Influence of Social Class on Cognitive Development of Syntax: A Study of Pakistani EFL Learners

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ABSTRACT

Influence of Social Class on Cognitive Development of Syntax: A Study of Pakistani EFL Learners

There is an undeniable link between language and social class of the learners. This study explores the link between syntax and social class of the learners by studying correlation between the two variables. Cognitivists considered language a cognitive construct but social cognition theories believe that human cognition is a social phenomenon, and so is language. Social class, which is a social variable, not only affects cognition, but also language. Based on this approach, this research project explores correlation between social class and the cognitive development of syntax among the learners of English language in Pakistani universities. The research also explores the link between cognitive and social approaches to language acquisition and highlights the social nature of language development. The study followed correlational method of research to find out the relationship between social class of the adult learners of English and cognitive development of syntax among them. This study also took into account gender, marital status and age as extraneous variables and studied the relationship of these with the sample's performance in syntax based test. The population for this study consisted of male and female students of language courses belonging to three universities of Pakistani capital Islamabad. To collect social class data and test syntactic skills of the sample, two research tools were designed; a Socio-economic Index (SES Index or SEI) and in the Syntax-based test. The SES Index consisted of five social class variables. These are *occupation, income, educational qualification, medium of instruction,* and *property.* The sample was asked to provide details of the said variables about three family members; the subjects themselves, their fathers and mothers. The second tool designed for this research was Syntax based test which aimed to test various syntactic skills of the learners. Students' performance in the syntax based test was considered an indicator of their cognitive development. The participants were required to fill up the SES Index and solve the test. Both the tools had equal marks, that is, 100. This class score of the respondents

was studied for its correlation with the syntax score. SPSS was used to study correlation between social class score / SES score of the individuals and their syntax score. The results yielded moderately significant positive correlation between social class of the individuals and their syntax score and the hypothesis that there is a positive correlation between the two variables was retained. Further, the population was divided into three social classes on the basis on 33% percentile and regression was run to see mean score difference, which pointed out significant mean difference in three SC groups. Apart from social class, *gender, marital status* and *age* were identified as extraneous variables. T-test and Mann Whitney were run in SPSS to study the relationship between each of the said variables and syntax. The data were categorised according to these variables and then the tests were applied. In case of *gender*, which is the first extraneous variable, the mean difference between *males* and *females* was significant with females scoring more in syntax test than males, but SPSS showed that these results were statistically non-significant, so the hypothesis of unequal variance between males and females was rejected. The t-test regarding *married* and *single* population proved statistically significant difference with married scoring higher than the singles in syntax test. Unlike *gender* and *marital status* variables, *age* variable had three groups, and due to non-homogenous population in these three groups, non-parametric Mann Whitney test was run. No statistically significant difference was found in the mean rank of age group 1 and 2, and 1 & 3. Also, no statistically significant difference was found in the mean rank of the two age groups, which proved equal performance in syntax test by both groups.

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LIST OF ABBREVIATIONS

EFL: English as a Foreign Language

ENL: English as a Native Language

ESL: English as a Second Language

L1: First Language

L2: Second Language

TL: Target Language

FL: Foreign Language

SC: Social Class

SES: Socio-economic Status

SEI: Socioeconomic Index

ELF: English as a Lingua Franca

ENL: English as a Native Language

CL: Cognitive Linguistics

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All praise be to Almighty Allah, the most Beneficent, the most Merciful. To Him belongs all the grace and glory. He is Supreme, all powerful, the custodian of all wisdom and knowledge, who made approximately one lac and twenty four thousand of his blessed servants the custodians of his divine message. Only He is complete and all of us have weaknesses and shortcomings for which we constantly seek His mercy and support. Allah's blessings be upon His servant and Prophet Muhammad (Peace be Upon Him) who was entrusted the holiest of the tasks to "teach" the mankind, purify human souls and illuminate human spirits. Essential literacy has been dug deep; it is multidimensional, and has entered into its ever-evolving current digital phase. But we come to the final agreement that the ultimate source of human learning remains to 'read and write', which is the essential divine message.

In life we take up different journeys; some on the straight roads, some others on the winding ones, some on the smooth ones and others on the bumpy ones. In some of the journeys we pass through the plains, in others through fertile fields, and in yet others, we venture into jungles or voyage in the deep seas. Some of these journeys end in disappointment but others yield fruits that we cherish for the rest of our lives. These journeys not only test our patience, resilience, and courage, but also make us stronger to take up further dangerous yet fruitful ventures in our future lives. Apart from testing our character, they require support of those around us as well as need good luck. PhD thesis proved one of such journeys which had its ups and downs, but on completion of it, I feel humbled as well as honoured to come out eventually victorious in this apparently herculean task.

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DEDICATION

I dedicate this humble effort to my family members, specially my **mother**, the memory of my late **father,** and my late **grandfather** whose last wish was to see me complete my PhD.

CHAPTER 1

INTRODUCTION

The phenomenon of language development is understood differently by different linguists. There is a great debate among the linguists as to whether language development is a cognitive phenomenon or a social one. Some linguists are also interested to study how social factors such as social class influence development of linguistic cognition. This makes the issue of development of language among children or adults a thorny one which needs a careful analysis of various factors.

Psycholinguistics takes language as a cognitive construct, whereas sociolinguistics considers it a socially constructed phenomenon believing that language is a part of human lives and must, therefore, be studied in the light of its relation to society. Botha (2011) asserts that the issue of "finding correlations between social variables and linguistic variables" (p. iii) is at the heart of sociolinguistics.

Cognitivists believe that language is developmental in nature and develops in cognition slowly and gradually like other cognitive processes such as thinking, understanding, memory and problem solving. According to them, human mind slowly absorbs the linguistic input, processes it, and then puts it to use for communication purposes. Johnson (2010) in his discussion of Piaget's theory of cognitive development explains that "cognitive development is a continual process of building knowledge ...... and existing knowledge structures" (p. xiii). The process of learning a second language follows the same cognitive development / information processes in which the information about language and language use is "picked up by the senses, stored, coded, and subsequently used in various ways" (Niesser, n.d., p. 01). The stages of storing the information, coding, and making them ready to be used are very complex and can be understood by keeping in mind various factors that affect cognitive development. It can

be said then, that cognitive and syntactic development are interrelated processes as syntactic development follows the same developmental patterns that can be observed in cognitive development. As cognitive functions mature, so does language.

Chomsky (1959) was the first to propound cognitive view of development of language. He believed that 'everybody learns a language, (…) because they possess an inborn capacity which permits them to acquire a language as a normal maturational process. This capacity is by definition universal….'' (as cited by Wilkins, & Kostly, 2013). Chomsky points to the aspect of 'creativity' by which he means "the ability of human beings to produce and comprehend an infinite number of novel sentences". (Al-Jasser, 2012, p. 6).

As opposed to the cognitive view of language, Vygotsky (1986), a key figure of modern pedagogy, views human cognition and learning as a social and cultural phenomenon rather than an individual one (as cited by Kozulin, 2003). Similarly, Halliday (2007) emphasises that language is a means by which we draw boundaries of the societies that share similar linguistic features due to their shared beliefs about and shared attitude towards a language. According to him, this is the reason why we give certain names to certain *language communities* as they share an attitude towards a particular language that they call their own. For example, we call English as being British, or American, or Indian, or African, and so on, because among other factors, language is one important factor that gives a sense of nationhood to people living in a particular area or a country (p. 06). The understanding of all learning being a social learning and all cognition being social cognition by Vygotsky and the understanding of Halliday that language is what forms societies, draw our attention to the possibility of language being more a social rather than individual, autonomous or innate phenomenon.

The reason why language is called a social phenomenon is that apart from the cognitive abilities of an individual to acquire a language, many social factors such as age, sex, gender, ethnicity, race, social class, status and religion etc., along the lines of which a society is stratified, play a key role in development of language in an individual or in a society (Mallinson, 2008). Through mutual interaction, individuals living in a particular

society share social knowledge. This social knowledge is communicated and also reflected through the use of language. An individual speaking a particular language stands as a representative of the society in which he / she has acquired that knowledge. This knowledge can be manifested in the use of mother tongue (hereinafter referred to as L1) of a particular speaker as well as in his / her use of Foreign Language (hereinafter referred to as FL).

Cognitive linguistics studies language development as a cognitive process and suggest that language in a child develops along his cognitive developmental stages. On the other hand, a great part of variationist sociolinguistics deals with the influence of social class on language. It believes that people belonging to different social classes have their own repertoire of language, and their social background seems to be reflected through their use of language in various ways. Social class studies in sociolinguistics have tried to investigate how the choice of words, pronunciation and other features of language vary among the users of language belonging to different social classes.

But as Christiansen & Dirven (2008) suggest, cognitive linguistics must also consider that "social variation systematically appears in the raw linguistic data" (p. 10) and anyone studying language variation may find it difficult to ignore the social dimensions of language variation.

Studying language from purely sociolinguistic or from purely psycholinguistic perspective may not provide a clear understanding of how cognitive and social aspects of language go side by side. To do so, there may be a need to take a different approach to the study of language, which may not take language as purely cognitive or as a purely social phenomenon, and this approach has been termed by Christiansen & Dirven (2008) as cognitive sociolinguistics.

Taking this approach forward, the present study aims to investigate the relationship between social class, which is one of the social factors that affect language development, and cognitive development of syntax. In doing so, the study tries to bridge the gap between the traditions of sociolinguistic variationism and cognitive linguistic tradition which study language from social and cognitive perspective, respectively.

However, it may be noted that it is not going to be a variationist study in the sense of studying various dialects etc., but will account only for the link between social class of EFL learners in Pakistani universities and their performance in a syntax based test. It is worth mentioning here that the research does not intend to prove a causal relationship between the social class and cognitive development of language reflected through their performance in syntax based test, but is limited to finding out correlation between the two.

This study will try to investigate whether there is a correlation between social class of the individuals and the cognitive development of syntax or not. If they correlate, how much? The study focuses on the learners of English as a foreign language in Pakistan. The assertion that the development of syntax is "cognitive" in nature, and that the cognitive development of syntax is related to social class, is based on the theories that suggest that development of language is a cognitive process (Rahimpur, 2010; Lin, 2009; Ziangui, 2005) and the ones that suggest that all cognition is social (Howard & Renfrow, 2006; Condor & Antaki, 1997; Marton, Abramoff & Rosenzweig 2005; Overwalle, 2009). A brief introduction to these theories will be presented in the following lines.

Keeping in view the fact that language is influenced by certain social factors as mentioned above, linguists have shown a great interest in how language and social stratification have an inter-relationship and how the influence of social stratification in terms of class stratification is manifested in the use of language of the individuals belonging to different sections of the society. Although social class is too broad a concept to be encapsulated in a definition, generally speaking the sections a society has been divided into in terms of prestige and status are normally referred to as 'social class'. However, the concept will be discussed in detail in section 1.2.

As stated above, a society is divided on the basis of various factors such as gender, race, ethnicity, cast, marital status, age, and class etc. Apart from other factors, the segment of a society that shares characteristics such as occupation, income, education and the resultant prestige and status is referred to as 'class'. Each segment of society referred to as 'class' differs in terms of its access to the resources, and this difference

affects almost each aspect of the life of members of a given class. This difference in access to resources is also believed to result in different academic achievement of either children or adults, and hence, in differing levels of linguistic competence. Variation in language of the users belonging to different social classes is a phenomenon which has invited a considerable attention of sociolinguists, and language variation as a sub-discipline of sociolinguistics deals with the issues of variation in language under various influences. Just like variation studies with reference to social class are possible, the same way a measurement of relationship on the linguistic performance of the foreign language learner in a particular area of language can also not be out of question. Before moving onto the link between the social background of the learners and their academic achievement and linguistic development, it is desirable to have an overview of the studies of language variation conducted in the field of sociolinguistics.

1.1.   Sociolinguistics and Language Variation

The issue of interaction of language with society is covered by variationist sociolinguistics which tries to explore how social stratification impacts various aspects of language (Labov, 1972; Juchem, 2003; Mather, n.d.). Social constructionism provides the basis of this idea as its proponents believe that lives of the individuals are constructed under the influence of our social-selves. Studies of language variation in sociolinguistics, in the same way, try to make a link between the social-selves of the individuals and the kind of language they speak. The differences of language used by the individuals are thus believed to be the representation of the contexts that have gone into the making of the social selves of the individuals.

Although the focus of the study is to look for social class as a correlate of syntactic variations among the students, it is pertinent that an understanding of social stratification and social class is also reached so that the issues related to its correlation with academic achievement in general and with syntactic development in particular become clearer at later stages of the study.

1.2.   Social Class and Academic Achievement

Social class is one important factor that affects so many aspects of human life, and education is one of these aspects. Students belonging to different social backgrounds have access to varied set of resources such as books, technology, tutoring and support from family and environment. All these factors affect their performance in learning. Students from high or mid socio-economic status (hereinafter referred to as SES) families have access to better academic and support resources as compared to their counterparts from low SES families. Their physical environment is more comfortable, they can have access to tutoring, have more attention from their parents, have comfortable home environment, and have to face lesser stress at home as compared to low-SES students, which makes a difference between their performance in the class. Various studies have found out a correlation between SES and Academic achievement of the students. For example, Buchner, Velden & Wolbers (2007) while referring to the studies of Mare (1981), Bourdieu (1973), Shavit / Blossfeldt (1993) assert that "there is historically a lasting and strong relationship between the SES of the family, the offspring's (non-) cognitive skills and educational achievement" (p. 02). They have shown the average academic performance of social classes and point out how 14.2% children from the lower educated parents of Cohort 1993 moved to an academic track in secondary education, whereas in children with higher educated parents the percentage was 61.6% (p. 17). Similarly, Willingham (2012) reports that high SES students do better than those from low SES families because they have better access to financial, and as a result human and social capital, and have to face lesser stress at home which leads to their better performance in studies (pp. 33-37). Reardon (2011) refers to the studies of Duncan & Mognuson (2007/2008), Coleman et al. (1966), Kagan (2002), Zigler and Muenchow (1992) and concludes that the income achievement gap between the children from high SES families and the low SES families has widened up to 30 to 40 per cent in the children born in 2001 than those born 25 years ago. He also elaborates that the increasing achievement gap between the children from families with different incomes may be due to the fact that their parents have different capacity to invest in the cognitive development of their children. Many other studies suggest similar pattern of correlation between

different SES of the parents and achievement gap between the children of the respective parents.

1.3.   Social Class and Language

Extending the above argument, that is, there is a correlation between SES of parents and the academic achievement gap between the children of these parents, there is a reason to believe that the same correlation exists between the SES of the students and their parents and development of language among them. This assumption has led so many researchers to carry out studies of sociolinguistic variation among the language learners to see how much influence social factors have on their linguistic development.

Botha (2011) cites Labov (1966, 1972) and Trudgill (1974) who discuss that on the basis of code theory of Bernstein (1971), variationist sociolinguistic have been interested to find out how much effect social class of the individuals has on the kind of language they speak and how social class and linguistic variation correlate. As they explain, Bernstein suggested that distinct forms of spoken language are associated with certain social groups. He pointed out that social groups can be distinguished on the basis of their forms of speech as each has a distinct form, separate from that of the other. He proposed that "the two distinct forms of language use arise because the organization of the two social strata is such that different emphases are placed on language potential" (p. 271).

The same point is extended by other researchers too, in their respective studies. The kind of language individuals speak, may, in the words of Coloma & Aires (2010), be 'a "marker" of a particular social or income class' and may be a valuable finding from sociolinguistic point of view.

Labov (1964) carried out his research on phonological differences in his famous study of departmental stores, in which he found out that people belonging to different social classes have different pronunciation of certain sounds.

1.4.   Social Cognition and Language Development

Piaget (1896-1980) considered that both language and cognition developed because of genetic epistemology. He thought that "there is something in the nature of infants that leads to the development of cognition and language" (as cited by Warsi, 1994, p. 02). Development, he thought, occurs in stages, and children learn to perform different cognitive tasks at different ages in different stages. As opposed to this theory, Vygotsky (1896-1934) believed that for cognition to develop, it was essential that there be an interaction of child with the world around him (Newman & Holzman, 2005, p. 62). Hence, as cognition develops in interaction with society, it is understood as social cognition. The term has been defined by Overwhalle (2009) who opines that it "broadly includes the cognitive processes used to understand and store information about other persons including the self, and about interpersonal norms and scripts (or procedures) to navigate efficiently in the social world" (p. 830).

This view of social cognition hints at the possibility of studying language as social cognitive phenomenon rather than purely a cognitive phenomenon, or purely a social phenomenon, because the theory of social cognition puts a question mark on the respective assumptions of language developing in either cognition or in social context. It rather invites attention of the researchers to study it as a "social cognitive" phenomenon, which is exactly what the present study will endeavour to do.

This view of looking at cognitive development of language from social perspective is also supported by Kristiansen & Dirven (2008) who emphasise that Cognitive Linguistics needs to adopt an approach that "would bring the objects of study and the methodologies employed in sociolinguistics and Cognitive Linguistics closer together" (p. 01). Also, they point out that the researchers have taken important steps towards "an empirically validated investigation into the social dimensions of linguistic variation" (p. 01).

So, the basic concern of this study is how language develops among the learners who are studying English as a foreign language. In this context, it needs to be kept in mind that the focus of the study is the process of "language learning", not acquisition.

Stephan Krashen (1982) made an important distinction between 'acquisition' and 'learning'. The process of language 'acquisition' in adults, in his view, is "similar, if not identical, to the way children develop ability in their first language" (p. 10). In his opinion, "Language acquisition is a subconscious process; language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using the language for communication" (p.10). As a result of language acquisition, adults subconsciously acquire language without having knowledge of rules. 'Learning', on the other hand, refers to "conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them" (p. 10).

Understanding this important distinction is essential to grasp the question of development of language in the context of this research. As the title of this research indicates, this study concerns itself with the relationship between social class and cognitive development of syntax. In doing so, it forms a triangle between social class, syntax and cognition. It first discusses cognitivism which believes syntax to be cognitive construct. This view is then contrasted with social cognitive theories which assert the point that all cognition is social, and hence syntax, which develops in cognition, also needs to be viewed as a socio-cognitive phenomenon developing in human mind. Social class is a process of social stratification due to which different social identities are assigned to individuals who differ from each other in terms of social prestige. It is believed to play a role in 'development' of linguistic cognition, which is an ongoing process. It is more so in the case of second or foreign language, where development is thought to be different from the language development in the sense of acquisition.

As highlighted by Krashen (1982) above, the acquisition takes place both in children as well as in adults. So the theories of "language development" in the context of acquisition among children are different from the SLA theories, the focus of which is acquisition of a second language. On the basis of this difference, the term 'language development' cannot be applicable to the development of language among adults. This point can be explained on two accounts: firstly, the sample for this study is learners of English, which means they are involved in the conscious act of learning language by learning rules. Secondly, they are not a case of "language development" because they are

adults who are competent speakers of their L1. So language as a system of communication is not 'yet to develop' among them. It is already developed / active and functional in their brains, hence they are not a fit case for a study of language development per se. The process of "learning" a foreign language, on the contrary, needs to be seen in terms of the learners trying to grasping syntactic structures of the TL which are obviously different from those in their L1. This distinction is necessary because this thesis makes use of the term 'linguistic development' on certain occasions when it lays out parameters of language developing among adult learners. Such use of this term is widespread in literature (eg. Kristiansen & Ibanez, 2010, p. 122, Aldana, 2009, p. 03) related to SLA or FL learning. Although the term "language development" is also used yet it is restricted to the discussion of language acquisition among children.

In view of the above distinction, it needs to be understood that the process of learning going on among the learners of a foreign language, the stages of learning rules of TL, and their skill to use those rules in their written or oral communication can be referred to by using any other term than 'language development' which refers to the development of language among children as a faculty (Emphasis added). Whether language is innate faculty that is pre-ordained or it is a cognitive function that needs social interaction for its activation is a separate topic of debate which shall be taken up by this study in Literature Review.

In case of the present study, development of syntax is studied in relation to the learners' period of study in their respective courses. Most of the learners (the sample) start off their respective English language courses with little understanding of how English as a subject (taught in Pakistani schools under traditional method) is different from English as a language, which involves development of the four language skills, namely reading, writing, listening and speaking, and an emphasis on phonology and syntax. The 'language' aspect of English is hardly a focus in Pakistani schools and colleges. In this way, the development is measured in this study in the sense that upto what level the sample's syntactic abilities or skills have developed from the point they took admission to their respective courses to the point of time on which they are tested for this research. The mention of the word "development" thus, refers to the theoretical

debate of language as a phenomenon, and does in no way imply that the research is an experimental study.

1.5   Syntax and Cognition

Chomsky (1959) presented a view of language as a cognitive construct whereas social cognition theories considered cognition to be developing under social influences. In view of both approaches that consider language as cognitive construct and cognition as a social construct respectively, there is a case to extend the discussion of relationship of social cognition with language to its relationship with syntax, which is one of the components of the latter. In the light of social constructivist theory, we need to see whether syntax really has something to do with social variables or not. Language evolves as general human cognition does, and syntax being a component of language must evolve like language, and all theories of social cognition that apply to language must also apply to syntax in the same way as they do to language as a whole.

Schoenemann (1999) in Callary (2009) reviewed the stance of innatists such as Chomsky (1968, 1980), Bickerton (1990), Pinker and Bloom (1990), and Pinker (1994) who believed that "there is an innate cognitive structure unique to human language (…) that determines what sort of basic structures and processes will be reflected in the syntax of any human natural language" (p. 3). These theorists also believed that there is a physical location in the brain called syntax module that specifically processes syntax. They took syntax as an independent entity and drew boundaries around it to help us study and understand syntax separately. Whereas these studied focused on studying syntax as a separate cognitive entity, the present research, in the light of social constructivist approach studies it in relation with social class to see how social class as a social variable is correlated with syntax as a component of language.

1.6   Social Class and Syntax

Syntax can be studied as a linguistic variable in relation to social variables such as social class to extend the variationist tradition that Labov (1964) set up in his famous variationist study to find out a possible correlation between phonological variation and

social classes of his sample. Further, the suggestions of the syntax being a cognitive process (Callary, 2009) and those of influence of social factors, specially social class on the development of cognition (Olsen & Dweck, 2005, Hahn & Gawronski, 2008, Payne & Gawronski, n.d), and on the development of syntax (Vasilyeva, Waterfall & Huttenlocher, 2008) make it a case worth studying that how much social class influences the cognitive development of syntax. Linguistic behaviour of the speakers belonging to different social classes is believed to be regular in the sense that a systematic correlation is found between the social factor and the linguistic choices of the speakers (Callary, 2009, p. 05). This study extends Bernstein's suggestion that the forms of individual speech habits are socially determined and 'they are general and specific as they permeate the entire speech community and exert a considerable influence on the individual speaker' to the study of manifestation of social characteristics in the choice of syntactic options the individual speakers (Callary, 2009, p. 06). The study of variation of syntax along the lines of social class of the speakers was carried out by Callary who used 'A Psycholinguistic Model of Syntactic Maturity' to study the grammatical operations of addition, deletion, substitution, transposition and embedding. Through the study of mean and standard deviation, he found out that the "speakers in high status group are more variable than those in the low social groups" (p.11) and the speakers of low status group are consistent in selecting syntactic items and processes. He suggested a more sophisticated analysis of the syntactic performance and calls his own study 'only a very crude beginning'.

The present research, intends to advance the study of syntactic variation among the English language learners belonging to different SCs by giving them syntactic alternates and studying their choice among these alternates through a specially designed test. The areas in which they have been provided choices in syntactic alternates are *addition, omission, replacement, constituent replacement, unscrambling sentences, choosing correct option, grammatical choices, lexical choices, verb form choices, pronoun choices, preposition and conjunction choices, arranging phrases, correction of sentences and using discourse markers*. In studying correlation of the test score with the SEI score, this study will advance the studies cited above to identify how social factors

affect linguistic cognition which is reflected through the learners' use of language, particularly syntax.

1.7. Rationale

The present study will focus on how much social class factors affect cognitive development of syntax among the learners of English as foreign language in Pakistan, and whether the leaners belonging to different social classes exhibit difference in their syntactic skills? The study is important in the sense that it will determine whether the students' score in the syntax based test varies vis a vis their social class. In doing so, it aims to add to the understanding of the scholars working in the field of sociolinguistics and psycholinguistics as to how language, particularly syntax, cognition, and society are interrelated. There is a wide array of literature suggesting the link between language and society, but the studies in the field of relationship of language with social class are still an area worth exploring. It is more so in the case of syntax, as only a handful of researches on a small scale have been conducted that point to the link between social class and syntactic development, and there is still a lot of room to conduct a full scale research to establish the link between syntax as a component of language, cognition, and social class as a component of society.

The suggestion for the kind of research this one is, has been put forward in many studies, for example Callary (2009), Adger and Trousdale (2012), and Lin (2002). These studies have hinted on the relationship between syntax and social class and the interrelationship of both, and have emphasized the need to investigate deeper into the area. Further, Mallinson (2011) has emphasized the need to study sociolinguistic variation and has proposed a correlational study of the linguistic variable under investigation (in this case syntax) and the social class of the individuals being studied. Her model forms the research design of this study. Schwenter (2011) studied variations in Spanish morpho-syntax. He refers to the landmark variationist studies done by Labov on the on the island of Martha's Vineyard (1963) and the very significant study in New York City (1966). The focus of these studies was on phonic level. He highlights that this tendency is due to the apparent ease of the study of phones, which do not affect meaning

of utterances, for example, while pronouncing the word best, it makes little difference to the native speakers whether the word is pronounced with or without final /t/ sound, because ultimately the context of use will make clear what is said, and there will be little difference of meaning. But this is not the case with studying syntactic variables. These studies provide the space in which to conduct this research and try to investigate how much syntax of the individuals is dependent on and reflects social class of the individuals. In case of Pakistani EFL learners, it will be a useful study with many pedagogical implications apart from its potential to enrich sociolinguistic research data.

1.8   Nature of the Research

This study is quantitative / observational in nature and will try to look into how much social background is responsible for cognitive development of syntax among Pakistani EFL learners. In other words, it will try to explore whether or not the correlation between social factors and syntactic development has the potential to determine the identity of individual students as members of a particular social class. Also, other quantitative tests will be used to measure variance of syntax score among different social classes as well as social groups such as males and females, married and unmarried, and samples of different age. For this purpose, two tools, namely an SES Index, and a Syntax based test have been designed. Each of these carries hundred marks. The SES score of the individual learners will be studied for correlation / variance in relation with the syntax based test score to see the influence of social class on development of syntax. The results of correlation will be analysed as a possible indicator of variation of cognition of learners from different social classes.

This research will employ hypothesis testing as a general research strategy to test claims about the data. In hypothesis testing, certain hypotheses are tested for their validity or otherwise by setting up a null hypothesis. If the research, for example, hypothesizes that there is a correlation between the two groups of a given population with reference to their age and height, the null hypothesis would assume no correlation or equal variance. If the test results are lesser than the alpha value set for the test, the null hypothesis will stand rejected and the alternative hypothesis will be approved, and if the

p value of the test is higher than the alpha ratio, the null hypothesis will retain. The detail of the process will be presented in the relevant section of the research.

1.9.   Statement of Problem

Bernstein (1960) suggested that different social groups may be distinguished on the basis of their use of distinct forms of language. According to him, the difference is marked the most when socioeconomic difference is great. He felt that the "inter-status differences in language facility result from entirely different modes of speech found within the middle-class and lower working-class" (p. 271). He identified the reason behind the use of distinct forms by different classes and opined that "the organization of the two social strata is such that different emphases are placed on language potential" (p. 271). Bernstein's theory of relationship between social class and language is relevant in Pakistani context where a great difference in lifestyles of different social classes leads to difference in use of language. This difference is also manifested in those learners' development of language who take up English courses to learn English language to improve their academic performance or enhance their life-chances. Difference of social background among the learners may be the reason not only behind difference of academic achievement among them but also in different levels of language development among them. The different level of development is evident not only in spoken, but also in written form of language. Some of the learners show exceptionally good progress in terms of developing their language whereas other lag behind, despite the fact that they are in the same course, are supposed to have almost same pre-qualification, share same age group with their fellows and the input received in their respective classes.

Rahman (2014) while commenting on the link between social classes and language remarks that "People of these classes are distinctive not only in their possession of wealthier assets, power, favorable regard, educational qualification or status, but also in their speaking manner, style or linguistic features" (p. 1). He asserts that the language used by a university professor is bound to be different from a garment

factory worker and of a businessman from a beggar. We can guess the social status of the person from the way he uses language. Habib (2010) also studied influence of social class on language variation in Syria and concluded that "social class remains a strong and salient factor influencing linguistic variation" (p. 176). These views substantiate the claims made by Bernstein regarding distinct use of language by people from distinct social backgrounds.

The difference of social background is likely to result in different cognitive development among the members of different social classes, and this could be a possible reason why some learners are never able to show the level of language development that their peers in the same courses do through their spoken or written language. The difference of language development is manifested in all areas of language such as pronunciation, use of vocabulary, and syntax, etc. Leaners from different social background are as much likely to differ in syntactic development as they are in other areas of language. Syntax being an important area of language requires a through attention of sociolinguistic researchers with regard to influence of social background on it. It is worth seeing whether Bernstein's theory of use of different language forms by members of different social classes is really relevant in case of syntactic development among Pakistani EFL leaners or not.

1.10   Purpose of the Present Research

This study explores the link between syntactic development, which is normally taken as a cognitive process occurring in human mind, and social class of the learners of English language in Pakistani context. The study intends to demonstrate how the syntactic development of learners is influenced by social class of the learners, and how it is the indicator of the fact that cognitive development of syntax is social. To be a little clearer, it will try to establish whether and how much the cognitive development of syntax is correlated with the social class of the participants of the study. As has been explained above, syntactic development is said to be a cognitive process, and all

cognition is thought to be social cognition. Hence, the influence of social class on syntactic development will be an indicator of varying cognitive development of the learners under the influence of social class. In this way, if there is positive correlation between syntactic development and social class, it will be taken as an indicator of correlation between social class and linguistic cognition.

1.11 Objectives

This research aims to:

i.   Find out relationship between cognitive development of syntax and the social class of the learners.

ii.   Identify the extent of cognitive and syntactic variation among the Pakistani EFL learners in relation to their social class.

iii.   Trace the relationship of gender, marital status, and age with cognitive development of syntax.

iv.   Highlight the issue of social variance among the EFL learners to enable English language teachers, educational administrators to consider social differences of the learners in devising teaching strategies and designing curriculum.

1.12   Research Question

As the present study aims to find out the relationship between social class and the cognitive development of syntax, therefore, the main question of the study is related to this very topic, which forms the main area of the study. Secondly, the sub questions focus on other extraneous variables such as gender, marital status of the participants of the study, and age of these participants. These variables are important demographic questions in the survey and the test, and help form subsets of the data on the basis of age, gender and marital status. The sub-questions ask whether each of these variables also play a role in the cognitive development of syntax or not.

It is pertinent to mention here, that the kind of relationship the present study intends to find out is linear correlation between the social class and the cognitive

development of syntax. It does not try to establish causal relationship, or suggest that the difference in cognition of the learners is due to their social class, etc.

Linear correlation endeavours to find out whether one variable has some kind of relationship with the other variable or not.

The main research question that this study aims to explore is a follows:

What is the relationship between social class and cognitive development of syntax among EFL learners of Pakistan?

1.12.1 Sub-questions

Apart from the social factors such as social class, ethnicity, race, etc., social characteristics of individuals such as gender, age and marital status are also likely to be related to cognitive development of the learners. Since the participants of the present study are from both genders, different age groups, and are likely to be both married and unmarried, it is but understandable to investigate the if these factors also play a role in the subject under study or not. The data related to age, gender and marital status will be based on the answers provided by the sample in response to the demographic questions asked in the SES Index and the Syntax test. DeFranzo (2012) presents the rationale of including the variables based on the demographic information. He opines that "Demographic questions are designed to help researchers determine what factors influence a respondent's answer, interests and opinions" (p. 01). He further explains that demographic information enables the researchers to "cross-tabulate and compare subgroups to see how responses vary between subgroups. Hence, the subgroups that emerge from the sample of this research based on the demographics are three age groups, to gender groups (male and female) and married and unmarried samples. In the light of the above, sub-questions are formulated to see variance of the results along the said sub-groups.

Although there can be full studies on each of the aforementioned factors, yet this study would try to explore these dimensions in whatever scale the scope of present research allows.

The sub questions that the present research will try to explore are as follows:

1. *How do learners from different social classes exhibit different cognitive development through their syntactic development?*

2. *To what extent does gender play a role in cognitive development of syntax?*

3. *How much does marital status play a role in cognitive development of syntax?*

4. *How much does age play a role in cognitive development of syntax?*

The sub-sets of data will be based upon the above sub-questions. That is, first the variance in three social classes that emerge from the data will be analysed, then the gender, age and marital status-wise sub groups will be studied for a possible variance among them.

Whereas empirically answerable research questions are required to operationalize the research concerns and their answers are expected by the end of the study through descriptive analysis, hypotheses emanating from the same questions are used to answer these questions through inferential study. The research questions should guide the conduct of the study and should not be limited to yes no answer (Selamat, 2008, as cited by Nenty 2009, p. 22).

1.12.2. Hypothesis

Based on the above research question and the sub questions, the main and sub hypotheses of the study could be as follows:

Cognitive Development of Syntax among Pakistani learners of English has a positive correlation with the learners' social class.

or

There is a significant relationship between the social class of the EFL learners in Pakistan and their cognitive development of syntax.

1.12.3. Sub hypotheses

The sub hypotheses based upon the secondary research questions are as follows:

i.   There is a significant difference in social class score and syntax score for the three population groups of the English learners in Pakistani universities

ii.   There is a significant relationship between the gender of the English learners in Pakistani universities and their cognitive development of syntax.

iii.   There is a significant relationship between the marital status of the English learners in Pakistani universities and their cognitive development of syntax

iv.   There is a significant relationship between the age of the English learners in Pakistani universities and their cognitive development of syntax

1.13   Delimitation of the Study

Whereas language development is a broad area of study and may encompass studies of morphology, vocabulary development and phonology alongside syntactic development, the present research aims to focus on varied syntactic development of the learners of English as Foreign Language due to their social background. As the problem of varied linguistic development among different leaners may be common everywhere, in order to restrict the intervention of other sociological factors than social class, the sample would be taken from the same ethnicity, that is, the participants would be of Punjabi origin, and at the same time, by virtue of being Punjabi, would be having the same language as their L1. The sample would be above 20 years of age. The study will focus on gauging the understanding of syntax through a test which would be based only on certain areas of syntax (further explained in Unit 3).

To analyse syntactic skills, the focus of the present research will be on the students' ability to perform a varied syntax related tasks in a test provided to them by the researcher, such as unscrambling the sentences, identifying correct use of tense, subject-verb agreement and preposition, construction of sentence after omission and replacement of certain words, and so on, all of which affect their linguistic performance and have the potential to exhibit how individual learners differ in their syntactic development.

1.14   Significance of the study

In the wake of globalization, the trend of foreign language learning is on the rise, and it is more so in case of English language which is spoken and understood around the globe. In such a scenario, a scientific study of the relationship between social class and language learning is need of the hour as it is expected to help the stakeholders of teaching – learning process, namely the teachers, students and curriculum developers, in various ways.

Firstly, an understanding of the influence of social class on learning of language is important for teachers. Such a study is expected to enable them to understand the dynamics of a classroom which has representation from various classes, and they would be better placed to devise appropriate teaching strategies for coping with the needs of learners from varied social backgrounds.

This, in turn, would be beneficial for the students who would be directly influenced and would benefit from such an approach to teaching which gives equal importance to all social classes in the classroom rather than teaching in a way that suits the students from only certain social / educational backgrounds. Learning capacity of the whole class in general is expected to increase as a result of such an approach.

A classroom is the context in which interaction between students from various social backgrounds takes place. Syllabus designers, then, must take into account this aspect of the classroom and design syllabus which caters to the needs of students belonging to every social class. This study, by highlighting the above said aspect of language classroom, will also aim at providing an insight to the syllabus designers to work with an eye on class diversity or social disparity within the language classroom and prepare the syllabus accordingly.

At theoretical level, the knowledge of variation in language, helps understand the overall structure of language. In this way, this study of syntactic variation could also give an insight to the linguistics looking for language variation in social context.

1.15 Summary

The first chapter of this study presents background of the present research. It does so by putting forth various assumptions related to how language is understood differently by different linguistic approaches. It brings to light as to how language is a social as well as a cognitive phenomenon, and how social background or social status of the learners goes into their cognitive development, and how language is one of the ways to measure this relationship between social background and cognition among the learners. It sums up the objectives of the study, that is, the expected outcomes that the researcher has in mind before venturing into this project. This chapter also presents rationale of the study, and presents a summary of the researches that provide motivation for this kind of research.

The context in which the present research is being conducted suits this kind of studies as there has not been any kind of research in the given context which tries to study correlation between the social class of the learners and their performance in syntax based test, university context. Therefore, this study aims to present the results which would be helpful in understanding social class as an important factor that plays a role in students' performance in various fields, foreign language learning being one of them.

It is important to understand that the main focus of this study is not to find out various classes existing in Pakistani context. It is not going to be a purely sociological survey, the kind that are normally carried out by state and non-state institutions to measure social structure of a society, but it only tries to study the link between social status of the learners of English as a foreign language in Pakistan, and their performance in one of the areas of language. That is to say, that although social class measurement is one important part of this study, it should not be taken as a whole, in any way.

CHAPTER 2

LITERATURE REVIEW

This chapter presents an overview of the studies that provide background for the present research. As the topic indicates, the research is a correlational study which considers social class as a correlate of cognitive development of syntax. In the light of the theoretical debate, it has been suggested in the first chapter that linguistic development in general, and syntactic development in particular, are cognitive processes, and also, that cognition does not develop in a vacuum and is rather affected by social factors such as social class etc.

This chapter has been divided into different sections. Due to the fact that the context of the study is EFL classes in Pakistan and the sample is EFL learners, the first section tries to establish the status of English as a foreign language in Pakistan. The sub sections of this first section discuss on what basis English can be considered -foreign language in Pakistan, what standards the non-natives need to follow, what status English as EFL is enjoying in Pakistan, and the general situation with regard to teaching of English in Pakistan. Section two briefly presents a summary of main theories of language development which include Behaviourism, Cognitivism and Social Cognition theories. This background is important to understand various approaches to language learning, and the debate in this section provides a context to discuss the development of English language among Pakistani leaners. The next section discusses in detail what is meant by cognitive development theories, two main schools of thought in cognitive development, those of Jean Piaget (1986) and Lev Vygotsky (1978). It further discusses different dimensions of cognitive development in children, adults and bilinguals. The first sub section regarding children summarises approaches of development in stages by Piaget and of social cognition by Vygotsky. The sub section regarding adults mainly focuses on how cognitive development is different in adults as compared to children and old people. The third sub section, which is about bilinguals, sums up the views of cognitive linguists

regarding how cognitive development in bilinguals takes place and its mentionable features. Fourth section presents approaches of theorists that lead to emergence of Social Constructionism as a discipline. These approaches underpin the idea that the reality around us, be it in form of language or cognition or identity etc. is socially constructed. These approaches provide a rationale for sociolinguistic research, which, in itself is a separate discipline dealing with the nature of interaction of language with society and its outcomes in form of linguistic variation. One of the sub sections in the study brings to light the theories that explain how cognitive development is social in nature, terming the phenomenon 'social cognition'. In the fifth section, the issue of social class and social stratification has been discussed, which the present study takes as a correlate of cognitive development of syntax among Pakistani EFL learners. This section covers issues such as what is meant by social stratification, what is meant by the term social class, how is social class related to educational achievement and schooling in general, and to language and linguistic development in particular. The last section introduces issues related to syntax and syntactic development. There is a discussion of how L2 syntax is processed in adults, what a syntactic category is and what is meant by a constituent, both of which are important ideas to understand for later discussion in the data analysis chapter, as expected. Further, a sub section is devoted to the relationship between cognition and syntax, and the final sub sections tries to sum up the discussion and focuses on the variation of syntax, which is ultimate study in the present research. In the end, a brief summary of the discussion and synthesis is presented, to make a comprehensive and coherent picture of the whole discussion regarding different areas involved in the study.

First of all, it is fair to discuss the status of English as a foreign language in Pakistan as this is the core context of the present study, and as to how English is an FL in Pakistani context, and what standards are to be followed by the teachers and administrators in the context where English is being taught as a foreign language.

2.1   English as a Foreign Language

English has spread far outside the countries where it was used by the monolingual English speakers who were said to be native speakers. Now, it is spoken in various

counties across the world as a foreign or second language. Whereas it is native language (ENL) in the countries where people speak it as their mother tongue, it is also spoken as second language (ESL) in many countries, and in yet others it is used as a foreign language (EFL). Speakers of the nations other than the ones in which it was spoken by monolingual English speakers are using English to interact with the world.

Mollin (2012) has commented on the views of Kachru (1985) who explained how English is no more restricted to the native speakers. In her explanation of Kachru's model, Mollin says that the first thing Kachru's model does is that it draws distinction between the native speakers in Inner Circles and the non-native speakers in the Outer and Expanding Circles. She elaborates that according to Kachru's model "English is used in all domains and for all communication purposes in the nations of the Inner Circle, and for many important intra-national functions in the Outer Circle". "In the Expanding Circle", as Mollin explains, "English is learnt as a foreign language for the purpose of communication with the Inner and Outer Circles" (p. 12). Kachru considers the speakers of Inner Circle as norm-providers, of the Outer Circle as the norm-developers, and the speakers of the Expanding Circle as norm-dependent.

Mollin (2012) further debates that English being used as lingua franca in Expanding Circle countries may just be moving towards the direction in which it would attain the status of a variety in its own right. It no more carries only the native identity. As cited by Kirkpatrick (2007) ". . . English now has multicultural identities" (Kachru 1985, p. 357). By virtue of its spread across the boundaries of the countries that are considered native, English has acquired the status of lingua franca. Same view has been expressed by Kachru, as cited by Rajagopalan (2004, p. 111), who says that "the native speakers [of English] seem to have lost the exclusive prerogative to control its standardisation" (p. 30).

However, Kachru's views about the spread of English outside the native areas as discussed in the above paragraph were contested by Quirk (1990) who suggested that local verities of English have lower status than the standard native (British) English. In Ranta's words (2004), Quirk (1990) proclaimed that "the so-called national variety of

English is an attempt to justify inability to acquire. . .'real' English" (p. 8). He did not agree with the idea that new varieties such as Indian or other varieties of English are emerging, but wanted people to follow British English as standard. Ranta criticizes this approach by Quirk and suggests that such a rigid approach to follow "correct" and "incorrect" perspective would nothing but inhibit a language from developing and growing naturally. She also cites Thomas (1991) who points out that:

> By favouring etymological over functional criteria in judging the desirability of linguistic items, purism may be a serious impediment to the spontaneous…growth of a language in accordance with its socio-communicative needs. (p. 219).

Quirk also mentions the role English plays in what he calls 'ESL countries' which is that of serving the 'internal purposes' such as administration, broadcasting and education. (Quirk & Widdowson, 1985, p. 02). What he means to say is that English can be taken as a foreign language only where it is not performing these roles. These points are important in the context of this study as they highlight the status of English in Pakistan where it is taught as a subject only, whereas all government schools follow Urdu as a medium of instruction. Hence, the overall educational system cannot be described as English medium. Also, the language used for broadcasting is largely Urdu, and in administration, English is used to an extent but not all administrative departments own it as an official language and there is a recent move to replace English with Urdu as official language under the orders of the superior judiciary (Haider, 2015. p. 01).

In the light of Kachru's division of the users of English language, Pakistan may be rated as a nation that is more of a "norm dependent" than "norm provider" or "norm developer". English here is used as a lingua franca. A detailed discussion on the issue will be done in the next sub-section. For the moment, we extend the discussion of English as an FL to what standards do the non-natives follow in their teaching-learning context.

2.1.1   Standard for non-natives

When it comes to learning English as a foreign language, the need is felt to determine what might be a good model to follow for the teachers and administration preparing the courses and course outlines. In such a case where more than one language

varieties are being used across the world, it becomes difficult especially for the non-native users of English language to decide which of the native varieties of English language should be taken as a model to be taught. Kirkpatrick (2007) makes this point when saying that "many different varieties of English are spoken in ENL countries. The idea that everyone speaks the same 'standard model' is simply incorrect (p. 28). Thus, we need to look at the standard variety of English language which we could follow for teaching purposes and base the English language-related syllabi on, especially when ELF is not an established variety of English language.

Mollin (2009) cites so many studies that suggest that the standard to be followed by the non-native speakers in teaching learning situation should be the native variety. She cites example of Timmis (2002), who, in a survey of 400 students from different countries found out that "the learners are highly oriented towards a native-speaker standard and would like to approximate this standard as closely as possible" (p. 53). At times, in her words, English spoken by the native speakers is a status symbol and the students want to speak like them in order to be recognized as good speakers. Using a language which appears different from non-natives may at times be considered as wrong or ungrammatical, and hence stands as undesirable for the students.

Another study cited by Mollin (2009) is that of Dalton-Puffer et al. (1997) who, in her words, "found a clearly negative attitude among Austrian advanced learners of English towards their own non-native accent, valuing native accents more highly" (p. 53). In another study, Murray (2003) found out that the Swiss-English teachers revealed that the non-native teachers teaching in Switzerland are conservative and prefer teaching in near-native English in which they have heavily invested, rather than accepting the European lingua franca English, when it comes to teaching (Mollin, p. 53).

Finally, Mollin (2012) gives her recommendations in the light of the above cited studies and suggests that "in discussing implications for teaching, (…) since we have no ELF variety, and since learners are oriented towards the native-speaker standard, the native norm should remain the teaching model …" (p. 54).

These sums up the discussion about what model should be followed in an EFL classroom by the teachers who are teaching English to their learners not as a native or second language, but as a foreign language. However idealistic the stance taken by Quirk & Widdowson might be, and howsoever difficult or un-attainable the target of teaching native model to the foreign learners may be, they cannot be allowed to deviate from standard when it comes to teaching language in academic context.

2.1.2   Status of English in Pakistan

The debate of English being a foreign language in the norm-dependent countries brings us to the discussion of the status of English in Pakistan where English is normally seen as a language that is preferred by upper class only. Urdu is the national language in Pakistan with the provinces having their own major and minor languages that, however, do not carry the status of national language as many provincial languages do in countries such as India. English, in Pakistan, is also associated with power elite who use it as a weapon to maintain their higher social status and keep the distance between themselves and the ordinary men belonging to lower middle and lower classes. The view of English being a powerful language in Pakistan is presented by Rasool and Mansoor (2009) as cited by Shameem (2011), who suggest that "English is the language of power in comparison with Urdu, the national language, and other regional languages of Pakistan" (p. 04).

Whereas English is looked up to as the language of power and a language with which better prospects are associated in terms of economic and social achievement, it is not the language of ordinary men and hence does not enjoy the status of Second Language as it would in many other non-native countries. It enjoys a different status in Pakistan than the one it enjoys in the countries falling in the Inner circle and Outer Circle as described by Kachru (1985). It also has a different status keeping Quirkian (1990) terms in mind, which differentiate between internal purposes of language and its use for the sake of communication with the outer world. Among the internal functions, he includes administration, education and broadcasting. He thinks if a language is performing these functions in a non-native country, it can be considered second language

of that country, and such countries can be termed as ESL countries. In Pakistan, the situation is different as English does not fully perform these functions. In administration, it is used but it does enjoy the status of official language. This is despite the fact that National Language Policy promises to give official status to Urdu which is the country's only national language. The important point to note here is the ambiguous policy of the government institutions which continue to use English for official communication despite the fact that it has not been given official status by the government. Jabeen et al. (2011) further explain the situation regarding the use of English as official language in Pakistan and point out that "After the Independence, English was allowed to be the official language for a limited period of time and the government announced to support and expand Urdu language so that it could be used for official purposes" (cited in Khalique, 2006, p. 112). English is still being used in official correspondence but steps are being taken by the government to minimise its use in official correspondence.

The second important area Quirk (1990) mentions is education. In the sphere of education, one can see a huge divide in terms of people's access to English language. Private schools provide education in English medium and cater to the students belonging to economically sound families / elite class and some portion of middle class whereas in public sector, medium of instruction is largely Urdu except a 30-35 minutes class (Shamim 2011, p. 06).

The third purpose which a Quirk (1990) mentions is broadcasting and in this realm also, one can see that the language of broadcasting in Pakistan is largely Urdu with the exception of a few English bulletins. It is also important to note that there is hardly any TV or radio channel in English language that reflects upon low level of acceptance for English among general public.

So, we can see that English does not perform the internal functions in Pakistan, a condition, which, if it was fulfilled, would have given English the status of Second Language to English in the country. And the fact that it does not perform the internal functions and is not 'institutionalised' as such, to use Kachruvian term, is enough to support the view that it is to be treated as a foreign language in Pakistan.

Keeping aside the discussion of status of English in Pakistan in the light of theories that assign a certain status to a language in a country, the fact remains that the new generation is aspiring to gain access to English more and more as it offers a great promise to be the language of economic and personal development. Good communication skills in English offer the youth a great advantage over those who do not have so good communication skills in English.

So far, we have discussed what foreign language is, what standards are needed to be followed in a country where a language is sued as a foreign language, and the status of English in Pakistan. Now, a detailed analysis of ELT situation in the country will be presented which will provide a background to understand the issues faced by learners of English in Pakistani schools and universities.

2.1.3   ELT situation in Pakistan

As has already been discussed, English is taught in Pakistani schools, colleges and universities as a foreign language. Most of the people use it as foreign language because they do not have its practical utility in their life outside homes. Only some of the masses need to use English outside home when in offices etc., because it is there that English is used for official communication. Apart from a limited official use, English is a foreign language for a major part of the country's population that lives in rural areas or are not job-dependent.

With reference to the educational system in Pakistan and the divide between the English and Urdu mediums of teaching, Coleman (2010) points out that there are four educational systems running parallel in Pakistan. These are:

- private elite English medium schools

- private non-elite 'English medium' schools

- government Urdu medium schools

- dini madaris (madrasas)" (p. 10)

We see that the elite schools are mostly private and follow English medium of instruction. The private schools also include non-elite English-medium schools which normally are the means of good education for the middle or lower middle class but provide less good education than the elite private schools anyway. A considerable number of schools in Pakistan are Urdu medium and are run by the government. These schools offer incentives such as free textbooks and free schooling. (Coleman, 2010. p. 10). The last category of schools is called *madaris*, which are religious schools. These schools provide free schooling and boarding to poor children and some of them teach English as a compulsory subject along with their regular curriculum which is normally based on different subjects than the ones taught in government or private schools of both kinds.

Due to the status of English in Pakistan as discussed above, the language is being taught in the country as a foreign language but despite the fact that there is a great controversy regarding its status whether it is foreign language or second language, the demand for English language teaching is ever increasing due to the status it provides to those who can speak it and have better speaking and writing skills than to those who do not have.

With reference to the courses of English language, the situation is as diverse as the system of education itself. The private schools offer textbooks that are more communicative and functional in nature and resultantly, the students who study in these schools have better English language skills as compared to those who study under conventional system in government schools. But the vast spectrum of education is governed by the traditional exam-based courses that do very less intend to teach language as such, but aim more to promote rote-learning. The students who study under conventional system, despite getting higher grades and good positions, lack the skills that are to be imparted to them through a syllabus which would promote skills rather than prepare them for better score in exams only.

In terms of learning language skills, focus is more on writing skills and to some extent reading skills also, but the important listening and speaking skills are ignored

altogether. The evaluation system does not allow checking oral skills of the students and academic performance of the students is judged on the basis of their performance on exam-paper only. This is the reason why the students are unable to develop listening and speaking skills and even after completing their formal education they are unable to speak or understand English the way they should, and then in order to gain communicative competence they have to recourse to the institutions that offer language courses with specific focus on speaking skills.

Apart from the rote learning-based examination system, another reason for the not so good situation of English Language Teaching is the unavailability of trained teachers of English. Most of the teachers are untrained and get into the job simply after passing a test and an interview. Hardly few teachers make themselves a part of professional development activities and very rarely teachers are a part of research activities. The state of affairs is not so encouraging in the government schools as the teachers are even found absent from classes most of time.

The third reason is non-existence of systematic course evaluation strategy. The textbook evaluation in Pakistani context is not done on systematic basis. Decisions regarding change of syllabus are taken on the basis of general understanding of the authorities in the educational bodies and the systematic up-gradation and development of the courses is hardly in practice. As a result, the students' needs are not catered for and the ultimate losers are the students themselves.

The above overview of the ELT situation in the country is important to understand the context of the research. English in Pakistan is taught as a foreign language, and the language teaching situation in the country with reference to English is such that different classes in Pakistani society give different importance to English language. There is different system of education for the affluent class and entirely different one for the less affluent one. The dual standards in imparting education to the public are highly likely to be reflected in the language skills, abilities and standards of the learners as they can be easily distinguished in academic or practical life on the basis of their performance in English language. This factor has a bearing on the performance of

the learners in their later educational life, which will be the main subject of discussion in this dissertation. The ones who study in English medium schools clearly stand out among the rest when it comes to their English language skills.

Form the discussion of the context of research, we move onto the theoretical debate surrounding language development. Acquisition is the term that is normally applied to the development of a person's language. It refers to how learning of first, or second or other languages takes place in the people. The phenomenon of language is one of the dimensions of human learning, which is understood differently by different psychological approaches. Therefore, before discussing language acquisition or development theories, let us see how learning theories provide the basis for language development theories. The debate of language learning theories will be crucial to understanding the stance taken by this study, which aims to see how the interaction of cognitive and social constructionist theories takes place as language develops among the learners in Pakistani context.

2.2   Learning and Development of Language

Language is one dimension of learning that occurs as humans grow up. Various theories have been presented to comprehend how the process of learning is accomplished, which is both complex as well as dynamic. No universally agreed definition can be presented for learning, but Ertmer & Newby (2010) present Schunk's (1991) interpretation of Shuell's definition that covers main ideas: "Learning is an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience" (p. 45). As language theories stem from general learning theories, it would facilitate the understanding if we looked at the historical approaches to learning that explain where knowledge came from and how people came to know? To compare the modern learning theories such as behaviourism, cognitivism and cosnstructionism, a brief description of the age old learning theories is presented here. Ertmer & Newby (2010) cite Schunk (1991) who explained *Empiricism* as a view that considers experience as the primary source of knowledge. In their description, the approach believes that "organisms are born with basically no knowledge and anything

learned is gained through interactions and associations with the environment" (p. 47). This approach espoused the belief that knowledge is derived from sensory impressions. The second important approach to learning was *Rationalism*, a belief that knowledge is derived from reason without the aid of senses (Schunk 1991 as cited by Ertmer & Newby 2010. p. 47). This is the belief that humans discover what is already present in their mind. The knowledge is present in mind is only discovered or recalled when humans confront with the reality.

These approaches to learning facilitate our comprehension of the existing theories of language which take one or the other stance in order to explain how development of language is accomplished by the learners.

Having discussed the different learning approaches in the history of psychology, we move on to the discussion of theories of language development. In the following section, we shall discuss major language development theories, that is, behaviourism, cognitivism, and social constructionism. The intent here is to provide a structured framework of discussion regarding various language development theories, and see how the interplay between cognitive and social interactionism theories can be understood in language development of the learners being studied.

