fit. The standard deviation values in each of three situations were 0.036, 0.038 and 0.041 (rounded off to three decimal places) which shows the precision of the collected data. The values of linear regression analysis of the Group B especially the correlation coefficient signify that as verbal abuse decreases so do its bad impacts on the comprehension and language production skills of a child.

4.6 Discussion

On the basis of the results' percentage, it is quite obvious that the abusive language faced and used by Group A was 67% and 54% respectively. The type of semantic association between linguistic choices of the same group was 71% negative. The abusive

language faced and used by Group B was 17% and 0% respectively. However, the percentage of negative association between linguistic choices made by the same group was 32%. The analysis of the data show that the participants used almost the same offensive linguistic choices they selected from the provided 'list of abusive words', which illustrates that the choice of abusive words a victims faces, unconsciously becomes a part of his/her own linguistic makeup. Similarly, facing verbal aggression may also affect the linguistic production of its victim and has a strong correlation between facing and using abusive language. In other words, the more verbal aggression a victim receives from the environment, the more abusive s/he becomes.

The results of the study also indicate the effect of verbal aggression on the comprehension and selection of linguistic choices made by its victim, as the participants who were facing more abusive language selected more negatively associated linguistic choices in Word Association Test. It suggests that exposure to verbal aggression can be an instigating factor that develops negative association between linguistic choices and also causes negative linguistic comprehension. Resultantly, the victims of verbal aggression become inclined towards the selection of the linguistic choices that are considered as negative or abusive use of language.

Regression analysis of the data provides strong evidence in support of direct proportionality between verbal abuse and its counterproductive negative consequences over the victim's comprehension and language production skills. The researcher found in the case of all 15 verbally abused children of Group A that they scored high values in the comprehension and language production tests, which were designed to measure negative impact of verbal abuse on a child language comprehension and production.

The above opinion was formed on the basis of strong uphill relationship showed by the correlation coefficient calculated for Group A. The values of three of the comparisons of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to r=0.877, r=0.827 and r=0.734 respectively. It proved that a strong relationship exists between verbal abuse and its effects on the comprehension and language production skills

of a child. So, the correlation coefficient strongly signifies that as verbal abuse increases so do its bad impacts on the comprehension and language production skills of a child.

The results of the bar graphs and linear regression analysis supported and testified the researcher's hypothesis that for every action, there is an equal and opposite reaction. The results showed that verbal abuse had a direct proportionality with the comprehension and language production skills of an individual. As it has already been seen in the case of Group A children, who were found verbally abused during their childhood that it badly reflected in their comprehension and language production skills.

Apart from the correlation coefficient, the coefficient of determination provided goodness of fit which determine the reliability and goodness of the data and its distance from the mean. Its values in all of the three comparisons of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to R^2=0.77, R^2= 0.72 and R^2=0.66 (rounded off to two digits) respectively which are a very good fit. It means that these values fit the regression analysis model. In other words, 66% to 77% of the dependent variables (y-values) are explained by the independent variables (x-values). The researcher also showed this with the help of scatter plot graphs and linear regression lines. It enhanced the researcher's confidence level over the collected data and so on the conclusion part.

The last two characters of the linear regression analysis of Group A "Standard Deviation" and "Variance between Predicted and Actual Values: Residuals" were also meant to show the precision of the collected data. The values of the standard deviation in all of the three situations of Group A including Verbal Abuse Vs. Comprehension, Verbal Abuse Vs. Language Production and Comprehension Vs. Language Production were calculated equal to 0.025, 0.048 and 0.036 (rounded off to three decimal places) respectively. Measurement of the reliability of the data was of paramount importance to the researcher because all the interpretation and analysis depended upon its correctness and could go in vein if it was incorrect. The coefficient of determination, standard error/ deviation and the analysis of variances (predicted and actual values) provided sufficient evidences about goodness of fit and accuracy of data.

On the other hand, the scores of 15 non-verbally abused children of Group B on the comprehension and language production tests were low. The value of correlation coefficient in all of the three situations of Group B were r=0.80, r=0.83 and r=0.70 again showing strong uphill relationship of direct proportionality. The values of the coefficient of determination in all of the three situations were R^2=0.74, R^2=0.70 and R^2=0.66 (rounded off to two digits) which is a very good fit. The standard deviation values in each of three situations were 0.036, 0.038 and 0.041 (rounded off to three decimal places) which shows the precision of the collected data. The values of linear regression analysis of the Group B especially the correlation coefficient signify that as verbal abuse decreases so do its bad impacts on the comprehension and language production skills of a child.