2.3   Research in Second Language Acquisition (SLA)

There are different approaches to understanding how language is acquired by children and adults. Language acquisition studies generally focus on the development of language among children, whereas in second language acquisition (SLA) the development of language among learners learning a second or foreign language is researched. Both domains differ in that the development of language in children might occur alongside their cognitive development, but in SLA, the development of language could mean the comprehension of the rules of the second language and the ability to communicate in it, after engaging with the rules consciously. Stranzy (1995) defines SLA as "the process of becoming competent or proficient in a second or foreign language, from the first use of a language item to its advanced applications at a later stage". (p. 8). Primarily, the focus of the discussion here is SLA theories as the primary

concern of this research is the learners of English as a foreign language in Pakistani context.

Marinis (2003) explains the difference between the L1 and L2 acquisition and opines that the primary difference between the two is that of ultimate attainment. In her view, the children acquiring L1 manage to acquire the language they are exposed to in relatively shorter time than the adult L2 learners, who do not manage to fully acquire grammar of L2 despite more exposure in the target language. She further explains that L2 researches focus on the 'offline' techniques such as "grammaticality judgment, elicitation and comprehension tasks" (p.144) and so on. The areas of interest to the L2 researchers have issues such as Universal Grammar (UG) being available or not to the L2 learners, and whether the 'source of divergence between L2 grammars and native grammars is the inability to reset UG parameters, and whether there is transfer from the first language to the second" (p. 144). Apart from Marinis, Stranzy (1995) also comment on the researches done in SLA and calls it a fairly new interdisciplinary subject. He says that this field of research is based upon research methods developed in the fields of psychology, anthropology, foreign language, and psychology etc. He opines that the "purpose of SLA studies is to describe and explain the way second languages are learned in terms of both linguistic and communicative competence" (p. 8) The researchers in this field of research study learners' performance and their understanding about what is the correct or incorrect use of language. He further elaborates that SLA carries out research with the aim to find out effective ways of learning and teaching foreign language and assumes that these researches can affect the way foreign language are learned. Research is done of the language of learners by examining their samples of oral or written texts. The goal of SLA research, in Stranzy's words is to "identify errors, establish developmental patterns and sequences, trace variability, and explore use" (p. 9).

Language acquisition and SLA studies help us understand what dimensions of research is undertaken by the researchers in the field. This discussion provides rationale for the research in the learners of English as a foreign language in Pakistani context. The goal of this research is the same as is explained by Marinis and Stranzy in the above

paragraph, that is, to make sense of the developmental patterns among the Pakistani EFL learners and to identify the factors that interplay with their development.

2.4   Language Development Theories

The purpose of the discussion about language development theories is to set a theoretical background for the present study. This section will provide an evolutionary analysis of the developmental theories. After giving a brief summary of behaviourism, which is pre-cursor to cognitivism, it will discuss in detail the cognitive development approach and then contrast this approach with social cognitive theories of language. Social cognitive theories bridge up the gap between cognitive and social domains of linguistic research. The main question that this discussion tries to answer is the ontological question as to what is the origin of language. The reference to behaviourism will be given with a view to provide historical background to the approaches to the origin of language, whereas the main debate will be about cognitive and social constructionist approaches to language. An effort will be made to provide a conceptual background to the point of view that language is more of a social cognitive phenomenon, rather than a purely cognitive or purely social one.

Let us first see what Behaviourism was, and how its proponents viewed the development of language.

2.4.1   Behaviourism

The empiricist understanding was behind the birth of various learning theories, and one of these leading psychological viewpoints was behaviourism. Behaviourism stemmed from Structuralism of Ferdinand De Saussure (1857-1913), who was a French philosopher. It was in the middle of the 20th century that B.F. Skinner (1904-1990) proposed that all learning, whether verbal or non-verbal, should be treated as habit formation, or a change in the observable behaviour made as a function of events in the social environment. Behaviourism treated all learning as conditioning, thinking that humans adapt to the environment around them, and the instruction focuses on conditioning. (Kramsch & Thorne, 2000 as cited in Xiangui, 2005)

Skinner believed that habit formation could be developed through imitation, positive reinforcement, and response. Language learning, whether first or second, was considered habit formation by him. He believed that correct responses by the speaker, whether learning first or second language, could be rewarded and reinforced and in this way language could be developed like a habit. Hence, the item under study could be repeated by the teacher and the learner made to be in habit of speaking that item. As Xinhuai (2005) cites Muller (1971) "analogy provides a better foundation for foreign language analysis" (p. 121). Hence, Behaviourism seems to advocate for developing language among the learner in the controlled environment through practice, memorization, and repetition of the grammatical structures. In such a situation, instructional strategies such as audio lingual approach /mechanic pattern drills could be helpful in developing oral skills. This approach was, however, rejected with the advent of cognitivism which favoured the view that language was a cognitive process, and the children had an innate capacity to recognise universal rules present in all languages, on the basis of which they make certain generalisations.

Since behaviourism is not directly related to the discussion in the present study, and a reference to it is being made to give a background of the discussion related to the origin of language or how language develops in its speakers, we are not dedicating more space to its discussion. However, cognitivism and social constructionism will be discussed in greater detail as both are directly related to the main theme of the study. Cognitivism will be discussed not only as a language development theory but will also be discussed as a discipline. Similarly, there will be a substantial discussion about social constructionism and social cognitive theories of language that emerged as a result of social constructivist thinking.

2.4.2 Cognitivism

Cognitivism emerged in response to the behaviourists' claims that language is learned through imitation. Noam Chomsky (1968d) opposed Skinner's belief that language is habit formation, and rather said that children learn language as a result of innate ability. They seem to have a blueprint in their mind which helps them recognise

general rules present in all universal languages. He believed that human brain has an innate capacity of language. His focus was the syntactic ability present in children who seem to understand the rules that govern the construction of sentences in a language. He asserted that children learn complex structures of language at such a tender age, which could not have been possible if there wasn't 'a grammatical structure for language hardwired in their brains before they ever hear human language' (Language development, 301). This is what he called *universal grammar*. According to Chomsky, when child hears language, the rules in his mind are triggered which he is able to apply to other sentences that he produces by himself, and it could not have been possible only by hearing the small amount of speech he hears. He gives example and says that children say things that they have never heard.

For instance, "The cats eated the mouses" rather than "The cats ate the mice." (p. 301).

If child were to imitate language, he would say this since he would have never heard such words as 'eated' from adults. This means that they are not just imitating, as Behaviourism believed, but they apply certain rules and create such sentences. This example is the proof that children have learnt the pattern but they are applying the pattern to the wrong word, which are supposed to be exemption. By universal grammar, Chomsky means the children's ability to apply such generalisations to whatever language they speak, and this process of generalisations is not expected to be limited to a particular language.

The generative beliefs of Chomsky, however have faced a serious criticism of focusing merely on the language universals and ignoring the language-specific features that pose a serious challenge to the child learning a language. As Dąbrowska and Kubinski (2004) cite Croft (2001), who opines that the cross-linguistic analysis of grammars of language reveals that "grammatical differences between languages are vast and neither syntactic categories nor syntactic relations are universals" (p. 01). Further, theorists opine that the structures present in English can be traced in other languages by the generative theorists alone, and may not be traced by other theorists who do not take a generative view of those structures, and hence cannot recognize them. Hence, they opine

that a learning system that is capable of learning the non-universal and language-specific features would also be able to learn some of the universal features of language.

These are some of the criticisms of generative cognitivist theory that render space for development of alternate theories, as shall be discussed in the following pages.

In contrast to the behaviourist approach that focused on observable behaviours, cognitivism paid attention to unobservable constructs such as mind, attitude, memory, reflection, and other mental processes perceived as internal. Cognitivists believed that just like other aspects of cognition, human mind is geared to processing all kind of information including language, which is of course a highly complex phenomenon. According to these principles, as Ziangui (2005) discusses, "greater importance is attached to acquiring conscious control of the language patterns through study and analysis than through analogy" (p. 122). Further, he cites Mueller (1971) who believed that "greater importance is given to understanding the language structure than to facility of using it" ' (p. 122). The sub skills that were the focus of this approach are "applying grammatical rules, choosing the appropriate vocabulary, following the pragmatic conventions governing the use of a specific language" (MacLaughlin (1987) as cited by Zighui, p. 122).

In a later study, Rahimpur (2010) argued that "language acquisition depends on cognitive development and requires cognitive prerequisites or co-requisites" (p.37). According to him, this is the reason why cognition is taken as an underlying language skill. Children acquire cognitive bases for the forms of language before they acquire the forms. For example, according to Rahimpur, "the child will learn where-question (location answer) prior to the when-question (time answer), because the concept of a place is acquired prior to the concept of time and this order is cognitively determined"' (p. 37). Therefore the order of linguistic development is considered to be the reflection of cognitive growth which preceded linguistic development.

As cited by Rahimpur, Brown (1994) argues that there is a relationship between language and cognition. Also, he cites Hatch (1983) who claims that "language is only one of the many analytical activities which depend on cognitive development and it is

also true that cognitive development and language development may grow side by side in early childhood, an inter-relational model that sees cognition as the basis for language development" (p. 37). Cognitivism equated learning with "discrete changes between the states of knowledge rather than with the changes in the probability of response" (Ertmer & Newby, 2013, p. 51), as behaviourism believed.

These developments marked a shift in the understanding of the origin of language, focusing on it being a nativist phenomenon rather than a habit formation process. The apparent question nativist cognitivism raised was that if language develops among the speakers as a result of imitation, what about the men who used language when there was none? This criticism raised serious questions on the behaviourist conception of language, and made way for a cognitive understanding of language.

2.4.2.1. Other nativists.

Apart from Chomsky, there are other theorists who pointed to the linguistic faculty present in human brain. For example, Wanat (1971) while explaining the nativist perspective of language development writes that "language development is related to the growth of the human brain, and that maturation in language parallels maturation in motor and thinking skills" (p. 145). As further discussed by Wannat, Lennberg believed that language is biologically determined and that no other creature than man has language. Lennberg studied language development in normal children and the abnormal children with congenital and environmental influences, and found out that languages share universal properties. These studies strengthen cognitivist claim that children do not acquire language as a result of receiving input and by forming a habit to repeat that input. The nativists including Chomsky and other mentalists believed that language is much more than habit formation because the children seem to produce novel utterances, which are different from the input they receive in form of the language spoken to them. They seem to form certain generalisations, as a result of which they commit errors such as forming 'ed' past forms for the irregular verbs such as 'go', 'draw', 'speak', and so on.

Nativist theory however, is problematic in the sense that it does not talk about the nature of language universals and does not tell whether language is actually unique to humans.

The nativists' claims that emphasize the understanding of language as a faculty present in the mind, however, were soon rejected by theories such as 'social constructionism' which focused more on the role of social interaction in development of language, rather than on it developing in cognition without any outer influence. Cognitivist belief of language developing in human mind rather than being a result of habit formation, then, were to last only till the rise of SLA, as it gave birth to 'social constructionism' which was a direct reaction of the cognitivist claims of language being a divinely endowed capacity. Social constructionism endeavoured to explain language as something that has meaning in social lives of its users. It is not a faculty simply endowed by nature that starts functioning automatically at a certain age. It rather is a phenomenon that cannot be understood without studying social dynamics of its use. Speakers are seen to be using language as a tool to do their social tasks such as greeting, approving and disapproving others' actions, negotiating meaning and forming discourses, which are much above simple description of it as a meaningful combination of words, as cognitivism believed it to be.

2.4.2.2 *Cognitive linguistics as a discipline*

As Zuengler & Miller (2006) cite, DeKeyser & Juffs (2005) assume that "Nobody would doubt that language, whether first or second, is an aspect of human cognition" (p. 37). Cognitive linguistics (Hereinafter referred to as CL) developed as a result of what Dirven & Ibanez (2010) call 'cognitive commitment'. They explain the term and say that it is "the conviction that there is fundamental unity and interaction among all cognitive faculties including perception, attention, categorization, conceptualization, memory, reasoning, and language" (Lako. 1990; Talmy 1997). They suggest that CL is popular because it does not reduce language to a self-sufficient system, and sees it beyond the "dichotomies such as syntax vs. semantics, lexis vs. grammar, semantics vs. pragmatics, langue vs. parole, competence vs. performance, and synchrony vs. diachrony" (p. 14).

According to Dirven & Ibanez (2010), the belief that the linguistic sign is arbitrary has given motivation to look for linguistic organization based on cognitive principles. This direction contrasts the claim of generative linguistics of language being an "autonomous system, detached from any other type of knowledge, including encyclopedic or world knowledge" (p. 14). Cognitive Linguistics holds that there is no clear-cut distinction between linguistic and encyclopaedic knowledge (Haiman, 1980; Langacker, 1987).

Littlemore (2009) in her introduction to CL summarises the claims on which the foundations of CL as a discipline are laid. She points out that there is no autonomous "language acquisition device" which is responsible for language acquisition and processing, and that language is 'usage-based' and is a product of physical interaction with the world. Language is governed by a single set of cognitive processes, and these other knowledge or learning is also governed by these very processes. Other principles are that words only provide a limited means of expression which is imperfect, and meaning is inherently situated in language with grammatical meaning being more abstract than lexical meaning (p. 01).

The principles on which CL is based, justify an investigation of language as a cognitive phenomenon. Syntax, which is one of the linguistic components, has already been discussed as developing in cognition, and there has been enough evidence of all cognition being social cognition, as discussed in the relevant section. It is, therefore, justified that a study with the intention to look for a link between linguistics cognitive development under the social influences such as those of social class be carried out to look for a possibility of how cognitive development of language can be affected by social factors.

2.4.2.3   Cognition and second/ foreign language

Learning of second or foreign language by adults must also be taken in that light as their cognition develops in terms of grasping the system of a new language gradually, and so does their actual performance of the language. In their discussion of Processability Theory in *Theories of Second Language Processing*, Methcell & Myles (2004) suggest that language develops along different stages of cognitive development, and as cited by

them, Pienemann (1998) calls these stages as 'processing procedures'. In this processing procedure the exchange of grammatical information across L1 and L2 occurs (pp. 111-115). Development of language in stages means that learners do not achieve communicative competence at once, but do so gradually. Safriani (2009) opines that communicative competence "….does not only refer to a learner's ability to apply and use grammatical rules, but also to form correct utterances, and know how to use these utterances appropriately" (p. 01). The present study will try to explore how far the learners belonging to various social classes have acquired different communicative competence due to difference in their syntactic and cognitive development.

2.4.2.4   Cognitive development in adults

Keeping in mind the sample of the present research, it is not out place to discuss the dimensions of cognitive development in adults. The stance the present study takes is that cognitive development of syntax among the adult learners of English in Pakistani context is under the influence of social class. But before going into the discussion of how cognition can be called a socially influenced phenomenon, it is important to understand how cognitive development among adults is different from the development in children during acquisition of L1.

Fischer, Yan & Stewart (2003) discuss how adult cognition differs from cognitive development of children. They discuss that the complexity levels of adult cognition change in two ways. Firstly, under different circumstances an adult shows multiple levels of cognition. As adults are capable of wide range of levels, cognitive performance in them varies much more than it does in children. Adults can act maturely, think dynamically, flexibly and contextually, and can handle cognitively complex tasks whereas children keep on making errors and at times ridiculous mistakes, and tend to act in simple ways. Second, in adults, the upper limit of cognitive functioning keeps on increasing beyond Piaget's formal operations (Inhelder & Piaget, 1955/1958; Piaget, 1975, 1983, as cited in Fischer, Yan, & Stewart (2003, p. 5-6). Some of the strands in the domain continue to develop in adult and the optimal cognitive skills continue to increase. Thus, the adults' cognitive skills are more flexible and adaptable to requirements of the

situation than those of children. At times they may also make unwise decision when they lack contextual support. As Fischer, Yan & Stewart (2003) sum up, "The dynamics of adults' multilevel performance vary with contextual support, prior experience, and joint action with other people" (p. 181).

These studies are important as they hint at the difference between cognitive development in adults and children. Studying cognitive development in adults is important from the perspective of the present research due to two reasons; firstly because the sample of the study are adult learners whose cognitive development is different from the cognitive development among children, and secondly because it takes into account age as an extraneous variable. The viewpoint presented by Fischer, Yan & Stewart (2003) justifies a study of cognitive development of language along the lines of different age categories as this study intends to do.

Apart from the above study, Martin & Zimprich (2005) discuss two approaches about cognitive development in middle age. On one hand, they discuss the decline of cognitive resources which emphasise the need to identify groups at the risk of decline. As cited by them, Schie (2000) suggest that "timely identification of at-risk individuals would permit preventive measures targeted at early stages of decline" (p. 180). Middle age could be an ideal age for preventive measures because the chances of training gains increase at the life time peak level. The second approach is that as midlife training may be characterised by cognitively demanding activities, it could be interesting to study how cognitively demanding activities could protect the middle aged person from cognitive decline or provide 'compensatory potential' for the later life.

Further, Martin & Zimprich (2005) discuss the ways in which middle life differs from young and old age. First, the person-environment interaction of middle life with young and middle life is hardly comparable as it may demand different developmental tasks and may have different everyday demands (Havighurst, 1948/1982; Sternberg, Grigorenko, & Oh, 2001). For example, the challenge of schooling in young life and of retirement in adult life may not be compared to middle life which "consist of work and

family environments requiring the particular skills of organizing, planning, problem solving, and multitasking" (Schooler, 1999, as cited by Martin & Zimprich, p. 180).

The second point of difference discussed is that in young age, formal training which includes shared and homogenous environment such as school or peers, influence cognitive development (Espy, Molfese, & DiLalla, 2001), whereas in old age, cognitive development becomes depends much on "physiological factors such as sensory and sensorimotor functions" (Baltes & Lindenberger, 1997; Li & Lindenberger, 2002; Lindenberger & Baltes, 1994; Hofer, Berg, & Era, 2003, as cited in Martin & Zimprich, p. 180). In the middle age, on the other hand, cognitive development depends upon the individual environments (Sternberg et al., 2001) as each individual is doing a different job, the respective environments of which influence cognitive skills development. (Kirlik & Bisantz, 1999). Thus, the cognitive patterns of individuals may be less correlated and more differentiated.

Thirdly, in young age, one needs developmental potential to support maturation process and academic achievement (Rees & Palmer, 1970) and as Havighurst, (1948/1982) suggest in Martin & Zimprich "to prepare for job demands" (p. 181), whereas in old age, age associated decline may be prevented through cognitive training. On the other hand, in middle age, "cognitive potential is typically used to develop job-specific skills, thus contributing to the development of highly job-specific and individualized change trajectories" (Moen & Wethington, 1999). Also, as discussed by Kliegl, Philipp, Luckner, & Krampe (2001) in Martin & Zimprich, in middle life the effects of cognitive training and it transfer are likely to be higher than in young or old age

Fourth, cognitive development in young age goes from low to high, across different tasks. In old age, cognitive performance naturally declines, and hence there is a decrease in performance from a high level downwards. Overall, the level of performance at middle age represents qualitative difference from young and old age groups.

2.4.2.5 *Cognitive development in bilingual*

English, in some cases could be L2 rather than FL. Some of the learners might be learning English as L2 and hence the issue of cognitive development among bilinguals

becomes relevant in this discussion. Lee (1996) in his study presents an overview of influence of bilingualism on cognitive development. He draws attention of the readers to the early studies conducted during the first half of the nineteenth century that grew out of this social context. These studies suggested that bilingualism had a negative impact on cognitive development and called it a reason for their academic under-achievement and lower IQ scores. He presents the evidence provided by Darcy (1953) who concluded that "....bilinguals suffer from a language handicap when measured by verbal tests of intelligence" (p. 50). This language handicap was considered to represent "the linguistic and mental confusion that retards intelligence through the college years" (Saer, 1923, cited by Lee, 1996). Furthermore, Lee cites Macnamara (1966) who claimed that "balance effect" caused lower verbal intelligence among bilingual children and their achieving proficiency in a second language resulted in a loss of proficiency in their first language. Thus, it was concluded that the linguistic proficiency among bilinguals was always lower than the proficiency among monolinguals. It was also suggested that as compared to monolinguals, bilingual children demonstrated weaker verbal abilities, including poorer vocabularies (Barke & Perry-Williams, 1938), deficient articulation (Carrow, 1957), lower standards on written composition and more grammatical errors (Harris, 1948, as cited in Lee, p. 501).

The researches have suggested a positive link between bilingualism and cognitive development, and varying models have been presented to explain the phenomenon. Lee (1996) points to objectification theory which claims that bilinguals learn more about forms as well as functions of language in acquiring two languages, and this affects various cognitive processes. He cites Vygotsky (1978, 1986) who discusses effects of bilingualism and opines that the bilingual child is able "to see a language as one particular system among many, to view its phenomena under more general categories, and this leads to awareness of his linguistic operation" (p. 510). Moreover, the bilingual's ability to objectify language is linked to a non-syncretism, as Piaget (1929) called it, which is that "the awareness that attributes of an object do not transfer to the word itself" (p. 502). Edwards and Christophersen (1988) found that this capacity in bilinguals may be at an advanced level, and Olson (1977) has stated that this capacity may be linked to

literacy. Lastly, when the bilinguals learn that one referent can have two words for it, it may increase the knowledge of L1 and of language as a symbolic system in them (Lee, p. 510). Hence, these children start processing concepts through higher levels of symbolic and abstract thinking (Hakuta, 1986).

The second model, as Lee (p. 511) suggests, is consistent with code switching theory. Bilinguals may have extra flexibility due to their ability to move easily from verbal production in a language to a production in another language. Peal and Lambert (1962) submitted that the bilinguals' ability to code-switch provides them an extra mental flexibility when they are solving cognitive tasks.

Hence we see an evolution in approaches towards impact of bilingualism on cognitive development, wherein the distance has been covered by the researchers from the conception of bilingualism as disadvantageous for development of linguistic proficiency to that of its being advantageous in various ways. Also, there is a belief that the sociocultural aspect of bilingualism also presents bilinguals with an added benefit as they absorb the socio-cognitive associates coming along with both languages they have learnt.

The discussion of cognitive theories presents the claims of language being an innate function. These theories of cognitive development, however, stand little ground when confronted with the theories of social cognition which rebut Chomsky and others' claims that language is purely a cognitive phenomenon.

2.4.3   Social cognition theories

The philosophical assumptions of both behaviourism and cognitivism were primarily objectivist that means that the world is something external for the learner. Constructionism, however, gives a different understanding of learning and views it as something that learner creates himself out of his experience. As cited by Ertmer & Newby (2010), Jonassesn (1999a) opines that "Most cognitive psychologists think of the mind as a reference tool to the real world; constructivists believe that the mind filters input from the world to produce its own unique reality" (p. 2). This is the departing point for constructivism from cognitivist approach. Explaining his theory of social

constructionism, Bandura (1989) remarks that "Development is not a monolithic process" (p. 02). Human capabilities, in his view, are different in the psychobiologic origins of humans and also in the experiential conditions that are needed to 'enhance and sustain them'. Therefore, there could be various types and patterns of changes in human development, and these differences could be due to the diversity of social practices that produce individual differences in the human capabilities, both complete and incomplete. Bnadura explains his modal of causation and theorizes that human behavior cannot be explained in terms of 'one-sided determinism'. According to these unidirectional causation models, behavior is termed as developing under the influence of environmental factors of internal dispositions. As opposed to this understanding, social cognitive theory presents a model of causation that involves 'triadic reciprocal determinism'. In this model of reciprocal causation, human behavior, cognition and various other personal factors, and environmental influences all operate as interacting determinants that influence each other bidirectionally" (p. 2) Bandura further explains that the sources of influences may not be of equal strength, but some factors may be stronger than others. The reciprocal influences are also not likely to occur simultaneously, but in time, causal factor activates response of the reciprocal factors.

Apart from Bandura (1986) who is considered to be the main proponent of social cognitive theory, there are other theorists who have tried to explain the concept of social cognition from different perspectives. Howard & Renfrow (2006), for example, cite psychologists Fiske and Taylor (1991) who use the term "social cognition" to refer to the "process whereby people make sense of other people and themselves" (p. 260). Sociologists, on the other hand, do not have the individualistic views of cognition and, instead "stress the social aspects of cognition more explicitly" (p.260). Further, they quote Howard and Hollander (1997) according to whom "cognition goes beyond intra-individual information processing; it is socially structured and transmitted, mirroring the values and norms of the relevant society and social groups" (p. 260). Social constructionism as an approach becomes relevant at this point of discussion. This approach considers reality as a social construct rather than something 'out there'.

Social cognition theory, in other words, is convergence point of psychology and sociology, and at the level of linguistics, of psycholinguistics and sociolinguistics, as the positions undertaken by both disciplines merge here and the strict boundaries of each soften up to accommodate and explain the other's position.

Further, Condor and Antaki (1997) believe in an interdisciplinary approach to cognition. They move away from the "mental processing of information" toward a definition of cognition as the "social construction of knowledge". Howard & Renfrow then sum up and say that each of these traditions uses social cognition "to refer to structures of knowledge, the interpersonal processes of knowledge creation and dissemination..." (p. 261). The content of this knowledge, according to them, and the aspects of cognition, is shaped by social forces.

Social cognition is also conceived as 'involving a plethora of different social inferences' (Overwalle, 2009). It is suggested that these finer distinctions can be cross cut and the social processes can be divided in 'two major types of mental inferences: (1) inferences of transitory states (goals and intentions) and (2) inferences of enduring characteristics (personality traits and social scripts).

In psychology, then, social cognition is taken as a social process in which meaning making is done, of both self and others. In sociologists' view, cognition is more than individualistic information processing and is socially structured as well as reflects the society and social groups. Cognition is considered as social knowledge, which is created through interaction and is shaped by different social groups. This view is in stark contrast with the cognitivist view that focuses on the innateness of language.

The social cognitivist claims advance our understanding of how there was a shift in the major approaches to learning; this shift was from cognitive beliefs to the social ones. Social cognition theories focus on interaction, and invite researchers to engage directly with the ideas of development of interaction as well as carrying the marks of that interaction in use by its speakers. The discussion of social cognitive theories is not only a theoretical debate, but also provides us the framework for studies such as this one, to look at language development in the light of social interaction where various social identities

such as class identities, gender identities and ethnographic identities may be created in language and are reflected in language. There is a two way relationship between language and the social context as language not only develops in it, but its use by the speakers is reflected through the use of language itself.

2.4.4   Social cognition and language.

In the light of Bandura's (1986) theory of social cognition, the theories of language development have also adopted social cognitive model to interpret the development of language. Just like all other cognition, linguistic cognition is also thought to be developing under the influence of various social factors. The discussion of how cognitive development could be taking place under social influences have led the researchers such as Labov (1968) to undertake analysis of the difference in language use among speakers of different social backgrounds. This is what is generally referred to as social variation of language. In Pakistani context, social differences are likely to be exhibited in various individual behaviors, not least in linguistic behavior of the learners. This warrants the researchers a chance to venture into this field and explore the nature of relationship between areas of language such as morphology, phonology, syntax and vocabulary and social factors such as gender, social class and so on. It is assumed that social class has a relationship with the development of linguistic cognition, which can be measured through the learners' performance in one or all of the areas of language mentioned above. This project chooses syntax that could possibly explain social variance in syntactic development among the learners, that is, how syntactic development varies among learners belonging to different social backgrounds.

The social structure of our society reflects division in terms of the individuals' place in society and their access to power. Resources that are accessible to an individual define how much power and prestige he is likely to have in society, which is directly linked to the resources available to him and the chances of progress at his disposal. Difference in access to resources is the main factor behind social inequality which is reflected in all spheres of life. The social stratification is obviously manifested in linguistic differences too, that are present in each society. Although this chapter has

allocated a substantial space to the discussion of social stratification and social class, that is not the focus of discussion at this point. For the time being we are concerned with how linguistic theories have tried to find their way through the enigma of cognitive development and have tried to solve it under the light of social cognitive theory.

An important definition of the term social cognition has been provided by Jaeghar, Di Paolo & Gallaghar (2010) who describe it as a "General term used to describe different forms of cognition about, or actions in regard to, agents or groups of agents, their intentions, emotions, actions and so on, particularly in terms of their relation to other agents and the self" (p. 441). What is important in this definition is the development of cognition in interaction between agents or groups of agents. Cognition is said to be developing in interaction between the agents, where the emotions, intentions and actions play a vital part. Thus, it points to an entirely different conception of cognitive development than conceived by cognitivism, which assigns it to internal process going on in human brain. This meaning will be clear in further discussion with reference to other relevant studies.

While defining social cognition, Overwhalle (2009) suggested that it "broadly includes the cognitive processes used to understand and store information about other persons including the self, and about interpersonal norms and scripts (or procedures) to navigate efficiently in the social world" (p.25). The context of development of cognition here assumes central importance in the discussion of cognitive development. Social interaction is done through language and the dynamics of social interaction affect development of language too, in their own way. Languages are said to be the carrier of social cosmology. As Zuengler & Miller (2006) cite, 'Sharwood Smith (1991) makes an important statement regarding the nature of language and opines that "cake" of SLA is cognitive, while its "icing" is the social' (p.37). This definition clearly explains the role of 'social' in what has long been considered purely 'cognitive'.

With reference to language, Marton, Abramoff & Rosenzweig (2005) point out that there is a strong relationship between social cognitive competence and language competence, although there are alternative views regarding the causality of this relationship. They cite Locke (1997) who suggests that "children's socio-cognitive

abilities provide a foundation for language development, thus language acquisition is determined by social cognition" (p. 144). Both statement read together explain how social cognition rather than cognition as understood by cognitivism is considered responsible for language development among children. According to Bishop (1997) & Leslie (1987) , "both language and social cognition are underpinned by certain cognitive abilities such as encoding and discriminating information, working memory, and processing capacity" (as cited by Marton, Abramoff & Rosenzweig, 2005. p. 144). They believe that despite the methodological differences and linguistic complexity of the tasks "both developmental and neuro-pathological data support a strong relationship between language development and social cognition" (p. 144). They further cite different inter-related claims that, for example, children with better linguistic skills evidence higher level of socio-cognitive competence (Jenkins & Astington, 1996); socio-cognitive abilities can be predicted from early language development (Astington & Jenkins, 1995); language deficits in autism are linked with socio-cognitive development (Baron-Cohen, Tager-Flusberg, & Cohen, 1993); the language deficits alone do not account for the range of social difficulties that children with specific language impairment (SLI) encounter (Singer & Bashir, 1999. p. 144). Social cognition here is said to be both behind language development as well as can be predicted from the linguistic skills.

Keeping in mind the fact that languages carry the culture of a nation or a language community, when we look at them along a particular dimension, they should express some basic assumptions of that culture. The structure of a language reflects as well as induces the structure between the sender and the receiver in verbal communication, who, in turn, structure the reality that they are trying to mirror in their communication. As discussed by Galtung & Nishimura (1983), "any language system itself, in its syntax, has structures that through semantic rules induce structures on that which is reflected" (p. 20). In this way, structure and culture seem to be inseparable elements. Galtung & Nishimura sum up the discussion and state that "there is structure in culture, and every structure has or is a culture" (p. 20).

Pishwa (2009) in her book *Language and Social Cognition: Expression of the Social Mind*, has carried out a detailed discussion of how language is understood as a

social cognitive phenomenon. She starts with problematizing the claim of cognitive linguists that social meaning reside in people's minds. She reminds us that whereas other disciplines have not tried to look into the question of social meaning residing in people's minds, sociolinguistics has tried to provide a macro view of language with the aim to get information about the linguistic behavior of different social groups, and how processing of social information is done in interaction (p. 01). She states that there are mutual benefits in the study of social cognition for both social psychologists as well as sociolinguists, because, according to Holtgraves (2002) as cited by her, "the study of language can contribute greatly to our understanding of social behavior" (p. 2). Pishwa points to a broad agreement among various disciplines on the social nature of cognition. For example, she cites Semin (2004) who argues in favour of situated cognition, viewing cognition as an adaptive process that emerges from the interaction between an agent and the world, both physical and social.

2.4.4.1   Referential approach and social turn

Pishwa (2009) discusses the shift in the emphasis in the study of language in linguistics and of cognition in cognitive science shifted with the shift from 'referential' approach to the 'social turn'. The two paradigm support different claims about cognition and the role of language is general cognizing. The shift can also be understood as the moving away of theoretical studies from transcendentalism to a secular world view. In transcendental view, it is believed that "language is referential for it bears true, factual knowledge of the outer, transcendental or physical world" (Pishwa, ibid. p. 12). In social turn, it is believed that "language is social, and rather than provide truth about the world, it provides meaning to members of a certain linguistic community" (p. 12). In the former approach, language and cognition are understood to be intertwined whereas in social turn, social cognition and language are thought to be related to one another.

Explaining referentialism in one of the chapters in Pishwa (2009), Gaunther remarks that "cognition" is a container term denoting various thought processes of mind. Mind is the concept that refers to the workings of neurons in human brain, and cognizing is the word used to explain rational thinking among humans. Human *ratio,* in Western

history has been interpreted to be linguistic in nature. Our thought processes and mental concepts have been structured in language. Historically, the role of ratio was believed to be the acquisition of language and specifically, knowledge. Human cognition, thus, have always formed a tripartite along with knowledge and language, under referential approach. The basic tenet of the referential paradigm was that "Human cognition enables the retrieval of factual knowledge about the physical world" and "this factual knowledge is assumed to always be of a linguistic nature because thoughts are assumed to be structured linguistically" (Gontier, p. 26). Therefore, language was thought to objectively refer to outer world.

As opposed to referential approach, *social turn* did not consider human cognition a neutral linguistic device that is fine-tuned to retrieve factual knowledge of the world. Social turn rather considered language and human cognition "an outcome of biological and social enculturation processes". Whereas many aspects of cognition are biologically recognized as silent and non-linguistically structured, and socioculturally, cognition is thought to be an outcome of social enculturation, then how did the study of cognition and language become related to the study of social life? The answer to this question is that language was started to be taken as a device for social cohesion by social contract theoreticians such as Hobbes, Locke, de Condillac, Rousseau, Smith and Herder etc, who, in their moral and political theories distinguished between a natural man and the cultural man, hence causing the onset of 'pnature / culture divide'. As Gontier cites, Hobbs (1909) believed that language is not natural, but human invention, and results in social life. It causes social cohesion, because it is through language that communities such as common wealth, United Nations etc. come to life. Language enables not only social life, but also culture. Hence, Gontier concluded that language, as a result of the movement called social turn, came to be understood as the communicative device that bonds humans in social life rather than providing true and objective knowledge of the physical world.

The above discussion brings to light the difference between the two most important approaches to the understanding of language and human cognition; how they differed in their understanding of language in relation to the world, and how both understood the relationship between language and cognition. All this discussion is of

immense value to understanding the two main theories of language. The discussion not only explains different approaches to cognitive development, but also lays bare the agenda of social constructionism that understood language as a social construct rather than cognitive one. The essential theoretical discussion with reference to the present study has been done here, and this is likely to effectively enable the reader to understand the approach taken by the present study in its study of syntactic development among the Pakistani EFL learners.

After the conceptual debate of the understanding of language and cognition by two approaches, namely cognitivism and social constructionism, let us progress the discussion towards two main theorists whose theories marked a shift from cognitivism to constructionism. First of all we discuss Piaget's theory and see how he studied the development of cognition in children as ever evolving, and how he viewed them to be constantly updating their knowledge that they received in form of social input, in the light of their experiences in the world, as they matured with every passing phase.

2.4.5   Piaget's Theory of Cognitive Development

Piaget described cognitive development in terms of general stages of development in child's capacity to think. These stages of thought are sensory motor stage, preoperational stage, concrete operational thought and formal operational thought that, according to Wellman & Gelman (1992), apply across widely varying content areas.

Wankat & Oreovicz (2013) while explaining the Piagetian theory say that the children's progress through the four stages is in the same order but at different rates (p. 265). At the transitional phase, children may be in two phases simultaneously in two different areas of development, since one period does not end abruptly to enter into the other. The four stages and the operations in them in the children's mind are as follows:

2.4.5.1   *Sensory Motor Stage*

The sensorimotor period ranges from birth to about two years of age. In this period, children start learning about their relationship to various objects. They learn a variety of fundamental movements and perceptual activities. They develop knowledge of

manipulating objects, and in later part, start thinking about the incidents which are not immediately present. As Wankat & Oreovicz (2013) quote Piaget, "the child is developing meaning for symbols" (p. 266). Semiotics becomes relevant to the discussion of cognitive development in child who is thought to be developing his contact and is trying to make sense of the world around him.

2.4.5.2   *Preoperational Stage*

The preoperational period lasts from two to seven years. Piaget (as cited by Wankat & Oreovicz, 2013) has divided this stage into the preoperational phase and the intuitive phase. In the preoperational phase "children use language and try to make sense of the world but have a much less sophisticated mode of thought than adults" (p. 265). They develop their thought on the basis of their own experiences of daily life and are not in position to learn from generalisations made by adults. For example, a child will not slow down his tricycle merely on an adult's saying so, unless he falls over. At a later stage in this period, children start drawing conclusions based on the vague impressions and perceptual judgments. They are not able to put their perception into words and are very rigid with their own conclusions rather than listening to rational explanations, because they are unable to think in cause-effect manner. However, in this phase, they start responding to the commands and are able to have conversation with adults. They are able to classify objects without conscious understanding of the basis on which they are classifying them. (Wankat & Oreovicz, 2013)

2.4.5.3   *Concrete Operational Stage*

The Concrete operational period starts at about seven years of age. At this stage, children start mental operations with real or concrete objects, events, or situations. They can classify the objects correctly according to a criterion such as size or colour. They start understanding amounts of things and are able to understand logical reasoning. For example, a concrete operational person can understand the need to go to bed early when it is necessary to rise early the next morning. The concrete operational stage is thought to end at eleven or twelve years of age. (Wankat & Oreovicz, 2013, p. 266). The importance of experience comes to light as the children refuse to learn from instructions given by

their parents at pre-operational stage, and rather seem to develop logic and understanding of the link between cause and effect through their experience of the world.

2.4.5.4   Formal Operational Stage

The last stage according to Piaget's theory is the formal operational stage, which may start roughly when concrete operational stage ends, that is, at eleven or twelve years of age. At this stage, an individual is capable of thinking of abstract concepts and thoughts. He can start forming hypothesis and can test them mentally without depending on the concrete objects. (Phillips, 1981, as cited in Wankat & Oreovicz, 2013). The formal operational thinker, as described by Wankat & Oreovicz, "can generalize from one kind of real object to another and to an abstract notion' (p. 266). He is 'able to think ahead to plan the solution path (...) and do combinatorial thinking and generate many possibilities". And lastly, he is "capable of metacognition, that is, thinking about thinking" (p. 266).

Wellman & Gelman (1992) opine that the Piagetian cognitive structures are 'content independent' and 'domain general'. As they put it, "at least some, and perhaps most, conceptual abilities seem specialized for, or first specifically developed for, particular types of content" (p. 339). They discuss that memory skills and capacities are substantially developed by specific content and give no advantage to the adult over children. They cite a study by Chi (1978) who proved that the chess expert children outperformed the adults who were 'chess novices on memory for chess board positions' despite the fact that these adults were better than the children in general memory tasks.

With regard to Piagetian view of cognitive development, this assertion of content dependent and domain general cognitive development as discussed by Wellman & Gelman (1992) points to the fact that cognition for each task develops independently, and general measures of assessment of cognitive development may not prove to be good indicator of specific areas of human cognition such as language. Hence, linguistic development needs to be taken as an independent cognitive process, and it must be studied separately rather than being studied alongside general cognitive development.

Ackerman (n.d.) explains the conceptual properties of Piaget's claims and says the conceptual changes that take place in children, as a result of people's actions in the world "or experience, in conjunction with a host of 'hidden' processes at play to equilibrate, or viably compensate, for surface perturbations" (p. 1). Children are not passive receivers of input, nor is their linguistic development reflective of merely some kind of innate capacity that would make them commit errors based on generalisation. They rather engage themselves actively in the process of interpretation their input in the light of their experience and knowledge that they obtain in the world. Contrasting Pigaet's understanding with cognitivist understanding of language development, Ackerman argues that "To Piaget, knowledge is not information to be delivered at one end, and encoded, memorized, retrieved, and applied at the other end. Instead, "knowledge is experience that is acquired through interaction with the world, people and things" (p. 3).

The contrast between cognitivist thinking and social thinking becomes clear through the interpretation provided by Ackerman. Piaget's theory provides an insight into the role of 'social' as it draws our attention away from 'cognitive', which considers linguistic ability as an innate one.

Moving on from Piaget's understanding of language cognition, we now try to see what Vygotsky had to say, who is believed to be one of the father s of social constructionism.

2.4.6 Vygotsky's Social Theory

The second important cognitive development theory was presented by Vygotsky's (1896–1934) which is of immense relevance to this study. Vygotsky sees cognitive development happening under the influence of social interaction. As cited by Newman & Holzman (2005) Vygotsky (1978) suggests that "All the higher mental functions originate as actual relations between people" (p.57). For Vygotsky, as Ivic (1994) quotes him, "human being is characterised by primary sociability" (p. 3). In 1932, he said that

> It is through the mediation of others, through the mediation of the adult, that the child   undertakes activities. Absolutely everything in the behaviour of the child

is merged and rooted in social relations. Thus, the child's relations with reality are from the start social relations, so that the new-born baby could be said to be   in the highest degree a social being. (Vygotsky, 1982-84, as cited in Ivic, 1994, p.3)

The role of people around the child, that is, his parents or others who have a better knowledge of the world, mediate between the child who is learner, and the knowledge of the world that they have and the child doesn't. This makes the child dependent upon people around him and he is no more an independent being acting under his divinely endowed ability to comprehend and communicate. He is dependent upon his 'interaction' with the world around him, for his learning in general, and for learning language in particular. Ivic (1994) highlights some main features of Vygotskian theory and states that

Human beings, by reason of their origin and nature, can neither exist nor develop in the normal way for their species as isolated monads: part of them is necessarily anchored in other human beings—in isolation they are not complete beings (p. 4).

Humans must interact with others to develop as humans. Inevitably, what requires 'social' around it for the purpose of its development cannot be declared 'natural' and 'independent'. Ivic (1994) stresses that the most important factor for a child in early infancy is 'asymmetrical interaction' or the "interaction with adults who are vectors of all the messages of that culture" (p. 4). The essential role in this interaction is played by signs and various semiotic systems. He says that the initial purpose of these systems is "to assist communication and, later, individuation, when they begin to be used as tools for the organization and control of individual behaviour" (p. 04). Hence, social interaction, according to Vygotsky, plays an essential role in child's development. The higher cognitive functions such as "deliberate attention, logical memory, verbal and conceptual thought and complex emotions" could not emerge without the assistance of social interaction.

His notion of Zone of Proximal Development (ZPD) advocates how development is not to be restricted to specific age groups or phases only, as was suggested by Piaget, but it can be seen as continually occurring phenomenon that goes on for the life time.

Since learning, or learning of language in this particular case, is one such mental function that is not to be restricted to specific age groups or phases only, it must also be seen as functioning in the social interaction.

Ackerman (n.d.) comments on the relationship between Paiget's and Vygotsky's respective theories and remarks that most of the constructivist models of human intelligence are "essentially science-centered and logic-oriented", be it Piaget's theory that is grounded in action or Vygotsky's theory that is mediated through language.

Vygotsky's socio-cultural theory has been further elaborated in chapter 3, as it forms the core of the theoretical foundation that guides this research. Vygostky's sociocultural theory is considered to be the founding theory which led to social social-constructivism – an approach that looks at the development of constructs such as cognition and language under social influence, that were earlier thought to be independent of any social context. A detail of the position taken by social constructivism as an interpretive framework follows in the section below.

The socio-cultural theory assigns role to the guidance provided by parents and / or more capable peers during the child's language development. The child is thought to learn from his society, through agents such as parents or peers. The main concept linked to Vygotsky's theory is that of the Zone of Proximal Development (ZPD), which is "the distance between the actual development level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky 1935 / 1978, as cited by Human-vogal, p. 26). The point to understand here is the difference between the child's present level of development, which Vygotsky believed is normally tested, and his potential development chances, which he said are not tested. What Vygotsky wanted was to introduce "two different presentations of a child: without or with the help of a partner (Carugati & Selleri, 2001, as cited by Topciu & Myftiu, 2015). As further explained by Topciu & Myftiu (2015, p. 173), child is confronted in his sociocultural context with a set of tasks, that he fulfills with the help of his peers. He is dependent at this stage for the instructions from his parents and peers. Lantlof and Throne

(2006) explain that Vygotsky believed that human mind did not only comprise of lower-level neurobiological base, but also possessed higher level cultural tools such as language, literacy, logic and so on, and he had a distinct capacity to control biology through these upper tools. Lantlof and Throne (2006) count *mediation*, *regulation* and *mediation by symbolic artifacts* as different constructs of the theory. The first construct is about mediation between individual and the society through the cultural tool of language, the second explains reshaping of biological perception into cultural perception, and the third is about using symbols as a tool to mediate one's own psychological activity.

Schnuck (2012) opines that Vygotsky's socio-cultural theory forms a cornerstone for social constructionism. It shifts the emphasis of understanding of learning from an objective phenomenon to the social one. The naturalists had considered language as something innate, but the social turn marked the understanding of construction of realities around us, including language as social phenomenon which is constructed rather than being innately present. Social context provides learners a chance to interact and solve problems within that interaction. Language is considered mediated phenomenon that actually performs social action. It is no longer considered a pre-ordained human faculty that just needs exposure to activate.

2.5   Social Constructionism as a Theory

The roots of sociolinguistic variation, which is the core area of linguistics, may be traced back to social constructionism. It believes that our lives are constructed under the influence of our social selves. By the word "lives" we not only mean things around us, but also the events and our beliefs about day to day life. It is a multi-disciplinary approach that views the role of society and interaction into almost every phenomenon around us. Its implications can be traced to all spheres of life, not least the education and language learning. Social Constructionism makes two different kinds of claims: a *metaphysical* claim, the one about things and facts, which is that things are 'real but of our own creation', and the *epistemic* one, the one about beliefs, that it plays a certain role in our social lives (Boghossian, n.d., pp. 2-3). Language, like all other realities around us,

is a reality that we confront in our day to day life, and it is bound to be used in interaction which is inherently social in nature.

Yuksel (2009) while explaining Bakhtinian view of social constructionism cites O'Connor (1998) who acknowledges that there is not 'a single coherent and identifiable 'view' (i.e., set of beliefs and assumptions) that goes by the name of social constructivism" (p. 25). Yuksel (2009) further discusses the two schools of thought regarding the nature of language. First one, according to him, is the formalist conception of language which considers language as 'a set of abstract, self-contained systems with a fixed set of structural components and a fixed set of rules for their combination" (Hall et al., 2005, as cited by Yuksel, p. 04) and is traced back to the Saussurian separation of langue from parole. On the other hand, the second view of language is Bakhtinian perspective, which considers language "as compromising dynamic constellations of sociocultural resources that are tied to their social and historical contexts" (Hall et al. 2005 as cited by Yuksel, p. 04). Bakhtin feels that language takes place in dialogue rather than occurring in individual's mind. Hence, it takes into account dialogic utterances instead of grammatical structure. He puts emphasis on utterance which, having the ability to invite a response makes language a dialogic phenomenon occurring in social interaction.

Social constructionism does not only explain the phenomenon of language variation, it also provides us with a chance to understand linguistic ethnography and different dynamics of language use in the classroom. As cited by Simpson (2011), Eckert (2000) feels that ethnography could be combined with quantitative analysis of sociolinguistic variation "to study the recreation and configuration of class identities among US high school students" (p. 519). This provides a reason to study sociolinguistic variation as a factor responsible to create and recreate class identities elsewhere too, which is exactly what the present study endeavours to do.

That language constructs and reflects social identities, as stated above, is at the heart of sociolinguistics which tries to see how communities and classes use language that form their identities as separate from those of other communities and classes.

Variations in use of language by speakers with these different cultural, communal and class identities could be reflected in different areas of language such as phonology, morphology, syntax and so on. Social constructionism provides us a theoretical basis to understand such social identities with the help of various types of analyses, linguistic analysis being one of them.

Lock and Strong (2010) explore the question of whether social sciences have the potential of doing for the helping professions such as engineering and medicine what natural sciences have done for biology and so on, and conclude that it is in *talk* that the work of therapy by psychiatrists happens, which cannot be ignored as a neutral process. Talk is one of the various kinds of social interactions which give meaning to what the state of things around us is. This social action forms the basis of knowledge, which is the understanding of reality as well as solution to a problem. In this way, language makes itself stand at the center of the dialogic process. Language constructs, discovers and re-constructs facts around us, which, as a result of socio-cultural process are not merely 'facts' out there, but become socially constructed realities (Lock & Strong (2010.p.2-5).

Social constructionism is often considered as an opposite of realism and is considered more of a relativist approach. The idea of reality being constructed in interaction makes the reality a *relative* concept, rather than a *fixed* or *natural* one. This is where social constructionism departs from the position taken by cognitivism as it considers all reality around humans, including language, a socially constructed one rather than the fixed, natural or pre-ordained one.

The conceptions of language being socially constructed led the social scientists to study language from a social perspective rather than cognitive one. The emergence of social constructionism gave rise to sociolinguistics as a sub-discipline which took into account the interaction between language and social factors such as class, gender, sex, ethicality and so on. Language variation emerged as a natural research area in the twentieth century and it studied how communities differ in their use of language from other communities. Studies of class differences remained at the core of these studies, as is evident from the studies of Labov (1974) and others. The following section discusses the

subjects that sociolinguistics as a discipline undertook for research. This section will try to link the present research with the earlier similar researches done in the field, and provide justification for the kind of research being undertaken in this project.

2.5.1 Sociolinguistics and Language Variation

The roots of studies similar to the present ones can be traced back to sociolinguistics, which is a branch of linguistics that emerged as a result of social constructionism. It took inspiration from social constructionist claim that all reality is socially constructed, hence language is also a socially constructed phenomenon and should be studied in relations to society. While describing the aims of sociolinguistics, Green (2007) emphasizes that "one of the goals of sociolinguistics is to understand the correlation between social factors and linguistic variation" (p. 24). Many sociolinguists of the twentieth century (Labov, 1974, Bernstein, 1960 etc.), have been debating the inter-relationship of language with society, and many studies have been carried out to show how social stratification impacts language variation (Labov, 1972, Juchem, 2003, Mather, n.d.). This means that language variation may be a result of the division of the society into certain classes such as upper class, middle class, working class and labour class etc.

Before moving ahead, we need to understand what we mean by language variation. Language variation can be studied by looking into different uses of language in a society. It may answer the questions such as who are the people who use it, how are they different and how language differs according the roles of individuals in the society, and for what purposes they use the kind of language they speak. Language variation occurs along the lines of all components of language, that is, phonology, morphology, vocabulary and syntax. Labov (1963, 1966, 1972) first drew attention to linguistic variation under the influence of social factors and highlighted phonological differences across different age groups and social classes. The production and use of linguistic variables was believed to be related to social factors such as age, gender, ethnicity and social class. The variationists after Labov rather pointed to actions, attitudes and ideologies of individual speakers as factors responsible for variation (Botha, 2011). Studies such as Labov's set an important precedent in the field of sociolinguistic

research, and pointed to the need of studying language variation with reference to social class in other areas of language than phonology also.

While explaining the debate of the relationship of language with society, Botha (2011) cites Wolfram (2006) who believes that "language has an underlying structure, and this structure varies according to extra-linguistic variables such as age, gender, social class, community membership, nationality, and so on" (p. 2)'. Wolfram believes that variation is found everywhere in language and can be seen in production of sounds, and symbols of visual and auditory processing. That means that language variation is everywhere, in all components of language. The present study, however, is a variationist study with a different approach. It does not study how the use of language varies across classes and communities, but rather tries to study variation in performance of the learners belonging to different social classes in a test that measures their performance in syntax. It is not a variationist study in the sense of studying different social dialects etc., but is restricted to the academic arena with the sole purpose of identifying how class identities are reflected in classroom through varied performance of leaners from multiple social identities. Difference in linguistic development is obvious in the learners' use of language, and syntax has been identified as the area in which social difference will be studied. The learners will be studied for a possible variance in syntax-test score that could be reflective of their different cognitive development.

Social class provides explanation to various behaviours as well as conditions among humans. Behaviours and conditions among humans vary alongside social stratifications. The following section explains how social stratification leads to the emergence of different social classes, and throws light at the social factors that lead to formation of groups that are inherently different from other groups in their social contours, that we refer to as social classes.

2.6   Social Stratification and Social Class

In order to study cognitive and linguistic variation in relation to social identities of the learners, and to take into account socio-cultural perspectives that conceive language as a phenomenon that develops in interaction, it is important to understand the

context that leads to the formation of different social groups within a larger context that we refer to as *society*. Humans are identified by the social contexts they belong to, largely because the choices of people belonging to different social contexts in terms of actions and wearing identity are different. And one of the social contexts that define and give meaning to our lives is social class. Social class emerges as a result of social stratification, which is defined by Kurbo (2012) as "a ranking of people or groups of people within a society" (01). In another definition, Bottero (2005), in Lambart & Bottero (2008) defines social stratification as "the patterning of inequality and its enduring consequences on the lives of those who experience it" (p. 04).

This ranking of individuals is normally based upon 'a system with rather predictable rules' and the social stratification theories are supposed to uncover those rules in a given society. Social stratification is manifested in a society by "unequal distribution of valued goods, services, and prestige" (p. 01). The main proponents of social stratification theory in the era of classical sociology are Karl Marx (1818-1883), Emile Durkheim (1858-1971), and Max Weber (1864-1920). The following paragraphs summarizes the stance of each theorist about social class.

It was Marx (1848) who first put forth a comprehensive social stratification theory. As cited by Costanza (2013), he termed the history of human existence as 'the history of class struggle' (p. 01). He thought that the society has always been divided into classes in form of "Free man and slave, patrician and plebeian, lord and serf, guild-master and journeyman..." (as cited in Kurbo, p. 01). In Marx's views, the division of society in the capitalist world is based on the ownership of property / means of production. He believes that basically society is divided between bourgeoisie, who are the owner of the capital, and proletariat who are working class and sell their labour to the bourgeoisie. There are other classes also, but the role they play is basically dependent on these two main classes. The discussion of class in Marx is never done in terms of definition, however, it is the context that tells us what he meant by the term class. He discussed at length how classes function in a capitalist structure, but stopped short of giving a definition of the term 'class' itself. As Mouser (2012) puts it, "one might regard it [class] as an undefined concept of which the meaning is explained contextually" (p. 22).

Although there may not be a definition provided by Marx about what social class actually is, there is a lot of meaning present for his followers to decipher in his discussion of the classes, who go on following his class theory to date. The conceptualisation of class was further done by later theorists such as Durkheim and Weber, and a lot of research has been done in the light of their respective theories of social class and the functioning of 'class' as they view it, in society.

2.6.1   What is social class?

As the above discussion reveals, the concept of social class is a slippery one. But here, an attempt is being made to further understand what the concept of social class is really understood as by different proponents of sociology.

In everyday language, class is taken as an indicator of social and material inequality. Individuals belonging to different social classes are believed to be unequal in their possessions of material means and hence differ in their capacity to excel in all spheres of life such as education, health and achieving social status. Placement of individuals in different classes means developing a hierarchy of social ladder according to varying occupations and income of the individuals. Such placement is done by the social researchers at conceptual level, and does not necessarily entail processes of restricting people to a particular class, because the chances of moving from one class to another are always there, no matter how little. Social class is not only responsible for developing a hierarchy of occupations, it is also responsible for social relations of individuals, putting those at the upper side of the ladder on advantage as compared to those on the lower side of the ladder, which in turn, ensures higher social status for those advantaged and lower social status for the disadvantaged one. This mechanism of stratification is responsible for various influences on the society.

As explained in the last section, After Marx (1818-1883), Max (1818-1883) and Weber (1864-1920) are two main proponents of social class. Whereas Marx relates social class with the possessions of means of production and its power to create differences, Weber relates it to the skills and the ability to improve this skill to move up the social ladder.

Araya, Bolaños & Israelsky (2011) state that social class "involves grouping people together according to their status within society and according to the groups they belong to" (p. 6). They opine that the inequalities in areas such as "power, authority, wealth, working and living conditions, life-styles, life-span, education, religion, and culture" help distinguish different social classes (p. 6).

Further, Coloma & Aires (2010) cite Macauley (2006) who has a different view than Araya, Bolaños & Israelsky. He believes that the definition of social class in sociolinguistics "has traditionally relied on a somewhat subjective classification based on several variables defined by each researcher, and no clear method of identifying social membership has emerged" (p. 9).

No matter whether there is an agreement on a proper definition of social class or not, the general understanding of the concept is clear that it is a system of stratification of a society based on different people's different access to power, resources, and status. The social status in a society varies in relation with socio-economic status, and higher social status comes with greater privilege as compared to the lower social status. The difference in status, then, is reflected in difference of opportunities that people belonging to different social classes can avail, which makes the society stratified in terms of division of means. And this difference of means is what makes difference in all spheres of life in members of all social classes.

As we have seen above, social class studies are inconclusive as to what variables the social class is constituted of. Different studies take into account different variables, one giving important to some, whereas others give importance to the others, and some variables standing common in all. Habib (2010) summarises the studies of Bergel (1962), Hodge and Trieman (1968), Goldstein (1969), Labov (1972) Hechter (1978), Venneman (1980), Eckert (1991), Compton and Scott (2000) and Yamaguchi and Wang (2002). In the light of these studies, the variables that she thinks constitute social class are income, education, occupation, and residential area. They play an important role in assigning social class to individuals. This is not to say that there is an agreement among all the above studies regarding the constituent factors of social class, but on the basis of a

thorough analysis, this is the conclusion that Habib has been able to draw as she studied social class in relation to academic achievement among Arab speakers belonging to different countries

2.6.2.   Social class and educational attainment

Educational research has long been interesting to know how the social background of the learners affects their progress in education and how students coming from different backgrounds perform differently in their educational endeavours. There is a huge array of research arguing that social class has its influence on the educational achievement of the students. This research is important to understand the general implications social class has on academic achievement in general, and the same link is likely to be present in the learners' foreign language development in academic context. A detailed discussion regarding the relationship between language and social class will be done in the following sections, For the moment we shall discuss the studies that found out link between social class and academic achievement of the learners, to understand the general context.

Archer (2005) opines that "education has always been centrally positioned within sociological theories of class re/production, playing an important role in ensuring either the reproduction of (middleclass) privileges or (working-class) disadvantages" (p. 05). This highlights the importance of social class in the studies of educational attainment as the performance of students is believed to reproduce class inequalities.

Willingham (2012) believes that educational attainment of the students depend upon three types of capital: financial, human and social. He believes that income of the family, knowledge and the skills of the learners and their social interaction affect the process of learning in various ways.

To measure the composite influence of these capitals, researchers adopt SES index which takes into account family income, parental education, and parental occupation. Willingham argues that the theories regarding how SES affects student learning fall under two categories: family investment models which suggest that 'high SES parents have more capital, and so can invest more in their children's development'

and stress models according to which "low SES is associated with long-term stress that has two effects: it makes parents less effective, and has direct, negative biological maturation consequences for children's maturing brain" (p. 34). Regarding the family investment model, the study discusses in detail that low SES affects negatively the students' progress due to lack of access to the resources of intellectual stimulation such as books, computer, tutors and extra academic support. Low SES is also a reason for poor health which directly affects students' learning. Apart from that, the physical environment of the students is also a key factor in their advancement or otherwise. The low SES students are faced with crowded housing, poor housing and lack of attention by their parents, all of which contribute to lack of confidence among them. Regarding the stress related issues, Willingham discusses that low SES families suffer from greater stress as compared to mid or high SES families as they are worried about food, job security and financial problems. These issues also have negative effect on parents' mood which adds to stress among kids, which results in their poor performance in their studies. Summing up the discussion, the researcher says that students from low SES background lack the cognitive challenge they need to receive from their homes and neighbourhoods, which is a key factor in their poor education, and the schools must strive to give them what is missing in their lives. (pp. 34-37)

2.6.3   Social Class in Schooling

The relationship between social class and learning has also been explored by Panofsky (2012) who proves the point with reference to the sociocultural theory put forward by Vygotsky (1978). He cites Vygotsky as saying that "children grow into the intellectual life of those around them" (p. 88). Vygotsky (1998) further noted that the environment of the individual undergoes change when "it expands to participation in societal production" (p. 43). Children take influence from those around them. As they grow into the life of the family and then into the life of 'societal production', they also grow into the life of the school. With the expansion of the environment, the young children "develop shared interests and life activity with a specific socioeconomic group"

(Panofsky, p .03). According to Vygotsky, nature of the development is pluralistic, and there is an importance of class in variation.

Panofsky further brings forward Leont'ev's (1981) idea, who identifies social structure as relevant to all human activity:

> If we removed human activity from the *system of social relationships and social life*, it would not exist and would have no structure. With all its varied forms, the human individual's activity is a system in the system of social relations. It does not exist without these relations. The specific form in which it exists is determined by the forms and means of material and mental social interaction…which depends on the individual's] place in society" (1981, p. 47; emphasis added)

Leont'ev (1981) further argues that "desires, emotions, motives are produced in and through the system of social relations, just as are cognitive processes" (Panfsky, p. 04). He mentions that desire drives all human activity in the objective environment, and hence plays a role in formation of their identity and their transformation in the cultural processes of schooling. School, hence, is taken by Vygotsky and Leont'ev as "an important activity setting in the system of social relations" (p. 04).

These commentaries about the relationship of social class with schooling are important as they provide a framework in which to study the relationship of language development in the learners who are learning English in foreign language in Pakistani universities. Pakistan is a stratified society in terms of people's access to resources. The difference of resources is highly likely to be reflected in the academic achievement of the learners in general, and language development in the language classes in particular.

2.6.4   Social class in Pakistan

Most of the definitions of SC or social stratification make sense mostly in the capitalist western societies. However, it may be a little difficult to understand the concept of social class in the light of definitions or discussions of the concept in that background. A thorough understanding of the social structure of Pakistan and the concept of social

division and mobility may be required before forming an opinion about the social structure of the society.

Rahman (2012) is an important figure who has tried to explain the structure of Pakistani society in its background as a part of colonial India, the social contour of which is altogether different from the western capitalist societies. It may be difficult to sum up the whole discussion that the writer has carried out in his book *"The Class Structure of Pakistan"*, however, some salient features discussed in it with reference to Pakistani society will be briefly analysed here.

Rahman (2012) explains that the foundations of his work on class structure are based on the framework of historical materialism, the main insight of which is that "the social, political, cultural and ideological conceptions of humans are dialectically connected to the economic foundations of a given society" (p. xix). He adopts three major propositions regarding the social class in South Asia, of which Pakistan is a part. He opines that the pre-colonial South Asia was qualitatively distinct in nature from the European feudalism. Secondly, he believes that the colonial path of the capitalistic development of the region resulted in a socio-economic formation that had the features of both Asiatic and capitalist modes of production. Based on this proposition he adopts the term Asiatic capitalism. His third proposition is that Pakistani manufacturing and services are dominated by petty commodity production and small-scale capitalism. The major highlights of his book are that Pakistan is an agrarian society which differs from the western wage-based labour relations. This is what he refers to as 'petty production' and 'small-scale capitalism', hence differing in nature from the European capitalism. In Asiatic mode of capitalism, oppression is rooted in the pre-colonial superstructure of South Asian economy, which, in Rahman's views, is still deep-rooted in Pakistani society. These oppressive relations need to be uprooted through fundamental transformation in Pakistani class structure of Asiatic capitalism.

Before Rehman, Hafeez (1985) explored the structure of Pakistani society in a very comprehensive way. She summed up social stratification in Pakistani society as being '*compensatory in nature'*. She feels that the compensatory process of social

stratification has "given rise to *status centric orientation*, and what indicates status centric orientation is '*the emergence of artificial middle class* which can be distinguished by the real middle class in terms of norms" (p. 01). She further elaborates that the current literature deals with *social class as a distributive process*, what are the established basis of social classes, measures of social status in a given society, relationships of different social classes among themselves, and the extent or magnitude of social mobility between different classes. But, in her view, there are some important changes taking place in Pakistani society that need to be conceptualised. She feels that Pakistani society exhibits emergence of a parallel middle class to the real middle class, and identifies two reasons for this emergence; first reason is the brain drain taking place in the country, and second one is 'slow rate of legitimized upward social mobility'.

Her study is based on four interrelated assumptions. First that "everyone in society has his own definition of his social status as superior in power, privilege and prestige, taken together or singly" (p. 620). The second assumption is that when an individual realizes the superior aspect of his status in terms of *power, privilege or prestige,* he also realizes his weakness or shortfall in one of these areas. That is to say that mostly the inferior groups may try to assert their class in terms of non-material aspects, and the "top groups may acknowledge their inferiority in terms of degrees of the three aspects of the social class" (p. 621). Her third assumption is that the individuals keep comparing themselves with others and make a conscious decision in terms of their social status, and fourthly, the individuals compare their own deprivation with the possessions of others, and either assert their possession or try to acquire what they are deprived of, to compete in terms of social status.

In the forthcoming discussion, Hafeez opines that the individuals are aware of their entitlements in the society and their social reward, and they try to increase their entitlements in order to achieve maximum social reward and hence raise their social status. This, she feels, makes Pakistani society a competitive or '*struggle-oriented*' society in terms of class struggle, and not passive or indifferent one, as all are struggling to improve their social position through their acts and responses to the inequalities prevalent in the society. This, then, reflects on the western society, as reflected in the

current literature, where individuals do not act to the inequalities of the society. Hafeez opines that the consciousness of the individuals about the inequalities plays a great role as it inspires them to decide about superior or inferior status, which in turn defines their pattern of struggle that they adopt for uplifting their social status. Hafeez feels that the individuals' conscious and struggles takes him at best to the level of middle or upper middle class, and this does not lead him to any kind of revolutionary change. This claim is supported by the researcher through a study of the aspiration and achievements of the overseas workers as their earnings and property emerged to be of the level of the middle class. These studies present an entirely different picture with relation to Pakistani society in which the conception of social class is different from the one prevalent in the western societies. This understanding is crucial to the theorising of social class in Pakistani context. Pakistani class structure is more fluid than constant, and there is not likely to be an obvious basis for the division of classes as is possible in the European capitalism, especially considering the prevalent agrarian class which makes the social structure different from the European one.

In another study, Ahmad (2001) explained the categorisation of Pakistani occupations on the basis of Gini Coefficient of the occupations. Ahmed first (2001) summarised various studies in the Pakistani context that have looked to study the difference of income in different occupation, and have tried to develop different measures of inequality. These studies include Khadija (1964), Bergan (1967), Mahmood (1984), Ercelawn (1988), Ahmad and Ludlow (1989) etc.

After distributing occupation into different categories, based on Gini Coefficient study of different occupations / professions in Pakistan, he applied Gini Coeffcent to the data obtained from Household Integrated Economic Survey (HIES) 1992-93 which conducted by the Federal Bureau of Statistics.

    (i) Legislators, Senior Officials and Managers

    (ii) Professionals

    (iii) Technicians and Associate Professionals

    (iv) Clerks, Service Workers and Shop and Market Sales Workers

 (v) Skilled Agricultural, Fishing, Craft and Related Trade Workers, Plant

and Machine Operators and Assemblers

(vi) Unskilled Labour, Elementary Occupations. (pp.122-1223)

Social class in Pakistan, as stated above, has different dynamics as compared to the rest of the world. The predominant factor among these dynamics is that it is an agrarian society, and involves various labour relations that are based on oppressive systems existing in the society since pre-colonial era. These relations of labour and agrarian relations involve domestic labour of each family that is involved in labour at the lands they work on. Their labour is not wage-based but profit-based or share-based in cases where they work as tenants. In such a scenario, it requires a thoughtful mechanism to theorize placement of such occupations that involve non-wage-based labour. It might not be as simple to place all occupation into different categories as Ahmad's study has done. Moreover, there might be a need to study other factors than occupation alone, in order to form a clearer and judicious picture of the social strata of Pakistani society.

2.7.   Language and Social Class

After having clearly understood what social class means, what factors constitute social classes, what influence they have on individual and group behaviours, and in what way they affect learners' performance in academic context, we move to the central issue of this research, that is, the relationship between language and social class. The relationship between language and the elements of society such as gender, age, ethnicity, and race is well established, and the sociolinguists try to find out how these social factors affect and cause variation in the language spoken by different speakers. The relationship between social class and language is also well established as so many studies have tried to trace a link between them by finding out systematic pattern of language variation found among the speakers belonging to different social classes. Snell (n.d) presented an evidence of the studies of relationship between language and social class. She pointed out to the studies of Block (2013), Hymes (1996), Chakrania and Huang (2012), Huygens and Vaughan (1983), Lai (2010), Bex and Watts (1999), Crowley (1989), Mugglestone

(2003), Collins (2009) who have explored the relationship between language and social class in their respective areas of study.

Further link between language as a cognitive phenomenon and the learner as a social being is traced by Serafica (1981). As cited by Rymel (2008), Serafica asserted that "Both 'mind' and the 'self' evolve in a social context" (p. 01). The elements of social class affect cognitive development that goes on in mind, in their own way, which, in turn, affects language development. The term social class has been defined by Vitt (2007) who calls it a "stratification system that divides a society into a hierarchy of social positions" (p. 553). He further explains the concept of social hierarchies and suggests that it is "a method of social ranking that involves money, power, culture, taste, identity, access, and exclusion" (p. 553). The relationship of social class with the language of the members of given social classes was first explored by Labov (1966), who, according to Callary (2009), "found that the distribution of the five phonological variables investigated was highly correlated with the social class of the informant" (p. 05).

The reasons of social stratification have also been explained by Hume, who, according to Wallech (1984), suggests that other than personal traits, passion is the basic element that divides the individuals in different types when living a society. Passion is taken by him as emotional response to the external objects, the topmost among which is property. These external objects cause perception of the self among individuals and hence, they are able to relate themselves to the group of people they belong to, in terms of being in possession of elements such as money, power, access, and so on. The existence of different emotions in people coming from different social backgrounds hints to the possibility of their different responses to the situations in their life including education, and language learning and use in social or academic interaction.

The view of language being a social phenomenon is also discussed by Bakhtin (1895-1975) who sees learning as situated in social interaction and disagrees with the view of it being in the mind of the speaker / user in form of abstract grammatical rules. As Yuksel (2009) discusses, Bakhtin feels that language acquires meaning in interaction

and the meaning of speech or a text does not stand on its own out of context. Wolter (2002/2003) asserts the same point when he cites Wierzbicka (1988) who points out that

> in natural language, meaning cannot be defined in terms of a relationship between linguistic units and elements of extra-linguistic reality… In natural language meaning consists in human interpretation of the world. It is subjective, it is anthropocentric, it reflects predominant cultural concerns and culture-specific modes of social interaction as much as any objective features of the world `as such (p. 14).

This explanation of language highlights the fact that language is a phenomenon that develops and is given meaning in 'human interaction', which is a very crucial factor in understanding language. It is not as objective as thought by the pre-social theories such as innatist cognitivism. Wierzbicka's (1988.) discussion in Wolter (2002 / 2003) is also important in the context of the present study as he relates the structure of language to the structure of the culture which it represents. He asserts that "every language embodies in its very structure a certain world-view, a certain philosophy" (p. 313). He further extends the discussion and points out that "since the syntactic constructions of a language embody and codify certain language-specific meanings and ways of thinking, the syntax of a language must determine to a considerable extent this language's cognitive profile", which, as Wolter points out, constitutes a manifestation of subjectivity. This, he says, is the indication towards the particular view of reality which is "embodied in a language and its syntax" (p. 313).

The last point discussed by Wierzbicka's (1988) highlights the relationship between syntax and cognition as he explains that the syntactic structures of a language are culture-specific, and embody ways of thinking of that culture in which it is spoken. The cognitive profile of the language and culture is embedded in the syntax of the language. Language, then, is not only reflective of socio-cultural, but also socio-cognitive profiling within the culture in which this language is being used. This is a very important suggestion that explains the point of view adopted in the study to prove a link between social cognition and language.

Social class differences in language behaviour were discussed by Lawton (2001) through various empirical studies. McCarthy (1954) studied the language of children and expressed her belief that "a child's linguistic expression is a valuable guide to his whole Psychology" (Lawton, p. 20). McCarthy, in her article, summarized the studies of Bayley (1933), Davis (1937), Fisher, (1932), Gesell (1925), Shirley (1938), M. E. Smith (1935), Young (1941), Shire (1945), LaBrant (1933), Heider and Heider (1940) and Nice (1933). The studies established age norms and developmental stages for criteria as vocabulary growth, length of sentence, use of compound and complex sentence types and usage of various parts of speech" (p. 21). Some of these investigations focused on the use of subordinate clauses as a mark of linguistic 'maturity' whereas others focused on length of sentence as index of development. McCarthy (1930) also studied language development of pre-school children and analysed sentences as "incomplete, functionally complete but structurally incomplete, simple, simple plus phrase, compound/complex, elaborated". This method was also used by other researchers such as Day (1932), Davis (1937) and Templin (1957) in their respective studies.

The above studies present examples of methods of analysis in the study of syntax. The analysis reveals that the most often used method to gauge linguistic maturity among the children is sentence length. This method was applied to the children of various social backgrounds to analyse the influence of social background on their linguistic development. Lawton (2001. p. 24) remarks that institutionalisation is the most dramatic example if environmental influence on language development. Studies of frequency of phonemes uttered by the orphanage and normal children were carried out by Brodbeck and Irwin (1946), Irwin (1948), Fischelli (1950) whereas studies of speech sounds, speech intelligibility, language organization level of institution children were carried out by Goldfarb (1943), (1945), Roudinesco and Appell (1950) and of vocabulary development by Williams& McFarland (1937), Moore, (1947), Kellmer Pringle (1965). Lowton (p.23) opines that of all the above cited studies, the ones by Goldfarb were the most comprehensive. He explains that Goldfarb studied the language of children who had spent three years in an institution and compared it with the development of the children who had spent the same amount of time in foster homes. He retested the children when

they were 3.5 years old, and tested them again when they were 6 and 8 years old. Finally they were tested at the age of adolescence. He found that the ones who had spent their first three years in orphanage were not only "retarded on specific language criteria, but also in adolescence had failed to progress beyond very low levels of abstract conceptual activity" (p. 23). Lawton summarizes Goldfarb's conclusion who felt that "'cultural deprivation' or absence of external stimulation resulted in a 'primitivization' of an individual's behaviour, i.e. that it was less differentiated, showed a greater degree of aimlessness and a preponderance of trial and error, non-reflective activity" (p. 23). The main point of emphasis in the study is that even at the early age, the social factors have "a significant and possibly permanent influence on linguistic and intellectual development" (p. 24).

Having discussed social class in detail, it time to now move on to the next part of the discussion that involves the relationship of social class with language, which is the point of interest in this research from sociolinguistic point of view.

2.7.1   SES and language acquisition

Socio-economic stratification is the concept that explains how society is divided into different classes. The question of how exactly the society is stratified into different sections and how exactly those stratifications have a bearing on language acquisition could be of vital interest to linguists. While discussing the link of social contexts with language acquisition, Hoff (2006) feels that although the language potential is based in human biology, it requires social environment for it to be realized. Hoff cites various studies to explain the two basic approaches to the study of language acquisition. The first one conceives language as a product of mental processes that take as their input information from the environment and produce as their output the ability to produce and understand language (Chomsky, 1965; Crain & Lillo-Martin, 1999; Hoff, 2003a, 2005). The second approach focuses more on shaping role of the social contexts in which children live than on internal processes that underlie development (Bronfenbrenner, 1979, 1988; Bronfenbrenner & Morris, 1998; Tudge, Grey & Hogan, 1997).   Hoff cites Bronfenbrenner & Morris (1998, 996) who describe social contexts as the nested set of

systems that surround the child. The systems that are most distant from child are culture, socioeconomic status and ethnicity. These systems form what they call proximal systems, which include schools, child care settings, and peer groups. These proximal systems are "the source of the child's direct interaction with the world, and these interactions are the primary "engines of development" (Hoff, p. 56). Hoff further asserts that combination of the two approaches yields a model which shows that "mechanisms of language acquisition reside in the head of child while the child resides in a system of social contexts" (p. 56). This gives rise to the questions of "how the mind acquires language and how social contexts shape language development" (p. 56). This is a very important point to understand the claims of language residing in the social contexts. The mechanism of language resides in child who himself resides in social context; hence social context becomes crucial to understanding the mechanisms of language acquisition in the child.

Hoff (2006) defines socioeconomic status (SES) as a compound variable which comprises education level, occupational prestige, and income, which, according to Kohn (1963) create "different basic conditions of life at different levels of the social order" (p.471). He states that the individual effects of the components of SES are not yet known but, he says that the effects of SES on the schooling language environment and language development, whether we measure it with a single indicator or aggregate of indicators, are 'robust and substantial'. Hoff finds consistent evidence of influence of SES and parenting and points out that:

> higher SES talk more to their children than do lower SES mothers, that the speech of higher SES mothers is more frequently uttered for the purpose of eliciting conversation than the speech of the lower SES mothers and that the speech of lower SES mothers more frequently is uttered for the purpose of directing their children's behaviour than the speech of higher SES mothers (Hoff, Larsen & Tardif, 2002, as cited by Hoff, p. 60).

This is an important point to note regarding how the speech of mothers belonging to high and low SES groups varies in purpose, and has its effects as the children whose

speech is intended to be elicited would be likely to have better language skills than those who are only the receivers of the instructions to guide their behaviour.

Children's language experience has a great magnitude of differences associated with the SES. Hoff (2006) goes on to cite Heath (1990) who explains that the children who live in public housing with single mothers having little education are living in virtual silence. The children who live in a full family with father and mother around are, on the other hand, more likely to receive language, and have a greater chance to produce it as well. Hoff then cites Hart & Risley (1995) in whose views children of high SES parenting hear 215,000 words those of middle SES parents hear 125,000, and the children of low SES parents in public assistance hear 62,000 words. According to heart and Risley's study in Hoff, the children with high SES not only heard more, but also different words than the low SES children heard. All the parents in the study had different style of interaction with respect to language use, depending on their respective SES. These important studies highlight how language and social environment of the children are inter-related, and how the former is reflected in the use of language by respective children in the above mentioned studies.

The pattern of differences associated with the education and occupation levels can also be observed in child directed speech at the higher end of SES scale. Hoff (2006) cites Hoff-Ginsberg (1991, 1998) in whose opinion

> A comparison of college-educated and high-school-educated mothers' conversation with their two year old children found that the college-educated-mothers talked more and used richer vocabulary, more frequently produced contingent replies to their children's speech, issued fewer directives, and asked more questions than did the high-school-educated mothers (p. 61).

So the mothers with different educational background differ in their use of language while talking to their kids, which inevitably has an influence on the language acquisition among their children. The differences related to SES in the size of vocabulary that children used in spontaneous speech were also found in Hoff-Ginsberg (1998). McCarthy (1930) is also cited in Hoff who found out that grammatical development of

children differed as the ones from higher strata produced longer responses to adult speech, and scored higher in the standardised tests that aimed to measure grammatical development. In this regard he cites studies of Dollaghan et al., 1999 and Mosisset, Barnard, Greenberg, Booth, & Spieker, 1999 which provide him the basis of his above argument.

2.7.2   William Labov's method of social class identification

Different researchers use different methods to identify social class of their respondents. One important study in relation to the link between social class and language is that of the famous sociolinguist Labov (1972). In his famous departmental store research, he conducted the study of the use of /r/ sound by various speakers in three departmental stores of New York. His method of stratifying the respondents into different social classes was that he took different departmental stores as representatives of different social classes. As explained by Kortmann (2007-2008), Labov tried to study the "frequency of the constricted / r / in final and pre-consonantal positions" (p. 8). For this purpose, he gathered information on the use of / r / from 264 individuals from three department stores named Saks, Macy's and S. Klein. The method of stratifying these stores socially was through location, price and advertising.

The method of identification of social class adopted by Labov was simple and straightforward in the sense that he did not study social class of the participants of his study as methodically as has been done in the present study. He chose his respondents on the basis of assumption that the customers going to a certain market belong to a certain social class, and the ones going to the other belong to another social class. This approach is likely to have weakness as there is no guarantee that a person belonging to lower social class will not go to an expensive market once in a while, and there is no guarantee that an upper class lady will not go to *Sunday bazar* in order to get cheaper stuff for winter with a view to save some money.

The method adopted by Labov can be contrasted with the present study which takes a well thought out and systematic approach to the study of social class of the participants. Although it might be more appropriate to discuss this subject in Chapter 3,

which is related to methodology, yet a reminder is being served here to highlight how the approach adopted by Labov to study social class of the respondents and the ones adopted in this study differ in their respective methodology and care of analysis.

2.8   Language and Gender

Gender is one of the other social factors that influence language and that is the reason why sociolinguists have been trying to study language development and variation in the background of gender differences. Language reflects not only one's status, but it also reflects who is speaking it in other terms than class alone, that is, whether the speaker is male or female, child or adult, white or black, and so on. All these differences account for variation in linguistic development and ultimately gave rise to the study of linguistic variation.

Spear (2005) mentions two strands in which the research on language and gender has been divided. First is "the study of how gender is represented *in* the language (the *form* of language) and the second is the 'study of how men and women *use* language (the *function* of language)" (p. 15). Spear explains that the first area is a vibrant one which assumes that language is an 'ideological filter on the world' (Ehrlich and King 1994as cited in Spear, 2005.p. 03). According to this perspective, "language reflects and perpetuates a sexist and heterosexist version of reality". Among the examples of sexist language are the instances of use of "he" as generic pronoun and "mankind" to refer to humanity and job titles that end in '-man' such as salesman and fisherman etc., and also the address terms for men ('Mr') and women ('Mrs'/'Miss') in which women are defined with reference to men rather than independently. Robin Lakoff (1973, 1975) demonstrated how language is sexist in various ways, and Dale Spender (1980) explored how 'he/man' language has developed. More on how Lakoff (1973, 1975) found language of women as different from that of men has been presented in Chapter 5 in discussion.

Debate on the relationship of gender, as Wardhaugh (2006) feels, has been one of the biggest 'growth' areas within sociolinguistics. He explains how sex and gender are biological and social entities in that one is pertains to genetics and other entails social,

cultural, genetic and psychological aspects. He cites Wodak (1997b, p. 13) who opines that 'gender is 'not . . . a pool of attributes "possessed" by a person, but . . . something a person "does" (Wardhaugh, 2006. p. 315). What the person does has to conform to what is expected of him or her from society and it is here where social construction of gender comes into play. Society attributes certain roles to certain sexes and what is expected from men is not expected from women and vice versa. In their use of language, men, for example, are not expected to be speaking 'soft' language, which is a very much 'female' trait. Men are rather expected to be firm and straightforward in their tone whereas women are expected to be indirect and polite, and sometimes overly so. In Wodak's (1997) view, gender is different from one generation to the other, from one religion to the other and from one social or racial background to the other. Gender is one important component of one's identity and that identity is maintained by acting upon or following the norms of behavior expected of the sex one belongs to. Deviating from social expectations is deviating from the norm. Males and females are said to be genetically different as one has two X chromosomes and the other has an X and a Y. These differences are manifest in their voice and different verbal skills. These differences are seen by Philips et al (1987) to result from different 'socialized practices'.

Wardhaugh (2006. pp. 44–112 & 162–207) cites Baron (1986) and Arliss (1991) who find women's speech as different from that of men, . But he also notices a bias as he sees that men's speech is considered the norm against which women's speech is judged rather than the opposite. Men's speech is hardly ever judged against the women's speech. The claims of women speech being 'trivial….gossip-laden, corrupt, illogical, idle, euphemistic, or deficient', imprecise, uncultivated, or unstylish and less profane than the speech of men in Wardhaugh's views are highly suspect and lack evidentiary proof. (see De Klerk, 1992, and Hughes, 1992 and the denial in Kipers, 1987). Further, Pilkington's (1998) study has been cited, who found out that men gossip as much as women do and the only difference is that they gossip differently. The most famous example in Wardhahugh's views is that of Wes Indies in Lesser Antilles. As a result of a conquest in which Carib speaking men killed Arwack speaking men and mated with the Arwack speaking women, different male and female languages emerged as men spoke Carib and

women spoke Arwick and the same languages were learnt by boys and girls from their fathers and mother respectively.

Different languages prescribe different forms of use within the same language for men and women. Wardhaugh (2006) further cites Sapir (1929a), who presented example of the Yana language of California which contains special forms of speech for and to women. (Dixon, 1971) presented the evidence of a novel gender difference in Dyirbal people of North Queensland, Australia where both genders use Guwal as an everyday language but when mother in law or father in law are present, Dyalºuy will be used as 'mother-in-law' variety.

The talk of women's language being different from men's is valid almost in every society since the norms about male and female versions of language and the stereotyping in this regard is largely the same across cultures, Pakistan being no exception. Most of the stereotypes about women's language are as true in Pakistan as anywhere else, and hence this aspect cannot be ignored in linguistic studies that aim to find out relationship between language and social factors. This is the reason why this study takes into account gender as one of the social influences and undertakes to study it as an extraneous variable.

2.9   Language and Age

Apart from gender, other variables that interact with language are age, race, ethnicity, and so on. Age results in certain cognitive abilities that in turn result in varying performance in the cognitive tasks such as language. Federmeier et al (2010) discuss change in cognitive abilities with age, which they say, is characterized by multiple trajectories. They cite Verhaeghen & Cerella, (2008), Zelinski & Lewis (2003) and Salthouse, (1991) who believe that there is a well-established slowing across a wide range of tasks 'including visual search, memory search, and word/non-word(lexical decision) judgments' (p. 150) . Slowing is also visible in sensory and motor processing and the potentials that are linked to perception and attention (Iragui, et al., 1993). Also, delays in reactions and processing speed have been observed by Fozard, Vercryssen, Reynolds, Hancock, & Quilter, 1994 and Baltes & Lindenberger, 1997. Aging is also

reported by Spencer & Raz, 1995; Verhaeghen & Cerella, 2008; Verhaeghen, Steitz, Sliwinski, & Cerella, 2003 to impact particular cognitive tasks such as spatial processing, source memory, and other tasks that require cognitive control. (as cited in Federmeier et al (2010. p. 149).

At the intersection of age related cognitive and neural trajectories lies language comprehension which requires word-related information and knowledge of the world that is supplemented with age and experience. Real time language processing, on the other hand, also requires processes such as memory that are affected by age (Light & Anderson, 1985; Park et al., 2002; Wingfield, Stine, Lahar, & Aberdeen, 1988 as cited in Federmeier et al., 2010).

Cheshire (2015) in her study points out that more research is available about childhood and adolescence regarding language use than about the language of adulthood or middle years of life. As pointed out by Eckert (1997, 157) in Cheshire, this is due to the middle age bias that exists in the age related studies and those of social sciences research in general. The middle-aged are seen as using the language maturely rather than learning it or losing it. Giles et al. (2000) confirmed the vitality of middle age as they studied undergraduate students and found that "middle aged people… have greater ethnolinguistic vitality than younger or older people" (Cheshire, p. 02).

In another study about second language proficiency, as cited by Stefánsson (2013), Nikolov and Djigunovi'c (2006) argued that "second language acquisition among children is achieved relatively fast and without effort" (p. 2). However, Haynes (2007), Genesee (2006) have criticized the belief of effortless and quick competence in the second language among children. They opine that apart from age, motivation and exposure are also important in explaining the second language proficiency. Atkinson (2002) observed significant differences in pronunciation among speakers aged 45-50 and 65-70 years. He created a series of age groups from teens to 80s to study these differences. This is similar to the present study which makes three age categories to study possible variance among the learners, as all of them are supposed to be adults and there is a likelihood of older learners being inducted as sample.

So age is found out to be an important variable which is relevant to language acquisition in case of second languages and the general ability of acquiring new languages is believed to be different in different ages. Hence, in order to give a clearer picture of the factors affecting language acquisition among the adults, age is one vital factor that needs to be focused. It is important in the sense that the population of the present study are adults who are learning English as a foreign language in universities. They include people belonging to various age levels, and are n0t restricted to one age group necessarily.

2.10 Language and Marital Status

Marital status is the third variable that the present study undertakes as an extraneous social variable to study as to how much it interacts with the performance of the learners in syntax based test. There has been little evidence in literature as to the interaction of marital status, but in Pakistani context marriage is an important part of one's identity, and along with age and maturity, is considered important in studying sample distribution. It may not be an independent variable worth studying in isolation, but the results of a possible variance between married and unmarried people can be studied in conjunction with the results of variance in age categories to understand the latter in a better manner.

2.11 Syntax and Syntactic Development

Apart from the theoretical discussions regarding the link between language and society, or particularly social class, it is also important to understand what we mean by the term syntax. Syntax is generally described as 'the study of structure of sentences' by McIntyre (2007, p. 01) Human language is distinct in a way from animals' language that the former is syntactic whereas the latter is non-syntactic. Nowak (2000) states that in animal communication, which is non-syntactic, 'signals refer to whole events', whereas, on the other hand, "Human language is syntactic: signals consist of components that have their own meaning. Syntax allows us to formulate a nearly unlimited number of sentences" (p. 1620).

Sentence is believed to be the minimal unit of propositional expressions in all human languages, and the human creativity is restricted by the structures a language has. It is syntax that studies the ways in which sentence construction is limited by the structures of a language. Words are the units that contain meaning in them, but the meaning of a sentence depends upon the way these units are arranged. If a given number of same words are arranged differently, it would lead to construction of different meaning. For example, Van Valin (2004) explains that the sentences '*Chris gave the notebook to Dana* and *Dana gave the notebook to Chris* contain exactly the same meaning-bearing elements, i.e. words, but they have different meanings because the words are combined differently in them.' (p. 01). He then cites Matthews (1982) who defines syntax in the following words.

The term 'syntax' is from the Ancient Greek *syntaxis*, a verbal noun which literally means 'arrangement' or 'setting out together'. Traditionally, it refers to the branch of grammar dealing with the ways in which words, with or without appropriate inflections, are arranged to show connections of meaning within the sentence.

When explaining a sentence structure, we need to explain and analyse it from two angles, i.e. we need to look into the linear arrangement of words to form a sentence, and into how words are arranged to form a constituent within a sentence. Just like there are acceptable and unacceptable arrangements of words as a sentence, the same way, only specific arrangement is possible to form a constituent. Although a detailed explanation of 'constituent follows' for the time being one can say that different phrases such as noun phrase, verb phrase or prepositional phrase may form a constituent as they can be separated within a given sentence.

Van Driem (2012) compares different approaches to the study of linguistic forms. He highlights that unlike functionalist or European structuralist perspective in which 'linguistic forms are seen as instruments used to convey meaningful elements' and the formalist or generative perception, according to which "linguistic forms are treated as abstract structures which can be filled with meaningful elements", Symbiosism 'treats linguistic forms as vehicles for the reproduction of meaningful elements in the hominid

brain'. According to this theory, naming and syntax are 'two faces of the same phenomenon'.

2.11.1 Processing of L2 syntax in adults

Tokowicz & MacWhinney (2012) in their study of learners of Spanish from English background discuss divergent views on whether adult second language learners process the new language input in the same way as they do in their native language. They cite DeKeyser (2000) who believes that "adults rely exclusively on explicit knowledge and explicit processing to comprehend sentences in L2". This means to suggest that for adult learners, it is necessary to be exposed to explicit knowledge and processing of L2 grammatical rules. However, they cite Ellis (2002) & Krashen (1994) who present another view of L2 comprehension and suggest that "although L2 learners may be exposed to explicit rules in classrooms and textbooks, they rely on implicit knowledge and implicit processing to comprehend sentences in L2" (p. 04).

They conclude that the comprehension of some of the linguistic structures and failure to understand some other L2 structures is because of similarities and differences, respectively, between the L1 and L2 structures. They suggest that "learners are able to implicitly process some aspects of L2 syntax even in early stages of learning, but that this knowledge depends on the similarity between L1 and L2" (p. 4).

2.11.2. What is a syntactic category?

A syntactic category is that class of words the members of which can replace each other in a given sentence. This point is explained by Gibson (2005) in the following words: 'A word w_1 that can substitute in the same position as another word w_2 in all grammatical sentences containing w_2 is said to be of the same syntactic category as w_2' (p.6). " In this way, different parts of speech may be understood as different syntactic categories because the words belonging to only a certain part of speech can replace their counterparts. The above statement can be explained by an example:

In the sentence

John saw a **fish** in the pond.

a words that can replace the word fish (w1) in the above sentence in the same structure as above sentence will be considered as belonging to the same syntactic category as the word fish. Hence in the sentences below:

John saw a **snake** in the pond.

Or

John saw a **pearl** in the pond.

The words snake (w2) and pearl (w3) form the same syntactic category as the word fish (w1). Similarly, w2 and w3 can replace w1 even if it occurs in different grammatical structures as in the sentences

We saw a big number of **fish** in the lake.

Or

They preferred **fish** over beef.

as we can conveniently replace the word fish (w1) with w2 or w3 despite the grammatical structure of both sentences being different from the earlier sentences.

2.11.3. What is a constituent?

Sheehan (2010) defines constituents and says that "Syntactic categories (i.e. words) can combine with other syntactic categories to form constituents. These constituents combine to make larger constituents, i.e. sentences" (p. 6). Also, the term is explained by Stabler (2012) through the analogy of syllable structure in phonology and word structure in morphology. In his views, syntax is a theory of phrases, and a sentence is a kind of phrase. When we look at phrases, we see that they have parts. He then asserts that "Linguists often call the parts of a sentence its "constituents," but you can just as well call them parts or pieces or units" (p. 26). The account of how structure is built either in phonology or in morphology provides the justification of existence of units of structure in syntax.

At word level, parts of speech which are often called syntactic category, form constituent with the help of another category, and so the process of formation of phrases

takes place. Test of a constituent can be done with the replacement of that constituent with the other constituents. Hence, in the sentence,

Tom likes Sally.

or

Tom likes her.

The underlined parts of the sentences which appear as syntactic category, function here as a single constituent since they can be replaced with a combination of words that constitute a single object, and can fit in their place such as *the girl with blue eyes and black hair.* The vice versa is also true. That means that the phrase *the girl with blue eyes and black hair* will also be treated as a single constituent as it can equally be replaced with *Sally* or *her*.

Further, Sheehan (p. 6) gives the following example of constituent explaining how more than one syntactic categories can form a single constituent.

a. *Obama*

b. *The President*

c. *The American President*

d. *The new President of the USA*

Understanding constituent analysis is important to understand the rationale behind the formation of the syntax test, which is the second tool designed for this study. The test (appendix F) includes questions based on constituent replacement where the learners are required to choose the constituents that can best replace the underlined constituents. The examples of such questions are questions 1 and 5, in which the participants are asked to replace the underlined constituent with the most appropriate one in the provided list of alternatives.

2.11.4 Variation in syntax

Although the study by Cheshire (2003) about variation in language in different ages discussed in section 2.9 relates as much to this section as elsewhere, it has been

discussed in that section first to highlight how the trend changed from studying syntax from cognitive point of view to studying it in relation to social background of the speakers. Like any other component of language, syntax is also likely to be variable from speaker to speaker, speech community to speech community, and context to context. Cornips and Corrigan's (2005) point of view is important to highlight this point further, who believe that varieties do not exist in isolation and there is a chance that even the most competent speaker of a given language is likely to switch from one variety to the other ranging between standard to non-standard varieties depending upon the social and discourse context. They believe that the variation of syntax, just like in Phonology, may be seen as an indicator of local identity of the speaker. In their words, "while syntax is often viewed within sociolinguistics as a marker of cohesion in large geographical areas, syntactic variants may also act as marker of local identity, as is the case with variability in the phonological component" (p. 4). They suggest that the dialect systems of even the adult speakers are likely to change under the influence of social, political and economic factors. Hence, they suggest that the biologists and sociolinguists need to pay greater attention to this aspect of idiolectal variation.

The viewpoint presented in the above study is important in the sense that it highlights the possibility of syntactic variation to be found in the adult speakers of a given language under the influence of social, economic and political factors, which is what the present study has undertaken to explore.

Further, Lisa (2007) discusses three approaches to syntactic variation. The variable rule approach that "accounts for variability by allowing variable rules to apply in different contexts at different probability levels" (p. 24). Another approach is determining "the parameters that account for differences among languages and dialects of a single language" (Henry 1995, Kayne 2000, as cited in Lisa, p. 24). The competing / multiple grammar approach suggest that variability is "due to the selection of different Grammars" (Adger & Smith 2005, Roeper 2006). As Lisa (p. 24) further cites, this approach takes the view "that there is more than one system of grammatical knowledge in the head of the native speaker, and variation boils down to the decisions that the speaker makes about which grammatical output to choose" (Adger and Smith, 2005, p. 164). Parametric

variation approach and multiple grammars approach assume that it is the speakers make their independent choices in terms of opting for particular constructions, whereas the variable rule approach suggests that variability is a part of a single grammatical system.

Various researches have proved variation of syntax under social influence. Huttenlocher et al (2002) have discussed a wide array of proofs of relation between individual differences among children with their syntactic development and variation in language input. The study considers 'input' as an influencing factor in acquisition of syntax as opposed to the claims that syntax 'depends on innately available structures'. In this regard, the study claims that normally the stages of syntactic development are predictable, but there is a proof of individual differences and variation occurs in the rate and course of acquisition (e.g. Fenson et al., 1994; Miller & Chapman, 1981, as cited by Huttenlocher et al.). The author points to the accumulating evidence of variations in language environment that children face, and "these variations may be correlated with differences in development" (p. 338). Another study cited by Huttenlocher et al is that of Nelson (1977) who focuses on how incoming speech could have a relation with the child's syntactic skill. Snow (1989) and Sokolov (1993) have also been cited who believe that the situation could be opposite also as they hint at the possibility that the the input coming into the child could also be affected by the child's ability.

2.11.5. Incorporating variation in syntactic theory

Lisa (2006) discusses that there have been different approaches in sociolinguistics and syntactic theory due to their different goals. Whereas syntactic theory has been trying to look to describe language as a property of human brain, and has been trying to look for principles that can make sense of the grammatical constructions of a language in a homogeneous speech community, sociolinguistics has been raising question on the claim that linguistics should be concerned with the "ideal speaker-listener in a completely homogeneous speech-community" (Chomsky,1965, p. 03. as cited in Lisa), as this claim seems to ignore the aspect of variation which is inherent in language. Hence, as Lisa points out, the history of incorporation of variation in syntactic theory has not been very long, and there has been very little research in the area regarding syntactic properties of

dialects of American English. However, Lisa refers to Sells, Rickford, and Wasow's (1996) opinion that the theoretical frameworks provided by Optimality Theory (OT) and the Minimalist Program (MP) suite well to deal with variation. In order to see how these programmes deal with variation in syntax, let us have a brief look at each.

2.11.6. Optimality theory (OT) and variation

Talking about OT, an example from African-American English (AAE) has been explained in Lisa (p.27) where two structures, namely, negative inversion in declarative sentences characterized by initial negated auxiliary (don't) and followed by an indefinite noun phrase (NP) (eg. *nobody*), and the corresponding non-inversion construction beginning with a negative indefinite noun phrase (NP) followed by a negated auxiliary, have the same meaning. Both sentences make up negative concord as two negative elements are interpreted as a single negation.

(1) (a) Don't nobody want no tea.

"Nobody wants tea" or "There isn't anybody who wants tea"

(b) Nobody don't want no tea.

"Nobody wants tea" (Lisa. p. 26)

OT, according to Lisa (pp. 26, 27) "is a theory of generative linguistics, which proposes that languages have their own rankings for the set of violable universal constraints, and different rankings lead to different patterns which result in variable constructions" (pp. 26, 27). Lisa further opines that the proof of the ability of OT to accommodate variation in the form of negated auxiliary and the negative indefinite NP (as shown in 1a, b) suggests the possibility that it can be extended to the accounts of dialectal variation. OT is argued to have advantages over other syntactic approaches because of the principled way in which it is able to account for the occurrence of   both

(1a) and (1b) – why it is possible for the negated auxiliary to be sentence   initial and why there is also an option for the negative indefinite NP to occur at the beginning of the sentence in some contexts. It is possible to derive (1a) and (1b) by ranking constraints that will generate the negated auxiliary in the initial position or the indefinite negative

subject at the beginning of the sentence, but the two constructions must be assumed to have the same semantic features (p. 27).

2.11.7 Minimalist programme (MP) and variation

As Lisa (2006) discusses, the MP takes into account general syntactic operations, and here, variability is connected to features of lexical items. She cites Adger & Smith (2005) who explain how the MP accounts for variation. In view of Cornips and Corrigan (2005) who cites Halle & Marantz (1993), "lexical items are simplified in that they lack any phonological information. They are, in effect, just bundles of syntactic and semantic features which are spelled out as morphemes at some point in the derivation" (p. 15). This has been illustrated by Adger and Smith in Lisa (p. 27) with the help of morpho-syntactic variation in *was*/*were* alternation in English in Buckie, Scotland. They give example of *was*/*were* which "alternate in environments in second person singular *you*, first person plural *we*, existential *there*, and NP plural constructions (2a, b), but not in third person plural pronoun *they* constructions (2c)".

(2) (a) Buckie boats were a' bonny graint.

"Buckie boats were all nicely grained"

(b) The mothers was roaring at ye comin' in.

"The mothers were shouting at you to come"

(c) They were still like partying hard.

"They were still partying hard" (2005, p. 156)

It is claimed that the MP can account for *was* / *were* variation in the appropriate contexts and also for the categorical occurrence of *were* when the environment is of *they* subjects. Adger and Smith explain that variation occurs due the features associated with the lexical items *was* and *were*. That is to say that *was* and *were* have different morphological features but same semantic features, hence, they can be interchangeably used while the meaning remains constant. Since morphological features depend upon the subject, be it pronoun or a full NP, it is the features of the subject that interact with *was*

and *were.* That means to say that the features of the subject and the form of *be* must agree; hence *they* will always agree with *were* in a categorical occurrence. Since the person features of *be* do not agree when it is spelled as *was,* it will not occur with *they (*Lisa, p. 27*).*

Lisa sums up that as OT is taken as 'a set of ranked constraints', the users of language such as the ones where sentences like A are possible, have access to grammars that will produce such sentence. Similarly, options for sentences are allowed in the MP because lexical items can have the same semantic features but different grammatical features. Hence, these theoretical syntactic models allow different outputs which are semantically equivalent. However, as Lisa points out, they do not incorporate in the framework the probability and frequency of occurrence of variables, unlike some sociolinguistic variation models.

The above discussion of incorporation of variation theory in sociolinguistics into syntactic theory invites attention to further research in the direction in syntactic variation, and there is a need to see how variation of syntax occurs in sociolinguistic context. Since, here in this study, the researcher is concerned with the syntactic variation and it relationship with social class, the above discussion provides a good theoretical support for the study. Although, it should be clear that the purpose of this research is not syntactic analysis of individual variants, however, the syntactic variation theories provide a good rationale for the research, and will help understand the phenomenon in a better manner. They may also help future researchers to carry on with the task of syntactic analysis of the options the learners belonging to different social classes have selected.

2.12   Syntax: Is it a cognitive or Social Construct?

Cognitivists believed that language develops alongside human cognition as it is one of various cognitive functions that human mind develops and performs. And naturally, syntax being a component of human language was no exception. However, the position taken by social constructivists made the researchers believed that just like language, syntax is also a social cognitive phenomenon rather than purely cognitive one.

We shall discuss the relation of linguistic cognition with social factors later in the section; first we discuss how syntax is considered to be a cognitive process.

2.12.1 Cognitivist View of Syntax & Need for syntactic Study

The first account of relation of language with cognition was presented by Chomsky who believed that children were born with 'language acquisition device' (LAD) and that they already had linguistic knowledge with them in their mind. He proved this with the argument that children do not imitate rules after hearing the adults speak, but make generalizations and as a result commit errors such as 'goed' and 'breaked'. They inferred their own rules from what they heard. In view of Harris (2013. p. 2) Chomsky's approach is called generative linguistics because he sought to describe mental structures responsible for generating grammatically correct sentences. Chomsky felt that syntactic ability in children was a unique aspect of their language. From the utterance 'Colourless green ideas sleep furiously' he concluded that "syntactic structures represent information independently from the meaning of the words in a sentence" (Harris, p. 02). By this he derived that syntax is a unique and independent human capacity which is not dependent upon other abilities. Harris further opines that although the debate between the psychologist and linguist regarding the status of language and cognition goes on till date, there have been implications for the theories of language and cognition in the three scientific developments named connectionism, cognitive linguistics, and cognitive neuroscience approach.

One important study that advanced the discussion with reference to innateness theory is that of Callary (2009) who presents Chomsky's (1968, 1980), Bickerton (1990), Pinker and Bloom (1990), and Pinker's (1994) review presented by Schoenemann (1999) who opine that "there is an innate cognitive structure unique to human language (…) that determines what sort of basic structures and processes will be reflected in the syntax of any human natural language" (p. 04). He also explains the conception of the view that there exists a physical location in the brain called syntax module that specifically processes syntax.

As highlighted above, this approach takes syntax as an independent entity, and is advantageous as it allows for an independent study of syntax to understand its development, and does not enforce upon it what Callary calls 'unnecessary contaminations' of context and pragmatics.

2.12.2 Social Constructivist View of Syntax

As with the progression of thought among the language development theorists who rebutted the claims of Chomsky who called language a cognitive phenomenon, the beliefs of linguists about cognitive development have also evolved who later started taking syntactic cognition as a social construct rather than purely an innate function.

An important study that reveals how syntax reveals social identities is that of Chesire (2003) which becomes relevant in this section as it contrasts the cognitivist claims of language being an innate process. Cheshire refers to the earlier stance of researchers such as Rydén (1991), Scherre and Naro (1992) who claimed that syntactic variation was "conditioned less by social factors than by internal, cognitive and situational constraints" (p. 1). These studied also claimed that syntactic variation could only rarely distinguish social groups in the same way as 'classic' phonological and morphological variants did. She responds to this claim and opines that since syntactic variants are less clearly visible than other linguistic variants such as phonological and morphological ones, we need to have clear pattering of social variants in different communities in order to draw firm conclusion about whether they are reflective of social groups or otherwise. She feels that in this regard, it is not really easy to decide which grammatical variants to analyse because most of these variants "often evade the conscious awareness of speakers and listeners" (p. 1). Cheshire studied a particular clause type in the 12-16 year working class adolescence whose playground conversations were recorded in Reading, Birkshire. Through this study she wanted to show "that syntactic variation can be intricately involved in the construction of social meaning" (p. 1). Cheshire studied the corpus of 50,000 words and focused what she calls lone *when* clause as an identity marker of the group he studied. She found out that there were 28 lone *when* clauses in the data set which accounted for 25 percent of all when clauses in the data as

there were 105 *when* clauses in total. Out of the 25 instances of lone when clauses, 22 served the function to initiate the extended turn, which Cheshire explains, functions to explain personal narrative. In this regard, she gives example of a talk between two girls and a boy who are sharing their experiences and the boy uses the said clause with a purpose.

Jenny:	you have to do horrible jobs if you're a nurse.. all the bed pans
All:	<LAUGHTER>
Jenny:	have you ever been in hospital?
Valerie:	[I have
Christine:	[oh yeah I have
Valerie:	I got run over by a car
Christine:	I fell off a gate backwards <LAUGHS> and I was unconscious
→Tommy:	oi *when I.. when I* went in hospital just for a little while…
Valerie:	sshhh
Tommy:	cos my sister and my cousin they bent my arm ..they twisted it right round (p.5)

In the above example, Tommy uses the *when* clause as an extended turn, when he narrates his personal experience. His use of *when* clause clears to other participants in the talk that he wants to take an extended turn, which is obvious from Valerie saying "sshhh" to ask her sister to be quite and let Tommy proceed. Cheshire substantiates her observation with that of Edwards and Middleton (1986) whom she cites as the ones who noted 'joint remembrance' of an event as a function of *when* clause.

Cheshire concludes that "Syntactic variants may distinguish social groups although the way they do it might be different from the way phonological or morphological variants do it. She goes on to explain that "They do not simply index membership in these groups; instead they may indicate deep-seated differences in the way in which different social groups create their social worlds" (p. 13). She points to the

lack of interest in the research of syntactic variation and sums up that it could be so because it is less interesting than the research of other variants, but, she asserts the point that "it is through syntax that we construct our discourse and, therefore, our social worlds" (p. 13).

The contrast between the approaches taken by cognitivists and social constructionists becomes clears through studies such as the above one and the ones that are cited therein. The earlier approaches such as those of Chomsky to study syntax as a reflection of kernel sentences may, then, be the thing of past as social constructionism takes over with much vigorous claims

2.13   Summary

This chapter put forward an analysis of literature related to the main concepts in the current study. It first of all explains how English is treated in Pakistani context and some arguments have been presented to show that English functions in Pakistani context as a foreign language. Then it throws light on how English is taught in Pakistani schools. After that, the works of different theorists related to the key areas of the study such as theories of language, cognitive development of language, social constructionism, social cognition, social stratification and social class, have been discussed. Finally, the studies that suggest the relationship between the social class of the learners and language variation have been summed up. The chapter tries to explain the main concepts related to the topic of the study and points to the need of a study that undertakes an in depth analysis of how social factors such a s class, gender and age play a role in the development of language in adult learners. Language is believed to be a cognitive phenomenon by the cognitivists, but social constructionism assigns a role to social interaction in development of it, hence making language a socio-cognitive phenomenon. The discussion of cognitivism and cognitive linguistics explains how language is basically a cognitive phenomenon and what are different theories related to cognitive development in adults in the context of L2 or FL learning. Later, cognitive development has been discussed as a social phenomenon in the light of social constructionist stance,

and finally social class and its relation with language, particularly syntax, has been discussed along with the variationist studies in syntax.

CHAPTER 3

RESEARCH METHODOLOGY

Social class studies constitute an important part of sociolinguistics. At a broader level, sociolinguistics deals with the relationship between language and society, and a part of sociology is the studies of social stratification which deals with how society is stratified along the lines of race, class, ethnicity, gender and so on. One of these social factors that play a significant role in shaping human lives is social class which affects almost every sphere of human lives, language being no exception.

Macaulay (2005) provides a complete list of studies that have used quantitative methods to study correlation between language variation and extra linguistic categories such as social class, gender, age and other factors such as race, ethnicity and so on. These studies include famous variationist studies such as the ones by Fischer (1958), Labov (1961 & 1966), Wolfram (1969), Trudgil (1974), Milroy (1980), and Eckert (2000), among others. Although the trend in later years changed from the study of language variation to the study of language change, especially discourse, social class is still an important explanatory factor in the sub-areas of linguistics, i.e. variation, change and discourse.