The one to one comparison of the scores achieved by each group, during Word Association and Picture Description Tests, revealed a stimulus response relationship between the cognitive processes of language comprehension and production. Also, during the analysis of data collected from CTS exposed a significant pattern that most of the children were facing verbal aggression either by their mother or father. However, it has been left for upcoming researchers to investigate the particular phenomenon. The data analysis of language production showed that most of the participants used the abusive words they selected from the list of abusive words that indicates a kind of imitation, however, the correlation was not investigated due to time concerns. Upcoming researchers are invited to explore the similarities/differences in the grammatical and phonological structures of parents' and their children's speeches. . It is also worth sharing that most of the participants from Group B were so surprised when they were asked the question: 'have you ever been scolded by your mother or father?' In response to this question, they asked: 'How can a mother or father scold their child even if they do something wrong?'

The results of the current study have been compared and contrasted with the results of few previous researches, upon which the details have been provided below.

While studying the word- association response, Istifci (2010) inspected the role of word association in reading comprehension with elementary and advanced level English language learners. The researcher divided the participants into two groups and used a 20 item word- association test for comparison and ascertaining similarities/ differences in

both the groups. This list consisted of 20 random most- frequently used English language vocabulary items out of which 10 words were concrete nouns; whereas, 10 were abstract nouns. At the first place, the researcher counted and categorized all the responses according to their frequencies. Later on, types of students' responses' in each level/group were classified separately in order to compare the responses of each group. The data analysis of this study showed that high level EFL learners used a wide and complex range of words during word association test such as love-affection, romanticism, mother-confidence, safety, beauty, life-expectancy, responsibility etc. However, low level EFL learners used simple adjectives such as love-necessary, mother- friendly, life-good, beautiful etc. The results of this study suggested that EFL learners used a wide range of word association techniques and the proficiency level of the students had partial effect on their use of word associations.

In contrast to this study, the current study investigated the role of verbal abuse in the development of negative linguistic schema during language comprehension. The researcher has also applied word association test for the investigation of language comprehension; however, this test consisted of 10 phonological synonyms and antonyms. The synonyms such as attracted, delighted and fascinated etc. were considered as positive words/ linguistic schemas; whereas, the words like angry, depressed and furious were considered as negative words/ linguistic schemas. The current research, adopted the same methodology followed by Istifci (2010) by dividing the participants into two groups for contrasting and comparing the results. But, these groups consisted of verbally abused and non-abused participants instead of high level and low level English language speakers' groups. After calculating the nature of linguistic schemas selected by each participant in percentage, the researcher compared/correlated the results of this test with the results of CTS. This comparison showed a correlation between facing verbal abuse and the choice of positive/negative words during language comprehension. The results showed that Group A (i.e., of verbally abused children) selected 71% negative words as compared to Group B (i.e., of non- verbally abused children) that selected only 32% negatively associated words. This comparison showed a strong relationship between facing verbal abuse and negative semantic association.

In an experimental study of language production, Finardi (2006) found out the impact of mental lexicons (stored vocabulary words) on the cognitive processes of language production in terms of fluency and accuracy. The researcher selected only 12 participants among which 6 were males and 6 were females. The data was collected with the help of 'Picture description psycholinguistic test' and for the inquiry of differences in mental lexicon between the participants, 'Operation word span test' was applied. This test was used to investigate the retrieval time of stored lexical/ vocabulary items. For that purpose, the participants were asked to memorize a list of 60 words; later on, they were asked to recall those words within 60 seconds. The same were also asked to be articulated during Picture description test. In order to find out the correlation between mental lexical retrieval time and language production, the results of both the tests were compared with each other. On the basis of the findings, it was concluded that the larger memory size resulted into greater fluency and accuracy during the process of language production.