Taking insight from such studies as quoted above, the present study took up the task to study variation in syntactic development among Pakistani EFL learners in relation to social class, which is one of the extra-linguistic factors (Serrano, 1978) that cause language variation. The social class variation was studied in terms of difference among the learners with different social backgrounds in their score in syntax test, and the correlation between the social class score and the syntax-based test score was studied quantitatively. Any variation in syntax score among the sample from different social backgrounds was taken as an indicator of the differing levels of cognitive development of the learners coming from different class backgrounds. Apart from social class, gender,

age and marital status of the participants will be studied as extraneous variables. The justification for studying these extraneous variables will be discussed in section 3.3.

The study is guided by the understanding that language being a socio-cognitive phenomenon, develops in cognition, which, in turn, develops in society. Language is related not only to cognition, but also to society. Hence it cannot be taken solely as a cognitive phenomenon or a social one. This assertion is based on the discussion of *cognitive socio-linguistics* as a new sub-discipline of linguistics and on the discussion of *social constructionism* as a father discipline that led to the emergence of cognitive-sociolinguistics

An overall picture of the theoretical framework that guides this study is being discussed in the following lines.

3.1   Theoretical Framework

The studies of language variation, change, and development have recently been interested to study interaction between cognition and social factors such as class, gender, ethnicity and so on. This trend marks a shift in the studies of linguistics which have long been concerned with language as a cognitive construct. Instead, the new approach views language as a phenomenon that is both cognitive and social. This new framework was first presented by Christiansen & Dirven (2008) in their book *Socio-Cognitive Linguistics* in which they explained the shared understanding of a mentionable number of researchers that language is more than a cognitively based independent structure, as Chomsky believed, but in its study of meaning, have to take social context into account as well, because no study of meaning can be carried out keeping the social context aside. In order to understand this new framework, let us discuss what Christiansen and Dirven have to say in there aforementioned book, and what Geeraerts, Kristiansen, & Peirsman (2010) said in the later book that was based on the advances in the field of sociolinguistics.

3.1.1.   Cognitive Sociolinguistics as a New Discipline

The roots of the conceptions of language as a social and cognitive construct be they in the realm of language acquisition, or language change or variation, can be traced

back to *social constructionism.* Researchers working in the realm of cognitive linguistics started to realize that it was difficult to capture the dynamic nature of conceptual and grammatical structure without looking into the dynamics of discourse and social interaction. This led to the consensus among these researchers that usage-based approach to the study of language needs to be adopted, which would try to understand linguistic structure by understanding social structure where it actually develops. Without knowing social structure, an understanding of linguistic structure was thought to be difficult to achieve.

As hinted above, Christiansen and Dirven (2008) were the first to use the term cognitive sociolinguistics. They explain that Langacker (1999) emphasized the need to extend the study of cognitive linguistics to the areas of social interaction and discourse. They point to the studies by other researchers in the similar vein, who highlighted the need to bring the objects of study and methodologies employed in sociolinguistics and cognitive linguistics close together and they took steps in the direction of empirically validated research into social dimensions of linguistic variation. Christiansen and Dirven (2008) further explain that "A usage-based linguistics takes language as it is actually used by real speakers in real situations in a specific historical moment" as the basis of its enquiry. As a consequence of this approach, cognitive linguistics must employ adequate methods that deal with social variation. They cite Geeraerts (2005) who advocated that

> "Cognitive Linguistics will not only have to come to terms with the fact that social variation systematically appears in the raw linguistic data brought under scrutiny, but also with the fact that the only way to systematically deal with variation which comprises a variety of different social dimensions inevitably involves a solid, empirical analysis". (Christiansen and Dirven, 2008, p. 03).

This would be a different approach than the one which cognitive linguistics has followed up till now as a discipline concerned with language as an "autonomous cognitive faculty" (Croft and Cruise, 2004, p. 01) only. In contrast to that, cognitive sociolinguistics in its dealing with examination and comparison of social and cognitive

dimensions of language, would "in a most natural way be subsumed under the cover term Cognitive Sociolinguistics" in the words of Christiansen & Dirven (2008, p. 4).

After Christiansen & Dirven's ground-breaking launch of their book on socio-cognitive linguistics, Haruschka et al (2009) advanced the discussion and explored how it could be relevant to the study of language change. They highlighted socio-cognitive linguistics as a new framework of linguistic analyses which considers language as a dynamic phenomenon which is both cognitively and socially informed. They discussed the process of language change and opined that selection of linguistic variants by the users is governed by both social and cognitive constraints. In their view, these approaches emerged with the understanding that "language change [is] as a dynamic population-based process, whereby speakers choose variants from a pool of linguistic variation in a way that is governed by both social and cognitive constraints" (p. 464). This conception of selection of language variants being constrained by social and cognitive constraints allow the researchers to move away from purely cognitive stance of cognitive linguistics, and look at the social dimensions such as context, interaction and dialogue to study the development of language. It needs to be seen as to what these social constraints are in development of linguistic cognition that affect language users, and how they do it.

In a later work titled *Advancements in Cognitive Sociolinguistics* (which is an advancement of Christiansen and Dirven's work, as stated in the introduction of this chapter) *Cognitive Sociolinguistics,* Geeraerts, Kristiansen, & Peirsman (2010) explain the reason of including social variation in cognitive linguistic and say that the "predominant semantic perspective of Cognitive Linguistics, and the usage-based nature of Cognitive Linguistics" (p. 2) are interrelated and lie at the heart of cognitive linguistic enterprise. Both these features are linked with social perspective. They say that the study of linguistic meaning constitutes foundational characteristics of cognitive linguistics. The underlying fundamentals of the discipline that language is all about meaning, and that "meaning is flexible and dynamic, that it is encyclopedic and non-autonomous, that it is based on usage and experience, and that it is perspectival in nature" (p. 2) contrast the cognitive stance. Meaning, however, is not something that exists in isolation, but is

created in interaction, and this is the reason why cognitive linguistics has come to realize that language does not only involve cognition, but socially and culturally situated cognition" (p. 2). Cognitive linguistics, based on this realization, produced a series of studies that believe that emergence of language and specific features of language "can only be adequately conceived of if one takes into account the socially interactive nature of linguistic communication" (p. 3). Examples of such studies are Sinha (2007) who studied language as an epigenetic system, Zlatev (2005) who studied situated embodiment, Itkonen (2003) who studied social nature of the linguistic system, Verhagen (2005) who studied the central role of inter-subjectivity in language, and Harder (2003) who studied the socio-functional background of language (as cited in Geeraerts, Kristiansen, & Peirsman, 2010, p. 3).

3.1.2 Social constructionism as an approach

These studies mentioned in the above section are based upon the realization that language cannot be considered an entirely natural phenomenon that has nothing to with social world. Meaning is created through interaction and in interaction, and hence is perspectival in nature. These conceptions have social constructivists underpinning, as said above, which is an approach that advocates construction of reality in society. This approach was first presented by Berger and Luckmann (1966) in their work on social institutions. As cited by Miranda & Saunders (2002), Berger & Luckmann propose that "institutions experienced as objective reality are in actuality social constructions" (p. 02). The institutions that are socially constructed assume an "objective" nature as "facts" in the social world. Similarly, they said that meaning may also be socially constructed. Schutz (1967) and Garfinkel (1967) emphasize the cognitive processes are underlying such social constructions. The concept of intersubjectivity provided by Schutz (1967) is based upon the understanding that meaning emerges from shared human experiences. In the light of the observations of Schutz (1967), we limit our discussion to the development of language, Intersubjectivity explains it as a phenomenon that develops in interaction rather than developing "in the cognition of a single individual". Garfinkel (1967) also

stresses that meaning making is done in interaction, and shared nature of meaning makes context important.

In a recent book which is a reflection on social constructionism from modern perspective, Lock and Strong (2010) explain social constructionism in the following lines:

> we are not just individually encapsulated information processors, but are inherently social beings who go through a remarkable process of becoming enculturated adults and experience the world in all its glories and disappointments: simply put, we are humans who are constructed through our inherent immersion in a shared experiential world with other people (p .05).

The view of human beings presented by Lock & Strong (2010) is that of their being socially constructed beings, because this is what can be a possible explanation of humans not being individually encapsulated information processors. Shared experience with the people we live with in a society is what constructs us as human beings. Ashleymdenardo (2016) states that "Social constructionism was born out of symbolic interactionism, which simply means people attach meanings to the things around them and behave based on those meanings, which are bred from social interaction" (p. 01). This means that meaning is constructed in interaction, and this socially constructed meaning is what drives our social lives. Considering meaning and understanding as the core features of human activity, social constructionism raises the question that how it is that the symbolically based language provides an altogether different social experience to two people speaking the same language as compared to two people who speak different language. Meaning and understanding is reached on the basis of mutual consensus over what the symbolic forms mean. Meaning making, then, is embedded in socio-cultural processes which are specific to particular time and place (Lock & Strong, p. 6-7). To explain this point, Lock & Strong (2010) give example of the word *fashionable* which may mean different in different times, that is, when we compare its meanings in 1900 with those in 2000, and in different space when we compare someone being fashionable in United States of America and in Saudi Arabia. They cite Gregon (1994a, p. 53) who

points out that "samples of language are integers within patterns of relationship. They are not maps or mirrors of other domains – referential worlds or interior impulses – but outgrowths of specific modes of life, rituals of exchange, relations of control and domination, and so on" (p. 8-9). Lock & Strong, however, add that there is more to reality than language alone; may be a 'pre-predicative inter-subjectivity' that provides the humans with the possibility for discursive life. The possibility of existence of a fabric in which human lives are constructed provides us, they suggest, with the chance to see human lives as different from the way that objective methods of a different tradition can conceive. This view of language being embedded in the sociocultural processes can be understood by Human-Vogal's (2004) explanation of constructivist belief about knowledge and cognition. She stated that the "knowledge human beings possess does not exist in a perfect form outside human existence". Knowledge is rather "the result of human beings interacting actively with the world" (p. 24). Knowledge in this context applied to all human learning, which inevitably involve cognition as well as language as a system of communication among all other systems that develop in human cognition. Constructivist approach does not consider knowledge as "objective, reliable, and independent of the context". And since knowledge is dependent on the context that goes into its construction, it means that 'absolute truths' do not exist any longer. Human-Vogal points to potential dangers hidden in following positivist approach. Certain communities might start considering their beliefs as absolute truths, which may not be considered true by other communities. The same situation might arise in education where certain groups start considering certain knowledge systems as true while disregarding others. Modern science then, finds out a solution and proposes to put a statement to empirical investigation involving "experimentation, measurement and verification" (p. 25) to test its truth. On the other hand, social constructionism provides a different perspective to understanding of knowledge. As Human-vogal explains, social constructivism "recognises that all knowledge is subjective and created in the human mind, not discovered in the nature" (p. 25). Knowledge is not seen as *acquired* or *discovered* but rather seen as *actively constructed*. Constructivist theory does not make truth claims, but investigates the viability of a particular statement in a given context. Explaining the

notion of viability, it is said that "If the knowledge we as humans create allows us to cope with the world, such knowledge is considered to be viable" (p. 25). What is variable has to be different from one society to the other based upon social norms. As Human-Vogal explains, studying these differences while assigning importance to the context takes us to the discussion of *situated cognition*, which, according to Lemke 1997, (as cited by Human Vogal, 2004) is a notion that the "meaning people derive from physical and social events is considered highly important to understand cognition because cognition is viewed as semiotic, or meaning making process" (p. 25-26).

Lock & Strong (2010), in their discussion of Marxism and language, deal with the affinities between Marxist ideas and concerns and social constructionist ideas and practices. Marx was concerned with what people can produce socially and how they may become estranged with these social products. His concerns were the over-determined forms of language-use and restricted communication between people. Following Marx, Bakhtinian Circle concerned themselves with dialogue and language-use in Pre-Stalinist Russia. The main Bakhtinian idea that "language lives only in the dialogic interaction of those who make use of it" (Bakhtin, 1984, as cited by Lock & Strong, 2010) highlights the social and dialogic nature of language. Bakhtinian outlook was marked by dealing with what he calls the 'intellectual baggage' of the innatist assumptions of internal mental representations and that of *competence* and *performance,* as passed down to us by Chomsky (1959), and it was focused on the "actual performance by people in dialogue" (Lock & Strong, 2010, p. 86). The Bakhtinian concern with dialogue as it takes place in interaction is based on the Marxist understanding that *forms of social organization* optimize or constrict possibilities between people. In this light, Bakhtin (1986) turned his eye towards how *forms of communication* "constrain people's possibilities for thought and action" (p. 86). The theoretical underpinnings for this study are derived from the concept of 'forms of social organizations' in Marx and 'forms of communication' in Bakhtin, as these two link our quest of studying a link between social class and language, first corresponding to the forms of social organization, and the second, to the forms of communication.

Lock & Strong (2010) contrast Bakhtinian view with the contemporary view in today's psycholinguistics, which is that words have meanings which are learnt and then these meanings are put to different uses such as passive and interrogative constructions through syntactic rules. This view advocates that the way of talking is implicit due to what goes on because of our genetic coding. Bakhtinian view, in contrast, is that of meaningful communication occurring in social interaction. Different ideas of formal and informal, right or wrong, of loyalty, respect etc. are legitimized differently by different forms of society. The formalization of right and wrong is done via the use of language by codifying how things 'should be done'. The repeated evaluation of 'how things are' lets people develop a shared understanding, and this shared understanding leads to development of a shared background or context. In the field of Pragmatics this is defined as presuppositions and implicatures that lead to the interpretation of utterances in particular contexts in particular ways.

For Bakhtin (1986), an utterance is not an expression of something that is already there, but it always creates something new and something unrepeatable, and more importantly "it has a relation to value" such as truth, goodness or beauty etc. Hence, language is not something 'given' but something that is 'created'. Bakhtin's colleague Volosinov (1973) is reported to have said that "The immediate social situation and broader social milieu wholly determine – and determine from within, (…) the structure of an utterance" (Lock and Strong, p. 88). Hence, Bakhtinian view is that of what happens in communication between people, how people formalize meaning as they agree upon 'what we talked about'. This view explains language not as something that is fixed in mental and actual dictionaries, but as something that is transmitted by speakers and is received by listeners. The user of language is "positioned between the meanings of words used by the prior speakers (…) and the intended recipients making sense of these words" (p. 91).

Social constructionism, then, is about a view of language that is different from the cognitive view as it assigns an important role to society and context of the use of language in construction of language. Language, whether it is referred to in terms of words, or meaning, or message or sentences, is considered to be socially constructed in

the same way as all other knowledge, and above all, all other reality is. Knowledge is not something external to the user and user is not detached from the context. It is in the context that the user of language creates meaning, as the speaker transmits meaning by adding value to it, and the listener receives it by adding further value. This conception of language is in total contrast to the Chomskian view which considered language as a purely cognitive construct, which is detached from society. Social constructionism brings in social interaction and context to understand the phenomenon of language, and assigns important role to the social axes such as class, gender, race and so on. In view of these claims that language cannot exist outside of social context, the Chomskian position of taking language as an external, independent, and innate phenomenon becomes clearly problematic, which provides a chance to the researchers to study cognitive development from social perspective.

This warrants the present study a claim to consider language a socio-cognitive phenomenon rather than purely cognitive phenomenon which is innate, external to the context and independent from context.

3.2   Methods in Sociolinguistic Research

Before going into the detail of the research design this study follows, it is pertinent to have a brief overview of the methods of research followed by the variationists in sociolinguistic research, since the present study also intends to explore the existence (or otherwise) of variation of syntax as a socio-cognitive phenomenon. The foundational variationist study was done by Labov (1963, 1966, 1972) who focused on sociolinguistic variation in the field of phonology, in which two variables were believed to be different only in their social or stylistic value, and served the same communicative purpose. Amid the realisation that identification of syntactic variables is more difficult than the phonological ones on account of the latter being "easily delimited and recognizable in that they are discrete unites with high frequency of appearance" (Serrano, 1998,. p. 1054), many researchers (Sankoff, 1973, Codergen and Sankoff, 1974; Weiner and Labov, 1983, as cited by Serrano, 1978) extended the methods to other sociolinguistic variables to levels of grammar other than phonology (p. 1056). They

discuss that it is really difficult to decide what 'variable' actually is, since the term might be understood differently in phonological research than it would be in syntactic research. In phonological research, for example, it may be very easy to differentiate between a *labio-dental* and *fricative* and consider both of them as variables, but in syntactic research it could be a much more a tricky business. The syntactic variable is different from phonological variable in the sense that it depends upon the context of its use, and it is up to the researchers to decide whether the syntactic variables correlate with social factors, and hence can be termed as sociolinguistic variables, or not. For example, a speaker belonging to a lower social class might be using a particular construction or a grammatical item more than others. The researcher aware of the context would be better placed to distinguish that variable from others, but an ordinary listener who is not aware of the context may not be able to distinguish that variable easily. This argument also provides rationale for the present study, which endeavours to do exactly what has been recommended by Serrano, that is, to look for the influence of social factors on the syntactic variables, or otherwise.

3.3   Method of Research

The study aims to find out correlation between the social class of the learners and their cognitive development of syntax. For this purpose, correlational research is followed as a general method of research. Apart from social class, gender, age and marital status of the learners are also studied as extraneous variables. These variables are based on the demographic details of the sample that they were asked in both research tools, i.e. SES Index and the Syntax test.

Correlation is a popular research method in quantitative research. Before moving on to the definition of correlation, it is important to understand what quantitative research is, and what answers it provides to the researcher. Sukamolson (n.d.) cites Cohen (1980) who explains that quantitative research is a form of social research that employs empirical methods and makes empirical statements. Empirical statements are descriptive statements about "what is" the case in the "real world" rather than what "ought to be the case" (p. 01). These statements are made in numerical terms, and empirical evaluations

are often applied. Moreover, Sukamolson (n.d.) cites Creswell (1994) who defines quantitative research as the research that is "explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics)" (p. 01).

Phenomenon such as how many students from a particular background score better as compared to those belonging to a different background, hence, is a good case for study using quantitative research as it would involve numeric data which would answer the question asked in the study. Both the variables being studied in correlation are normally independent, which means there is no causal relationship as there is in causal research. None of the variables is manipulated; rather the relationship between the two variables is studied. In correlational studies, the variable that is presumed to have an effect on another variable is normally referred to as 'predictor' variable, and the one on which the effect is presumed is referred to as 'outcome' variable. So the two variables are referred to as predictor and outcome instead of independent and dependent. In case of the present research, the social class, thus, is a predictor rather than independent variable as it predicts a change in the other variable, whereas syntax is the outcome variable in which the change is predicted.

Having discussed quantitative research, we now move on to the particular method used for this research which is 'correlation'. This study is a correlational research which is carried out to study a possible correlation between social class of the learners and syntactic development. Since the purpose of the research is to find out a correlation between social class and syntactic development and to prove that syntactic development, which is considered a cognitive construct, has a relationship with social class, correlation research is used as research method. Singh (2007) opines that "In its simplest form it signifies the relationship between two variables, that is, whether an increase in one variable results in the increase of the other variable" (p. 146). The direction of correlation is measured in terms of positive or negative correlation. The presence of correlation is referred to as positive correlation, and the absence is referred to as negative correlation. The measure of strong and weak correlation is referred to as strength of correlation. Further, Lodico, Spaulding & Voegtle (2006) explain the purpose of correlational

research and say that it aims "to measure two or more variables and examine whether there are relationships among the variables" (p. 214). Such researches deals with questions such as 'Is there a relationship between sitting on the computer for long hours and weight gain? Is there a relationship between old age and inability to concentrate?', and so on. Correlational research studies the systematicity of relationship between the two independent variables. That means, whether the variable 2 varies with the same rate as variable 1 does?

In correlational research, the presence or absence of linear relationship between two variables is displayed normally through a scatterplot, in which the line going up is an indication of strong relationship between the variables being studied and the line going down is an indication of negative correlation. Lodico, Spaulding & Voegtle (2006) also highlight 'significance' as an important issue in correlational research and assert that "It is imperative to assess whether the identified relationship between variables is statistically significant, that is, whether a correlation actually exists in the population" (p. 147). By this they mean that significance shows that the variables being studied are related in the real population of the study in the same way as they are shown in the study.

One important caution that needs to be taken in understanding correlation is that it does not necessarily mean causal relationship between the two variables under scrutiny.

In quantitative paradigm, while studying correlation between the two variables, it also becomes necessary to keep in mind other factors than the ones the researcher is taking into account while designing his study. In other words, there may not be a single predictor in case of a particular phenomenon and there may be other variables that are related with the outcome variable. These variables may not be of that much importance to the researcher as the one he / she is studying, but they cannot be simply ruled out, and their mention may be necessary to provide a fuller picture to the readers to understand the phenomenon in broader light. Such variables are often referred to as extraneous variables. Kothari (2004) explains extraneous variable as variables "that are not related to the purpose of the study, but may affect the dependent variable" (p. 34). He goes on to explain through an example that in case a researcher is trying to test the relationship between children's gains in social studies achievement and their self-concepts,

achievement in social study would be a dependent variable whereas self-concept would be an independent variable. But apart from self-concept, there may be other variable that may be related to achievement in social studies such as intelligence. Such a variable would be called extraneous variable.

3.4   Understanding Social Class & Constituent Variables

Before explaining what variables constitute SES Index, which is the first tool designed by the researcher to measure social class of the learners, the answer of certain questions needs to be answered to clarify what exactly are we looking to measure through SES Index. In this connection we need to ask ourselves some basic questions such as

(i)   What is social class?

(ii)   Can social class be fully measured?

(iii)   What variables constitute social class of an individual?

(iv)   What are the theoretical basis / rationale of selection of variables followed by this study? and

(v)   How are the variables identified by this study inter-related?

The following sections take up these questions one by one.

3.4.1. No fixed criterion to measure social class

All societies are stratified in terms of gender, race, ethnicity, social class, and so on. These stratification systems are referred to in sociology as social stratification. One of the systems of social stratification is class stratification, just like gender stratification, ethnic and racial stratification, and so on.

The classification of samples in sociolinguistic research has been done differently by different researchers. Researchers seem to have a consensus on there being no consensus as to the constituent variables of social class. Coloma & Aires (2010) cite Macauley (2006) who believes that the definition of social class in sociolinguistics "has traditionally relied on a somewhat subjective classification based on several variables defined by each researcher, and no clear method of identifying social membership has

emerged" (p. 9). The selection of social variables that constitute social class depends upon the purpose of the study, and is tailored with a view to considerations such as "theoretical simplicity, cognitive plausibility, and social realism" (Rickford, 1987, p. 284). Social prestige is attached to the access to resources or material means which are differently available to different individuals. Individuals with similar means share interests and people with shared interests stay close to each other to protect each other's interests. The group of people with similar means and interests form social communities which sometimes overlap, but a certain line can be drawn to classify these groups. This classification is what we refer to as social class.

3.4.2 Defining social class

As stated in chapter 1, social class is too broad a concept to ne encapsulated in a definition, but a working definition can be adopted to understand the conception of social class adopted by the present study.

The concept of social class is that of a hierarchy of social structure in terms of people's access to resources and means of income. Different people have different resources, and these resources define a person's place or status in society. In this way, social class can be taken as a composite influence of social capital and the resultant social milieu that surrounds a group of individuals in a society. Individuals sharing similar status in society are conscious of their status as different from others, and are able to identify the individuals around themselves who share their status. These individuals with shared social status form a group among themselves on the basis of shared interests, values and norms, which is called social class.

Social class has its importance in sociology and other discipline because it affects almost all areas of a person's life. It is directly linked to his progress in society in various ways. Education and language, thus, are no exception and studies have been conducted to trace a relationship between social class and education (Leont'ev, 1981; Vygotsky, 1978; Archer, 2005; Willingham, 2012; Gerhards, Hans & Carlson, 2017, Panofsky, 2012Vygotsky, 1998), social class and language (Block, 2013;, Hymes, 1996; Chakrania and Huang, 2012; Huygens and Vaughan, 1983; Lai, 2010; Bex and Watts, 1999;

Crowley, 1989; Mugglestone, 2003; Collins, 2009 as cited by Snell, n.d.), and social class and cognition (Rydén, 1991; Scherre and Naro, 1992; Edwards and Middleton, 1986, as cited in Chesire, 2003).

3.5.   Research Design & Rationale for the SES Index

Justification for studying relationship of linguistic variables with social variables has been provided by various social and sociolinguistic researchers. Mallinson (2007), for example, asserts that "the patterned nature of the relationship between social class and language variation has been a longstanding focus" (p. 01). She further elaborates how the linguists follow the traditions of sociology and determine as to which discrete social class an individual belongs by using a scale based on factors such as income, occupation and education. The model of the present study can be justified with the assertion of Mallinson who states that the sociologists dwelled on the index of socioeconomic status to conceptualize and operationalize the concept of social class. The index accounts for "the person's years of education, the occupation of the family breadwinner, and the family income" (p. 01). The data regarding these three factors can be "transformed into score that can be used to measure individual's place in the occupational hierarchy (and thereby approximate their social class), this approximation can be correlated with data from other variables, and tested statistically" (p. 01). The index dsigned for this study also takes into account medium of instruction, and property, apart from the three variables mentioned by Mallinson (2007), as in Pakistani context they play a vital role in shaping social identity of an individual.

As the present study is focused to investigate correlation between the social class and syntax, it has followed the model presented by Mallinson (2007). A socioeconomic index was prepared in order to obtain data regarding the five factors mentioned above, which were assigned marks. A working definition of social class, rationale of selection of SC variables, and the details regarding how these variables are categorized into different levels to determine different classes, are given in the following section. On the other hand, the linguistic variable, namely syntax, which is to be correlated with social class score, was tested through a test specially designed for this purpose. The score obtained by

the individuals in SEI were correlated with the score obtained by them in the test designed to gauge their syntactic development of English language.

3.5.1   Theoretical Basis of Studying Social Class Variables

The selection of variables is based upon literature related to social class studies in sociology and sociolinguistics. Different studies advocate selection of different factors or variables in order to make an assessment as to what social class a particular person or group belongs to. Habib (2010) summarizes the studies of Bergel (1962), Hodge & Trieman (1968), Goldstein (1969), Labov (1972) Hechter (1978), Venneman (1980), Eckert (1991), Compton & Scott (2000) and Yamaguchi & Wang (2002). In the light of these studies, the variables that she thinks constitute social class are *income*, *education*, *occupation*, and *residential area*. They play an important role in assigning social class to individuals.

Regarding the interrelationship of social background with educational attainment, Willingham (2012) opines that educational attainment of the students depend upon three types of capital: financial, human and social. He believes that *family income*, *knowledge* and the *skills* of the learners and their *social interaction* affect the process of learning in various ways. The composite influence of the social capital can be estimated via socioeconomic index which takes into account various social variables.

In the context of this study, five factors were selected for assessment of social class of the learner's family status. These factors are *occupation, monthly income, educational qualification, medium of instruction,* and *property*. These factors are important in Pakistani context as each is reflective of individuals' and family's access to resources, material wealth, and the resultant prestige and power enjoyed by them in society. In selection of these variables, insight was taken from sociologists, both local and international, via verbal discussions and email correspondences which are placed in Appendices. Both approved inclusions of these variables to assess social status in Pakistani context and validated the SES Index used by this study. One important exchange in this regard is with Heise (2013) who recommended basing the SES index on a composite of individual's income, occupational prestige, and education. He further

recommended classification of each of these into three levels appropriate for Pakistani context, and then summarizing the final score for each individual. The final index was then validated by Habib (2010) who suggested some changes in the classification of levels, which were incorporated in the final SES Index.

Apart from the above cited studies, insight was also taken from Hafeez (1985) in selection of variables for the SES Index, who has thoroughly described the dimensions of social class study in Pakistani context (discussed in detail in 2.6.4). Her study explores four interrelated assumptions. Firstly, everyone has his or her own has his own definitions of social status as superior in power, privilege and prestige. Secondly, individuals are able to realize their superiority in terms of the above three aspects of their social lives, as well as shortfalls and weaknesses. Thirdly, they keep comparing themselves with others and are able to make a conscious decision as to their social status, and finally, in face of deprivation compared to others, individuals assert their possessions to acquire what they are deprived of and compete in terms of social status. These assumptions explain how individuals compare themselves with other individuals in society in terms of their respective social status, and how they are able to reflect upon their social standing. This not only validates the assumption of the present study that individuals are able to reflect upon their social status but also help us identify social variables that assign power, privilege and prestige to individuals in Pakistani context, as identified by Hafeez (1985).

Section 4.3 has thrown light on vastness of the concept of social class. It then presented a working definition of SC, and then discussed various studies that mention various social variables to be taken into account while measuring social class of individuals. The next section will discuss the rationale of inclusion of each SC variable; it will also explain the method of categorization of each SC variables into three levels and of assigning marks to each level.

. This section (3.4.1) has summarized suggestions regarding what factors are important in formation of social class, whereas the next section (3.4.2) is going to provide rationale for selection of each variable individually and the categorization of each into

levels and marks assignment criterion. The following section will discuss the inter-relatedness of the selected variables to justify how this selection makes sense in the context of the present study.

3.6   Designing SES Index: Measurement scheme and Rationale for each variable

The Socio-economic Index aimed to measure cumulative social status of the participants of the study based upon various social variables. Taking insight from the studies cited in section above, the following five variables were selected to be studied for calculating social class score of the learners.

i.   Occupation

ii.   Income

iii.   Educational qualification

iv.   Medium of instruction

v.   Property

Except variables i & v, the other variables were categorised into three different levels. The participants were required to provide information about themselves, their father and mother. In case of variable ii, iii & iv, they were required to tick the categories they found themselves or their parents in, whereas in case of variable i & v the information they provided was placed in the relevant category by the researcher himself. Variable (i) was categorised into three levels based on the study by Croxford (2006) in which she has categorised the occupations in England, Wales and Scotland in three categories. The placement of occupations in relevant categories was done at a later stage (see Table 4.4.2, Chapter 4), since it would not be easy for the participants to decide the category of occupations if they are asked to do so. Similarly, responses to variable (v) property were also categorized into three levels after collection of the data.

Each variable was assigned marks out of total number of marks proportionately. Total marks for the SES Index were 100. Hence, each variable had maximum 20 marks. The top category was assigned maximum marks, that is, 20, whereas the 2nd was assigned

2/3 of the total variable score, and the third category was assigned 1/3 of the total marks. Hence, category 1 had 20 marks, 2 had 13.33, and 3 had 6.66 marks. These marks obtained by each of the three family members in each of the variables constituted class score of the individual participant, which were correlated with their score in Syntax based test, which is the second tool of the present study.

The rationale for the classification of categories of variables ii, iii & iv and non-categorisation in case of variable i & v is presented in the following lines.

3.6.1   Occupational Classification

One of the five factors that have been taken into account in determining SC of the individuals is occupation. Whereas different SC measurement models provide different classification of occupations in terms of economic differences that naturally come with different occupations or professions, and in terms of social prestige, the present study takes insight from the categorisation done by Croxford (2006), as stated in the above section, who divides occupations into three categories, that is Managerial & Professional , Intermediate, and working. Further insight could be taken from Ahmad (2012) who divides occupations in Pakistan into Major, Sub-Major, and Minor groups as published by the Bureau of Statistics in Pakistan Standard Classification of Occupations (1994). Based on these studies, the responses of the participants regarding occupations were placed in the relevant categories, and assigned marks.

Miles & De Putte (2010) presented a model to measure social class from occupations. They believe that occupation is a key factor that is considered while studying social stratification. They base their view of social class on Weberian model of stratification and on John Scott's adaptation of that model (Scott, 1966) and opine that social class is 'economically mediated social power, or the ability to influence one's life chances through the control of the resources via one's economic role. Keeping in mind the mechanisms underlying the structures of production of social power, they assert that in society, different positions are considered less or more honourable and the prestige attached to these positions is considered responsible for enhancing the life chances of individuals (P. 89).

Occupations, then, become a central option to be studied when studying social stratification, apart from other social variables.

3.6.2   Monthly Income

Monthly income is the second important variable that needs to be considered for study under social class. Higgs (2002) while mentioning the ways in which SES is measured in different countries talks about the US where "the Census Bureau uses a scoring regime based on occupation, monthly household income and education" (p.01). In another study, Coghlan (2012) cites Liu (2011) who includes income among the variables that he thinks objectively measure social class. Various other researchers for example Duncan (1961) have emphasized the need to include income as an important variable among the socio-economic variables, to measure SES of an individual. Furthermore, Miles and De Putte (2010) argue that "Wages are (…) a product of one's social power" (p. 97) and skill differences are normally reflected through different wages.

In the SES Index devised for the current study, *income* was categorized into above hundred thousand (one lac), fifty thousand to hundred thousands, and from twenty five thousand to 50 thousand, respectively. Also, the participants were asked to specify if monthly income is less than twenty five thousands, or more than one lac, which means that there might emerge more levels in terms of income than the three that have been mentioned here.

3.6.3   Educational Classification

Individual's education is an important factor that determines one's social status in society. With education are connected various life-chances such as progress, social growth and mobility, and the chances to earn good income that leads to supporting better life-style in society. Hoffmeyer-Zlotnik & Warner (2006), while acknowledging that the comparative measurement of education is not an easy task, propose that three anchor points can be identified to classify education. These are "the basic certificate, the highest possible degree of general education as the entry point to university, and finally the end of university education with the PhD thesis" (p. 1). Further, they point out that for cross

country comparison, "years of schooling" is the mostly used instrument of educational measurement, and different surveys use their own wording to focus on the information in slightly different ways.

Based on the above insight, for the purpose of SES Index for the present study, *Educational Qualification* has been divided into "up to Matriculation (primary / middle and matriculation), above matriculation to graduation, and masters or above, respectively. The participants were asked to explicitly mention if they or one of their parents were illiterate.

3.6.4   Medium of Instruction Classification

In Pakistani context, which is a multilingual society, the issue of medium of instruction is of utmost importance. Language is used as the medium of all education, and due to different preferences of the speakers of different languages, or different mind-sets prevailing in the society, one language has an edge over the other in terms of its selection as a medium of instruction. The language (medium) in which students study their courses has an impact on their performance in their schools. Owu-Ewie &Ashun (2015) quote Owu-Ewie (2012) who points out this fact and assert that "There is positive and significant correlation between language performance and performance in other academic subjects" (p. 72). This, according to them, "implies that students who are proficient in the language of instruction generally perform well in subjects taught in that language" (p. 72).

The situation in Pakistan regarding medium of instruction is generally varied. Some institutions, largely private sector schools / colleges follow English, whereas others which fall in government sector follow Urdu as a medium of instruction. However, there are institutions which place equal emphasis on both languages and teach some subjects in English whereas others in Urdu or local languages. Ahmed (2011) discusses the issue of medium of instruction in Pakistani context. She gives a general definition of the medium of instruction as it is understood and prevails in Pakistani context. She opines that "Language use to teach and to impart instructions in any discipline, subject and at and any level of learning (Elementary, secondary, Higher etc.) is called Medium of

Instruction" (p. 66). She further highlights that the official language being used in offices is still English, and the Pakistani constitution is also written in the same language. National language is Urdu, which is a lingua franca as it is understood by most of the population of the country, and the local languages spoken by various communities and provinces are many, such as *Punjabi, Pashto, Saraiki, Sindhi, Hindko and Barahwi.*, and so on.

Keeping in mind different languages that are used as a medium of instruction in Pakistan, three different levels were devised that is, English, Urdu, and Mix (English and Urdu both). The three levels were assigned marks as explained above. English was given highest marks due to the highest social prestige attached to it. It was then followed by Urdu, and mixed medium. This division of medium of instruction into three levels makes a general sense given the Pakistani context as explained above.

3.6.5   Property

Property was the fifth variable in the SES Index. The participants were asked to give an approximate cost of their family property such as house, agricultural or commercial land, or factory etc. The question regarding this variable was open ended. The responses of the participants were divided into three categories after the data was in hand. Pre-categorisation in case of property was not possible and did not make sense. Nor did any study suggest such pre-categorization of property when studied as an SC variable.

Advocating the need to include property as one of the variables in the study of socioeconomic status, Miles & De Putte (2010) remark that property in land is one important source of power production, and there is no sense in relying exclusively on the occupational information when measuring social stratification. Relying solely on occupational information would mean that all farmers are assigned same social prestige without taking into account the difference in the property they own, and this difference could be substantially important to warrant further classification within the same occupation.

As Miles & De Putte (2010) point out, the earlier approaches to measure stratification lacked clarity of definition and conceptualization that Sorokin (1927) asked

for, and this made it difficult to know what was being measured and how to interpret it. While talking about the Socioeconomic Index, Chan (2015) remarked that education and income were found out to be strong predictors of occupational prestige. A socioeconomic Index is there that facilitates cross national research, but as Ganzboom (1996) notes, its measurements are indirect, imperfect and hence discarded. The present study, in the light of these flaws in the existing indexes, sought to design its own Index that includes occupation, income, educational qualification as well as medium of instruction and property with a hope to have a fuller picture of social status of the individuals and their family.

3.6.6   Inter-linkage of the selected SC variables

These factors are interdependent on each other as one causes the other and so on. Individual's occupations and progress on the occupational ladder mostly depend upon their educational qualification. Good education ensures good occupations, which, in turn, return healthy income. Families with healthy income are obviously more likely to buy property than those with lower income. People earn profit through property by selling it, and buy more property, or establish or advance their businesses.

In the context of Pakistani society, in addition to *educational qualification*, *medium of instruction* also plays an important role in attainment of social prestige. Unequal access to educational facilities (discussed at length in section 2.1.3) means people in upper strata of occupations such as bureaucracy, administration and so on who have good income, and people with good enough property are able to send their kids to private schools which offer education in English medium to which social esteem is generally attached. On the other hand, government schools offer education in Urdu medium which is considered lesser prestigious in Pakistani context. Common man who cannot afford to send his kids to expensive private schools in contented with sending them to government schools where education is cheap, although the educational standard is equally low. Apart from these two extremes, there is a section of society which is neither here nor there. The kids of families belonging to this section of society start off with English medium in relatively expensive private school, but at some point in their

educational career, their parents are forced to withdraw them from private institutions due to economic constraints and they have to switch to Urdu medium schools midway. An additional factor here is the existence of schools where mixed medium (English & Urdu) is followed as some of the courses are taught in English and some other are taught in Urdu.

The study of these variables makes sense in the context of the Pakistan where each of these variables affects individuals' social status in its own way and adds to or negatively affects the resultant prestige that society returns to him / her. Social class assessment cannot be done only on the basis of income, as a person earning high income may not be highly educated and hence does not get the prestige equal to the person who has both high income as well as high educational qualification. Similarly, a person with high ranking occupation such as owner / head of an organization or an administrative position involving authority, high income, more property, high educational qualification, speaking good English by virtue of having studied in English medium schools, is likely to have greater prestige in society compared to those who are on a lower social ladder compared to him / her.

Apart from grouping individuals into different social strata called social classes, there exist differences between families and individuals within each social class. This means that even within a social class there could be a chance of further division based on various factors. For example, we take the number of family members as an example to see how families' within a social class could be different from other families within that class. However, there are other factors such as area of residence, number of family members within each family, personal likes and dislikes regarding adopting a particular life style and rejecting another. All these are areas of study which fall outside the scope of this study.

3.7   Test for Syntactic Skills

The syntax-based test aimed to test various syntactic skills of the participants of the study. It was designed in the light of the suggestions given by Callary (2009) and Moravcsik (2006).   It included 10 questions carrying a total of 100 marks. The questions

tested more than one syntactic skills and hence aimed to avoid possible bias because of the participants' understandings of a particular type of sentence skill. The skills that were tested include the following:

Q. 1. Constituent replacement

Q. 2. Unscrambling sentences

Q. 3. Filling in the blanks

Q. 4. Rewriting sentences omitting certain words

Q. 5. Rewriting sentences replacing certain words

Q. 6. Choosing correct sentences from the given options

Q. 7. Make appropriate grammatical choices, lexical choices, verb form choices, pronoun choices, preposition choices, and conjunction choices.

Q. 8. Arranging given phrases

Q. 9. Correcting the sentences

Q. 10. Using discourse markers in a given paragraph

In the beginning of both SES Index and Syntax based test, the participants were thanked for their willingness to participate in the study and were assured that the data they provide would be used for no other purpose than this research. Before filling up the SEI and attempting the test, they were also required to give demographic information such as name, age, qualification, institution, class, cell number, and email address.

Calary's (2009) work syntax and social class provides the basic motivation / direction for the present research that aims to test various syntactic skills of the learners through a specially designed test. He advocated for a correlational study between social factors and previously unexplained linguistic phenomenon. He says that the linguistic behaviour that was earlier considered random and unmotivated can be seen as regular and consistent when studied in relation with social factors (p.01). He also alludes to early efforts to define the relationship between aspects of social structure and linguistic

performance, and these include studies of McDavid, Fries, Puntam and O'Harn, Harms and Pickford's "*critique of the Linguistic Atlas of the United States of America*".

Maddison (1983) explains that "syntax involves the relationship of words in a sentence, including matters such as word order, usage of the negative, question forms, and connectives. (p.34). Maddison goes on to explains how multiple choice questions can be beneficial in testing grammatical ability of the students. He opines that any given test is a kind of tool that may be useful for some purpose and not useful for some other. Similarly, multiple choice completion tests are useful in the following way. First, he says, you can choose the grammar point that you need to test, Secondly, "prepare the right kind of sentence context", for the given grammar structure, then select three logical distractors, and prepare clear and simple instructions. (pp. 34.35). Explaining the sentence context, he gives a very good example. He says that if you are trying to test the students' ability to use "to plus verb", you have to prepare a sentence such as 'He is ready to go.' Leave the space of, to plus verb blank, give one correct option and include three distractors in the multiple choices that you offer to the students. Compare this sentence with a sentence that intends to test the students' ability to use 'must'. For testing this skill, you have to give a sentence such as "Michael is absent today. He must be ill." Compare the context of the sentence. Each gives a clear context to the student to guess the correct option from the mixed up multiple choices. This is one very important point that the test maker musty keep in mind.

3.8   Reliability and Validity of the Tools

Reliability and validity are two measures that need to be taken about the instruments being used in correlational research. Reliability has been defined by Lodico, Spaulding & Voegtle (2006) as "the consistency of measurement" and validity means "whether the measure accurately and appropriately measures whatever it is supposed to measure" (p. 230).

However, apart from this simple definition, another definition if validity is "the degree to which evidence and theory support the interpretations of test scores entailed by the proposed uses" (Chapter 8., p. 02)

The tools were designed after a thorough study of the literature related to both Social Class and Syntax. A detailed review of the similar studies was done, which has been mentioned in the literature review. Different sources were consulted to construct syntax based test, and the SES Index was also verified by the subject experts. Daise (2012), for example in his response to this researcher's question about how to devise social class measurement scale remarked that an adequate SES index for Pakistan could be designed "by classifying income, occupation prestige, and education each into three levels appropriate for Pakistan" (p. 01). Habib (2011) was consulted about construction of the SES Index, as she had the experience of conducting social class research in Arab countries. After a thoughtful construction, Habib (2011) finally termed the test as satisfactory after suggesting minor adaptations. (Email correspondence of the experts has been included in Appendix E, *Emails to Sociologists,* with their permission)

When designing the screening test to asses students' general knowledge of syntax and their profile of strengths and weaknesses in individual structures, we considered whether (i) the test measures the intended content area, (ii), how does it sample the content it is intended to measure, and (iii) is the test manageable for the students that it aims to test. Based on these insights, the syntax test was tested with the help of pilot study, which provided a clear picture of how useful it was for the students. The sample of the pilot study responded to the test with considerable ease, the questions in the test were responded to by most of the participants, and the issues highlighted in the test were adjusted to finalise it for final administration among the sample finally selected.

3.9   Pilot Study

A pilot study was conducted to test reliability of two models of the SEI prepared by the researchers, and then select one of them as final tool for SC related data collection. This pilot study was intended to help find out and remove any flaws in the light of trends in responses of the learners to each of the two Indexes.

One of the SES indexes was open ended whereas the other one was close ended. The researcher intended to see which of the two indexes yielded manageable results. The close ended index (Appendix A) pre-stated categories of the five SC variables namely

income, occupation, educational qualification, medium of instruction and *property*, and asked the respondents to tick the relevant category for themselves, their father and mother. The open ended index (Appendix B) did not state categories and asked the respondents for their feedback regarding these variables openly.

SES Index (SEI) would statistically assess socio-economic background of the students. It would convert participants' responses into statistical value to give them a certain social class score, which would then be correlated with the syntax score obtained by the participants through a test.

3.10   Piloting the SES Index

3.10.1   Composition of SES index 1

In the beginning, the index stated the purpose of the study, that is, to study correlation between social class of the students and cognitive development of syntax. The respondents were assured that the data is being collected for no other purpose than research. In demographic section, they were supposed to write their name, tick one of the three age groups, that is 20-30 years, 31-40 years, and 41 and above. They were supposed to check the relevant sign for their gender and marital status, and were asked to write current and permanent residence, institution they study in, class or level, their cell phone and their email address.

3.10.1.1.   Marks distribution scheme in SES index 1.

SES Index 1 (Appendix A) sought to collect information about the respondents, their mother, and father regarding the four SC variables, that is, (i) Occupation, (ii) Monthly Income, (iii) Educational Qualification and (iv) Medium of Instruction. All four variables were assigned 25 marks. Hence, total marks of the SES Index were 100.

Each variable was categorized into three levels. The division of marks was done on 33% formula, that is, the lowest level (L3) in each variable had 33% marks, the middle level (L2) had two thirds (66%) marks, and the highest level (L1) had maximum (100 marks). In this way, L1 had 25, L2 had 16.66 and L3 of each variable had 8.33 marks. The formula is further explained in Table 1 and Table 2 below.

The respondents were asked to select one of the three levels in case of each variable. They were supposed to answer in this way about three members of their families, i.e. themselves, their father and mother, separately. The purpose of collecting data from fathers and mothers was to have a clear picture of the social status of the subjects' families. According to the levels they selected for each of three family members in each variable, they were given marks on the basis of the criterion explained above. The average of the total score obtained by the three family members was to be considered the individual's social class score.

In the index, the first variable was open-ended but the responses would be categorized into three levels by the researcher himself after collecting the data. Each variable was assigned maximum of 75 marks (25 for self, 25 for father, and 25 for mother). Each section of the remaining three variables has 3 pre-defined levels from which respondents were to choose one.

Table 1

Levels of variables and marks distribution for SES index 1

Variable	Sections in Variables	Levels	Marks of 3 levels
1: Occupation	1 (student)	(1.1, 1.2, 1.3 &	Level 1:25
2: Income	2 (father)	2.1, 2.2, 2.3 &	Level 2: 16.66
3:Educational Qualification	3 (mother)	3.1, 3.2, 3.3&	Level 3: 8.33
4:Medium of Instruction		4.1, 4.2, 4.3)	

Since each section has 3 levels, and each level has 25 maximum marks, each section will have total 25x3=75 marks. Hence all 4 variables will have total 75x4=300 marks. The obtained score which is total of all 3 sections of each of the 4 variables will be considered individual's class score.

Further explanation of how class score has been calculated can be understood by table 2, which shows how the marks were allocated to each of three variables in all four social variables.

Table 2

Level-wise score allocation in each variable

	Occupation	Monthly Income	Educational Qualification	Medium of Instruction	
Levels & marks	1.1 (L 1) Marks 25	2.1 (L 1) Marks 25	3.1 (L 1) Marks 25	4.1 (L 1) Marks 25	Obtained / 100
	1.2 (L 2) Marks 16.66	2.2 (L 2) Marks 16.66	3.2 (L 2) Marks 16.66	4.2 (L 2) Marks 16.66	
	1.3 (L 3) Marks 8.33	2.3 (L 3) Marks 8.33	3.3 (L 3) Marks 8.33	4.3 (L 3) Marks 8.33	

The three family members, that is, self, father and mother were supposed to select one of the three levels from each variable. The example in table 3 below explains how the selected level for each family member was assigned score according to the level scores shown in table 2.

Table 3

Example of calculating SES score for individual

	Occupation	Monthly Income	Educational Qualification	Medium of Instruction	
Self	L 3 (8.33)	L ..NIL	L 2 (16.66)	L 1 (25)	49.99/100
Father	L 1 (25)	L 1 (25)	L 1 (25)	L 2 (16.66)	91.66/100
Mother	L 3 (8.33)	L ..NIL	L 3 (8.33)	L 2 (16.66)	33.32/100
Grand Total			174.97 / 300		
			(Average Class Score= 174.97/3= 58.32)		

Table 3 explains by an example how the students chose different levels of each of the four variables, for themselves, their father and mother, and how they were assigned marks, and their total score was calculated to draw average Class Score.

As mentioned a couple of paragraphs above, each variable was divided into three levels. Level 1 of the second variable, i.e. income was more than Rs.100,000/-, level 2 was up to 100,000 a month, and level 3 was up to 30,000 a month. Level 1 of educational qualification, which is the third variable, was above Masters, level 2 was from Matriculation to Graduation, and level 3 included those who are below Matriculation. Medium of instruction, which is the 4th variable, had English medium as level 1, Urdu medium as level 2, and English-Urdu medium as level 3.

The data collected through the Index 1 has been placed at Appendix C.

3.10.2 Composition of SES index 2

SES Index 2 was different from SES Index 1 in the sense that the respondents were required to respond to the Index open-endedly in all variables, not only in Occupation variable as in Index 1. Secondly, it asked questions about one more variable than the four mentioned in the last section, that is, property. The Index asked the respondents to give answers about all the SC variables about themselves, their father, and their mother, and included instructions as to how they are expected to respond to the Index. The Index did not give pre-defined levels to the respondents to tick the one they think describes them the best, as was the case in the latter. In the demographic section, it included two more questions, that is, about the area of permanent residence and the area of current residence.

Since the variables were open ended, and the responses of the participants would be assigned marks and score was to be calculated later, there was no level distribution and marks assigning done at pre stage, as was the case in Index 1, Table 2. (see Appendix D for the data that the SES Index 2 yielded)

3.10.3 Observations of the pilot Study

The researcher observed the following points on the basis of the pilot test of the two Indexes:

i.   Index 1 with levels specified was easy to fill for the students as more answers have been given where the levels have been specified.

ii.   It was more convenient for the researcher to assign marks to the levels in Index 1, as compared to Index 2, in which all variable asked for open ended answers.

iii. As variable 1 (occupation) had been kept open in Index 1, respondents seemed to give confusing / vague responses as "retired" and "government servant", etc.

iv.   No data emerged for level 4 in *Income* variable for Rs. 25000 or less. However, if it emerges in the final data collection, it will be difficult to justify it as well as to assign marks, since all other variables have 3 levels.

v.   It was observed that in *medium of instruction*, 'Mixed' section was pointed out by more respondents. As it may be considered more prestigious compared to Urdu, it might be placed under level 2 instead of level 3, as was the case in the current Index.

vi.   As most of the students (though not all) seemed to be responding to *property* variable, this variable may also be added to Index 1 if it is to be finally selected, although what three levels it should be categorized under is not clear.

Despite the recommendation that the pre-defining levels is easy to manage because it is easy to assign marks and calculate class score in such a way, the question remained as to how the occupation and property variable could be categorized into levels. There was no way that the students could be given a list of occupations and select the relevant one for themselves, their father and mother. Such a list would be hard to manage that included all occupations that the learners in Pakistani context would want to choose. Similarly, property the answer of property could not be restricted to any pre-determined boundaries, so the solution was to collect the data via open-ended question, and later divide it into three levels, and assign marks accordingly.

3.10.4. Adjustment / Finalization of Index

As a result of the pilot study, and the issues in categorizing occupation and property variables, the following adjustments were made to the SES Index.

1. The SES Index 1 was chosen as the final data collection tool, as it was to yield easily manageable data.

2. In the light of observation iv of the pilot study, *property* variable was also included in the Index as 5th variable, as it would give more credibility and weight to the social class picture of the respondents and their family.

3. Variable 1, that is, occupation, and variable 5, that is property, were left open ended, and it was decided that the data collected through the index would be categorized into three levels when the actual data is in hand, and the marks according to which level the responses fall in, would be assigned to the responses.

4. In variable 4, that is, "medium of instruction", the adjustment in positioning of the three mediums was made by bringing English-Urdu mix medium at level 2, instead of level 1, as more students said they studied in mixed medium, and it made sense that it should be assigned more marks that Urdu medium.

5. In view of the vague responses, clear instructions were written for the respondents before each of the five variables, so as to help them provide clear and error free data to the researcher.

6. The index was then finalised to be circulated among the samples for final data collection (see Final SES Index, Appendix E).

3.11 Methodology Challenges after Piloting, and Adjustment

As the pilot study data revealed, the scores of the sample were to be divided in different social classes, and then the extraneous variables such as gender and marital status were to be studied for interaction with syntactic development, correlational study would not serve the purpose for all the above. It would be limited to the study of the overall data, but to study variance of syntax score among different social classes and

among males and females, married and single, and among the three different age groups, different tests to study variance would be required. This required adjustment in the method of data analysis as ANOVA and T-test were considered as options to analyse variance among the three social class groups and the two gender and marital groups respectively. In the case of the three age groups, Mann Whitney test was used as this is the prescribed test for the data with non-homogeneous groups.

3.12   Technique of Data Analysis

The data collected from the aforementioned two tools, namely SES Index and Syntax test, will be analysed in two parts. First, the data received about the socioeconomic status of the participants will be presented. Again, there will be bi-dimensional presentation of the SES data. First, the overall response to the three response categories of each variable will be presented one by one through descriptive analysis in SPSS. After that, the response rate of each of the three family members will be presented via cross-tabulation technique in SPSS. Secondly, hypothesis testing technique will be used to test various hypotheses of the study regarding the main variable and the extraneous variables. Hypothesis testing is a technique in quantitative research which tests truth or falsehood of an assumption about the given data set. Hypothesis testing can be done via correlation for equally distributed data, with T test for two equally distributed groups, and with ANOVA for more than two groups from the same population. The correlation, as the name suggests tests the extent of relationship between the given variables. It tests the nature and strength of the relationship to reveal whether there is a relationship between the given variables or not. Similarly, relationship between two groups can be tested with T test and between more than two through ANOVA by looking for variance among the given groups. The presence of variance in the independent variable is the proof of relationship between the independent and dependent variable, whereas no variance means no significant relationship.

3.13   Population & Sampling

All male and female students who were studying English as a Foreign Language at three universities of the federal capital of Pakistan, Islamabad constituted

population of the present research. Sampling has been described by Singh (2007) as "the process of selection of sampling units from the population to estimate population parameters in such a way that the sample truly represents the population" (p. 89). The purpose of using sample is to apply inferential statistics on the data obtained from the selected sample in order to draw generalizations about a larger population. In the words of Singh, it is not easy for the social scientists to gather data from a large population, and in order to have an idea of the trends among a population, they rather choose a selected number of sample as representative of the population assuming that the trends obtained from the data collected through this sample and inferences made upon that basis will be representative of the whole population. Sample size has to be large enough to represent normal distribution of the overall population.

As discussed above, all male and female EFL students of the three universities in the federal capital of Pakistan, Islamabad constituted population of the study. In order to get representative data of this population, sample was selected from all three universities that offer courses of English as a foreign language. These universities are Air University Islamabad, National University of Modern Languages, and International Islamic University, Islamabad.

Being learners of English as a foreign language, these students met the requirement of the study. Naturally, all students come from various social backgrounds, and hence, they are likely to exhibit different cognitive development through their performance in language learning context, just like they do in all other areas. Having been exposed to grammatical and syntactic rules of English language, they better suited to respond to a study related to linguistic or syntactic development. The study was delimited to Punjabi students only, to avoid the interference of different L1. They were above 20 years of age, and had enrolled in these courses with at least twelve years of education. These students had received three to four months of input in form of teaching of the four language skills, grammar and pronunciation of English language at the time of their participation in the present research.

The number of sample approved by the university's board was 20 to 30. They were supposed to be male and female learners of English language courses offered at university level with 25 to 32 years of age, and with educational qualification of Graduation or Masters. They were also supposed to have studied English as a language in their respective courses at university level for three months. This was a constant factor for the entire sample against which variance in development of syntax was to be measured.

The selection of sample was done on the basis of the above criterion, with certain adjustments. Firstly, as the sample was supposed to be EFL learners / the students of language courses, they were inducted from National University of Modern Languages, Islamic International University, Islamabad, and Air University Islamabad. No other university in the twin cities offered English language courses to adults, hence they were not considered for induction of sample. Initially the researcher decided to increase the number of sample in order to make results of the research more representative of the population. Hence, the data collection tools, i.e. the SES Index and the syntax test were distributed to 300 EFL learners in the above mentioned universities. The average response ratio was about 33 per cent from each university. A total of 100 learners out of 300 responded. On close assessment of the Index and the test, 18 out of 100 indexes and tests were discarded. The discarded indexes and tests were those that were not filled / attempted at all, and it was very much likely that they would negatively affect the final data.

Stratified random sampling was adopted as sampling strategy. In this kind of sampling, every sample unit that meets the set criterion has equal chance of being selected as a representative of the population. Ten per cent (10 %) EFL students of the whole population from the three universities were selected as a sample. These were representative of the whole population, that is, the EFL students of the universities of the federal capital of Pakistan. This sample was likely to provide adequate data for generalization about the overall population. Considering the length of time required to respond to the SES Index and solve the Syntax test, it would not have been possible to induct a larger sample as it would require obtaining more time from administration and

the teachers teaching the respective classes from where the data was obtained. This would have been nearly impossible as in the semester system every teacher has limited time at his / her disposal to cover the prescribed syllabus.

3.13.1 Total number of sample

The total number of sample inducted for the study was 82. The division of the sample was also done age, marital and gender wise, which will be presented later.

Table 4

Statistics

	University	Age	Marital status	Gender
Valid	82	82	82	82
Missing	0	0	0	0

The data was collected from three universities. Total number of the sample from all three universities was 82, whose age, marital status, and gender were all coded in the category. The three universities from where the data was collected are Air University, Islamabad, Islamic International University, Islamabad, and NUML, Islamabad. The age group under which the respondents were labeled in the data are three; first one was from 20 to 30 years, the second one from 31 to 40 years and the third one was from 41 and above. The respondents were also labeled as married or unmarried, according to their responses as entered in the excel sheet.

Table 5

University-wise sample details

	Frequency	Percent	Valid Percent	Cumulative Percent
Air University	7	8.5	8.5	8.5
NUML Islamabad	43	52.4	52.4	61.0

Islamic Int University	32	39.0	39.0	100.0
Total	82	100.0	100.0	

Table 5 shows university-wise distribution of the sample. Seven (8.5% of the total) respondents were inducted from Air University, 43 (52.4%) were selected from NUML, Islamabad, and 32 (39%) were inducted from Islamic International University. As has been explained in the sampling technique section, the participants who met the requirements of the study were randomly selected from these universities.

3.13.2   Age-wise details of the sample

As can be seen in the graph below, according to the overall respondents who participated in the study, 73 or 89% belonged to the first age category decided by the researcher that was 20-30 years.
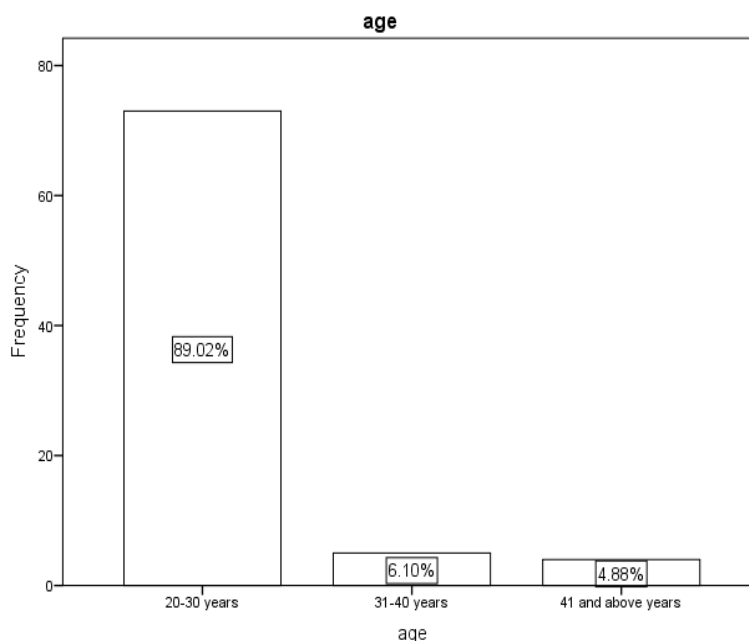
Figure 1: Age-wise sample distribution

Seventy three or 89 % respondents constituted the largest group who belonged to the first age group, that is, 20-30 years. Only 5 or 6.10 % respondents were in age group 2, that is 31-40 years, and 4 or 4.88 % were found to be above 41, or the last age group. In this sense, there was little homogeneity in age wise distribution of the sample, which also rendered this data unsuitable for variance related tests such as Pearson's Correlation Coefficient or t-test etc.

3.13.3   Gender-wise sample distribution

The sample included both the genders, female and male. As the data reveals, females form a larger part of the sample than males. This trend is also reflective of the ratio of males and females studying in EFL programmes in the universities.

Table 6

Gender wise distribution of Sample

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	24	29.3	29.3	29.3
Female	58	70.7	70.7	100.0
Total	82	100.0	100.0	

Females constituted 70 percent of the sample whereas males form a little less than 30 percent of the sample. Again, this trend might reflect at the possibility of greater number of females studying in the EFL courses or a chance of them being more willing to participate in research than males.

3.13.4 Distribution of sample: Marital status wise.

The sample included both married and unmarried respondents, as the data were collected from the EFL courses where some senior people also get themselves enrolled to improve their English language skills in order to enhance their professional abilities. Sixty four or 78 % of the sample were single, and about 21% were married. This verifies

the assumption of adults being part of the EFL courses more than other courses in the universities

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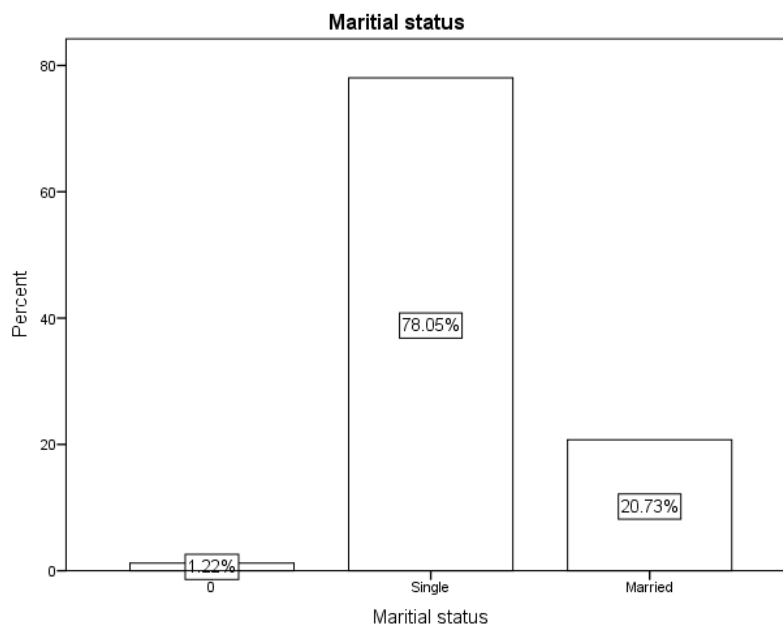
Figure 2: Marital status-wise sample distribution

Figure 2 reveals that single students constituted a major part (78 %) of the sample, whereas about 21 % of the sample consisted of married students. This is so because in the EFL courses, many adults who are settled in life and doing different jobs also get admission to enhance their English language skills. Also see Table 2 for numerical presentation of the marital status wise data in Appendix L.

3.14   Courses Offered at the Three Universities

The courses offered in the three universities are presented in the following tables. The sample was selected from the said universities from these courses.

Table 7

Language Courses Offered in the Three Universities

	University	Courses
1	Air University, Islamabad	1. Intensive Evening English Language Courses.

| 2 | National University of Modern Languages, Islamabad | 1. Diploma in English
2. Certificate in English
3. Foundation in English |
| 3 | International Islamic University, Islamabad | 1. Spoken English courses
2. Communication skills courses |

3.15. Summary

This chapter presents theoretical framework for the present study. It also provides a summary of the research design and research method used to carry out this study. The research is quantitative in nature in which correlation and variance between social class of the respondents and their score in the syntax based test was to be studied to find out how cognitive development of the respondents is influenced by their social background.

The subsequent part of the chapter explained in detail how the SES Index was developed after initial piloting of it, and on what lines Syntax test was designed. Finally, the chapter presented an introduction of population and sampling, as well as the detail of the sample university-wise, age-wise, gender-wise and marital status-wise.

CHAPTER 4

SOCIAL CLASS MEASUREMENT THROUGH SOCIOECONOMIC INDEX

The present research aimed to study correlation between social class of Pakistani EFL learners and their cognitive development of syntax. In order to study correlation between the two, the first important step was to ascertain social class of the sample. In academic research, the factors under scrutiny need to be studied scientifically and methodically. To conduct quantitative research, social variables such as class that are more fluid that constant, need to be captured in whatever totality possible, and any discussion based upon assumptions regarding the social class of a particular person or group might lead to incorrect assumptions and misleading conclusions. Therefore, SC has been systematically studied in this research. The SC variables have been identified after a thorough literature review related to SC, and the variables that this study took into consideration have been selected keeping in mind Pakistani context. A clear rationale has been provided in chapter 3 for selection of each. After that, a detailed method has been devised to calculate the score of each of the five SC variables about the subjects and their both parents, to collect representative data about social status of the subject's family.

Before going into the detail of how social class was measured, it is important to keep in mind the research question that this study intended to find answer for. The research question is:

What is the relationship between social class and cognitive development of syntax among EFL learners of Pakistan?

The above question can take different shapes while retaining the main focus on correlation between SC and cognitive development of syntax:

i.   *Is there a correlation between social class of the Pakistani EFL learners and their cognitive development of syntax?*

ii.   *How much does social class of Pakistani EFL learners correlate with their cognitive development of syntax?*

In the light of the research question, the sample's social class score was obtained and they were tested for their syntactic skills, which the study treats as an indicator of cognitive development. The social class assessment was done through a five-factor SES scale that this research refers to as SES Index, and assessment of the sample's syntactic skills was done through a test especially designed for this purpose. Both the SES scale and the test consisted of 100 marks each. This chapter deals particularly with the calculation of social class of the sample. It may be more of interest to sociologists or sociolinguists willing to measure the subjects' social class for whatever requirements in their respective domains of research. The reason of their interest in this chapter is likely to result from fact that social class has been converted from a superfluous concept to the one that is calculable, and the estimation of an individual's social class is likely to be made in terms of figures, which are fixed, rather than mere estimation, which are fluid. The SES index took into account *occupations, income, educational qualification, medium of instruction,* and *property*. As the literature reveals (see Chapters 2 & 3), these five factors are considered the most crucial ones to estimate social class of any individual. Since knowing only about the participants of the study could not have determined their social status, it was also important to seek information regarding their parents that would give us an overall estimation of the social status of the family that the subject belongs to.

Hence, this research initially took these two dimensions before finally converging in chapter 5 where discussion of correlation and variance between the two variables, namely social class and syntax, has been presented. The score obtained by each participant of the study in the two tools mentioned above was analyzed for correlation and variance of syntax score among different social class groups, gender (male and female) groups, married and single, and the three age groups defined in the sample.

This chapter, then, is related to the first part of the research which is measurement of the socio-economic status of the sample. First of all, it will elaborate the process of data collection. Secondly, it will explain the process of calculating SES score. Thirdly, it will present the list of different occupations that the respondents reported in case of each of the three family members. Then it will explain how the data obtained through open-ended questions about variable 1 and 5 was categorised and placed into three levels. And finally, a detail of how many people responded to the five questions that they were asked will be presented. In this regard, first the number of respondents in each level of the five variables is presented, and secondly, the cross tabulated responses of the respondents, that is, "self", "father" and "mother" to each of the five variables will be discussed.

4.1   Process of Collection of Data

The sample selected for data collection consisted of 82 learners belonging to three universities of the capital of Pakistan, that is, Air University, Islamabad, National University of Modern Languages, Islamabad, and Islamic International University, Islamabad. Since the study pertains to EFL learners, the sample selected for the study was EFL learners only, studying in different language courses. The detail of the participants from each university has already been presented in Chapter 3, Table 5, *University-wise sample details.*

In order to induct the sample, permission was obtained from the heads of the relevant departments, and the class teachers. The participants were asked to respond to the SES index and were administered the syntax test. The results of the Index and the Syntax test are presented in the following sections in detail.

4.2.   Socioeconomic Index

As mentioned above, the SES Index consisted of five variables, and to obtain an SES score of the respondents, they were required to select relevant level from the three levels mentioned against each of the three close-ended variables No. 2, 3 & 4. Apart from that, they were required to answer about the open-ended variables, that is, variables 1 & 5

for which no levels were mentioned in the Index. The subjects were supposed to provide information regarding all five variables about themselves, their fathers, and mothers.

Variables 1 and 5, i.e. *occupation* and *property* were left open because it was not possible to pre-determine the levels of these variables and it would have been unrealistic to expect the subjects to decide which category their or their parents' occupation falls in. Pre-determining the level of *property* was difficult because one could expect a wide range of answers in terms of property, so these two variables were left to be categorised at later stage, after the data was collected.

The graphic representation of conceptual layout of the SES Index is as follows:
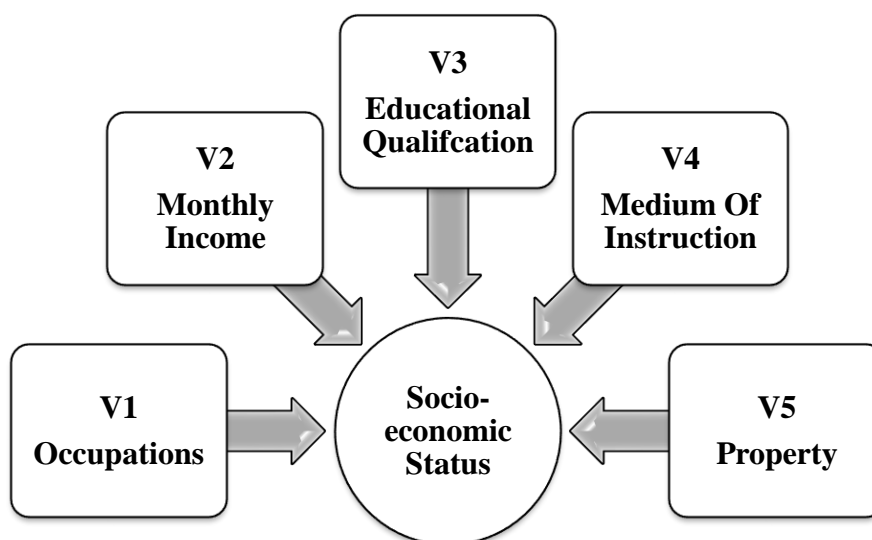
Figure 3: Five constituent variables of the SES Index

The three levels of responses in each variable carried different scores, as explained in section 4.3 below. The subjects were expected to mark the relevant level for themselves, and for both their parents. Responses to open-ended variables 1 and 5, then, were categorised into three levels by putting a cut-off point to assign score on the same pattern as done in the case of close-ended variables, in order to count the SES score. The process of calculating SES score is being explained in the following section, i.e. 4.3.

4.3   Calculating Social Class Score

Each of the five variables of the Index carried 20 marks, which makes it 20 x 5 = 100. Since all variables were divided into three levels and the marks to each level were assigned on the basis of 33 % formula, the first level was assigned 20 marks, the second was assigned 13.33, and the third level was assigned 6.66 marks. As stated earlier, since the first and last SC variables were open-ended, the level and score was decided by the researcher after the data was collected, but because the levels of the second, third and fourth variable were pre-determined, the respondents were themselves able to identify the level they and their parents fall in, and respond accordingly.

Each of the five variables was assigned 20 marks and the participants were required to answer about three family members including themselves, which makes the total marks = 300. This figure was divided by total number of family members about which the participant responded, that is, 3. That's why the marks obtained by each respondent were divided over 3 to take out average marks which gave us cumulative Class Score of each participant of the study.

Table 8

Steps in Calculating SES score

Descriptives	Figures
Total variables x score of each variable = 100	5 x 20= 100
100 x 3 (self, father & mother) = 300	100 x 3 = 300
Average / Cumulative Class Score: 300 / 3	300 / 3= 100

About variable 2, 3 and 4, the respondents were asked to select the level which they think they fall in. That means they obtain the score in case of each variable according to the level they select, which has been explained in the table below:

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Table 9

Criterion for assigning marks to three levels in each variable

		Level 1	Level 2	Level 3	
		20	13.33	6.66	
2.1	Self				Total / 3 =
2.2	Father				Respondent's
2.3	Mother				SES Score

Now that the process of allocating marks to different response levels in each variable of the SES has been explained, let us look at how the responses / data about the open ended variables 1 & 5 were categorised into three levels and on what criterion the cut-off lines were drawn for the three levels.

4.4. Occupations (variable 1)

Before presenting the classification of the occupations, the following table (No. 10) presents the percentage of the reported occupation that belonged to each of the three family members, i.e. the self (sample themselves), their fathers and mothers. This will give us an idea of how much work load is shouldered by each of the three family members taken into account for the present study.

In the first category, i.e. *self*, a large number of participants reported themselves as students, that are the reason why they constitute a small number (12.06 %) of the reported occupations. Similarly, the same number (12.06%) of occupations belonged to *mothers*, as mostly mothers do not work and are mentioned as housewife. Among mothers, only five occupations other than the 'housewife' were identified. The largest number of the reported occupations (75.86%) belonged to *fathers*, who are normally the sole bread earners for their families in the context of Pakistani society.

Table 10

No. of Occupations among respondents, fathers and mother

	Members	No.	Percentage	Cumulative percentage
1	Self	7	12.06	12.06
2	Father	44	75.86	87.92
3	Mother	7	12.06	100
Total		58	100	

Whereas Table 10 above shows the percentage of variation in the three family members, the tables below will present actual professions found among each family member. As highlighted above, the largest number of different occupations has been traced among fathers as they are mostly the bread earners of the family.

4.4.1 Occupations reported for each family member

4.4.1.1. Self

The subjects themselves revealed only seven different occupations. Most of them are obviously students, and are non-working people. 'Students' has been placed in level 3 of the occupation, as they stand low on the income scale. Whatever income they get, if this is the right word to be used for the money they have, mostly comes from their parents as their study or day to day expenses / pocket money. Only six other occupations were found among the 'self' category, which means only a small number of students work alongside their study (see Table 11).

Table 11

Occupations among 'self'

No.	Occupation among 'Self'

1	Student
2	School Teacher
3	Lecturer
4	Manager Finance
5	Advocate
6	Assistant Professor
7	Housewife

4.4.2.2. Occupations of Fathers

The largest number of occupation was reported to belong to fathers. After removing duplications, a total of 44 different occupations were reported. These included admin jobs, constructors, government, private and military personnel, and own account such as tailor, lawyer, electrician and land lord etc. Also, a considerable number of fathers were reported to be retired from different jobs. The general picture points to the social structure of Pakistani society in which father, who is the head of the family, is considered the main bread earner for other members of the family whereas mother takes care of domestic chores, while sons and daughters are either pursuing their study or are married off, respectively.

Table 12

Occupations among 'fathers'

S. No.	Occupations	S. No.	Occupations
1	Jr. Asstt Admin	23	Mechanic
2	Businessman	24	Professor
3	Farmer	25	Army Officer
4	Factory Worker	26	Land Lord

5	Retd. School Teacher	27	Retd Bank Officer
6	Private Job	28	Retd Govt Contractor
7	Govt Officer	29	Employer
8	Deputy Director	30	Govt Conductor
9	Working in air force	31	Assistant Admin
10	Teacher	32	Private Servant
11	Administrator	33	Retd Director
12	Constructor	34	Retd Engineer
13	Retired	35	Defence
14	Property Agent	36	Retd Govt Servant
15	Crain Operator	37	Retd Journalist
16	Chief Post Master	38	Assistant Officer
17	Out of Country	39	Tech Officer
18	Tailor	40	Retd Soldier
19	Retd Clerk	41	Lawyer
20	Manager	42	Electrician
21	Dead	43	Shopkeeper
22	Retd Armyman	44	Retd Assistant Manager

4.4.2.3. *Occupations among mothers*

The data revealed that only a small number (07) of occupations belonged to *mothers*. Most of the mothers were reported to be housewives, which is the main reason

of the small variation of occupations among mothers. Only one mother was reported to be manager finance, and others are reported to be teachers, lecturers or assistant professors, apart from being 'housewives'. This also points to a general trend in Pakistani society where people feel that teaching is the most suitable and respectable professions for women as they do not have / have very little interaction with male colleagues, unlike other office jobs.

Table 13

Occupations among 'mothers'

No.	Occupation among Mothers
1	Student
2	School Teacher
3	Lecturer
4	Manager Finance
5	Advocate
6	Assistant Professor
7	Housewife

Variation in the reported occupations is representative of Pakistani culture in which every adult family member is not considered responsible for earning a livelihood. Even in big families consisting of 8 to 10 or more members with more than half of them adults, usually father alone is responsible to make a living for his whole family. This reduces the SES score of the family as the ratio of earning hands per family is less than the work-force available in the family. More earning hands might have raised the family SES score and there was a likelihood of better SES leading to better life chances for the family members.

4.4.2. Classifying Occupations into Three Levels

The following table presents the division of all occupations obtained in the data into three different categories according to the esteem generally attached to them. The guidelines regarding how different occupations are to be classified were given in Croxford (2006) who mentions Managerial & Professional, Intermediate, and Working as the categories in which different occupations could be classified (see 3.3.1). The purpose of classification of the occupation is statistical as level 1, 2 and 3 would be awarded marks as per the scheme of the calculation to calculate the overall SES score of each individual.

Table 14

Level Wise distribution of Professions

	SC1	SC 2	SC 3
	Large Employer, High Managerial, High Professional, Low Managerial & Professional	Intermediate, Small Employers & Own Account	Lower supervisory & technical, Semi routine & routine
1	Businessman	Private job	Shopkeeper
2	Constructor	Retired Journalist	Mechanic
3	Land Lord	School teacher	Electrician
4	Advocate	Teacher	Factory Worker
5	Manager Finance	Beautician	Retd. School Teacher
6	Manager	Farmer	Crane operator
7	Govt Officer	Property Agent	Tailor
8	Deputy Director	Defence	Retd Clerk

9	Administrator	Saloon Owner	Retd Army man
10	Assistant Professor	Govt Servant	Govt Conductor
11	Chief Post Master	Chief Post Master Retd	Private Servant
12	Out of Country	EMPLOY (Employee)	Retired Govt Servant
13	Jr. Asstt Admin	Working in air force	Retd Soldier
14	Professor	=	Retd Teacher
15	Army Officer	=	Student
16	Lecturer	=	Housewife
17	Retd Bank Officer	=	Retired
18	Retd Govt Contractor	=	Dead
19	Employer	=	=
20	Assistant Admin	=	=
21	Retd Director	=	=
22	Retd Engineer	=	=
23	Assistant Officer	=	=
24	Tech Officer	=	=
25	Lawyer	=	=
26	Retd Assistant Manager	=	=
27	Associate Professor	=	=

The division has been done in the light of the categories given by Croxford (2006)

4.5.   Property (Variable 5)

Property is the second variable that was not pre-categorised into three levels because it was not logically possible to pre-determine levels of property without knowing who among the respondents came from what background and owned how much property.

Not everyone among the sample responded to the property question. Only a certain number of participants responded to it. The detail of those who answered the property question about themselves, their fathers, and mothers can be seen at Appendix F (Responses to Property question in SES Index). However a quick summary has been presented in the table below with duplicates mentioned in the extreme right column.

4.5.1   Summary of the property with duplications

The data yielded twenty values of property as shown below. The duplications have been shown in the right most column under 'No. of participants'. The variance of the property values is quite remarkable as it ranges between 100 million to 40 thousands. This points to the varied social backgrounds students in our universities in general and in EFL courses in particular belong to. This variance is also indicative of the fact that the assumption of varied social background of the participants is not totally based on assumptions, as the reader might feel when reading the problem statement of this study. All the data about property was not presented by the respondents in form of figures. Some of them mentioned property items such as house and cattle etc., instead of value of the property. These instances were converted into value on the basis of approximate cost of these items, as no other method would work to count their value in figures.

Table 15

Summary of Respondents of Property question

S.No.	Property Value	No. of participants
1	100000000	2
2	36000000	2
3	20000000	2
4	15000000	1
5	10000000	4
6	6000000	3

7	5000000	3
8	4000000	3
9	3500000	1
10	3000000	2
11	2500000	1
12	2000000	3
13	1700000	1
14	1100000	1
15	1000000	4
16	800000	2
17	700000	2
18	500000	1
19	250000	1
20	200000	2
21	40000	1
Total		42

A cursory view of the summary reveals a huge variance in the data, as the highest count stands at 100000000 (10 millions) whereas the smallest number is paltry 40,000 (Forty thousand) rupees.

4.5.2   Classification of property into three levels

It was necessary to obtain three levels of the cost of property (i.e. continuous values) so that marks can be assigned to each level accordingly. Therefore, visual binning method was used in the SPSS to arrange the values in descending order. After doing that,

a cut off line was drawn at 33 % which gave the values as presented in the table below. This gave the researcher three levels of property and it was easy to assign level marks to each level, as per the design of the study.

Whereas, exact level of each property value is given as follows:

Table 16

Division of Property in 3 levels

	Frequency	Percent	Valid Percent	Cumulative Percent
5000001.00+	13	29.5	29.5	100.0
1000001.00 - 5000000.00	16	36.4	36.4	70.5
<= 1000000.00	15	34.1	34.1	34.1
Total	44	100.0	100.0	

The three levels were coded in the SPSS as follows: Level 1 = 20, Level 2 + 13.33, and Level 3 = 6.66. This brings the level scores at par with the level scores assigned to the other SC variables.

The values in the table 17 below do not present all the responses of the sample in property column, because this has been done after removing duplicates in the original property list.

Table 17

Division of property in 3 levels via Visual binning procedure

Property Level 1		Property Level 2		Property Level 3	
5000001.00+		1000001.00 - 5000000.00		<= 1000000.00	
Level	Property cost	Level	Property cost	Level	Property cost

1	100000000	2	5000000	3	1000000
1	100000000	2	5000000	3	1000000
1	136000000	2	5000000	3	1000000
1	36000000	2	5000000	3	1000000
1	20000000	2	4000000	3	800000
1	20000000	2	4000000	3	800000
1	15000000	2	4000000	3	800000
1	10000000	2	3500000	3	700000
1	10000000	2	3000000	3	700000
1	10000000	2	3000000	3	700000
1	10000000	2	2500000	3	500000
1	6000000	2	2000000	3	250000
1	6000000	2	2000000	3	250000
		2	2000000	3	200000
		2	1700000	3	40000
		2	1100000		

Number of cut-points within groups are based upon 33.33 percent of the sample in each group. Range of values in each group is as follows

1= <=5000000+.

2 = 1000000.00-5000000.00,

3 = < = 100000

In simple words, three categories of property include the following: the first level is assigned to those who have property worth more than 5 million, those who have a property ranging between a million to five millions fall under level 2, and finally, those

who have property worth up to 100 thousands fall in level 3. In this way it becomes easy to assign level marks to property variable as per the scheme followed throughout the SES Index.

4.6   Calculating Social Class Data in Excel

The data obtained from the SES Index took certain steps to come into its final shape. An Excel sheet was arranged in such a way as to take into account all three family members, that is, self (subject), fathers and mothers vertically, and all five social class variables horizontally. The *gender, age,* and *marital status* of each sample were also recorded in relevant entries. While entering the data, first, the responses of the sample about variable 2, 3 and 4 were entered in the excel sheet in terms of levels (L1, L2, L3) against the three family members. And because there were no pre-defined levels for variables 1, i.e. *occupation* and 5, i.e. *property,* the samples' actual responses about all family members were written as they had reported them. Hence, the actual occupations and the cost of property were entered in variables 1 and 5. The second step was to categorise the responses about the open-ended questions into three levels. That is, all occupations were categorised into three levels and property was also categorised into three levels (see detail in 4.4.2 and 4.5.2 above), and the actual responses were then replaced with the respective levels to which they belonged. In the third phase, all levels were replaced with the scores that had been already assigned to them. With the single entry in excel data sheet, all level 1 entries were replaced with 20 marks, level 2 entries with 13.33 marks, and level 3 entries with 6.66 marks. The scores of all three family members of each sample for all five variables were calculated and the sum was divided over the number of family members, that is, 3, which gave us final Cumulative Class Score of each sample. The Syntax test score obtained from the syntax test were entered in the second column.

The Cumulative Class Score and Syntax score were the final data collected via the two tools of the study and all the test results that will be presented in the next chapter are based on these two scores.

These two scores were entered in the SPSS as the two main variables and *age, gender,* and *marital status* were coded as grouping variables (See Appendix J, SPSS Data of Social Class and Syntax Scores). The data about five SES variables was entered into SPSS separately, for analysis of responses to each of the five SES variable; overall and family member wise (see Appendix K, Data with five SES variables).

4.7   Statistical Analysis of the Social Class Data

This section presents statistical analysis of the number of respondents who responded to the SES Index. First, it will sum up the overall picture of the respondents, and then variable-wise analysis of how many respondents responded to each variable will be presented.

4.7.1   Descriptive statistics about the Sample.

Table 18 below presents an overview of the statistics of the respondents of SES Index. Each subject was asked to answer about the five SES variables that are mentioned in the first left column of the table. As the total sample from all universities was 82, the total number of respondents is 246, except property, which has 243 respondents. The minimum number against respondent is 1, which refers to the subject / each member of the selected sample who has answered the questions, and the maximum number, that is 3, refers to the three family members, that is, self, father and mother. As has been explained earlier, since the participants of the study are mostly students, they were required to answer questions about their father and mother too, without which obtaining a clear picture of the students' social background could not have been possible.

Table 18

Descriptive statistics of the respondents of SC Index vis a vis all five variables

	N	Minimum	Maximum	Mean	Std. Deviation
respondent	246	1	3	2.00	.818
Occupations	246	.00	20.00	10.0493	5.34747

M_Income	246	.00	20.00	4.1571	6.36614
Edu_qual	246	.00	20.00	11.7858	6.28630
Med_Inst	246	.00	20.00	11.6500	6.17871
Property	243	.00	20.00	2.3862	5.58445
Valid N	243				

4.7.1.1. Mean

Mean is defined as the "sum of observation divided by the number of observations". What mean does is to identify the central point of the data set. It serves as the benchmark according to which variance of the data is explained. Mean (M) can be understood through a simple example:

$$\underline{M = \Sigma\,(X)\,/\ N}$$

Where

Σ = Sum of

X = Individual data points

N = Sample size (number of data points)

2+3+0+1+2= 8 / 5 = 1.6

In this example, 2, 3, 0, 1 and 2 are the given values. The sum of these values is divided by the total number of values, which is 5, which gives us mean of the given data set, i.e. 1.6. Any deviation of the data will be studied in the light of this central point.

4.7.1.2. Standard Deviation

Standard deviation shows the relationship between mean and the rest of the data. If the data is close to mean, the standard deviation will be small, and if the data is far from mean, the standard deviation will be large. And if the data is not away from the mean itself, then the standard deviation will be zero. In short, it sums up the spread of the

data as compared to the mean. The following formula shows how standard deviation is calculated.

S2 = Σ (X-M) 2/n – 1

Where

Σ = Sum of

X = Individual score

M = Mean of all scores

N = Sample size (number of scores)

These statistics show tendencies of the responses in case of each family member that varies according to their responses in the actual data.

4.8   Level-wise Response Rate to the SES Variables

After explaining the number of family members, the details of responses to the questions about each of the SES variable is being presented below, one by one. The following sections will present the number of family members who fell in each of the three levels of each of the five SES variables, one by one. The first of the five SES variables is occupation, and the detail about number of responses to this variable is as below:

4.8.1   Occupation

Occupation is the first of the five SES variables. The SES Index included two response types: in variable 1 and 5, the subjects had freedom to write whatever appropriate answer they wanted to write related to occupations and property of themselves, their fathers and mothers. The second response type included variable 2, 3, and 4, in which the responses were pre-categorised into three levels, and the sample were required to tick against the relevant column about themselves, their fathers and their mothers.

In variable 1 and 5, placement of level was done after collection of data and then the score was assigned to each level on the same pattern as the other three variables. Level 1 of each of the five variables was assigned maximum marks, that is, 20, Level 2 was assigned 13.33, and Level 3 was assigned 6.66 marks.

Table 19

Number and Percentage of respondents in three occupational levels

		Frequency	Percent	Valid Percent	Cumulative Percent
	.00	2	.8	.8	.8
	6.66	163	66.3	66.3	67.1
Valid	13.33	35	14.2	14.2	81.3
	20.00	46	18.7	18.7	100.0
	Total	246	100.0	100.0	

As can be seen in table 20 above, only 46 (18.7 %) respondents were found to be in Level 1, whereas 35 (14.2) % were found to be in Level 2, and 163 (66.3%) respondents were found to be in Level 3.

Hence, the largest number was found in Level 3, and then the second one was Level 1, whereas Level 2 formed the smallest group. Only 2 respondents, that is, 0.8%, opted not to respond to this question. It may be noted that the first left column in the above table denotes three occupation levels in terms of scores assigned to each. Number 20 indicates Level 1, No. 13.33 points to Level 2, and the last and smallest occupational group / level has been indicated to by No. 6.66.

In simple words, majority family members belonged to the lowest level of occupation. This could be due to the fact that most of them were 'students' and 'housewives' who were labeled as level 3 occupations. The second largest number of

family members belonged to the second level, whereas the middle level had the smallest number

4.8.2. Monthly income (V2)

Monthly income is one of the most important variables that reveal social status of the individuals. Father, being the head of the family, is mostly considered responsible for earning family livelihood. The SES Index used in this study enquired about income of the sample, their fathers and mothers. As per the general scheme, *income* was also divided into three categories. An income worth more than (>) Rupees.100,000 was set as Level 1, Level 2 was between Rupees 50,000 to Rupees100,000, and those who had monthly income between Rupees 25,000 to Rupees50,000 constituted Level 3. This division of income was done on the basis of general economic sense prevailing in Pakistani context.
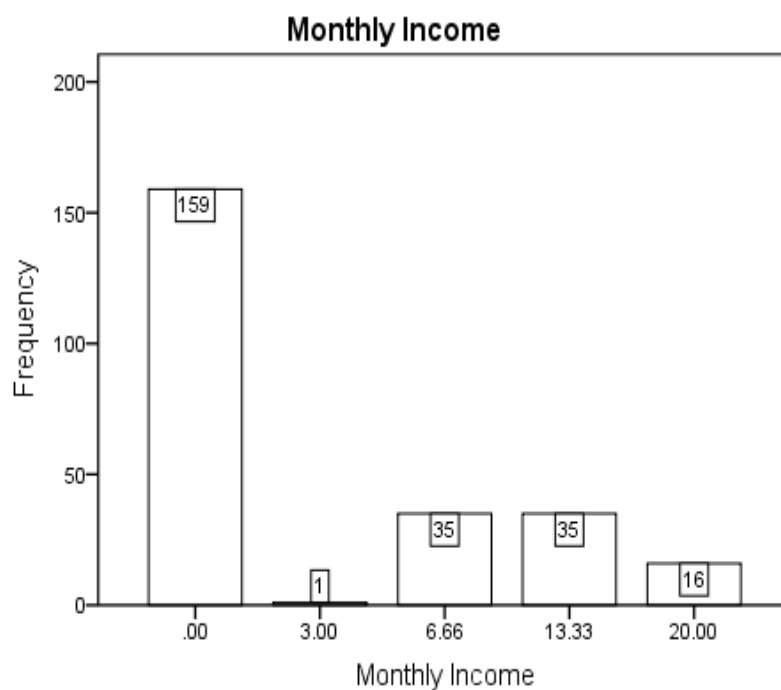
Figure 4: Overall level wise response to SES variable 2 (Monthly Income)

As Figure 4 above reveals, out of 246 respondents, only 16 (6.5 %) family members fall under Level 1. That is, their income was more than PKR 100,000/-. Thirty

five (14.2%) respondents belonged to Level 2 or the middle income category, that is, they earned Rs.50,000 to Rs.100,000/-, and the same number (14.2%) belonged to Level 3, whose income ranges between PKR 25,000 to PKR 50,000/-. (See SES Index at Appendix E).

The most important figure in this table is 159, which is the number of respondents who are reported to have no income. There could be two possible explanations of this figure. Firstly, it includes students who depend upon their parents and do not have any mentionable source of income. Most of the sample also reported their mothers as housewives, who are not likely to have any income, and hence, fathers, being head of the family are mostly the bread earners of their family. This is a reflection of Pakistani society where largely family members depend upon income of the head of the family, and not every member of the family necessarily contributes to the family income. Secondly, some people are reluctant to reveal their income due to so many social or legal reasons. (also see table 3 at Appendix L)

Moreover, there could possibly be a debate as to the number of people above or below these levels, as Level 1 has no upper limit, and there could a margin for further categorisation in this upper income group. Similarly, there could be difference of opinion regarding interpretation of the figures mentioning those who fall in .00 category as to how many actually didn't have an income and how many didn't want to reveal it. This, then, could lead to another kind of analysis of data which tries to answer this question specifically. However, this study stops short of carrying out this kind of analysis as it falls outside the scope of this research.

4.8.3. Educational qualification (V3)

The following table presents the responses of all three family members regarding their educational qualification, which is the third variable of the SES Index. The index divided *educational qualification* into three levels; the first one is *Masters and above*, which is allocated maximum marks, i.e. 20. The second level is *Matriculation to graduation*, which was assigned 13.33 marks, and the last level, which was assigned 6.66 marks, is *below matriculation*. This division was done on the basis of educational system

in Pakistan, where below matriculation is considered to be the lowest category of educational qualification, Masters and M.Phil. or PhD are considered to be the top qualifications, and whatever comes between Masters and Matriculation is considered middle level of education.

Table 20

Level wise response to Educational qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
	.00	32	13.0	13.0	13.0
	6.66	48	19.5	19.5	32.5
Valid	13.33	111	45.1	45.1	77.6
	20.00	55	22.4	22.4	100.0
	Total	246	100.0	100.0	

In table 21 above, 55 people (22.4% of the sample) are reported to be in Level 1, 111 or 45.1% are reported to be in Level 2, and 48 people (19.95%) fall under Level 3. However, no educational qualification or zero qualification was reported about 13% (also see Figure No.4 at Appendix L).

The middle level, that is, between matriculation to graduation was reported to be the largest group among all family members. Level 1 and Level 3 didn't have a great difference with 55 and 48 falling in each, respectively. This shows that about 22 % of the sample belonged to higher educational qualification group, and about 19 % belonged to the lower group, with a majority falling under the middle education group, as mentioned earlier. This picture of variation of educational qualification points to the fact that majority of the family members taken into account by this study have medium qualification with an almost identical number falling in both higher and lower educational categories.

4.8.4. Medium of instruction (V4).

Medium of instruction is the fourth variable that was studied to measure SES of the sample for this study. In Pakistani context where class segregation is also reflected through people's choices of medium of instruction, this could be a vital indicator of where the affluent class sends their kids to study and where the lesser affluent ones are provided education. Educational institution reflect class stratification in the way that private educational institutions offer education in English medium which is regarded as more esteemed medium as compared to Urdu medium. Urdu language, despite being the national language of Pakistan, is considered lesser important due to the international lingua franca status enjoyed by English language. Hence, the individuals who have studied under English medium of instruction, were placed in Level 1, and were allocated maximum score, that is, 20. Those who studied in mixed (English + Urdu) medium of instruction were placed in level 2 and were assigned 13.33 score, and those having studied under Urdu medium of instruction were placed under Level 3.
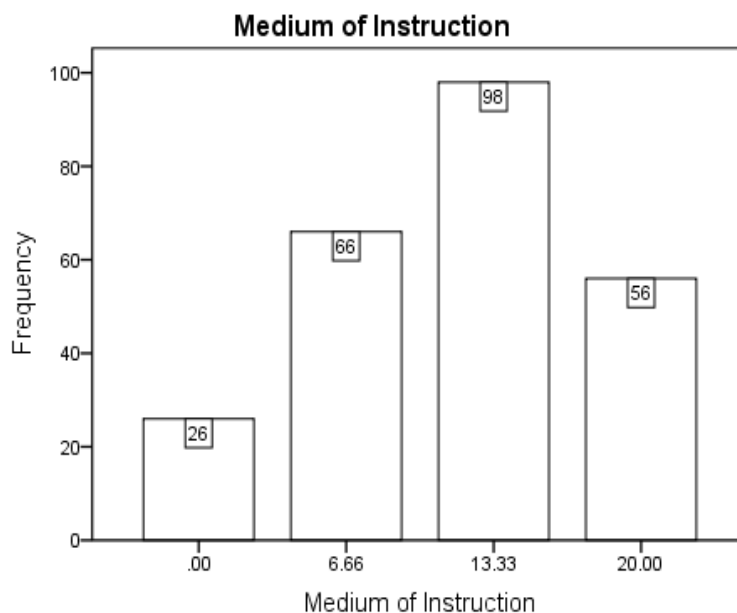
Figure 5: Overall level wise response to SES variable 4 (Medium of Instruction)

As the above table sums up, 56 or 22.8 per cent family members were reported to have studied under English medium of instruction and hence, were placed in Level 1. About 98 or 40 % were reported to have studied under mixed medium of instruction and hence were placed under level 2. And 26 per cent or 66 people were found to be in Level 3, whereas about 11 per cent did not report their medium of instruction. (Also see table in Appendix L).

The above statistics almost reflect people's choices with reference to the Medium of Instruction in Pakistan as studied by Gilani Research Foundation (2013) which asked a number of people about what should be the medium of instruction in schools in Pakistan, and more people replied in favour of mixed medium (Urdu and English) rather than in favour of one of the two languages, that is English or Urdu exclusively. Subjects such as English, mathematics and some of the science subjects are preferably taught in English, and Pakistan studies / social science, Islamic studies, Urdu, and so on are taught in Urdu, which gives rise to the mixed medium of instruction approach in Pakistan.
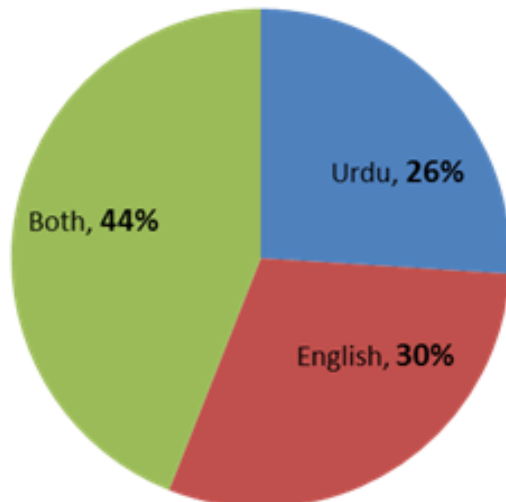
Figure 6: Responses to "what should be the medium of Education in schools in Pakistan

(Image adopted from http://galluppakistan.blogspot.com/2013/04/views-are-divided-over-what-should-be.html)

4.8.5. Property (V5).

One of the most significant variables of SC is property, as it contributes to the social prestige of individuals in a society. This is the fifth variable that is supposed to constitute SES in Pakistan. There were no pre-decided levels for property in the index as it could have been difficult to draw level boundaries without having actual response from respondents to the property related question. Hence the subjects were required to reply in open ended way about how much property they, their mothers and fathers owned. Later, the responses were collected and a cut-off point at 33% was drawn to divide the responses into three levels and to assign marks in order to bring this variable at par with the other variables, which were also divided into three levels and assigned marks under the same criterion. The detail of how property was divided into three levels and how marks were assigned has been presented in the initial sections of this chapter.

Table 21

Number and Percentage of respondents belonging to three property levels

		Frequency	Percent	Valid Percent	Cumulative Percent
	.00	199	80.9	81.9	81.9
	6.66	15	6.1	6.2	88.1
Valid	13.33	15	6.1	6.2	94.2
	20.00	14	5.7	5.8	100.0
	Total	243	98.8	100.0	
Missing	System	3	1.2		
Total		246	100.0		
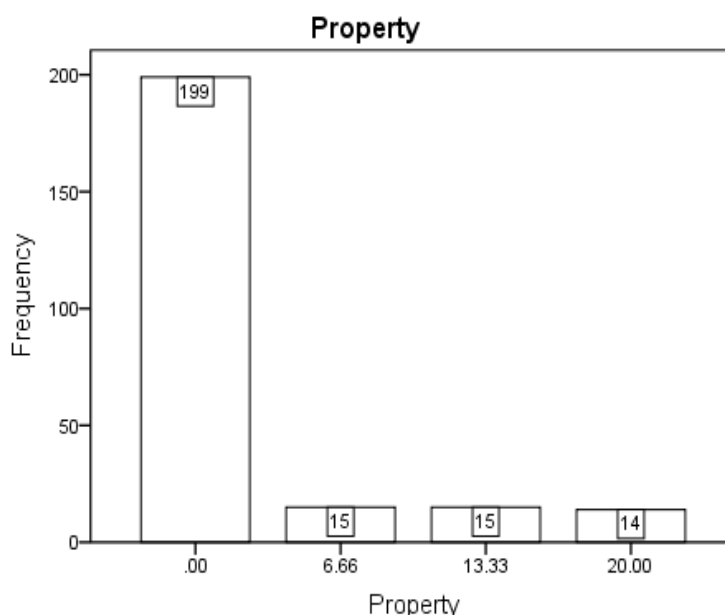
Figure 7: Overall level wise response to SES variable 5 (Property)

As table 22 above exhibits, only 18 % (100 – 82 = 18) responded to the question of property and 81.9 per cent chose not to reveal their property or had none. Out of the 18% who responded, 5.7% belonged to Level 1, and 6.01% each belonged to Level 2 and Level 3. The number of those who did not respond has been reflected in the table through .00.

There could be various explanations of such a high rate of no-response in property variable. Firstly, as the large number of the three family members consists of students and housewives, there is lesser chance of them owning property anyway. Some of the women in Pakistani society are given their due share of property that they inherit, but mostly, they are expected to surrender it in favour of their brothers or other male members of the family. Secondly, keeping in mind the structure of Pakistani society where income tax or property tax laws are not implemented by the government strictly enough; people keep looking for the ways to ditch authorities by not revealing their property publicly and hence evade taxes. This could be another possible reason of low response to this question. Thirdly, the reasons of not revealing properly could be the same as discussed in case of income, where it was said that people hide their income to save themselves from

family members' expectations of financial assistance or sharing the burden of family expenditures when they are not really obliged to do so, keeping in mind the norm of father being the livelihood provider of the family. A detailed discussion as to the low response to income and property question has been done in Chapter 6.

This much is the overall detail of how many family members belonged to which level. Since some of the questions are not clear through the answers presented by the above data, they are likely to be clear once family member wise data will be discussed in the upcoming section. For example, the above tables do not reveal how many of the students and how many of the mothers and fathers did not reveal their income, or whether they had none. This is likely to be clear once the family-member-wise data is discussed one by one.

4.9.   Cross Tabulation of Each Family Member: SC Variable-wise Analysis

Whereas section 4.8 presented the overall response distribution in terms of all three family members vis a vis each SC variable, this section presents the figures about these family members one by one, that is, the number of respondents in each of the three levels of each of the five SC variables.

In SPSS, cross tabulation method of analysis allows the researcher to manipulate the data in such a way as to give the freedom of comparison between different population groups. As compared to the Case Processing system which only allows simple processing of the cases in a chart, and does not compare the numbers or percentages, mean and mode etc., cross tabulation method does all that is required to compare one group with another, or with more than one in order to give comprehensive picture of the data.

4.9.1.   Processing cross tabulation in SPSS

The numeric data, when entered and coded in the SPSS, does give a general picture of the data as it can be observed in the variable view, but that is not always enough for the researcher. Cross tabulation, on the other hand, not only processes the data but also labels the outcomes of the data automatically, and hence it becomes easy to have a quick look at the outcome and guess the nature of the data.

The Crosstab option in the SPSS leads to the table which asks to enter *Row* and *Columns.* Here, the grouping variable will be placed in *Row*, whereas the numeric variable will be placed in *Column*. Clicking *Ok* will give the values of the numeric variables as per the groups they are divided into by the grouping variable.

Respondents, who were coded as self, father and mother in the SPSS, were entered in the *Rows* box, and *occupations* and *monthly income* which are numerical variables have been entered in the *Columns* box. The analysis thus presented will be the group wise data of the variables that are entered in the *Columns* box.

4.9.2.   Respondents' Occupations: Cross tabulation

Following is the analysis of responses of the participants of the present research about their own, fathers' and mothers' occupations. Occupation is the first of the five SC variables included in the SES Index. The Index aimed to systematically measure the respondent's social status by seeking information about five social class variables, about the participants of the research, their fathers and mothers (see SES Index details in Chapter 3 & 4). The table below gives an overview of how many people opted not to respond in each respondent category, or had no occupation to report, and how many fell in which category or level.

This section presents the number and percentage of respondents falling in different levels of each variable. The scheme of the analysis is such that the table presents numbers whereas the accompanying figure presents percentage of the responses. Levels have been denoted by their numbers, i.e. 20 for Level 1, 13.33 for Level 2, and 6.66 for Level 3, and .00 for no response. In the figure also, levels has been referred to by their respective marks and the percentage of each family members in a given level has been reflected via differently coloured bars, as highlighted in each figure.

Table 22

Crosstabulation for Occupations in numbers

	Occupations	Total

Respondent	.00	6.66	13.33	20.00	
Self	0	66	11	5	5	82
Father	0	2	22	18	40	82
Mother	0	75	6	1	1	82
Total		2	163	35	46	246
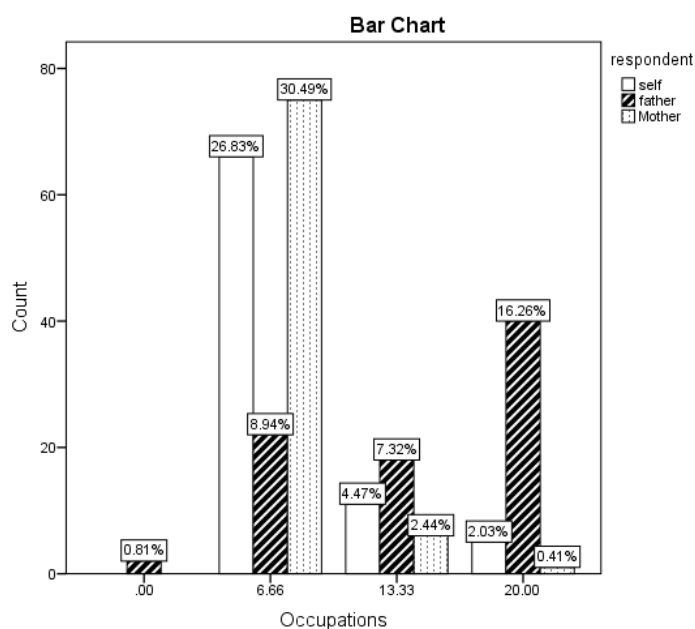
Figure 8: Occupational Cross Tabulation in percentage

Table 23 above shows distribution of the sample in three groups, self, father and mother. Then, the responses of each family member as they fall in different response category have been presented. Among 'self', that is, the sample themselves, 66 fall under 00, which means they did not reported an occupation, or did not have an occupation to report. Level 3 of the *occupation* variable was assigned 6.66 marks on the basis of 33 % formula. Eleven respondents reported themselves in occupation-level 3. Five students fell in the middle level, that was assigned 13.33 marks, and in the Level 1, which was assigned maximum (20) marks, there were only 5 respondents. The table above shows

that 40 (approx. 49%) of respondent's fathers' occupation fell in level 1 (20 marks). Occupations of 18 or 22 % of the respondents' fathers were categorised as level 2 (13.33 marks), and 22 (26.8% fell under level 3, which was assigned 6.66 marks.

Most of the mothers (75 or 91.5%) have been found to be in the last level, or level 3, which is indicated by 6.66 marks of them fall in level 3, six or 7.3% mothers have been placed in level 2, and only one mother is reported to be in level 1. The largest number is in level 3, because most of the mothers are housewives, which has been considered to be a level 3 occupation.

4.9.3.   Respondents' Monthly Income Cross Tabulation

The major tendency revealed in the data table below is consistent with the occupation table, that is, 78 % of the respondents have revealed zero income, which is consistent with the fact that they belong to level 3 in the occupations because of being student. Apart from that, 6.1 are shown to be in Level 1, 8.5 % are in level 2, whereas 7.3 are in level 3, all of which are consistent with the levels of occupations in "self" category in the way that all those who are in level 2 or 3, and have some source of income, are cumulatively about 22 per cent compared to 22 per cent of income as well.

Fathers' income chart shows that 20 or (24.4%) fathers' income has not been reported by the respondents. Nine fathers have been reported to be in Level 1, whereas 27 (33%) have been reported to be in level 2, and 25 (30.5%) have been said to belong to the last level, that is level 3. The highest percentage of responses is .00, that means that percentage wise middle income group is the largest group, but the 14.4 & who did not respond to the question of income makes the former a little questionable.

The largest group of mothers is reported to have no income, and this group covers 91.5% of the sample, i.e. 75. Out of the remaining mothers, 4 belong to level 3, that is 25,000 to Rs. 50,000. Only one belongs to level 2, and only 2 belong to level 1, which is more than Rs.100,000/-.