The limited sample size of the research study discussed in the previous paragraph was found inadequate. However, this discrepancy between the previous and the current researches has been addressed in the current study by taking a larger sample of 30 participants. Another drawback of Finardi's study is the unequal distribution of female and male participants that shows the chances of lop-sided results as there was a possibility of sharp/low memory in the case of female or male participants. Also, the researcher did not specify the age limit of the participants that aroused the chances of unreliable data because the age factor can affect lexical memory. These issues in the adopted methodology of the under discussion research study have been addressed in the current study by taking a large sample of 30 participants (12-14 years of their ages) and by dividing them into equal groups of male participants. The main objective of the under discussion study was to explore the retrieval time of lexicons during language production that can affect the fluency and accuracy. However, the main strength of this study is the Picture Description Test that has been widely used to investigate the processes of language comprehension and production. It has been observed that the researcher has unnecessarily used 'Operation word span test' though the Picture Description Test is complete in itself. In order to avoid 'Operation word span test', the researcher would have asked the participants to describe the particular picture, using as much words as possible within a

reasonable time duration. This is how it would have saved the researcher's precious time and energy. In contrast to this, the current study has only used the 'Picture Description Test' that is considered as the most suitable and complete test to investigate the cognitive processes of both language comprehension and production at the same time.

In an explanation of mental lexicons, Precosky (2011) described that the mental lexicons are the vocabulary items stored in human mind that have a significant role in language comprehension. These stored vocabulary words have different types of associations between them, such as: semantic, formal and encyclopedic. The researcher suggested 'word association test' as the most effective and widely used test to investigate the nature of links between words in mental lexicons. He rephrased the name of the previously mentioned test as a 'word association game' to decrease the anxiety related to the term 'test'. For this research study, a total of 47 participants were selected, those were later divided into 2 groups of native and second language speakers. The results showed that the native speakers produced more synonyms as compared to SL speakers when a stimulus word was provided to them. However, SL speakers used phonologically related responses when they were provided with a stimulus word, such as bat- rat- cat.

The similarity between the above stated research and the current study is that both the studies have investigated the nature of word association between mental lexicons. In addition, the current research considered verbal abuse as a particular type of linguistic schema that has a significant role in the development of word association. Therefore, the current study, correlated the scores of facing verbal abuse (on CTS) with the scores of negative association (on Word Association Test). For both the researches, participants were divided into two groups and Word Association Test was used for the data collection. The results of the current study showed that verbally abused participants selected more negative words such as angry, depressed and furious, etc.; however, non-verbally abused participants selected positive words, such as: attracted, delighted and fascinated, etc., when the stimulus was provided to them.

In the study of exploring a relationship between word association and lexical development, Seguin (2015) stated that the vocabulary items were stored in different patterns in human mind whereas the nature of this patterning has a very important role in

lexical development and language acquisition. The researcher used Word Association Test for the investigation of word association in native and second language speakers. This test consisted of seven random words like mother, library, money, the, play, curiosity, and colorful. The researcher asked the participants to provide the very first word that came to their mind after listening to each word. For the analysis purpose, the researcher investigated the nature of semantic association between the stimulus word and its responses and found out that most of the words belonged to world knowledge and collocation. The results of this test indicated a relationship between experiences and association as most of the produced words belonged to the category of world knowledge or collocation.

The conceptual framework offered by Newmeyer (1988) put forward that both the processes of language production and comprehension entailed interrelated cognitive and linguistic activities. A key evidence of the interrelatedness between cognitive and linguistic activities is the insertion of pauses and fillers during speech production. During the cognitive process of language comprehension, these pauses and fillers were inserted to receive, decode and comprehend message sent by a speaker. Pauses and fillers also helped in the selection of suitable lexical and grammatical structures during the process of language production.

The current study, has also applied a similar conceptual framework by Pickering and Garrod (2013) that proves the interconnectedness between the cognitive processes of language comprehension and production with the help of different examples and researches. According to this conceptual framework, there are common networks of imitation, prior linguistic experiences, prediction and self- monitoring between both the processes. The interlocutors predict and imitate the speech qualities of each other on the basis of their prior linguistic experiences. This framework also claims stimulus response relationship between the cognitive processes of language comprehension and production. The cognitive process of language comprehension works like stimulus whereas the process of language production is response.

The idea of interrelatedness between language production and comprehension is further supported by Levelt (1983) who asserted that self-correction and self-monitoring of grammatical and linguistic errors showed interrelatedness between both the cognitive

processes. Along with pauses, shared memory, the selection of suitable words according to the context and speaker's intention are also shared components of language production and comprehension (as cited in Bach & Harnish, 1979).

Brengden et al. (2006) investigated the effects of teacher's verbal aggression on emotional, behavioral and academic progress of children. The researchers used teachers' evaluations and self-reports to find out any emotional and behavioral irregularities among 399 school children. The comparison between the teachers' evaluation with self- reports revealed that 85% children were at 0% risk of facing verbal abuse by their teachers; however, 15% children were facing teacher's verbal aggression. The academic performance of the children who were facing teachers' verbal aggression was declared 'unsatisfactory' when they compared with the performance of the children who were not facing teacher's verbal aggression at all. In a comparison of this study with the current research, it has been identified that the previous study investigated the effects of verbal abuse on emotional and academic progress of children; however, the current study investigated the impact of verbal abuse on the cognitive processes of language comprehension and production in children. This quest focused on finding out the comprehension and production differences between verbally abused and non- verbally abused children. The data collection tools used this study were: self-reports and teachers' evaluation; however, the current study used Picture Description Test for the instigation of language production and Word Association Test to investigate language comprehension.

Some of the above discussed researches have explored the role of semantic association in language acquisition, fluency, accuracy, lexical development and reading comprehension. These researches have also explored the differences in the nature of word association in native and second language learners. Few researches have used conceptual frameworks to explain the interconnectedness between cognitive processes of language comprehension and production with different examples, concepts and theories. These researches have also highlighted the issue of delayed speech and poor academic records in verbally and emotionally abused children. In contrast to the findings of the previous researches, the current research explored the differences in the cognitive processes of language comprehension and production in verbally abused and non- verbally abused

children, the phenomena which had not been explored earlier. To fill this gap in the already existing body of knowledge and to find out the language comprehension and production differences in verbally abused and non-verbally abused children, the results were further compared and contrasted with each other.

Due to the time and financial constraints, the current study was delimited, to the investigation of the nature of semantic association in language comprehension and the nature of linguistic schemas in language production of verbally abused and non –verbally abused children. Nonetheless, the study opens awareness for the upcoming researchers to investigate the differences and similarities in syntactic and phonological features of verbally abused and non-abused children. In addition, there are several questions which remain unanswered, such as: the parental financial or economic status behind using abusive language and the percentage in which children face verbal aggression from their parents, teachers, classmates and friends etc. can also be the subject of further research investigations.

4.7 Chapter Summary

This chapter provides details of the collected data, comparison of all the results and a brief discussion to draw factual and objective conclusions. Initially, the findings of the Conflict Tactic Scale are compared with those of the Picture Description Test to find out the relationship between facing and using abusive language. Later on, the results of the previously mentioned test (i.e. CTS) are compared with those of Word Association Test to find out the correlation between facing verbal abuse and negative association.

CHAPTER 5

CONCLUSION

The current study aimed at finding out the differences in the cognitive processes of language comprehension and production in verbally abused and non-abused children. It also intended to explore the correlation between facing and using verbal abuse with the help of different psycholinguistic methods. The present study endeavored to find out the role of verbal abuse as a certain type of linguistic schemas that result into the production of abusive or belittling language and negative semantic association between mental lexicons in children. The particular phenomenon was investigated by assessing the nature of linguistic choices made by the participants using Picture Description and Word Association Test.

The current study attempted to seek answers to the following research questions:

1. What is the degree of correlation between children's exposure to verbal abuse and their production and comprehension of abusive language?
2. What is the nature of correlation between the cognitive processes of language comprehension and production in verbally abused and non-verbally abused children?
3. How are the cognitive processes of language comprehension and production similar/ different in verbally abused and non- verbally abused children?

In order to attain the answers to the above stated research questions, the current study was designed in two stages:

At the first stage, the researcher conducted Conflict Tactic (CTS) devised by Straus (1996), to investigate whether the participants were genuinely verbally abused or not. For making the collection of data more authentic and genuine the researcher also provided a list of abusive words to the participants. These abusive words were 14 in number and the participants were asked to select the words they usually encountered by their abusers. On the basis of the results of this test, 30 participants were divided into two equal sized groups. Group A consisted of 15 participants who secured more than 50% scores on CTS;

it was considered the group of verbally abused participants. Group B consisted of 15 participants who secured less than 50% scores in CTS test and it was considered as the group of non-verbally abused participants.