Table 23

Monthly Income Cross tabulation

		Monthly Income					Total
		.00	3.00	6.66	13.33	20.00	
	Self	64	0	6	7	5	82
Respondent	Father	20	1	25	27	9	82
	Mother	75	0	4	1	2	82
Total		159	1	35	35	16	246
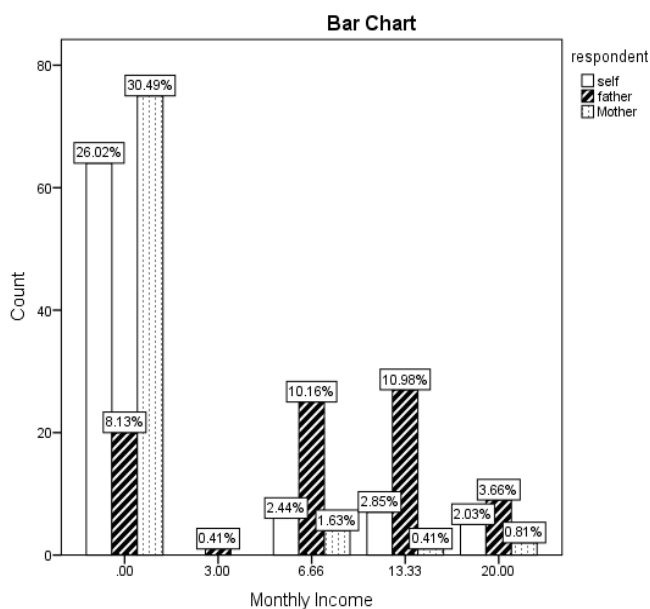
Figure 9: Cross tabulation for Monthly Income in percentage

4.9.4. Respondents' educational qualification crosstabulation

The table below gives an overview of the responses of the students in terms of their educational qualifications. The detail of those belonging to the three levels of this variable is as follows:

Table 24

Cross Tabulation for Educational Qualification in numbers

		Educational Qualification				Total
		.00	6.66	13.33	20.00	
respondent	Self	1	4	41	36	82
	Father	7	18	41	16	82
	Mother	24	26	29	3	82
Total		32	48	111	55	246
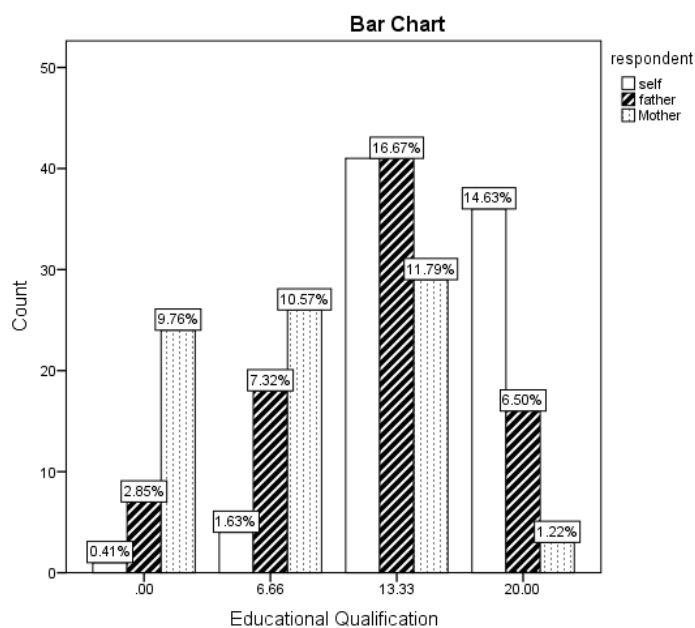
Figure 10: Crosstabulation of Educational Qualification in percentage

About 36 or about 44 % of the sample reported themselves to be in Level 1, whereas 41 (50%) were found to be in Level 2, and only four (4) were in the last level. One respondent did not report his / her qualification, which could be the result of their carelessness because certain level of qualification is presupposed for the university students and there is no question of someone entering the university without a certain

level of formal qualification. The largest group, then, is the second group, which is from matriculation to graduation, and the second biggest is level 1, and level 3 has a small number of students, which seems to contrast with the fact that students have to be at least intermediate to enter EFL courses at university level.

Fifty per cent fathers were reported to be in the level 2, that is, Matriculation to Graduation. The second largest group is 22% which is level 3, i.e. below matriculation , and the smallest number, that is 16 (19.5%) falls in level 1, which is Masters and above. However, 7 fathers' educational qualification has not been reported.

Three (3) mothers of the respondents are placed in level 1 of the third variable, i.e. *educational qualification*, which is above Masters. Twenty nine (29) or 35.4% mothers have been said to belong to level 2, which is above matriculation and up to graduation. Twenty six (26) or 31.7% belong to level 3, which is Matriculation and below. Finally, 24 or 29.3 per cent respondents did not talk about their mothers' educational qualifications.

4.9.5   Respondents' medium of instruction cross tabulation.

In medium of instruction variable, 53% students, which is the largest group, revealed that they are from English medium background. The second biggest is Urdu medium group, which is 25 (30.5%). The smallest group is Level two, that is mixed medium (English & Urdu) of instruction, which is 13 or 15.9%.

Only nine fathers are reported to be from English medium background, which is level 1, whereas fifty per cent (51.2%) or 42 fathers are reported to be in level 2 or from Urdu-English mixed medium of instruction. The smallest number, i.e. 24 (29.3 %) belongs to level 3, which is Urdu medium. Seven (8.5 %) fathers' medium of instruction has not been reflected in the data. Regarding mother, which is the third family member taken into account in the SES Index; level 2 which is Urdu-English medium of instruction is the largest group as it includes 43 mothers. Second largest group is level 3, which has 17 mothers, that is, 17 mothers studied in English medium schools. Only 3 mothers belong to level 1 of medium of instruction, which is English medium.

Table 25

Medium of Instruction Crosstabulation in number

		.00	6.66	13.33	20.00	Total
	Self	0	25	13	44	82
respondent	father	7	24	42	9	82
	Mother	19	17	43	3	82
	Total	26	66	98	56	246
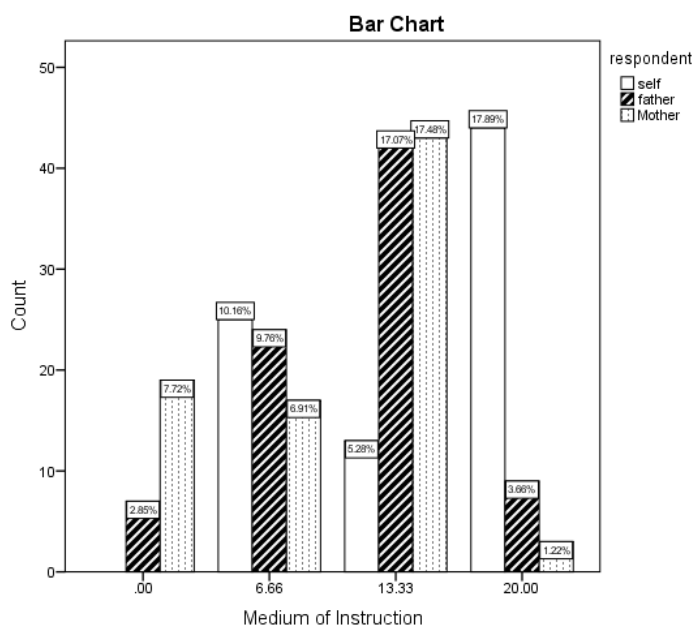
Figure 11: Medium of Instruction Cross tabulation in percentage

4.9.6. Respondent's Property Crosstabulation

This table presents a summary of the responses to property question, which is the most crucial one among the five variables as it has a lot to do with shaping up social prestige of an individual.

Table 26

Respondents' Property Crosstabulation in numbers

		.00	6.66	13.33	20.00	Total
	Self	76	4	0	0	80
respondent	Father	50	7	12	13	82
	Mother	73	4	3	1	81
	Total	199	15	15	14	243
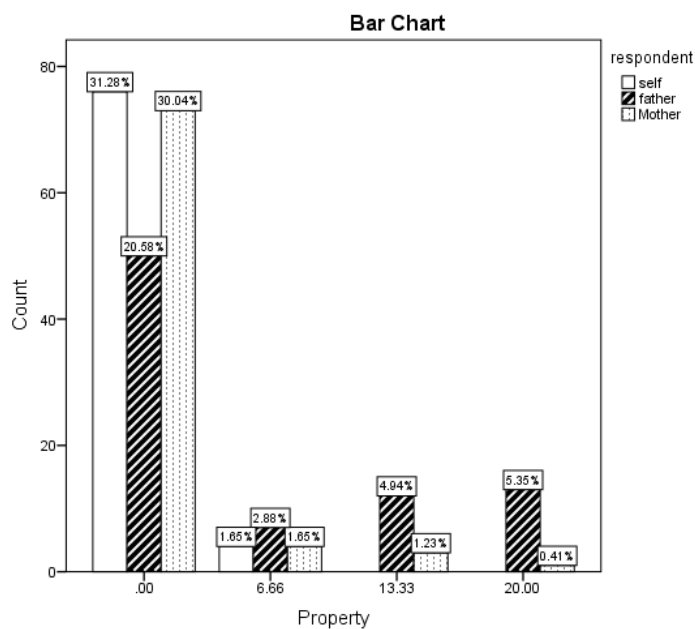
Figure 12: Property Cross tabulation in percentage

In a sharp contrast to other variable's results, the results of fifth variable reveal that nobody achieved Level 1 or Level 2 among the respondents themselves; only 4 respondents (4.9%) reported their property, and a large majority (93%) reported no property. The possible reason could be that the respondents are students and majority hasn't started a business etc. so as to be able to own a personal property.

Property question went unanswered for 50 fathers which makes it 61%. This is one of the recurring features in the data that the respondents tend not to reveal their parents' property. Out of the remaining sample, 13 fathers were placed in level 1, which is the highest level, 12 were placed in Level 2, and 7 were placed in Level 3.

In response to the question of mothers' property, the respondents revealed zero property of 89 % (73) mothers. Four mothers were placed in level 3, whereas 3 were found to be in level 2, and one was found in level 1. One mother was missing in the system. Again, the trend that emerges is that people are reluctant to reveal their income and property. There could be various reasons of this trend, which will be discussed in the discussion section of this chapter.

4.10   SES Index: Findings & Discussion

This section will present findings of the SES Index and discuss them with reference to the theoretical framework of the Index in particular, and of the present research in general.

As discussed in Chapter 2 section 2.5.2, talking about the cognitive development among second language learners, Zuengler & Miller (2006, p. 37) cite Smith (1991) who remarked that the cake of second language acquisition is cognitive while the icing is social. Also, in the same section, Gultung & Nishimura (1983) have been reported to have claimed that the structures or syntax of any language reflect as well as induce the structures of the respective language of the sender and the receiver upon each other. These assertions sum up that second or foreign language cognition is not free from the social influences, and the structures of language reveal, have influence of, as well as reflect the influence of social structure of the learners of a given language.

Based on these and other claims, this study undertook an analysis of the influence of social class on cognitive development of syntax through two main tools; a five-factor SES index, and a Syntax based test. The SES index that was devised after careful study of various SES variables and was finalized after its experimental use in the pilot study, took into account the above discussed five social variables that are considered to be important in forming an individual's social class.

As also mentioned in the introduction to this chapter, the data about these five variables was collected from the sample about themselves, their fathers and their mothers, since the assessment of social background of the sample that was supposed to consist of university students would not have been made accurately without information about their both parents. The five-factor SES Index can be seen at Appendix D. Rationale for including these five variables has been presented in detail in Chapter 3. And the method of calculating an individual's social score has been presented in section 4.3 above.

The important findings of the SES Scale will be summed up here in this section. Most important are the results obtained by occupation and property variables, as these two were open ended and were not pre-categorised into three levels as other three variables were. Hence, it is important to discuss the results reported by the sample for these variables and the placement of these into three levels to assign marks. In the second half the discussion on the response rate of the sample with regard to all five variables will be discussed in detail. The third part of this section will then discuss the rationale behind socioeconomic index, its construction and use in research visa vis the SES Index designed for the present study.

4.10.1. Variance in Occupations

The details of the occupations responded to by the sample have been presented in section 4.4. Also, the family member wise details have been presented in the tables 11, 12 and 13 after removing duplication in each. The first notable finding in case of occupations is the biggest variance reported in the case of fathers (43), compared to self (7) and mothers (7). This finding points to the fact that families in Pakistani society revolve around single person, that is, the head of the family who is normally father. Wives or mothers prefer to look after their homes and bring up their kids rather than going out and doing jobs to earn money. Fathers, on the other hand, take up different professions and work to provide for the needs of the family. The respondents themselves also did not report a great variance among their occupations. Before the study was conducted, it was assumed that since the EFL learners include adults, there might be a considerable number of different occupations among them, but that has been limited to

only seven occupations, as most of them reported themselves as student. No great variance was found in the mothers' occupations as most of the participants reported their mothers as housewives. As a result of this, the response to level 3 of the occupation has been large because both student and housewife are placed in level 3. However, there is also a likelihood that some working family members are categorised as level 3 occupations because of misreporting on part of the respondents, and it is not very easy to assess as to what extent this could have been the case.

The reported occupations were divided into three levels in order to assign them marks for the purpose of calculating the total SES score of the subjects of the study. As discussed in the relevant section above, the division was based on the categories provided by Croxford (2006). The categories under which the given occupations were placed are presented in table 14, Chapter 4.

The first category consisted of large employer, high and low managerial, and high and low skilled occupations. The occupations placed under this category in the present research were businessman, constructors, landlord, lawyers, managers, directors, their deputies, professors and lecturers. Although there could be a debate as to how a professor and a lecturer, who are supposed to be enjoying basic pay scale 21 and 18 respectively in Pakistani context, could be placed in the same category. The fact that both are considered highly skilled in terms of their educational and professional qualifications could be a justification of this categorisation. An important mention in this category is that of in service and retired managerial occupations. Both were placed in the same level because the social prestige assigned to an army general, let's say, is highly unlikely to diminish so much as to make the social researchers place him in a lower social category. He is likely to be accorded almost the same respect, albeit less feared, as a serving army general, in Pakistani context where army is a highly esteemed institution.

Occupational category or level 2 includes occupations such as private job, retired journalist, beautician, saloon owner, school teacher, chief post master retired and so on. Occupations such as defence, government servant and employee in air force have been placed in this category due to a widespread social trend of using euphemistic terms such

as these when not wanting to report actual occupations or job titles that have very high social prestige attached to them. This trend of euphemising prestigious occupations results due to social fears, security constraints, and the concern for not being known to all and sundry to avoid letting people build unrealistic hopes of favours in certain day to day matters. It is worth noting that "School teacher" has been placed in Level 2 because it falls under the heading "*Intermediate*", whereas it is difficult to retain "*Retired teacher*" in the same level due to significant economic disadvantage and resultant decline in social status.

Occupations such *as shopkeeper*, *mechanic*, *electrician*, etc. fall under "routine" so they have been placed in level 3. However, *Saloon owner*, *and beautician* have been considered as "*own account*" instead of routine, due to economic advantage they have over the former.

4.10.2.   Property

Property was reported by the respondents about only 42 family members out of the total of 246 respondents. This gave a total number of 21 figures after counting duplications. Some (not all) of these figures were obtained after rounding off certain reports of property that consisted of property-items such as 'house' or car, cows, etc, instead of their value in currency. Such was the case despite the fact that the subjects were requested to provide an estimated value of property that they, their fathers or mothers owned instead of mentioning property items themselves. The reported property ranged between Rupees 100000000 (100 million) to Rupees 40,000 (forty thousands). Hence the estimation of variance in terms of property provided enough evidence that there does exist a huge difference in what people own, based upon their social class or background.

To assign scores to the property responses, it was pertinent to divide them into three levels like other variables so that scores could be assigned to each level accordingly. For this purpose, the property values were divided into three levels or categories based on 33 percentile formula. The top category was assigned maximum marks, that is, 20, the second category was assigned 13.33 and the last category was

assigned 6.66 marks. The detail of how property was divided into three levels can be seen in table16 &17).

4.10.3. Responses to the five SES variables: Variance

There was a great variance of response among self, father and mother, in response to each variable. Each of the five social class variables presented a different picture in terms of responses of the above said three family members. The most remarkable differences have been seen in case of Income and Property in which most of the respondents chose not to answer or reported zero.

In *occupation* which is the first of the five social variables, 18.7 % of the total family members (246) were reported to belong to level one, 14.2 % were reported to be in level 2, and 66.3 % were reported to be in level 3. Only two members did not report the occupation, which means in case of the first variable 99 % response rate was observed. On the other hand, in case of the second variable, that is, *monthly income,* a stark contrast to the first variable was observed as about 65 % of the family member's income was not reported or zero income was reported. Only 6.5 % were reported to be in level 1, and 14.23 % each were reported to be in level 2 and level 3. Thirdly, in case of the third variable, i.e. *educational qualification*, non-response rate was 13.01 %, and in the fourth variable, i.e. *medium of instruction*, the non-response rate was about 11 %. The most striking results were received in property, where response rate was only 18 % and the rest of 82 % were reported to have no property.

If we compare the responses of *occupation* with *income* and *property* between the family members, we see that the 66 subjects reported themselves to have no occupation / reported themselves as student, which almost matches with the response of 'no income' which is 64. Similarly, 75 mothers were reported to have no occupation and the same figure is said to have no income.

But, interestingly, in father category only 9 are reported be in income level 1, 27 and 25 in level 2 and 3 respectively, and no income is reported for 20 fathers, whereas in occupation variable, 40 are said to be in level 1, which is the highest rank of occupations; 18 are said to be in level 2, and 22 are said to be in the last level. This is a proof of

inconsistent reporting of income as 20 fathers are said to have no income whereas 40 fall in the highest occupation level, and only two fathers are such who have not got a place in any of the three occupational categories or level. Also, the trend is substantiated with the report of 50 fathers having no property contrasted with 40 being in occupational level 1. Only a small number (13, 12 and 7) was reported to belong to level 1, 2 and 3 respectively.

These observations highlights the trend of not reporting income and property which are the most important factors in assessing prestige or social standing of a family. Whereas in some cases people may not have any property at all, but in most of the cases there is a strong likelihood of them not reporting intentionally? This, and the proof of not reporting 20 fathers' income when 40 are in the highest occupational category, highlights general psyche of the masses, which is also evident among the students coming to the university, as they have same fears and insecurities while reporting their family's income and property as everyone else. The reasons behind these fears and insecurities could be many. Some of them are discussed in the following lines:

4.10.3.1   Socio-psychological reasons of not reporting

The reasons behind not responding to the answers of income and property are largely socio-psychological. Let us discuss these reasons one by one.

4.10.3.1.1   Family Expectations from the wealthy

One of the reasons why people tend not to report their income and property is the fear of being known in society or family as wealthy. This fear is due to the social circumstances in Pakistani context in which more hopes are pinned on the wealthy people with regard to helping the less affluent members. In a family, for example, if someone is better off compared to other members of the family due to their income from job or savings, they would be likely to be pressured to contribute to the family expenditures even if they are not the head of the family or not responsible for livelihood. For example, in a lower social class family of six with moderate income, that consists of father, mother, two sisters between 20 to 26 and two brothers between 12 to 16, as a general rule father is responsible for the livelihood of the family. But if the eldest sister starts doing a job and

the family members feel that she is saving enough money after spending on her daily commuting, dresses and socializing needs etc., they are likely to expect from her that she would contribute to the family economy. If not in form of mainstream expenses such as food and utility bills, at least she is expected to take care of the younger school going siblings' needs, or at the very least arrange for her own dowry and plan for her wedding herself.

4.10.3.1.2 Tax evasion reasons

Some of the people also do not reveal their property due to tax evasion reasons, as they fear that the data they are being asked about might lead them to being trapped in the tax net by the government, and they or their parents might end up in jail or in court to explain their gains reported to the researchers. Such mistrust in the researcher's assurance of not using the information they provide for any other purpose than research has solid reasons, which is that people tend not to pay their taxes due to which they are compelled to hide their income and property, no matter whether it is being collected by an academic researcher or a social worker.

This point is validated by a situation the researcher had to face in Air University in which the envelop carrying the SES Index and the test was initially stolen by the students when they learnt that they are to respond to questions such as family income and family property. Later, a very small number of students expressed their willingness to participate in the study upon strong reassurance by the researcher that it has nothing to do with the government inquiries and they will not be exposed to any kind of official accountability of their and their family's wealth.

4.10.3.1.3 Fear of theft or loss

Some people are also reluctant to report their wealth or property due to precarious security situations in the country due to which citizens are normally scared of being exposed to the threat of theft or robbery etc. in case of revealing their wealth publicly.

4. 11   Discussion

The formation of SES Index was informed by various studies such as the ones by Ganzboom (1996), Wright (2003), Croxford (2006), Ahmad (2012), Miles & De Putte (2010), Higgs (2002), Coghlan (2012), Hoffmeyer-Zlotnik & Warner (2006), Owu-Ewie & Ashun (2015) and so on. The opinions of these theorists have been presented in detail in Chapter 2 and Chapter 3. In order to explain the concept of measuring social class, Oakes (n.d) study is being discussed here. He discussed the use of Duncan's SEI (socioeconomic Index) in the research in the US. This scale is reported to be based on the subjective assessment of occupational prestige, that is, 'being a judge is more prestigious than being a garbage collector'. This scale takes education as a pre-requisite for the given occupation and the income as its reward. Oakes compares the SEI measure by Duncan with the OSS (Occupational Status Score) by Nam & Power which differed from the former as it didn't use subjective ratings. Instead, it used 'measured income and educational status' (…) 'to create a single composite quantity'. This and other studies gave rise to the trend of measuring social class with occupational prestige. However, the study points out difficulty in measuring social prestige as there are various prestige scales and it is difficult to determine the ranks given the large number of occupational titles.

Oakes highlights the difficulty in measuring prestige of 'problematic' occupations such as 'full and partial retirees, students, homemakers, and military personnel'. He also mentions that 'Mapping stated occupations into (census) defined codes is difficult and often time consuming'. Oakes, however, does not consider the prestige measure as most suitable as other better measures of the SES may exist in present literature. He sums up the discussion by drawing attention of the reader to the fact that just like there is no final definition of SES, there isn't likely to be a final way to measure it either, and it depends upon the use to which it is to be put, or upon the research question it is to answer. He says that one should collect as much socioeconomic data as possible but keeping in mind the real world constraints, the SES information can only be collected through conventional means of educational attainment, income and occupational prestige.

In the light of the discussion done by Oakes (n.d), we can sum up the story of SES measurement from different angles. Firstly, that occupational prestige, educational attainment and the income are a way of measuring the socioeconomic level of an individual considering the prestige that occupation, education and income assign to them. Secondly, he highlights the difficulty in assigning each occupation to a category, and the difficulty of assigning problematic occupations to the given categories. Thirdly, he sees no clear definition of the term SES and does not think there is a clear-cut way of measuring SES of a person; rather how much SES related information needs to be collected depends upon the purpose of the study.

The three angles in which the study has been summed up, help to explain the approach taken by the researcher to devise his own five-factor SES Index. The Duncan's scale took into consideration firstly education, then occupation as its dependent factor, and then income as reward for occupation. These are three of the variables that this study has made part of its SES index. He creates link between these three variables and deems it essential to measure social prestige of the individual by calculating these three variables.

The present study identifies another node attached to education variable, that is, medium of instruction, which is an important factor that not only reflects but also perpetuates social divisions, as different mediums of education suit different social classes. Those with lesser education do not have the ability to enter into good occupations, and hence, are likely to have lower income which inhibits their capacity to send their kids to the schools that offer English as a medium of instruction. The divisions are perpetuated in the sense that the kids who attain education in good schools with English as a medium of education have brighter chance of getting into good occupations due to their ability to speak the language to which society attachés esteem. Their good occupations ensure good income, and the circle goes on like this.

Similarly, property is the outcome of income which is directly dependent on occupational status. Property sometimes is the outcome as well as source of more

income. Lands generate revenue in form of crops as well as rent, whereas commercial property causes increase of income in form of rent as well as money coming from its sale,

From the second point regarding difficulty in allocating the occupations to a given class, Oakes' observation only justifies the difficulty in assigning levels to the various professions obtained in the data collected by the sample of this study as the decision to place student and housewife in level 3 of occupation was taken only to account for their existence in terms of assigning them marks and avoiding the risk of leaving them unaccounted and rendering the results of the SES Index questionable.

Otherwise there can be an argument over placing these two, and 'dead' in the same category as other occupations such as retired teacher, soldier etc. (see Chapter 4, section 4.4.2).

Keeping in mind Oakes' reference to the real world realities and the difficulty in assigning a separate class to each individual, a way out has to be thought of, which, in case of class categorization of the occupations is possible through rounding off the terms of drawing class boundaries and hence assigning a group of occupations to one category and another to another. Although each and every person cannot be equal in terms of prestige, and there has to be a difference in status estimation of each person, yet drawing a cut off line at certain point to mark class boundaries seems to be a solution.

4.12   Conclusion

This chapter starts with the introduction to the study and reminds that the research required bi-dimensional approach in data analysis. The first kind of data was about SES Index, which is presented in this Chapter. First, it starts with the introduction to the SES Index, explains the process of collection of data, and presents the responses to the open ended variables of the Index, that is, *occupations* and *property*. After that, the process of division of this data into three levels has been explained and also the process of assigning different score to different levels of the five social class variables has been explained in detail. After that, it presents the results of the SES related data about all five SC variables. These results are presented in two parts. Section 4.10 presented the overall response rate to the five social class variables. The responses were proved to be different

depending upon the nature of the variable. It then discussed the findings that the SES Index yielded about the sample, and the relevance and justification for this SES Index was discussed in the light of earlier studies that inform construction of the Index. The data serves two purposes; first, it provides us a solid base on which to conduct research. Social class data is quantitative in nature. Five social class variables are included in the SES index to assess social prestige of the family to which the leaner belongs. Secondly, this data serves as a guideline to assess variability of social class among the learners of English as a foreign language in Pakistani universities. Different responses to different SC variables depicts that learners and their parents differ widely from each other in terms of their social prestige, which is likely to affect their kids (learners') performance in academic context, especially in language development.

CHAPTER 5

SOCIAL CLASS AND SYNTAX

This chapter presents a detailed analysis of the variance in the outcome variable in relation to the predictor variable as well as the extraneous variables. The first section presents descriptive statistics pertaining to the sample with regard to their demographic details. This also gives us an idea of the variables that have been taken into account in the present study, and whose subsets will be later analysed for variance among them.

The second part of this chapter presents the correlation and variance results obtained through different statistical tests in two sections. The first section presents an analysis of correlation between the two variables studied for this research, i.e. *social class*, and syntax. Syntax score, as the larger framework of the study explains, has been taken as an indicator of cognitive development of the sample, and further discussion on that will be done in the discussion part of the chapter. But for now, the focus of the analysis will be on the results that have been generated through the tests run on SPSS on the two variables in hand, namely, *social class*, and *syntax*.

The third section of this chapter takes into account the variables that are considered as extraneous ones. These variables include *gender, age* and *marital status* of the sample. The sample's coding according to the sub categories of these variables will also be presented in section 3 of this chapter. It is important to mention here that social class is the main predictor variable that the present research aims to study for its correlation with syntactic development. Apart from social class, there are other variables that are important in language development in general, and hence need to be studied for their relation with syntactic development. Although they are not the main factors, they are studied here as extraneous variables, and only form a subsidiary part of the study. The last part of the chapter presents the findings reached through the tests with reference to relevant studies.

5.1. Descriptive statistics

5.1.1. Demographic variables

In the demographic detail of the sample, the following factors were recorded. The total number of sample inducted for the research was 82, which were selected from three federal universities. The three extraneous variables recorded about the sample include *age, gender* and *marital status*. The study treats these variables as extraneous variables and will study variance among the subset of these variables through appropriate SPSS tests.

Table 27

Descriptive Statistics of demographics

	N	Minimum	Maximum	Mean	Std. Deviation
university	82	1	3	2.30	.622
Age	82	1	3	1.16	.484
Gender	82	1	2	1.71	.458
Marital	82	1	2	1.21	.408
Valid N (list wise)	82				

5.1.2. University wise details.

The university wise distribution of the sample can be seen below in table 29. From Air University, Islamabad, seven students participated in the study. From the National University of Modern Languages, Islamabad, 43 students participated, and from Islamic International University, Islamabad, 32 students participated.

Table 28

University wise sample

	Frequency	Percent	Valid Percent	Cumulative Percent
Air University	7	8.5	8.5	8.5
NUML Islamabad	43	52.4	52.4	61.0
Islamic Int. University	32	39.0	39.0	100.0
Total	82	100.0	100.0	

5.2.　Overall correlation of all three universities

The main part of the research is the results of correlation between social class score and syntax test score of the sample, and variance in the Social Class Score of different social classes. The scores of social class were obtained with the help of the participants' responses to the five social class variables in the socio-economic index, and the syntax- based test (discussed in Chapter 4 in detail) that each participant of the study solved. These results are presented in different ways. First of all, to see the effect of different social classes on the performance of the sample in syntax test, which is reflected through their score in the test, correlation and regression analysis will be presented. Secondly, ANOVA is applied to the three SC groups, and the results of ANOVA are compared with the results of correlation coefficient.

After discussing social class versus syntax, the extraneous variables identified in the study, such as gender, age, and marital status of the respondents are analysed one by one to investigate how much effect they have on the development of syntax among the sample, apart from their social class, which is the main social variable. Since the sample of the research were adults, and studied in co-education system, there were likely to be both male and female learners, married and unmarried learners, and the learners of

varying age categories as well. The study of the descriptives, however, shows that there is varying number of subjects in different groups of each category.

As mentioned before, the data have been analysed with the help of SPSS, which is a standard statistical tool / software to study various relations between the available data.

Table 29

Mean and Standard Deviation of SC Score and Syntax Score

	Mean	Std. Deviation	N
Com_score	39.9994	11.52622	82
Syn_score	52.1829	16.04171	82

The first table presents the mean and standard deviation (hereinafter referred to as SD) found in the overall data. The cumulative class score has been presented in the above SPSS table as 'Com-Score' and the syntax score has been referred to as 'Syn_score'. As the table shows, the mean of SC score is 39.99, which means that the average score of the samples in SES Index is about 40 per cent. Similarly, the mean of Syntax score is 52.18, which is about 12.19 more than the class score.

As can be seen in Appendix J, i.e. summary of SC score and Syntax score, the lowest score in the Cumulative Class Score or SEI score is 17.77, and the highest score is 80, whereas the total number of sample is 82, each showing the score they obtained in the SEI and Syntax Score. The smallest Syntax Score is 08 and the highest score is 93. This makes understanding SD Score and the difference of mean between the two variables quite easy.

In SC, $Sd = 11.52$, whereas in Syntax test score $Sd = 16.04$. SD shows the deviation of the data from the mean, which means that in case of SC Score, the data varies 11.52 from the mean value, and in case of Syntax Score, it varies 16.04 from the mean value.

All the above details give us a general picture of variance between the two scores, marking a baseline for further study of the variance among different social classes or other social groups such as gender or age etc.

Now, as discussed above, the correlation and regression analysis of Social Class Score and Syntax Score is being presented as the first part of the analysis of the data. This analysis is crucial in answering the research question (section 1.12) that this study tries to answer.

5.2.1. Correlation and regression of social class score and syntax score

Correlation analysis is used to describe strength and direction of the linear relationship between two independent variables. Correlation is only concerned with the strength and direction of the relationship, and does not imply that any kind of causal relationship exists between the two variables. It does not imply, for example, that in our study, the Syntax Score is due to the social background of the students. It is just an analysis of how they correlate with each other. Under the broader research design that this study follows, the variance in syntax score will be considered an indicator of varying cognitive development of the learners, hence referring to the development of syntax as 'cognitive development of syntax'. The correlation between social class score and syntax score will be seen as social variation of syntax which is due to varied cognitive development.

In order to find out correlation, normally Pearson correlation coefficient method is used. The effect size in the correlation table is represented through 'r'. It is a standardized measure that shows the strength and direction of linear relationship between the two variables. In statistics, $r = -1$ is considered perfect negative correlation, whereas $r = 1$ shows positive correlation. Varying degrees of effect size can be understood by the following matrix:

Effect size of correlation:

Small $r = .10$ to $.29$;

Medium $r = .30$ to $.49$;

Large r =.50 to 1.0

5.2.1.1   *Pearson correlation coefficient*

The following table presents the results of the correlation coefficient test run on the data provided by the sample from the three Pakistani universities. The data is about the Social Class of the participants and the Syntax-based Test Score.

Table 30

Pearson Correlation Coefficient

		Cumulative Class score	Syntax Score
Cumulative Class Score	Pearson Correlation	1	.425**
	Sig. (2-tailed)		.000
	N	82	82
Syntax Score	Pearson Correlation	.425**	1
	Sig. (2-tailed)	.000	
	N	82	82

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

In the table above, the overall correlation of the total sample is presented. cu

Both the rows in the table present correlation coefficient of each variable, which means that correlation coefficient of SC Score with the Syntax score, as shown in the first row, is 0.425, and the correlation coefficient of Syntax Score with SC Score shown in the second row is also the same. As the coefficient correlation is always between -1 to +1, the correlation between the two variables (r = 0.425) can be described as moderately significant.

Another important reading in the table is that of the significance (Sig. (2-tailed). The significance value / cut off line set for this test in SPSS was 0.01, and according to

the test statistics, significance level is .000, which is lower than the cut off value, and hence, is positive. As Banfielder (2008) remarks, "If the p-value is less than your pre-established cut-off …, then you may conclude that there is a statistically significant correlation between your two sets of observations" (p. 02).

This means that correlation coefficient in case of the present test is valid, and did not occur by chance, as would have been the case if significance value was greater than the cut-off line.
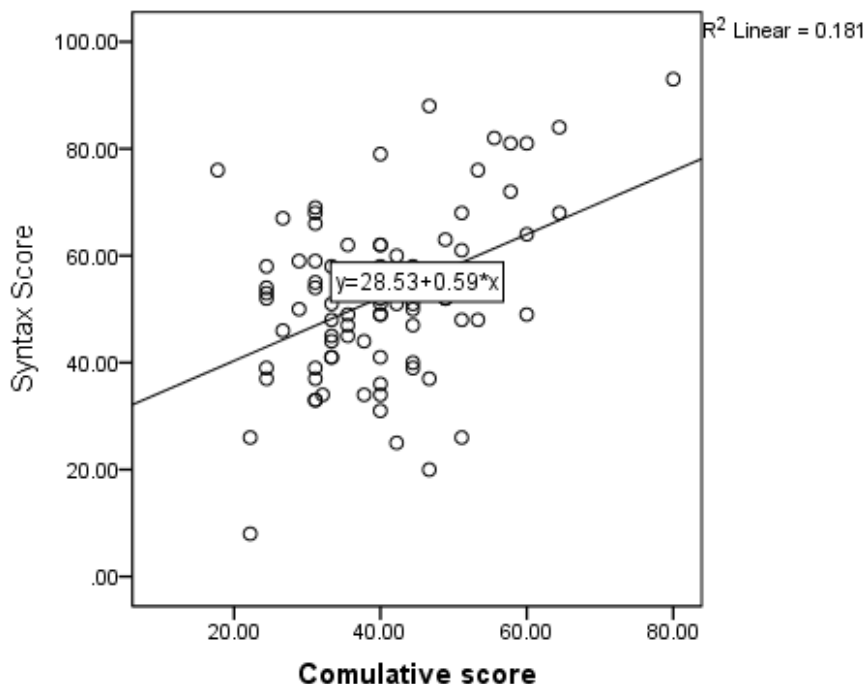
Figure 13: Overall correlation of the sample

Figure 13 above explains how cumulative class score and syntax test score correlate. With the help of a scatterplot, we can see how the two variables are scattered across the regression line. The line going up is an indication of positive linear relationship, but the question of its strength can further be explained by the r score, which is 0.425, which is neither very high, nor very low. This is the reason why the correlation has been described in the above section as moderately positive, and the relationship, moderately strong.

We would need to refer back to the above graph again when we discuss the regression line, to see how it is drawn and what it signifies.

5.2.1.2.   *Testing Hypothesis*

The null hypothesis for the overall data that aimed to test correlation between social class and syntax is as below:

There is no correlation between the Social Class Score and the Syntax Score among the sample.

Alternative hypothesis could be as follows:

There is a strong correlation between Social Class Score and the syntax Score among the sample.

As the results of the correlation reveal positive correlation, the null hypothesis that does not encourage the possibility of a correlation will be rejected in favour of the alternative hypothesis that asserts a strong correlation between the two variables under study. In other words, the alternative hypothesis will be retained and the null hypothesis will be rejected. This means that there is a strong correlation between social class and syntax scores of the sample of this study.

5.2.1.3.   *Regression analysis*

In order to test how much the dependent variable can be explained by the independent variable, Regression analysis is used. SPSS explains these equations with the help of model summary, which explains the Adjusted R Squared, which, when divided by 100, reveals how much the variance in dependent size can be explained by the independent size. Simply put, it will try to explain how much the Syntax score can be explained by the Social Class Score.

Table 31

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.425[a]	.181	.170	14.61221

a. *Predictors: (Constant), Cumulative score*

In the above regression table, Adjusted R Square tells us about the proportion of the total variability that occurred in the dependent variable, explained by the independent variable.

$r\,2\,/100$ = ratio of predictor

.170/100=17

This means that the 17 % variability in the Syntax Score of the subjects can be explained by the social class of the sample of the study.

Table 32

ANOVAa

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3762.932	1	3762.932	17.624	.000b
	Residual	17081.324	80	213.517		
	Total	20844.256	81			

a. *Dependent Variable: Syntax Score*

b. *Predictors: (Constant), Cumulative score*

This table helps us decide the significance of the model, i.e. is the independent variable a good predictor of the dependent variable? This shows as to how much independent variable can be used to explain the dependent variable.

Results: F=17.629 (1.80) = 17.624, P=.000

As the sig value is .000, which is less than alpha value=0.05, we will conclude that the model is significant.

Table 33

Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.530	5.861		4.868	.000
	Cumulative score	.591	.141	.425	4.198	.000

a. Dependent Variable: Syntax Score

The regression analysis verifies the results of Pearson Correlation Coefficient

Equation for the line that uses SC Score to predict Syntax Score would take B (intercept value) of the independent variable (0.591) and add intercept B value of dependent variable. This gives us:

Y=0.591+28.530

To determine whether the Social Class is significant, t-value and significance of this table would be read, which are t =4.198 and Sig=.000.

5.2.2. Social class categories vs syntax: ANOVA Results

The social class data was divided into three categories in order to find the extent of variance among different social classes with reference to Syntax Score, which is the variable under investigation. In order to divide the SC data to obtain three distinct social classes, a formula of 33 percentile score was applied to the social class score of the sample. A cut off line was drawn at each 33 percentile, giving three distinct groups which this study referred to as distinct social classes. Hence, the top 33 percentile constituted

SC 1 or Upper Social Class, the middle 33 percentile was considered SC 2, and the lower 33 percentile group was considered SC 3, or the lower class.

Table 34

Division of Classes: 33 percentile-wise

S. No.	Percentile	Division of SCs	No. in each class
1	Upper 33.33 percentile (44.44+)	Upper Social Class (SC 1)	22
2	Middle 33.33 percentile (33.33 - 44.43)	Middle Social Class (SC 2)	29
3	Lower 33.33 percentile (<= 33.32)	Lower Social Class (SC 3)	31

5.2.2.1 Statistics

The distribution of SC wise data has been explained in the table below:

Table 35

Division of SC data into three distinct classes

	Frequency	Percent	Valid Percent	Cumulative Percent
44.44+	22	26.8	26.8	37.8
33.33 - 44.43	29	35.4	35.4	73.2
<= 33.32	31	37.8	37.8	100.0
Total	82	100.0	100.0	

Table 35 above shows the division of social classes sample on the basis of 33% percentile formula, the number of subjects that fall in each of the three social classes and their percentages. The first division in the above table (No. 35) is 44.44+ which includes the subjects who scored in the top most percentile category on the SES scale. This class has been referred to as SC1 and is represented in the data as 'SC Cat' (right most line in

the table in Appendix J) and coded as 1 in the SPSS. Thirty one (22) or 26.8 % subjects constituted the upper social class or SC1. The second class is formed by those subjects whose percentile score was between 33.33 and 44.43. This is Middle social class and is coded in SPSS as 2. This class has 29 subject, i.e. it is formed by 35.4% of the total sample. The lower social class includes the sample who scored above the percentile score of <=33.32 in the SES Index. This is the lower social class and has been referred to as SC3 and coded as 3 in the SPSS data. This class has 31 subjects or 37.8% of the total sample. Total number of sample is 82 (Also see Figure 5 in Appendix L).

5.2.2.2   Rationale for division of classes

The division of social classes in this study has been done in order to see how learners belonging to different social background perform differently in one of the areas of language, namely syntax. This division presents an approximate difference of social status of the learners, which is based on the social class score obtained by them in their SES index. The division of social classes has been done on the basis of 33 percentile formula. It makes sense to divide the sample into three distinct and discrete classes, that is, upper, lower, and middle class. The division of the sample into three distinct classes is aimed to test the hypothesis that the learners belonging to different classes perform differently. As has been explained in chapter 4, the variance of syntax score in these three classes gives us an idea of how the sample belonging to these classes performs differently in syntax score from those belonging to the other classes.

At theoretical level, the justification for division of the sample into three classes have been provided in various studies in Pakistani context that divide the society into three social classes, that is, upper, middle, and lower class. These studies include Qazalbash (2013), Ibnyhassan (2014) and Lusha (2016), all of which divide Pakistani society into three social classes, as mentioned above.

5.2.2.3.   Oneway ANOVA

ANOVA test in SPSS would reveal whether there is variance of Syntax Score among the three social classes or not. The test was conducted to analyse whether or not

there are significant differences in the mean Social Class Scores based upon the percentile score 33 for each class.

5.2.2.4.   *Hypothesis*

The hypothesis for the present section of the study is that

There is a significant difference in mean social class score (represented by com_score_cat in the tables) *and syntax score for the three population groups* (upper, middle and lower classes).

5.2.2.4   *Null hypothesis*

The null hypothesis for present section of analysis is:

There is no significant difference in mean SC score for the three SC groups. i.e. SC1, SC2 and SC3

So, this section of analysis will try to find out variances among the three social classes that are referred to in the data as SC1, SC2, and SC3, respectively. The presence of variance among these groups is crucial to the purpose of this research as it will highlight the possible cognitive differences in terms of syntactic development among people belonging to different social classes. The variance in syntax score among the three social groups will imply that cognitive development differences represented through varied syntax score are social in nature, as the sample belonging to different classes score differently on the syntax test, which is a measure of development of linguistic cognition in the learners.

Table 36

Formation of three Social Classes

	N	Mean	Std. Deviation
44.44+	22	22	19.67182
33.33 - 44.43	29	29	11.26659
<= 33.32	31	31	14.35660

Total	82	82		16.04171

The purpose of formation of these categories is to obtain three social classes in order to see if there is variance among different social class groups with reference to the syntax score obtained by them or not.

Table 37

ANOVA

Syntax Score

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2980.103	2	1490.052	6.589	.002
Within Groups	17864.153	79	226.129		
Total	20844.256	81			

As the table above reveals, the mean square or the variance estimate across the three SC groups is 1490.052. This number is also called 'between subject variance'. Population variance observed between groups is $f = 6.589$. The significance threshold / critical value was set at .05, so the significance revealed is close to .000, that is, .002, which is lesser than the critical value and shows nearly perfectly significant variance.

$\alpha = .05$

$\rho = .002$

$f = 6.589$

If the significance revealed by ANOVA is less than the critical value of alpha (*a*) set by the experimenter, then the effect is said to be significant. Hence, if the *p*-value is

$\rho = <.05$

$\rho = .002.$,

that means that these test statistics reveal a perfectly statistically significant result.

These results, then, reject the null hypothesis that is "*There is no significant difference in mean SC score for the three social classes*". This means that the alternative assumption is true, which holds that there *is* a significant difference in mean scores of the three population groups, that is, the Upper, Middle and Lower Social Classes. This is an important finding with regard to the research question of the study that aims to find out relationship between social class and syntax.

5.2.2.5.   *Estimated marginal means*

The difference of mean syntax score of the three social class groups has been presented in the following graph. It evidently sums up that the mean syntax score does not differ greatly between the second and the third social class, whereas upper SC has a higher mean syntax score (63) than SC 2 and SC 3.
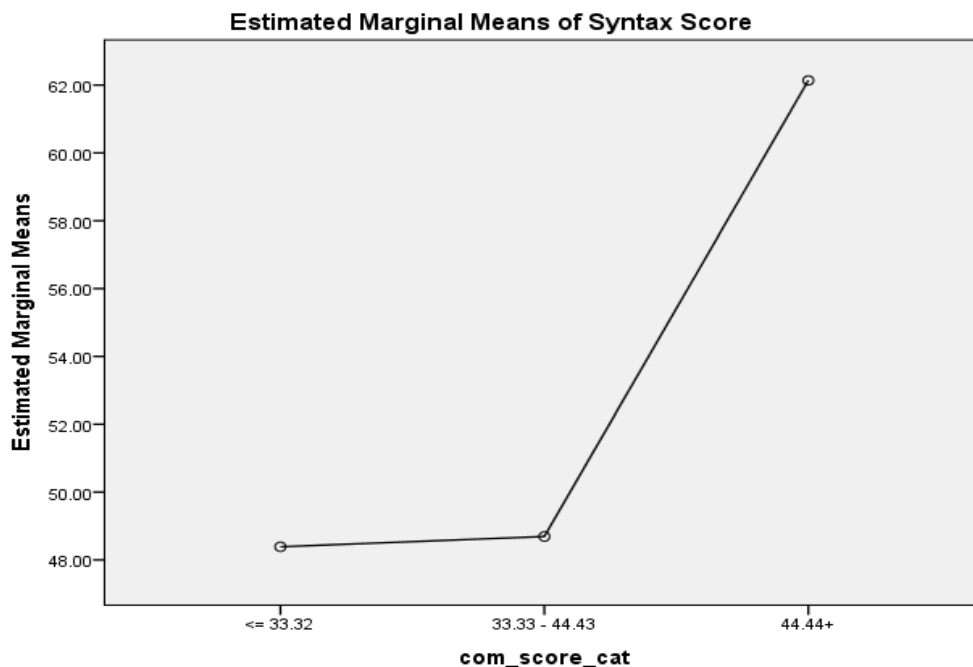
Figure 14: Estimated marginal means of Syntax Score

This result should be studied alongside the *p-* value presented in the above section which reveals statistically significant result and approves the hypothesis of difference of syntax score in different social classes. The difference in syntactic performance among learners belonging to different social classes is indicative of different cognitive development among them.

Table 38

Grand Mean: Dependent Variable: Syntax Score

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
53.071	1.679	49.729	56.413

Grand Mean of the dependent variable Syntax Score is 53.071, with standard error of 1.679. Upon 95 % confidence interval, lower bound score is 49.729, and Upper Bound is 56.413. This score sets a central mark in the light of which the difference of means of the three different social classes is to be established.

5.2.2.6.   *Post Hoc Tests: com_score_cat*

Post hoc tests are run to see if any significant differences occur in the data. Post hoc test was run on SPSS for *com_score_cat*, which is the classes divided by percentile score 33. Also, in order to see whether the homogeneity assumption of the test is fulfilled or not, Homogeniety Subset was run, which revealed the following results:

Table 39

Post Hoc Tests: Multiple Comparisons

Dependent Variable: Syntax Score

Scheffe

(I) com_score_cat	(J) com_score_cat	Mean Difference (I-J)	Sig.

44.44+	<= 33.32	13.74927[*]	.006
	33.33 - 44.43	13.44671[*]	.009
33.33 - 44.43	<= 33.32	.30256	.997
	44.44+	-13.44671[*]	.009
<= 33.32	33.33 - 44.43	-.30256	.997
	44.44+	-13.74927[*]	.006

*. The mean difference is significant at the 0.05 level.

Mean difference of the Syntax score of the two subsets is as follows:

Table 40

Student-Newman-Keulsa,b,c homogeneity subset :Syntax Score

Student-Newman-Keuls[a,b,c]

com_score_cat	N	Subset	
		1	2
44.44+	22		62.1364
33.33 - 44.43	29	48.6897	
<= 33.32	31	48.3871	
Sig.		.942	1.000

Lastly, to understand whether there is a significance difference in the means of the two variables or not, we have to look at the post hoc test, which shows whether or not the means are significantly different in case of each variable. Student-Newman-Keulsa,b,c above reveals the variance of means as shown in table 40. The mean of the first SES group or the Lower Class is = 48.3871, which is only a little different from the Mean of SES group 2, or Middle Class, which is 48.6897. That is why both have been placed in subset 1. However, the mean of SES group 3 or Upper class is significantly different

from both Middle class and the Upper class, standing at 62.1364, and hence, that has formed subset 2 of the means.

5.3. Gender vs Syntax: t-Test Results

Gender is one of the extraneous variables that this study has taken into account. As the data was collected from both males and females, it was pertinent to study the influence of all extraneous variables. The following distribution of gender was observed in the sample inducted for the current study:

Table 41

Gender-wise sample distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	24	29.3	29.3	29.3
Valid	Female	58	70.7	70.7	100.0
	Total	82	100.0	100.0	

In the gender table, 24 (29.3 %) of the sample was male, and 58 (70.7 %) were female. This however, should not be taken as representation of percentage of students who enroll in the EFL related courses in the universities where the data has been collected.

5.3.1 What is t-test?

The t-test tests hypothesis about a certain population or population groups μ in situations where the value of σ is unknown. The mean difference and the significance value are the indicators of whether the null hypothesis H_0 is true or the alternative one is true. This test is used to test hypotheses about an unknown population mean. T-test provides us with two t-values: one is calculated t value, and the other one is critical t-

value. If the calculated t-value is greater in size than the critical value, the Null hypothesis H_0 is rejected.

In order to test whether the variances in the groups are equal or not equal, we study Levine's test, for F and Significance values, represented by F and Sig. For testing the assumptions of the normal data, Q-Q plots can be used. Also, histogram and boxplots can be used to see the distribution and level, respectively. (Chapter 9, P, 01 & Garth, 2011, p. 67)

The results of the test can be discussed in terms of the p-value that shows the significance of the statistical findings, the effect size which shows the level of effect in the data. To understand the results of the t-test, it is pertinent to discuss what it means by Cohen's *d*, and the p-value, and why they are significant in the discussion of statistical results.

5.3.2   What is effect size: Cohen's d?

Walker (2007-8, p. 01) cites Field, (2005a; 2005b) who explains that the effect size is a measure used to observe magnitude of the effect. This is a standardized measure and is used across different studies via different scales of measurements. Among these are Cohen's *d,* and Pearson's Correlation coefficient, which measure the effect size of one variable on the other to see the strength of relationship between the two.

The formula to calculate the effect size is:

$$t2$$

Eta squared = ------------------------

$$T\ 2 + (N1 + N2 - 2)$$

According to Cohen's formula, effect size for t-test could be calculated according to the following formula:

M2-M1/ *Sd* pooled = Cohen's *d*

$$d = \frac{M_{group1} - M_{group2}}{SD_{pooled}}$$

So, as explained by Walker, (2007,), "if group 1 has a mean score of 24 with an SD of 5, and group 2 has a mean score of 20 with an SD of 4,

$$SD_{pooled} = \sqrt{(5^2 + 4^2)/2} = 4.53$$

and therefore

$$d = \frac{20 - 24}{4.53} = 0.88$$

which reveals a large value of d, which tells us that the "difference between these two groups is large enough and consistent enough to be really important" (p.1).

5.3.3. What is p-value?

In order to test whether the results of our study are significant or not, we need to look at the p-value of our tests. We use hypothesis tests to test the validity of a claim made about a population. P–value can be interpreted in the following ways: small p value provides strong evidence against the null hypothesis, and the null hypothesis is rejected. A large p-value is weak evidence against the null hypothesis and the null hypothesis cannot be rejected.

T-test was run in the SPSS to obtain the mean differences of the two groups, i.e. single and married in the sample, with Syntax as Dependent variable and the Gender, labelled as male and female, as grouping variable.

The t-test was run to test the following Null hypothesis and the Alternative hypothesis:

Null / Ho   The variances of the two groups are approximately equal

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Or

There is no significance difference between the Syntax score obtained by male and female EFL learners of Pakistani universities

Alternative, H1   there is significance difference between the Syntax score obtained by male and female EFL learners of Pakistani universities

Table 42

Mean and Standard deviation of Gender groups

	Gender	N	Mean	Std. Deviation
Syntax Score	Male	24	47.0417	14.54970
	Female	58	54.3103	16.26449

The above table sums up the variance of mean and standard deviation of males and females among the samples (Also see Figure 6 in Appendix L).

Table 43

Independent Samples Test 1

	Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.	t	df
Equal variances assumed	.515	.475	-1.897	80
Syntax Score Equal variances not assumed			-1.987	47.780

Table 44

Independent Samples Test 2

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
Syntax Score	Equal variances assumed	.061	-7.26868	3.83253
	Equal variances not assumed	.053	-7.26868	3.65807

Table 45

Independent Samples Test 3

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
Syntax Score	Equal variances assumed	-14.89565	.35829
	Equal variances not assumed	-14.62460	.08725

5.3.4. Interpretation of the t-Test

The test revealed the mean difference between the two groups ($M1$=47.0417, $M2$=54.3103) which means that the mean for males is less than the mean of females (See Table 42). Mean difference of the two groups is (Md =-7.2686), which is significantly big. But the mean difference is not a conclusive evidence to study variance. This variance of means could be due to the number of the sample in both groups, and could be due to

the outliers in any of the groups that create the difference of means. So, in order to study the variance, we need to apply t-test which removes the bias in the reading of the mean differences and tells us the actual variance in the two data sets.

T-test lets us know whether the value it provides is smaller than the critical value or not. The critical value alpha 0.05 means that there is 5% chance that the data is random, and greater than 95 % chance that the data is significant. If the value obtained is greater than 0.05, it means that there is less chance than 95 % that the data is significant and more chance that 5 % of it being random.

In the t-test, homogeneity of variance is one of the major concerns which is given by Levene's test for equality of variance. This test is significant at .475 which means that the variances in the data are significantly different or that the data is 47 % random (as shown in table 46, and should not be pooled. This means that the t reported in *equal variances not assumed* should be read, which is -1.987. This should be compared to the t-value reported in the row *equal variances assumed* which is -1.897.

5.3.5. Result of the t-Test

The test results were found to be statistically non-significant t ($80 = -1.978$, *p* $=.475 > .05$) two tailed with the females scoring higher (*M*=54.3103, *Sd*= 16.26449) than the males (*M*=47.0417, *Sd*=14.54970). The magnitude of the difference of the means (mean difference = 7. 26868) was not big.

As the p-value of the t-test reveals, the variations of the two groups are almost equal, so the null hypothesis will not be rejected and will be retained against the alternate hypothesis that assumes unequal variance between males and females.

5.3.6   Testing with the bell curve

The results of the t test can be checked with the bell curve in order to see whether there is enough evidence to reject the null hypothesis. In case of the bell curve, the X takes position right on the H_0 if there is enough evidence in favour of it, and takes a position away from the H_0 mark if the evidence is not in favour of the null hypothesis. In such a case, H_0 will be rejected, and the H_a will be retained.
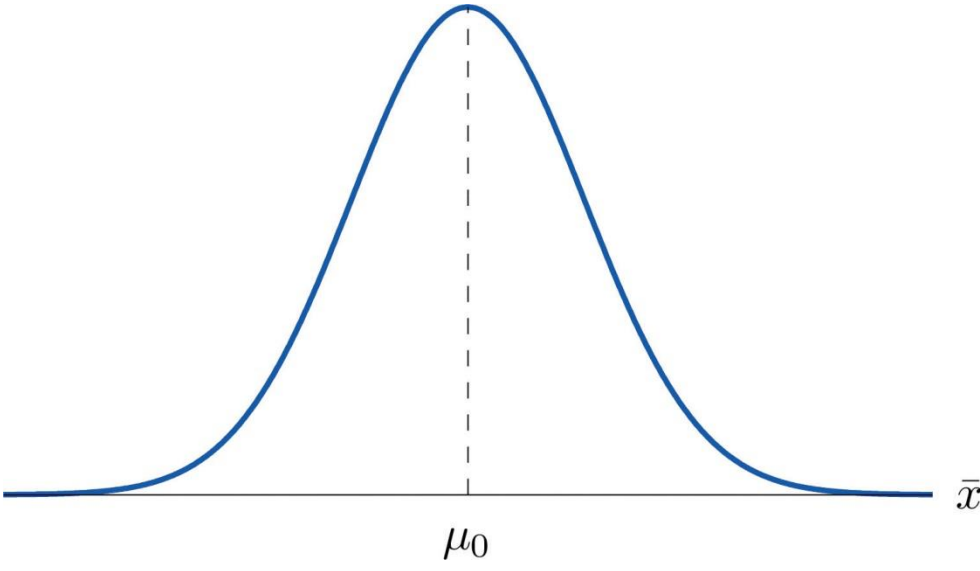
Figure 15: The Density Curve for X‾‾ if H0 Is True (Chap 8*)*
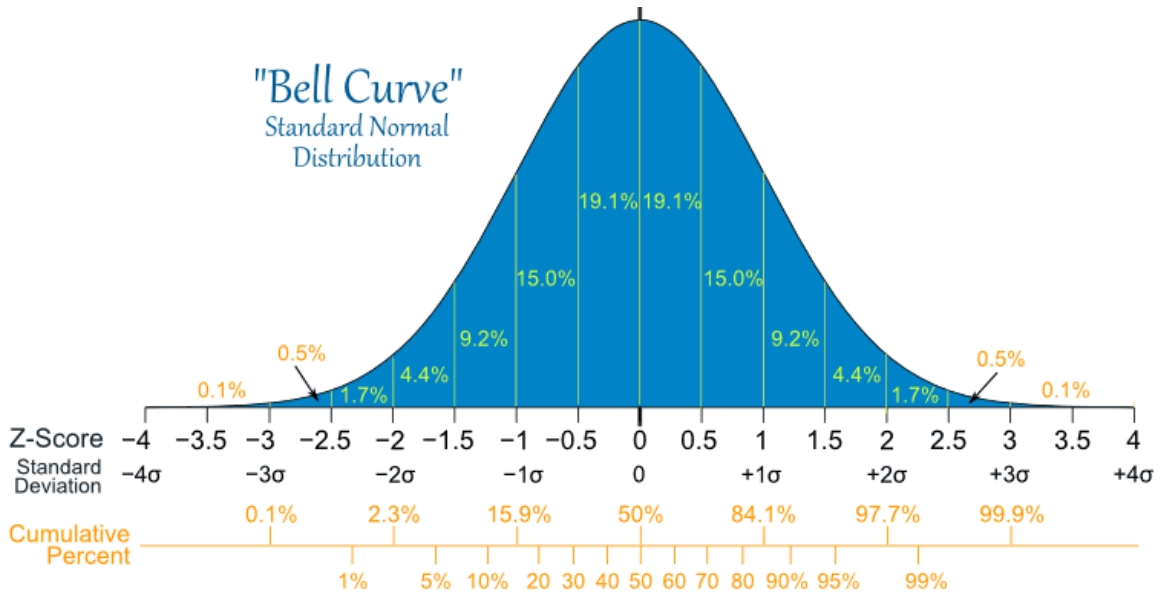
Figure 16: Bell Curve for Standard distribution

Image adapted from https://www.mathsisfun.com/data/images/normal-distrubution-large.gif

5.3.7   Bell Curve for the Current t-Test

For the current t-test, the *p*-value obtained is 0.475 which is greater than the alpha value 0.05. If we look at the above bell curve of normal standard distribution, we see that the obtained value is removed from the centre towards 0.5 mark on the right. This does mean that it falls near the centre with about as much standard deviation as the test statistics show. This, then, is enough to retain the null hypothesis against the alternate hypothesis.

5.3.8   Estimated marginal means

Table 46

Grand Mean

Dependent Variable: Syntax Score

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
54.059	1.955	50.131	57.987

5.4   Marital Status: T- test and its results in terms of *p*-value and effect size

In the sample, there were 64 single and 17 married. Before we read the t-test, we need to look at the difference of the means in the two groups, and after comparing the means and studying the difference of the means, proceed to read the *t*-value and significance in the t-test result.

Table 47

Group Statistics

Marital status	N	Mean	Std. Deviation	Std. Error Mean

Syntax Score	Single	64	49.7188	15.04751	1.88094
	Married	17	62.1176	16.56005	4.01640

The mean difference between the two groups was revealed as (M1=49.7188, M2=62.1176) which means that the mean of the married sample was bigger than the mean of singles (See Table 47, Group Statistics). Mean difference of the two groups is (*Md* =-12.39890), which is significantly big (See Figure 7 in Appendix L). But, as discussed in the t-test of males and females, the mean difference is not a conclusive evidence to study variance among the given groups. This difference of means could be due to the number of the sample in both groups, and could be due to the outliers in any of the groups that create the difference of means. So, in order to study the variance, we need to apply t-test which removes the bias in the reading of mean differences and tells us the actual variance in the two data sets.

As already discussed in the gender t test, a t-test is used to test a null hypothesis which assumes that the variances in the given two groups are equal, whereas there is an alternate hypothesis that the variances are not equal.

The t-test applied on the two marital status-wise groups, that is, married and singles, found among the sample for the present study yielded the following results:

Table 48

Independent Samples Test

		t-test for Equality of Means		
		T	df	Sig. (2-tailed)
Syntax Score	Equal variances assumed	-2.957	79	.004
	Equal variances not assumed	-2.796	23.501	.010

If we read the p-value of the T-test of married and singles, it is 0.04, which is smaller than the alpha value and is a proof of enough evidence that the data is not random, but more than 95% significant, which is the confidence interval set for the current test.

5.4.1   Cohen's d for and p- value in the t-test

For the present t test applied on the two groups, single and married, the following effect size has been obtained, according to Cohen's standards, which represents a large effect size.

Cohen's $d = (62.1176 - 49.7188) / 15.821865 = 0.78365$.

5.4.2   Results of the T-Test

The test results were found to be statistically significant t (79 = -2.975, $p < .05$ two tailed with the married scoring higher ($M = 62.11$, $Sd = 16.56$) than the singles ($M = 49.71$, $Sd = 15.04$). The magnitude of the difference of the means was (mean difference = 12.3988) big.

Hence, the claim about the population that there is a significant difference between the syntax score of married and unmarried sample groups has been proved to be true, whereas the null hypothesis which states that there is no variance among married and single groups of the sample has been rejected.

The results of the present t-test contrasts with the t-Test applied on the two gender groups in which no variance was observed among the males and females present in the sample, although another retesting of a sample with equal males and females could be desirable to re-test gender-wise variance in syntactic development among the population.

5.5   Extraneous variable 3: Age-wise Results

There were three age groups in the SES index and the students were required to tick the relevant one. The table (49) below reflects how many respondents belonged to which age group. The first age group was 20 to 30 years, and as the data shows, 73 (89 %) respondents belonged to this age group. Five (6.1%) belonged to the second age

group, that is, 31 to 40 years, and in the last group, that is 41 years and above, 4 students were found (also see Figure 8 in Appendix L).

This, then, means that the age group wise data that is obtained after collection of data provides non-normally distributed, which asks for the use of nonparametric test, rather than a parametric one.

Table 49

Age-wise sample distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
20-30 years	73	89.0	89.0	89.0
31-40 years	5	6.1	6.1	95.1
41 and above years	4	4.9	4.9	100.0
Total	82	100.0	100.0	

5.5.1. Mann Whitney test (Non-Parametric) for Age Group 1 & 2

The Mann-Whitney U test is one of the non-parametric tests, and is used when the data does not meet the requirements of a parametric test as it does in the t-test. This reports difference between the Mean Rank of the two groups. This test is used for the data that is not normally distributed or the variances among them are markedly different, which would have taken a t-test if it was equally distributed. In other words, it is a non-parametric equivalent of the t-Test to study variance among two groups. Since this is a nonparametric test, we have to rely on the statistical difference in the mean ranks of the two groups.

In order to compare age groups among each other, same number of values as the smallest group (3) was randomly selected from the largest group, that is Age group 1. Group 3 had 4 samples, so same number of samples were randomly selected from group one to compare the correlation of social class with syntax in both groups. The null hypothesis and the alternate hypothesis that the Mann Whitney test tries to test are:

Ho = The sample are taken from identical population groups.

H1 = The samples are not taken from identical population groups.

5.5.2. Process for Mann Whitney of age group 1 & 2

The data was entered in the SPSS keeping in mind the smaller group of the two. The smaller group was group 2, that is, 31 to 40 years old respondents, which had 5 samples. The same number was randomly selected from the bigger group 1, which is 20 to 30 years old. The variables were set as *age*, *social class*, and *syntax*.

Secondly, in SPSS, in *non-parametric tests*, *2* independent samples were run. The *Syntax* was set as test variable and the *age* was set as grouping variable. The groups were defined as group 1 and 2, and the test was run with *descriptive* and *Mann Whitney U* options checked, which gave us the following tables. The following trail was used in SPSS for the test:

Analyze => non-parametric tests =>legacy dialogues =>2 independent samples =>Mann Whitney U , Descrptives => Ok

5.5.3   Hypotheses for the test

The first Mann Whitney U test for AG 1 & AG 2 was intended to test the following null hypotheses that are formed in the light of the current study:

H*o = Mean rank of one group of population is not different from the mean rank of the other group of population.*

or

Distribution of Syntax score is the same across all age categories of the social class data.

or

There is no difference between the syntax scores of Age group 1 and Age group 2.

The alternate hypothesis for this group of sample was as follows:

H1 = *There is a difference between the syntax scores of Age group 1 and Age group 2.*

5.5.4. Test Results

As the table below shows, 10 samples from age group 1 and 2 with ten corresponding syntax scores were calculated for the Mann Whitney U test, which produced the results as shown in Table 51.

Table 50

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Syntax	10	57.3000	13.52405	40.00	84.00
Age	10	1.5000	.52705	1.00	2.00

In this test, categorical variable is age, and the numerical variable is syntax score. The relationship between the two variables is desired to be seen, to have an idea whether age has something to do with the sample's performance in syntax test or not.

Table 51

Mann Whitney for AG 1 & AG 2:Ranks

	Age	N	Mean Rank	Sum of Ranks
	20-30	5	4.60	23.00
Syntax	31-40	5	6.40	32.00
	Total	10		

These tests see whether the ranks of the two groups are significantly difference or not. The Mann Whitney U test was conducted to see the difference between the mean

rank difference of SC Age group 1 in their syntax score with the mean rank difference of SC Age group 2 to see if age has a role to play in their syntax score or not.

Table 52

Test Statisticsa

	Syntax
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.940
Asymp. Sig. (2-tailed)	.347
Exact Sig. [2*(1-tailed Sig.)]	.421b

a. Grouping Variable: Age

b. Not corrected for ties.

Results

Based on the above tables, the following results can be analyzed to draw conclusion about the null hypothesis.

Mean Rank of AG1 = 4.60

Mean Rank of AG 2 = 6.40

Mann Whitney U Score = 8.000

p – value = .347

As the alpha ratio for the test was 0.05, and the p value obtained is .347 which is greater than the alpha ratio, this means that the null hypothesis will be retained against the alternate hypothesis. This means that there is no statistically significant mean rank difference between the two age groups, which is opposite the assumption of difference of syntax score between the two age groups.

Apart from the statistical analysis, we can conclude that age does not have significant relationship with the performance of the two social class groups in their syntax test.

5.5.5   Mann Whitney for age group 1 & 3.

In the SPSS, three variables were created for the purpose of Mann Whitney Test. Age variable which is a nominal variable, was assigned values as per the Age group 1 and 3. (AG1=20-30 & AG3=41 and above). The data was entered in the SPSS keeping in mind the smaller group of the two. The smaller group in this case was the 41 years and above group which had 4 samples. The same number was randomly selected from the bigger group 1, which is 20 to 30 years. Social Class and Syntax score were entered as second and third variables.

As in the first Mann Whitney test, in SPSS, in *non-parametric tests*, *2 independent samples* were run. The *Syntax* was set as test variable and the *Age* was set as grouping variable. The groups this time were defined as group 1 and 3, unlike the first test in which they were set as 1 and 2. Then the test was run with *descriptive* and *Mann Whitney U* options checked which gave us the following tables. The trail used for the test has been mentioned in the first Mann Whitney U test.

5.5.5.1 Hypotheses for the test

The Mann Whitney U test intended to test the following null hypotheses that are formed in the light of the current study:

Ho = Distribution of Syntax score is the same across all age categories of the social class data".

Or

There is no difference between the syntax scores of Age group 1 and Age group 3.

and the alternate hypothesis

H1 = There is a difference between the syntax scores of Age group 1 and Age group 3.

5.5.5.2   *Test results*

As the table below shows, the social class and syntax scores of 4 samples each from AG1 and AG3 were used to calculate Mann Whitney U test

Table 53

Mann-Whitney Test for AG 1 & AG3: Ranks

	Age	N	Mean Rank	Sum of Ranks
	20-30	4	3.00	12.00
Syntax	>40	4	6.00	24.00
	Total	8		

In the Mann-Whitney test on Age group 1 and Age group 3, we see that there is difference in mean rank in both the variables.

Mean Rank Age group 1(20-30) = 3.00

Mean Rank Age group 3(>41) = 6.00

In order to see whether the results are statistically significant or not, we will have to look at Z score and the exact significance in Wilcoxon W test.

Table 54

Test Statisticsa

	Syntax
Mann-Whitney U	2.000
Wilcoxon W	12.000
Z	-1.732
Asymp. Sig. (2-tailed)	.083

Exact Sig. [2*(1-tailed Sig.)]   .114[b]

───

a. Grouping Variable: Age

b. Not corrected for ties.

As the above test reveals, z score is -1.732 and the two tailed significance is .083, which is greater than α =.05.

Mann Whitney U Score = 2

$z = 0\text{-}1.732$

$p = 0.083$

According to the theory, if the two samples come from different populations, their population averages / mean and median will be different. Either the two averages are different, or one is greater than the other. So as the p value is greater than the alpha 0.05, the test concludes that there is no significance difference between the syntax score of age group 1 and age group 3. That means that both the young and the middle aged samples performed equally in their syntax score.

This, however, will be a little too simplistic to say that the analysis of AG 1 &2, and that of AG 2 & 3 is equal, because of the difference of the p value of both. The present test shows a slightly greater value than the alpha, which means that there is a likelihood of difference between the youngest and the eldest age group, whereas that likelihood is minimum in case of the sample belonging to 20-30 and 31 to 40 years of age.

5.5.6   Mann Whitney Test for Age Group 2 & 3.

The Mann Whitney test was run on the two data sets of Age group 1 and 2 by using the same procedure as explained in the first part, in order to see how they co-vary. All samples of the smaller data set (Age group 3), that is, 4, were taken and similar number was selected from the large data set (Age group 2) randomly in order to run the nonparametric Mann Whitney Test. It yielded the following results.

Table 55

Ranks

	Age	N	Mean Rank	Sum of Ranks
	31-40	4	3.63	14.50
Syntax	>41	4	5.38	21.50
	Total	8		

In the ranks table above, we can see that the mean rank of the Age group 2 that is 31- 40 years is significantly different than the mean rank of group 3, which is above 41 years. This, however, is not sufficient to draw conclusion about the null hypothesis. So we shall move to the statistics of the table below:

Table 56

Test Statisticsa

	Syntax
Mann-Whitney U	4.500
Wilcoxon W	14.500
Z	-1.016
Asymp. Sig. (2-tailed)	.309
Exact Sig. [2*(1-tailed Sig.)]	.343b

a. Grouping Variable: Age

b. Not corrected for ties.

The table above shows the following results:

Mann Whitney U value = 4.500.

$Z = -1.016$

$P = 0.309$

We can see that the *p*-value is greater than the alpha 0.05, which means that the null hypothesis cannot be rejected. In other words, there is no great variance in the syntax score of the two age groups, that is, AG 2 & 3.

The results of the above three tests reveal that age has not been found to have a statistically significant influence on the syntax score, as none of the two groups have shown a significant score of p, which would have rejected the null hypothesis.

5.6 Findings & Discussion

In this section, the results of Pearson correlation and the process of categorisation of the sample into three social classes, and the results of analysis of variance among these classes are discussed. The correlation and variance among the social class with reference to their score in syntax-based test is the main area of the study. Also, because *gender, marital status and age* that were important demographic questions in the SES Index and the test, were treated as extraneous variables besides social class, this section will also discuss the findings of the study with reference to variance among the male and females, married and unmarried, and the three age groups among the sample, namely 20-30, 31 to 40 and 41 and above.

5.6.1 Social class vs syntax: Pearson correlation between the social class score of EFL learners and syntax score

This research aimed to gauge the influence of social class on students' performance in the syntax test. In order to see the influence of the social class on language, first Pearson Correlation was applied to the data to study correlation coefficient of the two variables. The Pearson correlation revealed correlation coefficient r = .425 which means a *moderately strong correlation* was observed in the overall data of 82 students. Significance of the test was at .000 level, which was statistically significant because it was lower than a = 0.01.

$\alpha = 0.01$

Pearson's *r* = .425

Sig (two tailed): 0.000

After studying the Pearson correlation results, the regression analysis was done, which revealed $r2 = 0.170$, which means that 17 variability among the dependent variable can be explained by social class.

Both the tests approved the hypothesis that there does exist a positive correlation between the social class of the EFL learners of Pakistani universities and their performance in the syntax based test. This is an important finding with regard to the relation of social class with the language development of the Pakistani learners as positive correlation has been found between social class of the learners.

5.6.1.1. Categorization of social classes into three and ANOVA results

As a second measure in the study, the data provided by the sample was divided into three classes. As explained in Chapter 5, Table 35, *Division of SC data into three distinct classes*, the data was ordered in ascending order based on the social class score of the sample. This ordered data was then divided into three sections by drawing cut off line at 33 percentile score which provided us with three social classes. The lower 33 percentile or the Lower Class was coded as Class 1; the second 33 percentile or the Middle Class was coded as Class 2, and the upper 33 percentile score formed Class 3 or the Upper Class. The distribution of the sample in *Upper*, *Middle*, and *Lower* classes was 27, 37 & 38 per cent, respectively.

In order to test variance of the means of the three social classes, ANOVA was run on SPSS with Syntax as dependent variable and categorised social classes as grouping variable. The ANOVA results revealed p-value of .002, which was less than the alpha value, and because the p value of the ANOVA was statistically significant, it rejected the null hypothesis, that is, that the three social classes have same mean score of syntax. This means that the three social classes were rather found to be different from each other in terms of their mean syntax score, which affirms that the social class is related with the students' performance in syntax-based result. As to how much influence it has on the syntactic development of the EFL learners can be learnt by reading the difference of mean score of each class. The ANOVA results of variance also point to strong

relationship between the two variables, as was proved with the Pearson correlation results which has been explained in the last section.

5.6.2   Discussion

There have been widespread proofs of social class being relevant to the educational attainment among students as their social background affects their educational endeavours. The results of the present study go a step forward in making sense of the claims of sociologists who claimed that social class does affect language acquisition and learning. As opposed to cognitivist claims of mind being geared to processing all kind of information including language (see Cognitivism in Chapter 2), Vygotsky put forward the theory of cognitive development happening under the influence of social interaction (see Vygotsky's Social Theory in chapter 2). In the light of such claims as those of Vygostsky, and the cognitive-sociolinguistics' stance of *usage-based* approach to the study of language, the researcher studied correlation of social class with the development of syntax among Pakistani learners to explore the possibility of relationship between social class and the development of linguistic cognition in the sample. Educational theorists have been interested to study the effect of social divisions in society on academic achievement of the learners to see how social inequalities are carried forward by people belonging to different social strata into their everyday lives. Sociologists conducting research in the field of education believed that students coming from affluent class are likely to have better family support during their studies in form of better schooling, extra tutorial support in and outside home; they are likely to have better study environment available and are not likely to have worries such as the lack of economic resources etc. which are usually confronted by the students belonging to lower social classes of the society. Referring back to the literature that supports this stance, Archer (2005) asserted that education is positioned within the theories of class reproduction which results in reproduction of middle class privileges or the lower class disadvantages (also see section 2.6.2, chapter 2). This reproduction of social inequalities is seen as an impediment to meritocracy and social mobility by researchers such as Perry and Francis (2010) who have worked on a project to devise strategy to reduce the class

gap in order to enable the students from underprivileged class to realize their potential in true sense and compete in the society with equal chances. There is a point to understand here for the academics be they from the field of education or linguistics, that all students are not equal, as we generally believe. They are representatives of their households and they differ in their mental and cognitive makeup just like their households differ from other households. Their exposure to the social world affects their mental make-up. Students from better social background not only have money in pocket to pay the fee for expensive school and hire well qualified tutors, they also have educated parents and elder siblings, atmosphere of reading books and novels and watching movies at home and discussion on these novels and movies, and so on. The fact that their parents belong to higher occupation categories means that they live in a posh area, or at least in a better residential area than where common folk live, have interaction with the educated people and their families that share their status. This gives them greater exposure to language as compared to the rest of kids who grow up without all these things, and hence lack the atmosphere that develops their cognitive skills in a better manner. Due to these invisible differences, their performance is bound to be different from other students. In some cases the learners may perform better than others who are apparently as much capable of performing well as others, and at times they may perform lesser well than those with apparently the same caliber. Most of the teachers normally see what is obvious and assess the students on the basis of their obvious similarities such as age, uniform, and apparent good relations between all students. What they do not see and do not have time to dig deep into is what the background of each student in their class is, in terms of their social status of the privileges they enjoy or don't, in relation to their other peers.

Class inequalities are not limited to the unavailability of resources for the under-privileged alone, but this unavailability causes various hurdles for those belonging to these classes in attainment of their life goals. There are good students in different classes but they cannot excel in face of the limitations they have to experience in their lives. Hence, they are left to see their counterparts gallop along the way to academic excellence. Perry & Francis' claim in the above paragraph is further substantiated by Cassen and Kingdon (2007), Dyson et al. (2010), National Equality Panel (2010) Sodha

and Margo (2010) and Kerr and West (2010) who have proved through empirical research that "social class is the strongest predictor of educational attainment in Britain" (Perry and Francis 2010p. 05). In section 2.6.2 again, Willingham (2012) also suggested that educational attainment of the students depended upon financial, human and social capital, as the family income, their knowledge and skills as well as social interaction play a role in the process of learning in very many ways. All these factors combined with the social status and prestige that comes with the access to these go a long way towards boosting not only the learners confidence but also provide them atmosphere that is facilitative to their learning as compared to the learners who are not as much privileged in their lives.

The influence of social background of the learners is as much on language as on their academic performance in general. This claim was first presented by Labov (1966) who found out that the five phonological variables that he studied, highly correlated with the social class of the informants (Callary, 2009). Labov called what he studied, "phonological correlates" of social class. In that sense, what the present research has studied in not exactly the syntactic correlates of social class because it has not taken into account any one particular social variant as such, as Labov did, but has studied performance of the sample in a syntax test. However, what this resreach has done is to study syntax as a correlate of social class and the results have proved positive correlation between the two variables. Hume (1771-1776), as cited by Wallech (1984), had long ago pointed to the possibility that people belonging to different social background could respond differently to the situations such as learning language and educational achievement (see 2.6.2, chapter 2). This is obvious in the results of the study in which learners belonging to different social classes have performed differently in language based test.

The results of the research can be understood in the light of the claims cited above which highlighted that social inequalities are reproduced by people belonging to different classes. The learners belonging to the Upper social class or *SC3* visibly scored better than the ones belonging to Middle *(SC2)* or Lower classes *(SC1)* as identified in this research. As the ANOVA test reveals, the mean score of the three population groups

is significantly different. Mean syntax score of *SC3* or Upper class is found to be much higher than the mean syntax-score of *SC2* or middle class, and *SC1* or lower class. The middle and lower class, however, do not have great difference between themselves compared to the difference of both with the upper class (see section 5.2.2.5 in chapter 5).

The results of the present study approve Vygotsky's claims of the link between social interaction and the development of language. At initial level, the overall correlation coefficient study of the total sample proves positive correlation between social class and syntax, which is found enough to retain the main hypothesis of the study that there is a relationship between the independent and the dependent variables, i.e. social class and syntax. Topçiu & Myftiu (2015) elaborate Vygotsky's position and affirm that the "focus of his work is the individual's interaction with society, the impact of social interaction, the language and the learning culture" (p. 173). They go on to explain that Vygotsky viewed "cognitive functions as a product of social interaction" (p. 173). They cite Vygotsky (1934) as saying that "The human learning means a specific social nature and a process through which children enter gradually in the intellectual life of people surrounding them" (p. 173). Human mind, then, is seen as mediated rather than independent, as seen by cognitivism. In this regard, Lantlof (2000) has been cited in Topçiu & Myftiu who cite Vygotsky to explain that child in his early age is entirely dependent upon his parents as he takes instruction about what to do and what not to do. These interchanges happen through language through which the child adapts to social inheritance. The child receives knowledge in interaction and then assimilates this knowledge after adding personal value to it. This is not simple imitation, as behaviourism would claim, but this personal value-added knowledge is a result of interaction rather than imitation. This is social constructionism of Vygotsky which lays bare the role of interaction in development of language. The interaction happens between the learner, who may be a child or adult one, at multiple levels. The interaction might happen at individual level within family, at social level with peers around the learner, at academic level in school and college and so on. The theories that count educational context as relevant are as much relevant in this discussion as they are elsewhere. The medium of instruction has been studied by this research as an important constituent element of one's

social identity. It has been explained in the initial sections of chapter 2 that private schools in Pakistan offer education in English medium whereas government schools normally offer education in Urdu or mixed medium. The lower class learners only have access to the government schools, whereas the upper class children go to private schools where English is normally the medium of instruction. The difference of medium of instruction is mainly due to the socioeconomic difference of the families children come from, as the parents with higher socioeconomic status might be able to send their kids to more expensive private schools whereas the parents with lower socioeconomic status may have to contend with sending their kids to government schools which are cheap, but lag behind in terms of good teaching atmosphere as well as ignore English as a medium of instruction. The situation may have improved just a little in recent years, but largely the situation remains the same in most areas of the country.

Kids in private schools, then, have access to better teaching environment, interact with peers belonging to families of almost equal social status, have better qualified teachers available in their private schools, and have better home environment which adds to their learning conditions positively. Social context, then, is an important factor that not only lays bare the social inequalities in the country, but also gives an insight into how social background goes into developing cognitive capabilities of a child. A learner with better home and school environment is more mentally relaxed, more comfortable and hence better motivated than a learner who is deprived of conducive learning atmosphere both at home and school. He might not have well educated parents to support his learning, a factor that is relevant as much too general education as it is to their language development. Bernstein's (1971) code theory applies to this point of discussion who had found out that people belonging to different social backgrounds have different code, which he termed restricted and elaborated code. The code is likely to be transferred to the kids in the same way as it is present in the parents. As a result, the children from lower classes are likely to inherit restricted code and their counterparts from better off families are likely to inherit elaborated code from their parents.

Social interaction, hence, lies at the heart of language development. Ellis (2000) has been cited by Topçiu & Myftiu (2015) who belives that "the sociocultural theory of

learning starts not through interaction but during interaction" (p. 138). They explain that children first learn the task with the help of another person, and at the next stage are able to do them independently. Social interaction, in this way, is considered by him as a support to learning.

To advance the discussion further, Bender (2000) highlights the link between social and linguistic variables and points out that phonological variation is structured at speech community level because hierarchical organization of different speech styles are parallel to the socioeconomic organization of community. This, he says is true in two respects. First, he refers to the Labovian research in which the latter found out 'the higher a speaker's socio-economic status, the lower their use of stigmatized variants'. Secondly, the same study also presented Labov's observation that speakers used the stigmatized variants more in casual speech and less in formal speech, which reflects the hierarchy of speech styles within the community. Bender points out that although the interpretation about linkage between variation, community's social structure and style has been challenged, yet Wenrich's (1968) point that variation is "not merely random fluctuations to be assumed away, but instead indicative of the interface between language and social structure" (Bender, p. 191) is still valid. Social class, as studied in this research, is a social structure that reflects in linguistic structure that is formulated within the very social structure we are talking about. The claim made by this research is in relation with the ontological question regarding language, that is, where is it that language of the learner develops, whether it develops in brain or society, and the results support the claim that it within the social structures that language originates, and the social structures are reproduced in linguistic, and probably also in syntactic structures. Bender moves from phonology and questions whether sociolinguistic variation at the level of syntax exists in the same way as it does in phonology? She thinks that this could further lead to questions whether there exists a syntactic variable, and if it does, does it interact with the social variable in the same way as phonological ones do? Bender argues that although a syntactic variable is not a variable in the sense in which a phonological one is, because if a variable is taken as a choice-point, syntactic variable does not offer a choice point because it normally consists of a morpheme 'me' which has a semantic value, unlike a

phone which has none, and offers many choice-points. But this could be true in case of inflections such as in variable negative concord and variable subject-verb agreement.

Bender (2000) points out that certain researches have tried to study correlation of syntactic variable with social factors. She summarizes that Cedergren & Sanko (1974) found out that "*que*-deletion in Montreal French correlates with social class" (p. 192). Also, Eckert (2000) reported correlation of rates of negative concord among the Detroit adolescents with socioeconomic facts related to the speakers and with different social categories within the high school. And finally, Bendar reflects on Chambers (1995) who claimed that "\[g]rammatical variables tend to mark social stratification more sharply [than phonological variables]" (p. 51).

These examples not only justify the rationale of the present research but also support its research design as well as results. Syntax is taken by this research as a variable to reflect upon cognitive development of the learners. The development of syntax as a cognitive function was hypothesized to be affected or related to the social background of the learners to prove the fact that language and linguistic cognition are socially constructed phenomenon, and the social aspect cannot be detached from the study of its development.

5.6.2.1 *Syntactic development as an indicator of cognitive development*

Language development is a measure of cognitive development. The theorists who studied the development of linguistic cognition tried to create a link between cognition and language. The research in hand took a three pronged approach to study language development in relation to cognitive development and then studied the influence of social class, which is one of the axes of social division, on language development. The aim of the study was to study how much the assumptions of the educationists are true who believe that social class differences are reproduced in academic context, and to see whether and how much difference in language development is there between different social classes. This research intended to study the relationship between there phenomenon; syntax, cognition and social class. The language development theories discussed at length the relationship between language and cognition. In the second part of

the discussion in literature review, it was highlighted with reference to social constructionism and social cognitive theories that language or cognitive development of language is not an objective phenomenon, and the world is not something external to the learner as cognitivism believes. World is not something "out there" but very much relevant in the process of learning language as it provides a context to the learner in which he makes sense of the language he uses. Experience is at the core of learning, which takes place in society. Social interaction, thus, is the context in which linguistic cognition develops.

Educational psychology makes sense of what we mean by cognition, what goes in the mind of a learner when the process of learning takes place. It also helps us understand how the theories of psychology are relevant to various educational situations. The development of cognitive studies as an area of knowledge took different phases. In the first phase of the development of cognitive studies, cognition was viewed as 'association between events', and learning was supposed to happen as a result of 'trial and error'. As explained in the literature review, Skinner (1904-1990) presented behaviourist theory and viewed cognition as observable behavior rather than a mental activity. Learning was understood by the principle of operant conditioning which considered behavior a result of association between events and responses, which were strengthened with positive reinforcements. (Human-Vogal, as cited in Elof & Ebersohn, 2004). As opposed to the operant conditioning, classical conditioning principle believed that 'associations are formed between a stimulus and involuntary response' (Long, 2000 as cited by Human-Vogal, 2004). B. F, Skinner applied behaviourist principles to the learning of language, but his claim of stimulus response relation was soon rejected by Chomsky who argued that children are capable of producing novel utterances that were never heard before. After Skinner's *behiourism* and Chomsky's *cognitivism*, Vygotsky emphasized the *socio-cultural* aspect of cognition and this was known to the world when in 1960 his work was translated from Russian to English.

Vygotskian claims of language being a social phenomenon led to the emergence of social constructionism as a mode of inquiry which gave importance to social processes. The *social turn* that emerge with the Vygotskian ideas opposed cognitive

claims, and this is the result of this social turn that studies such as Cheshire's (2015) are claiming to find social stratification of language in instances of specific syntactic patterns (see detailed discussion in 2.11.8).

The social claims of studies such as Cheshire's can be better understood by the findings of the present study which has been conducted in Pakistani context. In studying performance of the learners belonging to different social classes, the study wanted to analyze the effect of social background of the learners on their syntactic development. It found out positive correlation between the independent variable, that is social class of the learners and syntax which is dependent variable of the study. The design of the study such as this one is recommended by researches such as Eckert's (2000) which proposed that ethnography could be combined with quantitative analysis of the sociolinguistic variation "to study the recreation and configuration of class identities" (cited in Simpson, 2000, p. 519).

An important understanding this research is based on is that learners in a foreign language classroom are carrier of different social backgrounds. The difference of social backgrounds is reflected through their performance in the syntax based test that was used as a tool to study syntactic variation among them. The difference of social background of the learners is evident not only from the social class score of the sample studied for this research, but also by the wide variety of occupations, and a wide range of difference in monthly income and property reported by the sample. The range of occupations of fathers reported by the learners include occupations such as landlord who are considered very influential figures in Pakistani society to retired clerk and retired soldier, who belong to the lowest strata of society (see chapter 4). The difference of property owned by different learners' families is startling as it ranges from 10 million rupees to a meager 40,000. Similarly, the difference of performance in syntax test is huge among learners categorized as representatives of upper class or lower class according to the data they provided. The learners categorized as upper class one (see Appendix J) were coded as number 1 in the SPSS. There are about 66% learners who scored above 50 out of total number of 21 in upper class, whereas it is 45% in the lower class that is coded as No.3. In SC1 (upper class), 38 leaners scored above 80 marks in syntax test, whereas none of the

sample placed in SC3 (lower class) scored near or above 80 in the same test. This is a serious situation that reveals the re-production of class inequality among the language learners.

Table 57

Class-wise variance in syntax score of the sample

Classes	Scores above 50 in Syntax	Scores above 80 in syntax
Upper Class (SC1)	66%	38%
Middle Class (SC2)	51%	0%
Lower Class (SC3)	45%	0%

This selection of representative syntax scores reveals the difference in the learners' performance which is indicative of varied cognitive ability of the learners belonging to different social classes.

Apart from this, as discussed in the literature review (Section 2.4.2) cognitivists believe that human mind is geared to process all kind of information including language. Ziangi (2005) asserted the importance of acquiring conscious control of patterns of language through study and analysis, while Muller (1971) called for giving greater importance to understanding the language structure than to the facility of using it. Another researcher Rahimpur (2010) stated that language depended upon cognition and called cognition an underlying language skill. He also cited Brown (1994) who claimed that there is a relationship between cognition and Hatch (1983), who felt that language is only one of the analytical abilities to depend on cognitive development.

In the light of the above relationship of cognition with language and of both with society, various researchers undertook to study relationship of language with social factors such as gender, ethnicity and class. Whereas Labov studied the influence of social class on pronunciation of the speakers, Lakoff (2000) studied variation among males and females with regard to their language use. Age is also given great importance in understanding development of language as Scovel (2000) asked a question whether age is

important in morph-syntactic development, and Lakshmanan (1995) tried to study how universal grammar influenced children's grammar, and Singleton (2001) ponders whether children and adults process language in the same way or not.

Social variables, in all these studies assume a vital role in interpreting development of language, which is considered as much social as it is considered a cognitive phenomenon.

Language is not only thought to be shaped by social processes but syntactic structures are thought to reflect social structures. Social constructionism not only provides an insight into the development of language but also provides different pedagogical frameworks to facilitate language learning. It is not only an interpretive framework but also but also a pedagogical theory.

The above discussion points to the fact that the development of language is a cognitive process and linguistic cognition is nothing else than an imprint of social cognition. In simple words, all linguistic development reflects cognitive development and no linguistic development can be seen as independent of its social context. In the context of the present study, then, it can be assumed that the difference in syntax score among the learners belonging to different social classes may be taken as a representation of different cognitive development among them. Linguistic and cognitive development have been explained by the theorists as parallel processes, and hence all linguistic performance is cognitive performance, and since all cognition is social, linguistic cognition cannot be deemed to be free of social influence as well.

5.6.3   Gender vs language (Syntactic Development)

Language and gender is an issue of massive debate among the sociologists of the present and the 20th century. Sociologists often try to study language from the perspectives of males and female and try to get into the mechanics of language use by both males and females and how they differ from one another. Wardhaugh (2006) argues that in sociolinguistics, connection between the language structure and its use, and the social roles of men and women is a major topic. The question of whether the differences in the ways of speaking of men and women arise from the structures of language or do

they have something to do with how the two sexes relate to each other in the society is of great importance (p. 316). He highlights that the difference between sex and gender is that one is biologically determined whereas the other is socially constructed and has more to do with the roles assigned to each sex and the expectations assigned to each in the society. He cites Wodak (1997b.) who reminds us that gender is "not…a pool of attributes "possessed" by a person, but ….something a person "does" (p. 13) She also points out that gender could be different from one generation to the other and from one culture, ethnicity, religious group and social class to the other.

Wardhaugh (2006) has pointed out that women's speech has been described by many researchers (Baron, 1986, Arliss, 1991) as different from men. But it is men's language that is considered the norm, and women's language is always studied in relation with men's rather than the opposite. The proof of this can be found in Labov (2001) who talks about women conforming to the sociolinguistic norms when they are overtly prescribed. Wardaugh argues that there is less "evidentiary support" for the claims that women's speech is "trivial, gossip laden, corrupt, illogical, idle, euphemistic, or deficient..." (p. 317) as compared to men's speech. He cites Pilkington's (1998) study who finds out that men gossip just as much as women do. Only the men's gossip is different from that of women.

The discussion further presents claims of Brend (1975) who observed that the intonation patterns of women and men vary as women have been observed to use patterns of politeness and surprise more than men. Also, Lakoff said that women often reply to answer with arising intonation which is normally not associated to the answer and is rather associated to question. This could be because of their lack of confidence, another evidence of which is their use of tag questions more often than men.

Commenting on language, Hickey (n.d) remarks that language is not only a system of communication, but also it is a social phenomenon. He asserts that sociolinguists intend to show us how language is "governed by factors such as class, gender and race, etc. (p. 01). Father, he explains that all researchers believe that language of males and females is essentially different and it is due to their growing up with certain

social roles attached to both males and females. The manifestation of these roles is visible in all social roles of males and females including language. "Genderisation" starts with names, as both are given specific names with a very little overlap between the names of the two gender groups. Gender roles are approved or disapproved by the parents or society with the responses such as *'good boy, good girl: bad boy, bad girl'* etc. when they are conforming or not conforming to their respective gendered roles.

Hickey also points to the presentation of evidence of gendered language by Robin Lakoff (2000) which is manifested through powerless language of women as obvious in their use of *tag questions, indirect statement, use of hedges, alternatives, , high rising intonation at end of sentence.*

Some examples presented in these cases by Hickey are as given below:

i.   Indirect statement*: It would save a lot of money if we bought a smaller car.*

ii.   Tag questions: *It's not that much to ask, is it?*

iii.   Use of hedges, alternatives: *It's not really that difficult. Well, why not? We could go for a drive or a walk this afternoon.*

iv.   High rising intonation at end of sentence: *We could go away for the weekend.ä*

v.   Use of augmentatives: *I'm /delighted you're going to help. They're /so kind!*

vi.   Use of euphemisms: *Peter's gone to wash his hands. (p. 26)*

These evidences of gendered language or the claims that language use and the choices of males and females with reference to language are different, warrant for a study that takes gender into consideration as a social category in interpretation of linguistic variation of any kind as well as gives a room for studying gender-wise results of linguistic performance observed in a given context.

5.6.3.1. Gender-wise Results: T test

The present study took gender into consideration as one of the three extraneous variables that may have something to do with syntactic development among Pakistani EFL learners.

There were 24 males and 58 females among the sample, and in order to study whether there is difference in the syntactic score of the male and female groups or not, t-test was run on the data obtained from the socioeconomic measurement tool, SES Index, and the syntax based test. The results yielded p-value of (80 = -1.978, p =.475 > .05 two tailed) which proved that there is no statistically significant difference in the male and female groups in their syntax score. It did not reject the null hypothesis of similarity of variance among the groups, and hence the hypothesis of there being a significant difference among males scoring different in syntax based test than females could not be approved.

Studies of difference in male and female linguistic development have been done on boys and girls as well. The following section will sum up the results of the difference among boys' and girls' performance in sentence length and syntactic maturity.

5.6.3.2. Syntax Development in Boys and Girls

To compare and contrast the present study with a similar study of syntax variation with reference to different genders, we refer to the research done by Koenigsknecht & Friedman (1976) who used the Developmental Sentence Scoring (DSS) procedure in order to collect what they called 'normative information' among male and female children. They collected verbal samples from them in response to a different variety of stimulus samples. They found that in the children aged 2, 3, 4, 5, and 6 years, girls averaged significantly higher than the boys on several measures of sentence length and syntactic maturity. (Koenigsknecht & Friedman, 1976). They further cite Haggard, 1957, Jersild & Ritzman, 1938, Sampson 1959, who noted that some early empirical studies in the American children, girls performed better on a variety of measures of expressive language ability than boys. But on the contrary, a considerable research suggested that these differences in sexes may have resulted due to certain situational and experimental

variables. Later studies (eg. Templin, 1957) explained these differences in the light of changes in the child rearing practices, "especially a general reduction in early child sex typing'. In contrast, when the data from non-American and non-white-middle class children was collected (Anastasi & D'Anglo 1952; Dunsden & Frasier-Roberts, 1957) no superiority of girls over boys in verbal skills was observed.

Explaining the difference between earlier studies and the present one, however, Koenigsknecht & Friedman (1976) remark that the earlier studies regarding male female comparisons were conducted about general language measures, that is, mean sentence length, total verbal output, variation in vocabulary, rather than on the specific syntactic structures on which they are dependent. The present one, on the contrary, 'was designed to obtain norms of male and female syntax development, using developmental weightings of specific grammatical structures' (p. 1112). Over a range of age levels, spontaneous verbalisation was elicited from a large sample, and it the study anticipated to observe female superiority in the rate of grammar acquisition. The final hypothesis of the study was that male female differences would be obtained only on specific syntactic categories.

Results of the studies showed significant sex differences in four out of the total of eight grammatical categories, that is, indefinite pronouns, noun modifiers, personal pronouns, main verbs and conjunctions'. Final results showed a "spurt in syntax development by girls at about 4 years of age' whereas less significance difference at early age, which could have been due to nature of the DSS instrument used or probably the hierarchy was not fine enough to pick differences among the younger age groups. (p. 1113).

In contrast to the above discussed research by Koenigsknecht & Friedman, the present research falls short of confirming gender-wise differences in the syntax score. As this is a quantitative study which only studies correlation and variance in terms of statistical significance, and does not go into the detail of linguistic variation in terms different choices in syntactic alternates made by males and females, it is desirable to carry out a study which goes a step further and carries out an in depth study of difference in syntactic choices among males and females. Also, a similar testing of difference

between male and females with equal variance in the sample could present a better picture of the variance in syntactic development / performance.

5.6.4 Marital status wise results: T test

There has been hardly any research available in the literature regarding language variation or academic achievement which focuses on variation in language or in the performance of a linguistic test in married and singles, but since the present study included the sample that were likely to be adults and hence, some among them were expected to be married, this provided us another dimension in which to study the difference of performance in syntax based test. Earlier, this study presented the difference in performance of syntax based test vis a vis their social classes and gender, and the third dimension along which the variations of the syntax scores has been studied is the grouping of the sample in married and single groups. Although marital status is not a stratifying factor like age and gender and class are, it still is an important social identity factor in Pakistani context where the institution of marriage is grounded on conservative basis and is not a negligible aspect of one's identity.

The current study revealed statistically significant difference between the married and single groups of sample. The t-Test results yielded p = 0.04 which is smaller than < .05 two tailed, with the married scoring higher (M=62.11, Sd= 16.56) than the singles (M=49.71, Sd=15.04). The magnitude of the difference of the means was (mean difference= 12.3988) big.

This adds to the dimensions studied earlier, in which class wise differences in syntax score were observed but no statistically significant differences were observed in the males and females. Here, in the third account the null hypothesis regarding married and single groups, that is, the married and singles in the population exhibit equal variance, stands rejected and significant variance among the married and single population has been observed.

The difference among the married and singles could be traced back to the level of maturity and seriousness among the two groups as the former are more likely to have entered into the EFL courses to improve their language efficiency, which would help

them improve their performance at work place. Singles, on the other hands, are free from the responsibilities of raising a family and hence are less serious about their studies. Also, they are likely to take EFL courses not serious as they do not consider them a degree such as bachelor or masters, which are given more importance in terms of grade or skill acquisition rather than competency enhancement courses such as language courses, or computer classes, etc.

Although the results of the present t-test contrasts with the t-test applied on the two gender groups as no variance was observed among the males and females present in the sample, another re-testing of a sample with equal male and female sample groups could be desirable to re-test gender-wise variance in syntactic development.

5.6.5 Age vs Syntactic Development

Among the three extraneous variables studied for the influence on syntactic development, one important variable is age. Language is undeniably a cognitive process (see section 2.4) and as a child grows up, his cognitive faculties improve with every passing phase of his age (see 2.3.1).

But the story does not end at the last stage of cognitive development Piaget mentions in his landmark study. Wellman and Gelman (1992)   s contest the view of age based cognitive development of language as they cite Chi's (1978) who stressed on content dependence and domain generality of language, and pointed out that children with chess skills outsmarted adults who were better than these children in general memory tasks, and their age was no benefit to them. With this he asserted the point that all cognitive tasks are different than others, and so is language. Hence it must be studied separately in relation with the cognitive development and age.

In the light of the above controversy which puts language at the centre of the dispute whether cognitive development is age dependent or not, testing either of the two claims in our own context becomes more than desirable.

5.6.5.1.   *Age Wise Results: Mann Whitney U*

The Mann Whitney U test run on different age groups as specified in the SES Index to test the hypothesis whether there is a variance in different age groups with reference to their syntax score or not. The results of the test run on Age group 1 and 2 di not reject the null hypothesis which means that there was no mentionable variance in the syntax score of the two age groups. The significance score of the test was $p= 0.347$ which was greater than $a = 0.05$, and hence not able to reject the hypothesis of variance in the two age groups. The p- value of Mann Whitney U for Age group 1 and Age group 3 is = .083, which is also not less than the alpha ratio, and hence the null hypothesis of no difference in groups was retained. Similarly, in the test run for group 2 and group 3 also, no great difference in syntax score was found as the P value = .309 was larger than the alpha 0.05.

5.6.5.2.   *Discussion*

Generally, it is assumed that younger learners are good at learning language as they have sharp learning skills, and language learning faculties dim with the passage of years in adults and they are not able to demonstrate the same language learning abilities as their younger counterparts are able to do. This, however, has not been the result of this study as the youngest, middle and almost middle aged group have presented no variance in their syntax score.

An important study regarding the influence of age on learning language is Critical Period Hypothesis (CPH) was first presented by Penfield & Roberts, 1959, Lenneberg, 1967 and it was later modified for the languages other than the first languages by Johnson & Newport (1989). This hypothesis stated that 'there is a specific and limited period of time for language acquisition' (Pujol, 2008. p.13). Also, there are two claims regarding the CPH; one is that language can be learnt only by puberty and after that the exposure will not help, and the second one is that the language learnt after puberty will be 'more difficult and incomplete'. However, as the discussion is advanced by Johnson & Newport, (1989) regarding the SL (second language), *exercise hypothesis* and *maturational state hypothesis* are presented which state that the grown-ups can learn a

language with greater exercise, and the maturational state hypothesis believes that the learning capacity diminishes with maturity if it is not put to practice in its given time. Resultantly, exercise hypothesis leaves a margin for the adults to master linguistic skills at later age with practice and be equal to the children who learned at an early age. Pujol also presents evidence from Collier (1987), Fathman (1975 / 1982), Ervin-Tripp (1974), García Mayo (2003). Harley (1986), and Swain & Lapkin (1989) regarding superiority among the older learners in development of morphology and syntax. He cites Cummins who proved superiority of the adult learners as he showed that the L2 acquiring skills mature in the adults which give them an edge in learning a second or foreign language.

Apart from the above study, Stefánsson (2013) cites Nikolov and Djigunovi'c, (2006) who opined that "second language acquisition among children is achieved relatively fast and without effort" (p. 02). However, there also has been criticism on this belief of effortless and quick competence in the second language among children. (Haynes 2007, Genesee 2006). They assert that apart from age, motivation and exposure are also important in explaining the second language proficiency.

The results of the tests applied to different age groups in the present study, however, do not come up to the expectation of difference between different age groups as no mentionable variance in the syntax score was found among different age groups. AG 1 (20 to 30 years), AG 2 (31 to 40 years), and AG 3 (41 years and above) have revealed almost same score in syntax based test, due to which it is difficult to say that age has an influence on the syntactic development of the EFL learners in the context of present research. These results rather go in favour of Chi's (1978) study referred to in the last section, who found out that children with greater skills in a given cognitive task could outperform adults who otherwise have better score in other cognitive skills.

The results could also be traced back to the fact that all the sample of the study are beyond the puberty, as the sample age was above, and not below 20. This could be one explanation of no variance among different age groups. Secondly, smaller age groups than the present one (where one group is formed by 10 years) could present better results with reference to influence of age. Also, a similar study with the sample belonging to pre-

puberty and post-puberty stage could yield better results. Finally, small number of groups could also be a reason of the non-significant variance of the syntax score in the given age groups in the present research

5.7   Summary

This chapter is the second main part of the research. It dealt with all important issue of the relationship of social class with syntax, and then it dealt with how development of language, specifically syntax, is a cognitive process. It presented an overview of how the three seemingly different areas of knowledge, i.e. language, cognition and society interact with each other and converge under the umbrella of social constructionism, and how this study helps us understand this interaction. Also, this chapter summed up the relationship between language and gender as it presented results of gender based analysis of the data. Also, it presented proof of variation among the married and single groups among the sample, and highlighted that no difference of syntax score was observed between the three age groups present in the sample. The discussion was based on the results of various statistical tests applied to the data collected through Social Index and the Syntax related test. It summed up the correlation results of the overall data, and then it looked for variance in three different social class categories through ANOVA test in SPSS. After that, t-test results regarding gender and marital status and Mann Whitney test results regarding the three age groups of the sample were presented and discussed.

CHAPTER 6

CONCLUSION

This chapter sums up the discussion related to the topic of the research in the light of theoretical perspective adopted by this research, and provides an overview of the research design that is based on the adopted theoretical perspective. It then presents a summary of results vis a vis the research question and hypotheses of the study. By highlighting the findings of the study and presenting important conclusions reached on their basis, it analyses how the purpose of the research has been fulfilled and how the objectives the study intended to achieve have been accomplished. This chapter also mentions the gap bridges by this research, and finally, suggestions for future research in this field have been outlined.

6.1   Theoretical Aspect of Research

This study falls at the intersection of cognitivism that considers language as an innate ability, and social cognitive theories that view linguistic cognition to be developing in social interaction. The research studied variance in performance of a syntax based test among EFL learners in relation to their social class background, and tried to postulate on the basis of social cognition theories resulting from social constructionism that it is due to varied social background that the EFL learners in Pakistani universities develop different linguistic cognition, which is manifest in varied syntactic development among them.

Social cognitive theories, as explained in literature review (section 2.4.3) are the convergence point of psychology and sociology, and at the level of linguistics, of psycholinguistics and sociolinguistics. Psycholinguistics and sociolinguistics merge under the sub-discipline of cognitive sociolinguistics. The former takes social cognition as a social process where meaning making is done, whereas in the latter, cognition is

thought to be socially structured and transmitted, which is reflective of the structure of social groups, and norms of the relevant social groups within that society. Cognitive sociolinguistics emphasizes the need to take both approaches together and puts forward a case of studying meaning in social interaction. Cornips & Corrigan (2005) believed that in order to provide a holistic picture of how language develops both in cognition and society, both these factors need to be studied side by side. They referred to such an approach as cognitive sociolinguistics. Such a study, in their view, would bridge the gap between sociolinguistic and cognitive linguistics, which otherwise differ in their purpose in relation to the study of language.

Keeping in mind the above position of cognitive sociolinguistics, we need to look at certain basic assumptions that formed the foundation of this thesis. These assumptions are discussed in the following paragraphs one by one to lay bare the conceptual layout of the study.

Firstly, the study highlights the stand of cognitive linguistics which contests the claim of innatists such as Chomsky (1968) and others that language is an innate ability. The newly emerging research trend in cognitive linguistics, namely cognitive sociolinguists, highlighted through a series of studies that support the view of language being *usage-based*, and context-dependent. Cognitive sociolinguistics maintained that social context cannot be detached from the study of meaning because it is through social interaction that the process of meaning-making takes place. Language, it believed, is not an autonomous system but is usage-based, and a product of the learner's physical interaction with the world (Christiansen & Dirven, 2008, Gaeratees, Christiansen & Ibanez, 2010. See detail in theoretical framework, chapter 3). Linguistic cognition, according to them, does not develop in isolation but is shaped by social practices and social actions in the environment around the individual. It is not merely "intra-individual information processing" (Howard & Hollander, 1997, as cited by Howard & Renfrow, 2003, p. 260), but mirrors values and norms of relevant society and group. Hence, language, by virtue of being a cognitive process, is also bound to be affected by social environment.

Secondly, the interaction of language with society or the context of its use means that development of language cannot be considered a monolithic process, as innatists would believe. It is a dynamic phenomenon which is reflective of social practices, social customs and social structures that give it a shape in their own way. In this way, language is as dynamic as the social context in which it develops in interaction. Keeping in mind this dynamic nature of language, there is a sound basis to assume that cognitive development and language of the members of a society is likely to be varied under their respective social circumstances. This variation is reflective of the social structures that cause it, and these social structures are what we refer to as social class.

Since the study deals with adult learners of English, we need to see how cognitive development is different in adults as compared to children. In this context, Pienmann (1998) explained that development of linguistic cognition in adults follows certain processing procedures. Adults attain communicative competence gradually as there takes place an exchange between grammar of L1 and grammar of L2 or FL among them, which is not the case in children who are acquiring language for the first time. In the light of this distinction, development of language in EFL learners is to be treated differently than language development among children at the time of acquisition.

The next important point that links the previous discussion of language and cognition being social phenomena is that since language develops in social interaction where social identities such as class identities, gender identities, and ethnic identities are constructed, these identities are bound to be reflected through language. This is where the talk of relationship between language and social stratifications such as social class, gender, age and so on becomes relevant. Identities resulting from the said social stratification systems are in a dialectic relationship with language in the sense that it is language that shapes social identities, and at the same times these identities are reflected through language. Speaking in terms of restricted and elaborated code theory put forward by Bernstein (1960), for example, restricted code is the identity of the lower class as well as it is the use of the same code by lower class that shapes their identity as such.

This literature review provided a comprehensive analysis of cognitive and social approaches to language development (sections 2.4.2 and 2.4.3, respectively). Both these approaches converge in the discussion of language as a social-cognitive phenomenon in sections 2.4.3 & 2.4.4. This analysis is aimed to builds up a case for considering both cognition as well as language as social phenomena. The theoretical debate in the literature review thus covers the inter-relatedness of cognition, society and language. Such a theoretical discussion is unprecedented in Pakistani context because in Pakistani context, language is studied either from sociolinguistic point of view or from psycholinguistic one, and hardly ever an effort is made to study the relationship of language with society and mind simultaneously, or the inter-relatedness of the above said disciplines in explaining language.