At the second stage of the research study, the researcher applied Picture Description Test to investigate language production in verbally abused and non-abused children. Another test applied at this stage was Word Association Test which investigated the process of language comprehension in verbally abused and non- abused children.

The study satisfactorily answered the research questions. The answers to the above stated research questions as provided by the findings of the study are:

1. The values of coefficient correlation, correlation of determination and standard deviational of Group A are r=0.877, R^2=0.77and 0.025 respectively. These values showed a strong correlation between facing verbal abuse and negative semantic association. The participants of Group A, who were facing more verbal aggression, they selected more linguistic choices with negative semantic association in Words Association Test. However, the values of coefficient correlation, correlation of determination and standard deviational of Group B are r=0.80 R^2=0.74, 0.036. These values again showed a positive correlation between facing verbal abuse and negative semantic association. The participants of Group B, who were facing less verbal abuse, they selected few linguistic choices with negative semantic association in Word Association Test. On the basis of these findings, the study concluded that there is a positive correlation between facing verbal abuse and the existence of negative linguistic comprehension.
2. During finding out the correlation between facing verbal abuse and language production, the significant values found for coefficient correlation, correlation of determination and standard deviational of Group A are 0.827, R^2= 0.72 and 0.048 respectively. These values showed a strong correlation between facing verbal abuse and the use of abusive language. The participants of Group A, who were facing more verbal aggression, they used more abusive words during Picture Description Test. In contrast to these values, the values of coefficient correlation, correlation of determination and standard deviational of Group B are r=0.83, R^2=0.70 and 0.038.

These values again showed a positive correlation between facing verbal abuse and use of abusive language. The participants of Group B, who were facing less verbal abuse, they used less abusive words during Picture Description Test. On the basis of these findings, it can be concluded that verbally abused children used more abusive language that was closer in nature to the language used for them; whereas, non-verbally abused children used the language which was free of any abusive word.

3. A stimulus, response relationship has been found in the cognitive processes of language comprehension and production. The foregoing conclusion has been drawn after comparing the scores of language comprehension with language production for each group. The comparison of Group A indicated the values of coefficient correlation, coefficient of determination and standard deviations, such as: r=0.734, R^2=0.66, standard deviation= 0.036. However, the values found from comparing the scores of language comprehension and production of Group B, such as: r=0.70, R^2=0.66 and 0.041.
4. On the basis of results obtained from data analysis, it can be concluded that the process of language comprehension is different in verbally abused and non-abused children. This particular claim has been formed on the basis of the reason that the verbally abused children selected more linguistic choices with negative semantic association; however, non-verbally abused children showed less negative comprehension by selecting few linguistic choices with negative semantic association. The same difference has been found in the language production of verbally abused and non-abused children, as the verbally abused children used more abusive words. The language of verbally abused children was closer in nature to the language used for them; however, non-verbally abused children used positive or healthy language without any use of abusive words.

The important trends and patterns observed during the data collection and analysis procedures are:

From the recordings of the Picture Description Test, it came into notice that the children used almost the same abusive words that they were facing from their

surroundings. It shows that the type of language children encounter from their surroundings, they also imitate the same type of language. It is also worth sharing that most of the participants from Group B were so surprised when they were asked the question: 'have you ever been scolded by your mother or father?' In response to this question, they asked: 'how can a mother or father scold their child even if they do something wrong?' From the findings of the study, it can be inferred that facing more abusive language results into using more abusive language. Moreover, children who face more verbal aggression they are more likely to become abusers with their friends, siblings or class-fellows.

There is a general perception that the children learn abusive language from their schools. In contrast to this, the findings of the study show that mostly parents themselves use abusive language with their children. The second larger agreement of the students was on facing abusive language from their own classmates or friends. On the basis of these observations, it can be inferred that there are more chances of getting rebuked or verbally abused by parents or friends.

To sum up, it was revealed from the data analysis of CTS test that Group 'A', which was facing 67.33% verbal abusive, used 54% abusive language during producing dialogues for a particular situation in Picture Description Test. In contrast to it, Group B, which was facing only 17.33% verbal abusive, produced only 0% abusive language during the same activity. These findings proved helpful in correlating verbal abuse faced by a child and his/her use of abusive language. At the same time, it revealed the nature of linguistic differences in verbally abused and non-abused children. From the analysis of the collected data, it is quite obvious that verbally abused participants used abusive words which were closer in nature to the words selected from the list of abusive words that showed an act of imitation. However, Group B which was facing 17% verbal abusive used 0% abusive language. It is also important to be noticed that the participants of Group B neither selected any abusive word from the list nor they produced a single belittling or abusive word during the activity of dialogue production. Relating these findings with the theoretical framework of this study, it can be concluded that the linguistic structures

children encounter during the process of language comprehension they imitate those linguistic structures during their language production.

The Word Association Test (WAT) was used to investigate the process of language comprehension in verbally abused and non- abused children. The results of WAT showed that Group A, which was facing and producing a high rate of abusive language was simultaneously found with a higher level of negative semantic association that was 71%. In contrast to it, Group B which was facing and producing less abusive language was found with comparatively less negative association that was only 32%. The comparison between facing verbal abuse and language comprehension helped to find out if there was any relationship between both; it also helped to find out the differences in the nature of semantic association. Relating the theoretical framework with the observations and findings of the current study, it can be inferred that verbal abuse works like a certain type of linguistic schema that develops negative semantic association between the lexical items stored in the mental lexicon in children. Therefore, the children who face verbal aggression use linguistic choices with negative semantic association, but those who do not face verbal aggression, they show positive semantic association. Furthermore, due to stimulus repose relationship between the cognitive processes of language comprehension and production, children produce language by imitating the characteristics of language structures they encounter during the process of language comprehension.

5.1 Relation with previous researches

The findings of the current research are generally compatible with the previous researches as the current study also found an interrelatedness of linguistic comprehension and production. Some of the conventional researches measured social, psychological and behavioral phenomena whereas some of them explored the phenomena of delayed speech caused by different types of abuse on children. In contrast to them, the findings of the current research imply the role of verbal abuse in the processes of language comprehension and production as a certain type of linguistic schema. The current research has also explored the differences in the cognitive process of language production and comprehension in verbal abuse and non-verbally abused children. In short, the study demonstrated a link between abusive use of language and negative semantic association

in the mental lexicons of verbally abused children that showed a negative impact of verbal abuse on the language development of children.

5.2 Limitations of the Study

Due to finding the female participants reluctant in providing their personal information, the current study was limited to the male participants of grades 8 and 9 (Bench Mark School Systems Islamabad). Another hindrance, which made the study limited, was that some of the participants were reluctant in providing the recorded data. Due to the privacy concerns and incomplete and insufficient data, the researcher limited the current study to the investigation of linguistic features of 15 verbally abused and 15 non-verbally abused children.

5.3 Recommendations for Further Research

In the light of the findings of the study, the researcher recommends the following areas for further research:

1. During the current research, it has been observed that most of the participants were of the view that they were being abused either by their parents or by their classmates. It is not the objective of the current study to calculate and compare the percentages in which the participants were getting abused by different people. Yet, upcoming researchers can investigate who abuses the children more either their parents, classmates, cousins, and teachers or someone else inside or outside their homes. It is also been recommended to investigate the percentages in which children receive verbal aggression from their parents, teachers, friends or classmates.
2. To investigate different factors such as education, financial issues, age, social issues or some other factors which instigate parents to use good or bad language with their children.
3. In a response to the question, “Do you yourself use the same hurting language with others?” 65% Participants from Group A agreed that they also use abusive language with others. Whereas, in response to the same question, only 10% participants from Group B declared that they also used hurting language with others. The participants from the same group replied that they did not know how to get scolded as they had been

respected and cared by their parents. This correlation shows that children who face more abusive or hurting language by someone use the same hurting language with a certain proportion. The upcoming researchers are invited to investigate the correlation between the verbal abuse faced by a child and the use of abusive language by him/her.

4. There could be many back- ground factors for the abusers for using hurting or abusive language such as their low or high educational background, their high or low financial status or some poor social factors when someone encounters the same abusive language during his/her own childhood as a result started using the same abusive language for his young ones. So, it has been recommended to investigate the other possible factors behind the dilemma of using hurting or abusive language for children.
5. It is supposed by the researcher that there are differences between verbally abused and non -abused children not only at linguistic level but also at paralinguistic level. So, it has been recommended to all the upcoming researchers to find out the paralinguistic/ prosodic differences of verbally abused and non -abused children.
6. Considering language as the most significant and influential factor that could affect human comprehension, the researcher has investigated the impact of linguistic input on the cognitive skill of linguistic comprehension. Other than linguistic factors, there would be many other factors that can have positive or negative influence on human comprehension and linguistic association such as context, intention, the relationship between interlocutors, etc. Hence, the researcher invites the upcoming researchers to explore all the other possible factors that can affect the developmental process of language comprehension and production.
7. Furthermore, it is recommended to investigate the various sources of receiving abusive language, such as the language encountered through cartoon movies, shows, games or fiction books for children etc.
8. The upcoming researchers are suggested to investigate the language differences among private and public schools' children. They might further explore the reasons behind these linguistic differences.
9. Facing verbal abuse may also cause the use of abusive language by adults which may further be explored by the future researchers.

5.4 Contribution to Research

The current study has contributed to research as it has explored the significant differences in the cognitive processes of language comprehension and production of verbally abused and non-abused children. It has further contributed to research by exploring the particular phenomena in Pakistani society, which have not been explored yet, to the best of researcher's knowledge. Another contribution of the study is to explore verbal abuse as a certain type of linguistic schema that affects the process of language production and results into the production of abusive or belittling language in children. Additionally, it develops negative semantic association between the mental lexicons of verbally abused children during the process of language comprehension. The study, therefore, is an attempt at making the parents, teachers and caretakers aware of the hazardous effects of using abusive language with children.

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APPENDIX A

Conflict Tactic Scale

Participant No:

Who uses abusive/hurting words to you most of the time (Tick the relevant option)?

- Mother
- Father
- Teacher
- Classmate/Friend
- Cousin/Siblings
- Aunt/Uncle
- No one

1. **How often do you feel rebuked?**
   a. never b. often c. more often d. always

2. **Do they use insulting words for you?**
   a. never b. often c. more often d. always

3. **How often do they shout at you?**
   a. never b. often c. more often d. always

4. **How often do you feel lonely?**
   a. never b. often c. more often d. always

5. **Do you feel that someone teases you by saying bad words or calling you names?**
   a. never b. often c. more often d. always

6. How often do you feel, you are not enjoying your life?

a. never b. often c. more often d. always

7. When you do something wrong and your parents interrogate, do you tell lies?

a. never b. often c. more often d. always

8. Do you argue a lot with other people?

a. never b. often c. more often d. always

9. Do you cry a lot when someone say something bad to you?

a. never b. often c. more often d. always

10. How often do you use abusive language with your siblings/cousins or friends?

a. never b. often c. more often d. always

Q.2. Tick/mention the words which have been used for you.

پاگل	گدھا	الو کے پٹھا
Duffer	Idiot	Foolish/ fool
کتا	Non-sense	Mad
اندھا	جاہل	خراب دماغ
بے غیرت	کمینہ	خبیث
		بےوقوف

APPENDIX B

PICTURE DESCRIPTION TEST

Story No: 1 Suppose you have done something wrong or possibly not followed your mother/father/teacher's instructions and now being encountered so in such situation what could be their dialogues.

Dialogues/list of abusive words used by the partcipant for Picture Description Activity.

APPENDIX C

WORDS ASSOCIATION TEST

Please select the most suitable word that immediately comes to your mind after reading the following pair of words against each sentence.

1. She usually feels **attracted/angry** when someone asks her to help him/her.
2. The children were feeling **delighted/depressed.**
3. Her mother got **furious/fascinated** on/by her fabricated story.
4. She was **excited/embarrassed** to see him climbing up the tree.
5. Her mother was **generous/grumpy (bad tempered)** to them.
6. She often feels **insulted/interested** among her family members.
7. He was a **happy/hurt** child during his childhood.
8. Those were the most **painful/peaceful** movements when she ever shared her worries with her mother.
9. The tone of their mother becomes **tender/tense** when they tell her what they were doing.
10. She ever feels **glad/guilt** when her mother gets annoyed at her.