In the light of the above theoretical perspective which is based on social constructionism, this research studied the relationship between social class of the EFL learners and their social background. Details of the research design are being presented in the following section:

6.2   Overview of Research Design

In this section we try to sum up the methodological construction of the research. As stated earlier, this research aimed to study syntactic variation among the learners in terms of variance in their performance in a syntax-based test. The problem at the core of this research was the difference in development of syntactic skills among the learners of language courses in Pakistani universities despite the fact that they have almost the same educational qualification and have had the same amount of input in form of classroom teaching.

On the basis of the theoretical stance of socio-cognitivists and social constructionists, the study aimed to explore whether there is a link between social class and syntax as a linguistic variable, just like foundational variationists studies such as Labov (1968, 70) established a link between language and social class of the leaner in their study of phonological variants. The aim was to study syntax as a possible indicator of local social identity of the language learners (in our case, EFL learners). The

recommendations for such a study as this one were also presented by Mallinson (2008), Serrano (1978) and Callary (2009). In studying this relationship, the research tried to explore whether variance in syntactic development among the learners is reflective of their varied cognitive development under the influence of social class or not. This made a triangle between three distinct areas of study, i.e. sociology, language and cognition.

This study took insight from the methodology followed in sociolinguistics by researchers such as those of Labov, 1972, Bernstein, 1960, Juchem, 2003, Mather, n.d., Mallinson, 2008, etc. who debated inter-relationship of language with society, and carried out studies to highlight how social stratification causes language variation. Another recommendation came from Green (2007) who opined that "one of the goals of sociolinguistics is to understand the correlation between social factors and linguistic variation" (p. 24). All these studies directly link social variation of language to the division of individuals in groups. Social grouping of individuals' should be understood in the terms of difference of social prestige that individuals enjoy in society which is based on a multitude of factors. These factors either raise or lower one's esteem and are also attached with the chances of progress in society.

The research can be easily divided into two sections, that is, the first one which is correlational study of social class and syntax, whereas the second part deals with the theoretical interpretation regarding the correlation between social classes and syntactic performance is due to varied cognition of the learners. The second part is more of a theoretical debate than empirical research, but is important as it establishes the link between the three cornerstones on which the structure of this research is built, namely, social class, syntax and cognition.

The study was conducted in the three universities of federal capital of Pakistan and the male and female Punjabi learners of above 20 years of age studying in graduate level courses of English constituted the population of the research. (see details in section 3.12, chapter 12). Based on the social cognitive theories such as those of Bandura (1989) and Vygotsky (1978), this research intended to find out how syntax reveals social identities of the learners, and how learners belonging to different social classes exhibit different level

of syntactic development. (see research question in section 1.12, chapter 1). This quantitative research followed hypothesis testing technique to study the relationship between the said social and linguistic variable, namely social class and syntax, to ascertain that linguistic cognition develops under social influence. (see hypothesis in section 1.12.2, chapter 1). The outcome that this study intended to achieve was to educate the academia about the relationship between social background of the leaners and their linguistic development, and in doing so, inform the teacher and policy-makers at university level to devise teaching strategies and design syllabus that considers differentiated teaching and caters to the needs of the learners belonging to all social backgrounds.

To carry out such a study as this one required two pronged approach involving sociology to study what social class is, how it is measured and why it is important in educational context, and sociolinguistics to study variation and see the level of syntactic development the sample of the study. Such an approach was required because the correlation of the two variables under inquiry would take a close assessment of both. Without a careful assessment of the student's social class, an informed estimation of its relationship with the learner's cognitive or linguistic development could not have been made. In other words, this study is as much sociological as it is linguistic one. It is sociological in the sense, in addition to the one mentioned above, that it aims to take an informed approach to measurement of socioeconomic status of the participant of it, and linguistic in that it studies the performance of the participants in one of the components of the language, that is, syntax.

Two important points of view this study is based upon are that (i) syntax is a cognitive process, and (ii) the cognitive development of syntax is social in nature (see section 1.4, 1.5 & 1.6 in chapter 1). Hence, based upon these assertions, the study of social development of cognition was done through assessment of language, i.e. syntax. In other words, the relationship between social class and syntax will be taken as the relationship between social class and cognition. The detailed discussion on that in the light of studies presenting the proof of language development being synonymous of cognitive development has been done in 5.6.2.

This approach to the study of linguistic development has been informed by social cognitive theories of language which consider language as a cognitive phenomenon that develops in society, under the influence of various social factors. These theories contrast the claims of cognitivism that considered language a cognitive phenomenon that is a result of innate ability. The roots of social cognition theories go back to social constructivism which is a mode of human inquiry that focuses on the role of social interaction in construction of reality, hence considering every reality a socially constructed one. This approach of defining all reality as a social reality makes social constructionists take language as a socially constructed reality too, rather than a cognitive one. Cognition also comes to be understood a social phenomenon rather than an innate human capacity.

The study advanced sociolinguistic tradition of studying relationship between language and society as it focused on syntax as linguistic variable and social class as a social variable. By examining correlation between the quantitative scores based on a socioeconomic index and syntax based test, it aimed to find out a link between social background of the learners and linguistic cognition.

Through correlational research design, the above said link was explored by measuring social class of the learners through a five factor socioeconomic scale (SES Index) based on a method of objective measurement of social status, and through a syntax test. The socio-economic index consisted of five social class variables, namely occupation, monthly income, educational qualification, medium of instruction, and property. To get a full picture of the leaners' social class, they were required to answer questions about themselves, their father and mother (see detail in 3.9.4 in chapter 3). The syntax test consisted of multiple choice questions about different syntactic skills (see details in section 3.6 chapter 3). The SES Index and the test carried 100 marks each. The sample answered the questions about social variables, and solved the test. Correlation coefficient was performed to obtain correlation between the social class and the syntax test score. Further, the social data was categorised into three classes on the basis of 33 percentile formula, and through ANOVA, variance of syntax score was studied among the three social classes, i.e. upper, middle, and low social class. The study also explored

the relationship between gender, marital status and age, as extraneous variables. It tried to find out the relationship of these social variables with syntactic development among the sample, who were adults consisting of males and females above 20 years of age, through t-test and Mann Whitney U test.

A summary of important results of the study obtained from the analysis of the data is being presented for an overview.

6.3   Summary of Results

The results of the study were presented in two parts; firstly, the results of the social class of the sample as revealed by the SES Index in Chapter 4, and secondly the statistical tests results about interaction of social class and the learners' performance in syntax score as a main area of study, and of gender, marital status and age as sub-areas of study in Chapter 5. The summary of the results is as follows:

1. Statistically significant positive correlation ($r = .425$) was observed in the sample that consisted of Pakistani EFL Learners, between their SES score and the score in syntax based test. It was proved that there is a moderately strong positive correlation between the social class and syntax among the Pakistani EFL learners studying in the federal universities.

2. Three social classes emerged from the sample, and a significant variance was observed between the higher social class and the middle and lower social classes. That means, the effect of social class on the development of syntax was seen to be significantly great in the higher social class, whereas in the middle and lower social classes the sample's social class did not reflect any significant relationship with the syntactic performance of the learners.

3. No variance in syntax score was observed between males and females present in the sample. This means that gender did not seem to influence cognitive development of syntax among the learners.

4. A significant variance was observed between married and unmarried / single members of the sample and married people scored better in syntax based test as compared to the singles.

5. The three different age groups did not reveal any variance among them in syntax score, and all age groups presented non-significant variance of syntax score.

The results of the study establish positive correlation between the overall social class score of the sample and their score in the syntax test. The sample's performance in syntax, which is a cognitive process, is found to be varying alongside their social classes, and the leaners of different classes have different score in the test that measures their syntactic skills. The sample belonging to upper class demonstrated better syntactic development, whereas the sample belonging to middle and lower classes did not exhibit much difference in their syntactic development. Different score of the sample belonging to different social classes is the proof of the fact that the learners' cognitive development is varied, (See 1.9 & 1.10). The upper class learners selected more correct syntactic variants in the multiple choice questions in the test than their counterparts who belonged to middle and lower classes, who selected less correct variants. The better score of the sample in syntax test needs to be seen in the light of sociolinguistic and social cognitivist claims that linguistic cognition carries influence of social background of the learners. In the light of the results, the top scores obtained by upper class learners in syntax test can perhaps be attributed to their better social class score on the socioeconomic index.

Although a correlational study does not establish a causal link between the variables under investigation, some generalisation can still be made on the basis of circumstantial proofs and other studies discussed in the literature (sub-section 2.6.3 and section 2.7 in chapter 2) that suggest influence of one on the other. The high syntax scores of the learners who belong to upper class can then be seen in the light of the fact that their parents belong to upper occupational categories, have more income to support their family, have better educational qualification, have studied in prestigious schools offering better education and have more property than others. By virtue of the social prestige and better life style they can afford, they are perhaps in a better position to provide their kids

good schooling, better care at home, better facilities to study, and most importantly, provide better linguistic input during the various phases of their development. These social advantages would not have been available to those whose parents do not belong to prestigious occupational categories, do not have so good educational qualification (a factor that should perhaps be taken as a pre-requisite for occupations), and do not possess enough means to send their kids to prestigious schools and provide really conducive environment at home for their better cognitive growth. The social prestige and the accompanying advantages that the upper class leaners might be in access of, may perhaps get multiplied if the leaners themselves (being an adult) are employed, have better education, income and property than the rest of their course-mates, who are merely dependent upon their family's support to study in the universities where they study.

6.4   Limitations of the Study

During the process of research, certain unforeseen factors hinder the researchers' ability to answer the research question effectively and to find out facts in an adequate way. These are the limitations of research, which, although do not necessarily point to the weaknesses of the study, but highlight in what way the research design, tools and research process could have been, and can be made more fruitful.

Firstly, the SES Index should not be taken as a hundred per cent accurate way to assess individual's socio-economic background. The results or findings of the SES Index are fluid in terms of the participants' social class assessment in the sense that not everything that constitutes social class has been necessarily covered by this index. Social class is largely an elusive social phenomenon, because there are so many factors that go into the making of what we are and how different we are socially and status wise, from people around us.

Secondly, there are various questions to which people do not feel comfortable while responding. Due to this fact, the scores that they have obtained on the SES Index is not really representative of the true social status of the people, which is not likely to be truly judged by their response to a few questions. As has been observed in the results of the SES Index, a large majority of respondents did not respond to the question of income

and property. This factor contributed to their low score on the index, whereas in reality they might have higher social status than what their SES score in this study reflects. Hence, the SES scores are fluid, and not fully reliable.

There is a socio-economic cultural aspect to this. People are reluctant to reveal their income and property mainly due to tax evasion reasons. They fear that revealing all their income and property could land them in some kind of trouble and they may have to justify their means and sources of income as well as be answerable to the authorities for the years of tax they may not have paid. Unmarried girls in the family want to hide their savings or income or property because they do not want to share the burden of the family expenses. They feel that if they reveal their income, they may have to face pressure from their family to contribute to the household expenses, which they do not want to do. Married females want to hide their income and property to avoid letting their family members know of their assets, due to inheritance issues that come up once the financial position of a family member is known to everybody.

Lastly, the students in the universities where the sample has been inducted come from upper and high middle class background. Students from low socio-economic background can either study in these universities on scholarships or by working extra hours after their classes. People from upper socio-economic background are usually reluctant to reveal their wealth to avoid taxes. The researcher had to face a lot of difficulty at one of the federal universities where mostly students from affluent class come to study. Most of the students did not respond to the Index, thinking that it might be a mouse trap or a covert way of the authorities to assess their and their families' financial position. Despite that they were assured by the researcher that this information will be kept confidential, and is required only for the purpose of academic research, they were quite hesitant to answer the questions. Only a small number of students from that university participated in the study.

6.5   Contribution of the Research

The research has made important contributions to the understanding of language as a socio-cognitive phenomenon as well as has its implications in the area of applied

linguistics. Labov (1972) had highlighted the influence of social factors on linguistic variation. He theorized how people from different social classes used different phonological variants, which he described as markers of the speakers' social identity. He found out that these phonological variables correlated with social variables such as social class, age, gender, ethnicity and so on. He studied the presence or absence of consonantal /r/ in the pre-vocalic positions in words such as *car, card, four* and *fourth.* This variable, he says, "appeared sensitive to any measure of social or stylistic stratification" (Labov, 1972, p. 169). As Botha (2011) explained the trend further, the variationists after Labov hinted at actions, attitudes, and ideologies as factors responsible for variation. Regarding variation of syntax in relation to the society, Cheshire (2003) demonstrated how speakers from a particular social group used lone *when* clause as a marker of their social identity (detail in section 2.12.). A recent study by Gerhard, Hans & Carlson (2017) also commented on the link between social class and the students' chances to acquire transnational human capital and what are the factors that "might cause class-specific access to transnational human capital?" (p. 49). They say that in order to stay in a foreign country, pass the curriculum and get to know the social and cultural life of a particular country, they need resources in order to mix up with the natives, play outside and engage in other cultural activities. They have the chance of improving their language, knowing social rules of the country and "and acquiring various forms of transnational human capital" (p. 49) when they interact with the natives. But participating in an international student exchange can require economic resources "to pay for the program fees, good organizational preparation, a high degree of personal maturity, and finally, the parents' approval and support". This is where social class becomes relevant as "students differ significantly in the degree to which they (and their families) fulfill these criteria and, consequently, in their chances to spend part of their educational career abroad" (p.49), all of which "depend on their families' endowment with economic, social, and cultural capital – in other words, their class position" (p. 50).

All these studies show a trend in which social class is looked at as a factor that causes the emergence of different language among individuals belonging to different social classes. There is believed to be a pattern of language variation that emerges

alongside social stratification, a theory which is named by cognitive-sociolinguistics as "structured heterogeneity". Although there do exist some researches that explored the link between social class and syntax but they were restricted to the linguistic variants such as prevocalic / r / identified by Labov (1972) or social markers such as *when* clause as discussed by Cheshire, and the relationship of SC with acquisition of social capital, to quote just a few examples, but no study has been carried out in educational context in Pakistan to explore how social class correlates with the performance of the learners in development of their linguistic skills, particularly syntactic ones. The results of this research testify our assumptions that learners belonging to different social background develop their language differently. This difference is evident in positive correlation between social class socre and syntax score of the sample, and in variance of performance of the learners in syntax based test, as the upper class learners scored much better than the middle and lower class. Although correlational studies are often shy to develop a causal link between the variables they study, the emerging pattern only highlight the possibility of finding a connection between them as one might cause the other, or vice versa.

Hence, the study draws attention of the academia towards an important aspect of studying our classrooms and the students' progress in development of language from social perspective, rather than the perspective of individual differences alone, which is normally the case in our classrooms. Students' performance is hardly seen in the light of their social backgrounds. If it is, it is done at the level of phonetics, or the use of certain words which they tend to repeat, but this research has studied variance of students' performance and has found out that it highly correlates with the social identities of the learners. This study not only gives an estimate of social diversity that is reflected through the population that forms the learners in a given context, but also helps to assess the nature of the educational dynamics that emerge as a result of prevailing social diversity. This in turn, equips the educational planners and policy implementers such as school administration and teachers to prepare themselves for the task of efficiently performing their duties as they proceed with their educational tasks being well informed about the population that they are dealing with, and do not base their efforts merely on theoretical

assumption that may not be relevant to their own context. This awareness means that the processes such as designing syllabus for the language courses, devising teaching strategies, and placement of students in classes, must be carried out keeping in mind the learners who make it to the universities with the hopes to move up on the social ladder. The teaching environment must be encouraging for the students from lower strata of society rather than discouraging, and must pave the way for them to uplift themselves and not keep crumbling under social and economic pressures.

At theoretical level, the research studies advance the understanding of the academia regarding how social structures are reflected, repeated and reproduced in the linguistic structures opted for in the syntax test by the samples belonging to different social strata. That is to say that varied syntactic development among the learners is reflective of the social lines along which a society is divided in terms of social prestige, privilege and power. Good scores of the higher class and lower score of the middle and lower class students can be seen as reproduction of their class identity. Although there may be exceptions, for example there may be some learners who perform better despite their low social background, but in empirical studies we do not talk about exceptions but look at the general picture that emerges from the data and theorize on the basis of that picture. The trend we can generalize and present here as a theory is that students from higher socio-economic background have greater chances to excel in their studies and in the case of this research, are likely to progress better in learning English language compared to their counterparts who belong to less-well-off families. The social milieu affects the learners' performance in their respective fields. Learners who belong to well off families go to good schools in their earlier career where they interact with better qualified staff. Their parents can afford tutorship facilities apart from the school expenses. They can study in English medium, and by virtue of better communication skills, are better placed to get into good careers.

The third mentionable contribution this research has made to the study of social class in particular and to sociolinguistics in general is its construction of social class Index (SES Index) as a method of social class assessment. In literature related to sociolinguistics, no clear cut method to quantify SC is found. Mostly studies have relied

on interviews in which the sample themselves decide which SC they belong to or the researcher makes an estimate as to their social background keeping in mind certain characteristics such as area of residence, dress, area of shopping and so on. This research changes this trend, because as per recommendation of various sociolinguists, there is a need to study the interaction of social variables with language in a quantitative way. For example, Putz, Robinson & Reef (2014) remind us of the changing trend among Grondelaers, Geeraerts, and Speelman (2007) and Gries and Stefanowitsch (2006) who gradually moved away from qualitative to quantitative. These researchers were working in the vein of cognitive linguistics which felt that language is not only a repository of form-meaning units, but is grounded in experiential events, and there is a need to apply empirical methods of Corpus linguistics to study those usage events. So, when an empirical research such as correlational study is to be carried out, there would be a need to not only study linguistic variable quantitatively, but also the identified social variable, as recommended by ones like Mallinson (2007) who suggested an index such as the one designed by this study to ascertain which discrete social class an individual belongs to. She recommended studying factors such as income, occupation and education (see section 3.6 for details).

The SES Index includes five factors that were considered important by this study. Future researchers can benefit from the same index, replicate this study in their respective context, or amend the index as per the requirement of their study by adding or removing certain constituent variables, as they deem appropriate. The responses from the samples can be converted into score following the method explained in chapter 3, and be studied for correlation with the results of the linguistic variable. If seen as an independent research tool, it provides a reliable social class assessment method fit for any sociological study that aims to measure social status of the individuals in a society for various civic planning purposes and for theoretical surveys in different dimensions. It took into account all the important factors that we called social variables that need to be studied for assessing one's socio-economic status, however the researchers can modify it according to the requirement of their research.

6.6   Directions for Future Research

This research provides certain insight into the areas in which research in future can be carried out in the field of social class vs language development. These guidelines can pave the way for further research in the areas that can be explored in future as, like every research, the present one also leaves some side alleys unexplored as it took its own methodical rout set up to look for the answers to its research questions.

The research model followed by this researcher can be applied to a different context, for example at a provincial level, or at college and school level, to provide greater understanding of the relationship between development of language among learners and social factors such as social class and gender of the learners, etc.

The present model of research can be applied to the study of educational development of the learners in any context and is not restricted to the area of language development alone. The general method of assessing socioeconomic background and the learners' performance in educational context is always helpful in providing insight into the prevailing educational scenario in a given context and helps guide all the stake holders of the educational process including parents, teachers and planners to adjust their approach to the process of teaching and learning and provide better academic support to the learners, who are beneficiary of all this process.

With reference to the syntax test, future researchers could analyse the responses to different areas of the test or different syntactic skills separately and compare the results of these areas one by one, instead of analysing the overall score of the test as the present study has done.

A full scale independent study can be carried out to assess the nature of relationship between the development of language taking place among the

learners and each of the social factors such as gender, age, ethnicity, different linguistic background or L1, and so on.

6.7   Conclusion

The findings of this study are not generalizable except to a limited research area. The areas of research that this study signposts are open for future researchers to investigate and to develop a deeper understanding about the issues that the present study has highlighted. Quest for knowledge is unending and this study can be a valuable addition to the existing body of knowledge on the subject it undertook for research, based upon prior studies and observations.

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<The End>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

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APPENDICES

Appendix A

SES Index of EFL Learners 1

Dear respondent,

Thanks for participating in this research. This study aims to find out the influence of social class of the English language learners on their cognitive development of syntax. Please fill up the following form carefully. The information you provide will be used for no other purpose than this research. Your valuable contribution will no doubt serve to increase the knowledge of the academia.

Please read the instructions in each section carefully, and try to give the accurate answer.

Respondent's Name: _____ _____

Age: Tick relevant

20 to 30 years: ☐   31 to 40 years: ☐   41 years & above: ☐

Sex: Male ☐ Female ☐   Marital Status: Married ☐   Single: ☐

Area of Permanent residence:_____**Current residence**:_____

*Institution:*_____*Class/Level*:_____

*Email:*_____ *Cell No.*_____

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1. Occupations

Write professions of each of the following. For example, if you are a professional, write your job title, i.e. *engineer* or *advocate* etc. If you are not working, write *student*. Similarly, if your mother is not working, write *house wife*, and if your father is retired, mention what he retired as, eg. *Retired as soldier / school teacher* etc .

1.1	You	
1.2	Your father	
1.3	Your mother	

2.   Income

Note: Tick under the relevant level, against each of the following. If someone doesn't earn, write *NIL*.

		Level 1 Above 100,000/- a month	**Level 2** Upto 100,000/- a month	**Level 3** Upto 30,000 a month
2.1	You			
2.2	Your father			
2.3	Your mother			

3.   Educational Qualification

Tick under the relevant level, against each of the following.

		Level 1 Masters and above (PGD/M Phil / PhD)	**Level 2** Matriculation to Graduation	**Level 3** Up to Matriculation (Matriculation / Middle / Primary)
3.1	You			
3.2	Your father			
3.3	Your mother			

1.   Medium of Instruction

Tickunder the relevant level, against each of the following.

		Level 1 English Medium	**Level 2** Urdu Medium	**Level 3** Mix (English & Urdu)
4.1	You			
4.2	Your father			
4.3	Your mother			

Appendix B

SES Index of EFL Learners 2

Dear respondent,

Thanks for participating in this research. This study aims to find out the influence of social class of the English language learners on their cognitive development of syntax. Please fill up the following form carefully. The information you provide will be used for no other purpose than this research. Your valuable contribution will no doubt serve to increase the knowledge of the academia.

Please read the instructions in each section carefully, and try to give the accurate answer.

Respondent's Name: _____ _____

Age: Tick relevant

20 to 30 years: ☐   30 to 40 years: ☐   41 years & above: ☐

Sex: Male ☐ Female ☐   Marital Status: Married ☐   Single: ☐

*Area of Permanent Residence (Village/City/both):*_____

Area of Current residence: _____

*Institution:*_____

Class/Level:_____

Cell No:_____

*Email:*_____

Note: Write required information about yourself, and both of your parents. Read the following instructions carefully. Please try to provide exact information.

1. **Occupation:** If you / your father / mother are not doing a job, write current status, i.e. student, retired as (soldier, professor etc) or housewife etc, respectively.
2. **Educational Qualification:** Please mention the title of the degree obtained. If illiterate, mention as such.
3. **Medium of Instruction:** If you have mentioned educational qualification, you must also specify the medium of instruction.
4. **Monthly Income:** Please give exact figure. If someone is not earning, write NIL.
5. **Cost of Property:** Please mention the approximate cost. If you are not sure of the estimate, mention the number or quantity of the property and its location. If there is no property, write NIL. If you have property and you don't mention, it will affect the results of the study.

No.	Members	Occupation / profession	Educational Qualification	Medium of Instruction (English/Urdu/Mix)	Monthly Income	Approximate Cost of Property
1	You					
2	Your father / head of your family					
3	Your mother					

Appendix C
SES Index of Learners (Close ended, with Levels)
Cumulative Data of Pilot Test
Dated: 23-05-2013
Conducted at NUML, Islamabad

S. No	Respondent Name	Sex	Age	Marital Status	1. Occupation (75)			2. Income (75)			3. Educational Qualification (75)			4. Medium of Instruction (75)			Score (300)
					1.1 Student	1.2 Father	1.3 Mother	2.1 Student	2.2 Father	2.3 Mother	3.1 Student	3.2 Father	3.3 Mother	4.1 Student	4.2 Father	4.3 Mother	
1	Sadia Abid Isld	F	20-30	S	Student (8.33)	Businessman (25)	Housewife (8.33)	NIL	2.2.1 (25)	NIL	3.1.1 (25)	3.2.2 (16.66)	3.3.3 (8.33)	4.1.3 (8.33)	4.2.2 (16.66)	4.3.2 (16.66)	158.3
2	Bilal Mumtaz Isld	M	20-30	S	Student (8.33)	Govt Servant (8.33)	Housewife (8.33)	NIL	2.2.2 (16.66)	NIL	3.1.2 (16.66)	3.2.1 (25)	3.3.2 (16.66)	4.1.1 (25)	4.2.3 (8.33)	4.3.3 (8.33)	141.63
3	Amna Arsalan ShekhuPura	F	41-	M	Student (8.33)	Advocate (16.33)	Housewife (8.33)	NIL	2.2.2 (16.66)	NIL	3.1.2 (16.66)	3.2.1 (25)	3.3.2 (16.66)	4.1.2 (16.66)	4.2.1 (25)	4.3.3 (8.33)	157.96
4	Sarwat Nida Kohat	F	20-30	S	Student (8.33)	Retired (8.33)	Housewife (8.33)	NIL	2.2.3 (8.33)	NIL	3.1.1 (25)	3.2.1 (25)	3.3.3 (8.33)	4.1.2 (16.66)	4.2.3 (8.33)	4.3.2 (16.66)	133.3
5	Allauddin Waziristan	M	20-30	S	Student (8.33)	Jirga Person (25)	Housewife (8.33)	NIL	NIL	NIL	3.1.1 (25)	3.2.3 (8.33)	NIL	4.1.3 (8.33)	4.2.3 (8.33)	4.3.3 (8.33)	99.98
6	Aqil Ahmad Haripur	M	20-30	S	Madrissa Teacher (16.66)	Retd School Teacher (16.66)	Housewife (8.33)	2.1.3 (8.33)	NIL	NIL	3.1.2 (16.66)	3.2.1 (25)	3.3.3 (8.33)	4.1.3 (8.33)	4.2.3 (8.33)	4.3.2 (16.66)	133.29

Appendix D
SES Index of Learners 2 ((*without levels*)
Cumulative Data of Pilot Test
Dated: 23-05-2013
Conducted at NUML, Islamabad

S. No	Respondent Name	Sex	Age	Marital Status	1. Occupation			2. Income			3. Educational Qualification			4. Medium of Instruction			5. Cost of Property		
	Sections				1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2	5.3
					Student	Father	Mother	Student	Father	Mother	Student	Father	Mother	Student	Father	Mother	Student	Father	Mother
1	Sadia Abid Islamabad	F	20-30	S	Student	Business man	House wife	NIL	Above one lac	NIL	Masters	Intermediate	Matriculation	Mix	Urdu	Urdu	3 million	3 million	3 million
2	Bilal Mumtaz Islamabad	M	20-30	S	Student	Govt Servant	House wife	NIL	80, 000	NIL	B. Com	MA	BA	English	Mix	Mix	NIL	Approx 1.5 caror	Approx. 60 lacs
3	Amna Arsalan ShekhuPura	F	41-	M	Student	Advocate	House wife	NIL	Not sure	NIL	Adv Diploma	LLB	Graduation	Mix	Urdu	Urdu	More than 2 caror	More than 5 million	More than 5 million
4	Sarwat Nida Kohat	F	20-30	S	Student	Retired	House wife	NIL	30-40,000	NIL	Masters	Masters	Matriculation	English	English	Urdu	NIL	NIL	NIL
5	Allauddin Waziristan	M	20-30	S	Student	Jirga Person	House wife	NIL	NIL	NIL	Advance Diploma	Middle	NIL	English	Urdu	NIL	30.0000/-	30,0000/-	NIL
6	Aqil Ahmad Haripur	M	20-30	S	Madrissa Teacher	Retd School Teacher	House wife	10,000/-	24,000/-	NIL	Dars e Nizami	MA English	NIL	Mix	Mix	Urdu	=	=	=

Note: Index II has an additional variable *Property* which was not part of Index I.

Appendix E

SES Index of EFL Learners (Final)

Dear respondent,

Thanks for participating in this research. This study aims to find out the influence of social class of the English language learners on their cognitive development of syntax. Please fill up this questionnaire carefully and solve the objective test attached with it. The information you provide will be used for no other purpose than this research. Your valuable contribution will no doubt serve to increase the knowledge of the academia.

Please read the instructions in each section carefully, and try to give the accurate answer.

Respondent's Name: _____ _____

Age: Tick relevant

i) 20 to 30 years: ☐   ii) 30 to 40 years: ☐   iii) 41 years & above: ☐

Sex: Male ☐ Female ☐   Marital Status: Married ☐ Single: ☐

Area of Permanent residence:_____.........Current residence:_____

*Institution:*_____*Class/Level*:_____

*Email:*_____ *Cell No.*_____

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1. **Occupations**

Write occupation / profession of each of the following. For example, if you are a professional, write your job title, i.e. *engineer* or *advocate* etc. If you are not working, write *student*. Similarly, if your mother is not working, write *house wife*, and if your father is retired, mention what he retired as, eg. *Retired as soldier / school teacher* etc. Please avoid using vague expressions such as *government servant* or *retired* since they give no clue of one's social status.

1.1	You	
1.2	Your father	
1.3	Your mother	

2. Monthly Income

Note: Tick under the relevant level, against each of the following. If someone doesn't earn, write *NIL*.

		Level 1	Level 2	Level 3
		Above Rs. 100,000/- a month (specify)	Rs. 50,000 to 100,000/- a month	Rs. 25,000 to 50,000 a month (If less, please specify)
2.1	You			
2.2	Your father			
2.3	Your mother			

3. Educational Qualification

Tick under the relevant level, against each of the following. If illiterate, write **NIL**.

		Level 1	Level 2	Level 3
		Masters and above (PGD/M Phil / PhD)	Matriculation to Graduation	Up to Matriculation (Matriculation / Middle / Primary)
3.1	You			
3.2	Your father			
3.3	Your mother			

4. Medium of Instruction

Tick under the relevant level, against each of the following.

		Level 1	Level 2	Level 3
		English Medium	Urdu Medium	Mix (English & Urdu)
4.1	You			

4.2	Your father			
4.3	Your mother			

5. <u>**Approximate Cost of Property**</u>

If you or your parents have any property, please mention its approximate cost. Please write both in figures as well as in words, to avoid ambiguity.

5.1	You	
5.2	Your father	
5.3	Your mother	

Thanks for your participation. This researcher can be reached at ubaidkhan81@gmail.com.

Appendix F

Test for Syntactic Skills

Dear participant

Thanks for your willingness to participate in this test. This test has been designed to test the syntactic skills of the participants of the study being carried out as a part of Ph.D. research. The topic of research is "Influence of Social Class on the Cognitive Development of Syntax: A study of Pakistani EFL Learners".

Please fill up the information below before you proceed to attempt the test. The information you provide will be kept strictly confidential and will be used for no other purpose than this research.

Demographics

Name: _____**Age:**_____

Qualification:_____**Institution:**_____
___

Class:_____**Cell No.**_____

Email:_____

For your convenience, each question begins with an example. The correct answers in these examples are written in bold. Follow the examples and attempt the questions.

This researcher appreciates your willingness to participate in the test. You can reach the researcher at ubaidkhan81@gmail.com

Total Marks: 100

Q.No. 1. Constituent Replacement

Replace the underlined part of the sentence with the most suitable of the following options.
05

Example: The <u>birds in the zoo</u> were very rare.
➤ *Strange incident*
➤ *lion who roars*
➤ ***flowers in her garden***
➤ *boy in the bus*

i.	Terrorism is a real threat to <u>global economy</u>.	
	➤ *World peace*	
	➤ *Menace for*	
	➤ *Around the world*	
	➤ *In the way*	
ii.	I am too much busy to deal with <u>this petty issue</u>.	
	➤ *Out of the box*	
	➤ *Her problems*	
	➤ *In the room*	
	➤ *Vacant space*	
iii.	Theyhave vacated <u>the haunted house</u>.	
	➤ *his intentions*	
	➤ *true relations*	
	➤ *the rented home*	
	➤ *the prisons of war*	
iv.	The ruler of that kingdom was <u>a very pious man</u>.	
	➤ *in the green garden*	
	➤ *her black shoes*	
	➤ *my boss*	

	➤ *her business*	
v.	They <u>have been waiting</u> for a long time.	
	➤ *asked the boy*	
	➤ *wished him success*	
	➤ *stayed in the hotel*	
	➤ *derail the business*	

Q. No. 2.   Arranging Jumbled Words /unscramble

Arrange the given words to form a correct sentence.   10

Example:	buss/ fast/ / reached/ very/ ran/she/ the/ and/running
	She ran very fast and reached the running buss.

i	were/ the / zoo / sitting / nests /in /the / quiet /in / their/ birds
ii	New York / living / the / 80s / in / in / been / cousin / has / my
iii	my / be / Sunday / university / will / on / not / even / closed /
iv.	and / soldiers / killed / were / some / were / wounded / many / in / the / battle /
v.	always/ in / play / cricket / they / evening /

Q. No. 3.   Filling in the Blanks

Choose from the given options to fill in the blank space.
05

Example:	My neigbour still lives in _____.

	➢ *at the roof*
	➢ **A college hostel**
	➢ *very bravely*
	➢ *small amount*

i.	We _____ for his help but to no avail.
	➢ *Have to ask*
	➢ *Kept asking*
	➢ *Shall be asking*
	➢ *Did not ask*
ii.	The fossils _____ from the zoo by the locals themselves.
	➢ *is stealing*
	➢ *are being steal*
	➢ *had been stolen*
	➢ *stole*
iii.	My family _____ in Australia five years back.
	➢ *is settling*
	➢ *has settled*
	➢ *settled*
	➢ *has been settling*
	The boys _____for more than an hour.
	➢ *make noise*
	➢ *making noise*
	➢ *have been making noise*
	➢ *has make noise*
	My servants are always_____during duty hours.

	➢ *found alert*
	➢ *find alert*
	➢ *finding alert*
	➢ *alerting*

Q. No. 4.   Rewrite the Sentence (omission)

Re-write the following sentences after omitting <u>you.</u>   10

Example:	You may have an accident if the road is slippery.
	A slippery road may cause an accident.

i.	During the day, you may have to face a lot of problems.
ii.	When entering the city, you may have to show your Identity Card.
iii.	When you enter the bus, you have to face a lot of rush.
iv.	When you wake up in the morning, the first thing you do is brush your teeth.
v.	When you invite a friend for lunch, normally it is you who pays the bill.

Q. No. 5.   Rewrite the sentence (Replacement)

Rewrite the sentence using <u>because.</u>   10

Example:	His carelessness has caused so many accidents.
	So many accidents have happened because of his carelessness.

i.	The storm has ruined the crops in many villages.

ii.	Your bad habit of smoking has spoiled your kids.
iii.	The general's orders did not let the army march forward.
iv.	My nephew left the city due to uncertain security situation.
v.	The beautiful girl was at quite a distance, so I could not talk to her.

Q. No. 6.   Choose Correct Sentence

Choose correct sentence from the given options in each case.
05

Example:	He should have visited doctor if he were ill.
	He should have visited a doctor if he was ill.
	He should have to visit a doctor if he was ill.

i.	**Which one is correct?**
	We should help the people that are unable to feed themselves.
	We should help people that are unable to feed themselves.
	We should help people who are unable to feed themselves.
ii.	**Which one is correct?**
	Who are these people waiting?
	Who are waiting these people?
	Who are these people waiting for?
iii.	**Which one is correct?**
	I in the morning go for exercise.
	In the morning I for exercise go

	I go for exercise in the evening.
iv.	**Which one is correct?**
	He is going to get very soon married.
	He is going very soon to get married.
	He is going to get married very soon.
v.	**Which one is correct?**
	We are going to walk.
	We are going for a walk.
	We are going on a walk.

Q. No.7.   Make Appropriate Choices

Choose from the given options to complete sentences.

Example:	The drummers _____to start beating drums.	has planned/ are planning.
	The drummers are planning to start beating drums.	

i.   Grammatical Choices05

i.	We _____ planning a trip to London.	*am /are*
ii.	They boys_____ running around the ground aimlessly.	*has been / have been*
iii.	Why _____ you go and join a gym?	*doesn't you?/ don't you*
iv.	The girls _____afraid of the dog, so they didn't enter the house.	*was/ were*
v.	Many terrorist organizations _____ fled the area.	*has / have*

ii.   Lexical Choices 05

Example:	The public anger has _____with the passage of time.	*decreased / lowered*
	The public anger has decreased with the passage of time.	

i.	He played his part _____.	*perfect/ perfectly*

ii.	The man has _____ that he stole his neighbour's cow.	*declared / admitted*
iii.	My boss seems _____ in people's private affairs.	*disinterested / uninterested*
iv.	The old laws of slavery have now been _____.	*destroyed / abolished*
v.	She can hardly _____ the smoke of a cigar.	*stand / endure*

iii.   Verb form Choices 05

| Example : | The poor farmers start_____their fields before the dawn. | *ploughing/ plough* |
| | **The poor farmers start ploughing their fields before the dawn.** | |

i.	He _____ to the village to see his mother.	*travelled / travel*
ii.	The girl _____ with her doll in the garden.	*playing / was playing*
iii.	We _____ have a lot of fun during summer vacations.	*use to / used to*
iv.	The stars_____ in the sky all night.	*shine / are shining*
v.	She _____ to fame within days.	*risen / rose*

iv.   Pronoun Choices 05

| Example : | All these fields with tall trees are _____. | *our/ours.* |
| | **All these fields with tall trees are ours.** | |

i.	My sister, father, and _____ are not going for lunch.	*me / I*
ii.	All except _____ went to the annual dinner.	*he / him*
iii.	We asked _____ elder brother to take them home before evening.	*theirs/ their*
iv.	We waited for _____arrival for quite some time.	*yours/ your*
v.	This beautiful car is _____.	*her / hers.*

v.   Preposition Choices 05

| Example : | The public does not have trust ____our politicians anymore. | *on/in* |
| | **The public does not have trust in politician anymore.** | |

| i. | Many policemen entered the house _____ jungle. | *in / inside* |

ii.	The dogs are normally attracted _____ fresh meat.	*by / to*
iii.	My uncle lives _____ the Greenhill Motel.	*behind / beyond*
iv.	Your son is very popular _____ girls.	*with / among*
v.	Her daughter is known _____ her elegant style.	*about / for*

vi.   Conjunction Choices05

Example :	My relatives are living with me _____ recent flood in my native town.	*in spite of / because of*
	My relatives are living with me <u>because of</u> flood in my native town.	

i.	They killed the beautiful lion _____he had starting eating their sheep.	*because / due to*
ii.	My teacher ran short of words _____ she was not prepared for the class.	*as / due to*
iii.	Your uncle has left the city _____ continuous life threats.	*in spite of / due to*
iv.	My family has left Africa _____ racial discrimination.	*because / because of*
v.	The valley has turned to life_____ the heavy downpour.	*despite / after*

Q. No. 8.   Arranging Phrases

Arrange the following phrases in proper order.   05

Example:	The girl little beautiful
	The beautiful little girl

i.	The pack of wolves hungry
ii.	The military regime oppressive Burmese
iii.	The girl who was lonely crying
iv.	My relatives in suburbs living

xiii

v.	The young nicely dressed up lady

Q.No.9.   Correct the Following Sentences   10

Example:	I am sick about her silly demands.
	I am sick of her silly demands.

i.	I am a big fan of these famous player.
ii.	Most student are from outside Islamabad.
iii.	We have been accused with stealing his money.
iv.	The young man is quite sure about his success.
v.	She is based on the southern border area.
vi.	I don't know why the boy have failed.
vii.	My uncle is very close with me.
viii.	Naheed described about city in an interesting way.
ix.	Both the friends sitting in the hall is very clever.
x.	I am fully agree with your opinion

Q.No.10.   Using Discourse Markers:

Put appropriate discourse markers in the given blanks from the list provided below: 10

whenever, in case of, although, after, some other times, often, besides, sometimes, for instance, in spite of

> _____ some people think that a farmer's day starts before the dawn and ends at the sunset, he has no typical day. _____, he spends his times in the fields.__ ____ feeding the animals, a farmer may spend rest of his day tending the crops. _____ he is busy in ploughing, _____in harrowing, cultivating or harvesting. _____ this, he may have to work on machines and spend some time in repairing the tools. _____ the rapidly changing nature of farming, some works still need his constant attention. _____, it is unimaginable for him to take a day off even on Sundays. _____ feeding the stock or milking the cows, he cannot think of skipping a single day. He needs someone's help to do his share of work_____he is ill.

****

Appendix G

Email Correspondence with Sociologists

1. Emails of David Hasie, Assistant Professor, Indiana University

Khan, Ubaid ubaid.khan81@aiou.edu.pk   3:32 AM (21 hours ago)

to christopherbad., althause, cutright, heise, jacksone, james, cjamison, pope, strykers, aralders, weihuaan, sbenard, cbrooks, cha5, jcalarco

Dear Professor

I do hope that you are doing well. Let me introduce myself. I am a PhD Scholar from Islamabad, Pakistan, doing my degree in Sociolinguistics. I need your kind help in my research. I want to see the influence of Social Class of the participants on their Linguistic Development. In order to find correlation between the social class and linguistic development, i need to have a score on Social Class scale, for each of my subjects, so that it could be correlated with their score in the linguistic development related test that i have already prepared.

I have read the works of different theorists such as Ganzeboom, Wright, Goldthorpe, and Hollingshead etc, on the topic of social class, but am confused regarding developing the actual scale that could give me score of each person's social class.

I shall be highly grateful if you kindly help me and tell how to determine social class of participants and how to grade them in different classes.

Looking forward to your generous response.

Truly,

heise@indiana.edu
4:22 PM (8 hours ago)

David Heise

to me

Hello Ubaidullah,

Social class rarely is measured in American studies. When it is, it typically is assessed in terms of the kinds of furnishings a family has in its home.

Instead, American sociologists typically measure socioeconomic status, which is a composite of an individual's income, occupational prestige, and education. However, there is no reason to think the standard U.S.A. formulas for combining these things into an index would work in Pakistani society because American and Pakistani cultures are different.

You probably can devise an adequate SES index for Pakistan by classifying income, occupation prestige, and education each into three levels appropriate for Pakistan, and then summing the three numbers you get for each individual. Of course, that still will give you a measure of SES rather than class.

Sorry I cannot be more helpful.

....

Thanks Professor David

I am really thankful for your guidance. Since I am not a Sociologist (linguistics being my main area of interest), probably i confused the terms social class and SES as synonyms. What i get from your suggestion is the idea that these are two different things. Actually, i want to find out correlation between social class and Syntax (one of the five components of language, other four being Morphology, Pronunciation, Semantics, and Pragmatics), just like William Labov did in his famous New York Departmental store study where he found out a correlation between "Social class and Pronunciation". Here is the link for the work http://www.stanford.edu/class/linguist62n/labov001.pdf. Despite having read all this, I am at loss how he determined what social class the participants of his study belonged to, in order to assert his thesis.

Thanks for your kind help. Your suggestion is likely to be helpful.

Regards

Ubaidullah Khan
....
....

 David Heise   2:46 AM (19 hours ago)

 to me

Hi Ubaidullah,

Labov categorized people into social classes in terms of what store they patronized in

order to buy clothes and household goods. So, for example, customers at Saks Fifth Avenue could be presumed to be upper class individuals.

You probably could do the same in Islamabad. The lower class stores would be the ones that no one goes to if they can afford to shop elsewhere. The middle class stores are the ones where most professional workers shop, as well as other middle class people with lower incomes. The upper class stores are the ones where most people might like to shop but they don't because they cannot afford the prices.

I hope this helps.

....

Khan, Ubaid ubaid.khan81@aiou.edu.pk 10:53 PM (4 minutes ago)

to David

Dear Professor David

Thanks for explaining the categorization criterion of Labov to me. This is more than helpful. Of course I can do the same in a similar study, and would like to replicate it sometime in future. But my subjects would be learners of English as a Foreign Language who come to one of the language universities of Islamabad. They come from diverse social background, and in order to catagorise them, i need to devise a different criterion.

In the light of ur suggestion in your last email, i have started designing my own index. It is not in the final shape yet. I would like to share it with you, if you like, once i finalize it.

Thanks indeed for your valuable time and insightful suggestions.

Profound Regards

2. Email Series of Dr Rania Habib, Assistant Professor, Syracuse University

Dear Dr. Ubaidullah Khan,
 You requested a copy of my paper Habib, Rania. 2010. Towards determining social class in Arabic-speaking communities and implications for linguistic variation. Sociolinguistic Studies 4 (1), 175-200.

 Please find it attached. Please let me know if it has been helpful to your project.
 Best wishes

 Rania Habib, Ph.D.
Assistant Professor of Linguistics
Coordinator of Arabic Program
Dept. of Languages, Literatures, and Linguistics
Syracuse University
325 H. B. Crouse
Syracuse, NY 13244
Tel: 315-443-5490
Fax: 315-443-5376
Attachments area

ubaid khan <ubaidkhan81@gmail.com> 2/27/13

 to Rania

Dear Dr Rania

The article is indeed of great help. I am working on my PhD thesis at National University of Modern Langueages, Islamabad, and my topic of research is related to correlation between social class and syntactic variation. I contacted Dr Christine Mallinson and she introduced me to you, and luckily I found you on academia.edu, and sent a request for your article straightaway, and you have been so kind to share it with me.

I have had a bird's eye view of your article. As im facing difficulty in designing a criterion for determining social class, i hope that you article would be a great help.

However, I would like to share my plan of determining the social class which is not in final form, if you feel interested. May be you can also guide me as to how to move ahead.

Thanks very much indeed, again

Profound Regards

Ubaidullah Khan
MA English Linguistics & Literature (NUML, PAK)
MA TEFL (PAK)

PhD Scholar at NUML (PK)

Rania Habib <rhabib@syr.edu> 2/27/13

 to me

Glad to be of help! If you have any questions, please feel free to ask.
 Best,
Rania Habib, Ph.D.
Assistant Professor of Linguistics
Coordinator of Arabic Program
Dept. of Languages, Literatures, and Linguistics
Syracuse University
325 H. B. Crouse
Syracuse, NY 13244
Tel: 315-443-5490
Fax: 315-443-5376

From: ubaid khan [ubaidkhan81@gmail.com]
Sent: Wednesday, February 27, 2013 11:16 AM
To: Rania Habib
Subject: Re: requested article

 ubaid khan <ubaidkhan81@gmail.com> 5/26/13

 to Rania

Dear Dr Rania
I am writing with reference to my previous correspondence with you, and taking advantage of your offer to help, I want to get your kind feedback on the SES Index based questionnaire that I have prepared to measure SES of the EFL learners.

 I have included 5 variables in it, i.e. occupation, income, educational qualification, medium of instruction, and property. Whereas I have kept occupation and property open ended, largely due to unavailability of theoretical basis of categorization in Pakistani context, I have divided rest of three into 3 levels.
Since it is to be a correlational research, i will assign marks to all levels of all variables. Occupation and Property I will divide based on the data that emerges, and will then assign them marks. I will then try to see how much SES marks correlate with the marks that the students have scored in syntax based test that I intend to give them.
Will you please spare a few moments to look at my Index and give your kind feedback? If there are some issues you foresee in collecting data, would you please like to guide me about them?

I shall be really obliged if you could offer some guidance.
Profound Regards

Attachments area

Rania Habib <rhabib@syr.edu> 5/27/13

 to me

Hi Ubaid,
 The sheet looks ok to me. However, the question is how you are going to do the correlations to determine social class? Do you have a preconceived idea of their social class? or do you have to ask them in which social class they consider themselves? Regarding education, the mother and father may not have any of the degrees that you mention in your division. Thus, more division should be included. Occupation could be divided into levels as well, including in each level certain occupations. In addition, in most countries, it is not only the cost of the residence that determines the social class of a person, but also the residential area in which the house is located. So you may want to think of factoring this in. Regarding income, is there only three income levels or more? All of these should be taken into consideration.
 Best,
 Rania Habib, Ph.D.
Assistant Professor of Linguistics
Coordinator of Arabic Program
Dept. of Languages, Literatures, and Linguistics
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325 H. B. Crouse
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Appendix H

Property Chart 1: Responses to Property Question in SES Index

Only the following people responded to property question, about themselves and / their father and / mother.

Original List wise No.	Family member F= Father M=Mother S= Self	Value of Property
	NUML	
5	S	
	F	10 million
	M	
8	S	1 million
	F	10 Million
	M	3 million
9	S	
	F	3.5 million
	M	1 million
10	S	0.7 million
	F	2.5 million
	M	
11	S	
	F	1.1 million
	M	
14	S	
	F	3 million
	M	
28	S	
	F	0.8 million
	M	
29	S	
	F	2 million
	M	
31	S	
	F	0.5 million
	M	0.2 million
	IIUI	
1	S	
	F	36 million
	M	
3	S	40,000/-
	F	0.7 Million
	M	
4	S	
	F	4 million
	M	

5	S	
	F	6 million
	M	
7	S	
	F	100 million
	M	
9	F	100 million
10	S	
	F	20 million
	M	
11	S	1 million
	F	5 million
	M	5 million
15	S	
	F	0.25 million
	M	0.25 million
17	S	
	F	2 million
	M	
18	S	
	F	5 million
	M	4 million
19	S	
	F	2 million
	M	
20	S	
	F	0.8 million
	M	0.7 million
21	S	
	F	10 million
	M	
22	F	10 million
23	F	15 million
	M	6 million
24	F	1 million
25	F	1.7 million
26	F	2 million
27	F	20 million
28		
	F	36 million

29		
	F	0.8 million
30		
	F	4 million
31		
	F	6 million

Appendix I
Property Chart II

(Values obtained from all respondents before (L) and after (R) removing duplications)

1 <= 1000000.00, 2= <= 1000000.00, 3= 5000001.00+

Values	Code	Values	Code	Values	Code
100000000	3	5000000	2	1000000	1
100000000	3	5000000	2	1000000	1
136000000	3	5000000	2	1000000	1
36000000	3	5000000	2	1000000	1
20000000	3	4000000	2	800000	1
20000000	3	4000000	2	800000	1
15000000	3	4000000	2	800000	1
10000000	3	3500000	2	700000	1
10000000	3	3000000	2	700000	1
10000000	3	3000000	2	700000	1
10000000	3	2500000	2	500000	1
6000000	3	2000000	2	250000	1
6000000	3	2000000	2	250000	1
		2000000	2	200000	1
		1700000	2	40000	1
		1100000	2		

property level

	Frequency	Percent	Valid Percent	Cumulative Percent
<= 1000000.00	15	34.1	34.1	34.1
1000001.00 - 5000000.00	16	36.4	36.4	70.5
5000001.00+	13	29.5	29.5	100.0
Total	44	100.0	100.0	

Valid

Appendix J
SPSS Data of Social Class and Syntax Score

University: Codes (1 = Air Uni, 2 = NUML, 3 = Islam-Uni)
Age: Codes (1 = 20 – 30, 2 = 31- 40, 3 = > 41)
Gender: Codes (1 = Male, 2 = Female)
Marital: Codes (1 = Married, 2 = Single)

University	Age	Gender	Marital	Com-Score	Syn-Score	SC Cat
2	1	2	1	28.88	50	3
2	1	2	1	31.09	68	3
2	1	2	1	33.32	41	3
2	1	2	1	32.1	34	3
2	1	2	1	31.1	37	3
2	1	2	1	31.09	39	3
2	1	2	1	31.09	59	3
2	1	2	1	24.43	53	3
2	1	2	1	33.32	51	3
2	1	2	1	33.32	58	3
2	1	2	1	31.1	55	3
2	1	2	1	26.66	46	3
2	1	2	2	24.44	37	3
2	1	2	2	24.43	52	3
2	1	2	1	22.21	26	3
2	3	2	2	17.77	76	3
2	1	2	1	33.32	48	3
2	1	1	1	22.21	8	3
2	1	2	1	26.66	67	3
3	1	1	1	24.43	54	3
3	1	1	1	28.88	59	3
3	1	1	1	31.1	66	3
3	1	1	1	31.1	33	3
3	1	1	1	24.42	39	3
3	1	1	1	33.32	44	3
3	1	1	1	31.09	54	3
3	1	1	1	33.31	41	3
3	1	2	2	24.43	58	3
3	1	2	2	33.32	45	3
3	1	1	1	31.1	69	3
3	1	1	1	31.09	33	3
1	1	2	1	39.99	36	2
1	1	2	1	39.99	49	2
1	1	2	1	44.43	53	2
1	1	2	1	39.99	62	2
1	1	1	1	42.21	60	2
2	1	2	2	44.43	39	2
2	1	2	0	39.98	41	2

2	1	2	1	42.21	25	2
2	1	2	1	44.43	58	2
2	1	2	1	35.55	49	2
2	1	2	1	37.77	34	2
2	1	2	1	39.99	79	2
2	1	2	1	35.54	62	2
2	1	2	1	37.76	44	2
2	1	2	1	42.21	53	2
2	1	2	1	44.43	51	2
2	1	2	1	44.43	50	2
2	1	2	1	39.99	51	2
2	1	2	1	39.98	52	2
2	2	2	2	35.54	45	2
2	3	2	2	42.21	51	2
3	1	2	2	39.99	62	2
3	1	1	1	35.53	47	2
3	1	1	1	39.98	31	2
3	1	1	1	44.43	40	2
3	1	1	1	39.98	49	2
3	1	1	1	44.43	47	2
3	1	1	1	39.98	58	2
3	1	1	1	39.99	34	2
1	1	2	1	51.1	61	1
1	1	1	1	53.32	76	1
2	1	2	1	59.99	64	1
2	2	2	2	59.98	49	1
2	1	2	1	48.88	52	1
2	1	2	1	48.88	52	1
2	1	2	1	48.87	63	1
2	1	2	1	55.55	82	1
2	1	2	1	46.66	20	1
2	1	2	1	51.1	26	1
3	1	1	1	46.66	37	1
3	3	2	2	46.66	88	1
3	1	2	2	57.77	81	1
3	1	2	2	59.99	81	1
3	3	2	2	64.44	68	1
3	1	2	1	80	93	1
3	2	2	2	64.43	84	1
3	2	2	2	51.1	68	1
3	2	2	2	57.77	72	1
3	1	1	1	53.32	48	1
3	1	1	1	51.1	48	1
3	1	1	1	48.88	54	1

Appendix K
SPSS Data of 5 SC variables

Codes: 1 = Level 3, 2 = Level 2, 3 = Level 1

Levels	Occupations	Monthly Income	Educational Qualification	Medium of Instruction	Property
1	6.66	0	20	20	0
2	13.33	0	13.33	13.33	0
3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	20	0
2	13.33	13.33	13.33	13.33	0
3	6.66	0	6.66	13.33	0
1	6.66	0	20	20	0
2	20	6.66	13.33	13.33	0
3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	20	0
2	20	13.33	13.33	6.66	0
3	6.66	0	13.33	6.66	0
1	6.66	0	13.33	20	0
2	20	13.33	20	20	0
3	6.66	0	13.33	20	0
1	6.66	0	20	20	0
2	20	13.33	20	20	0
3	6.66	6.66	13.33	13.33	0
1	6.66	0	20	20	0
2	13.33	6.66	13.33	13.33	0
3	13.33	0	6.66	13.33	0
1	6.66	13.33	20	6.66	0
2	20	6.66	13.33	6.66	0
3	6.66	13.33	6.66	13.33	0
1	6.66	6.66	20	6.66	0
2	13.33	13.33	20	6.66	0
3	6.66	0	13.33	6.66	0
1	6.66	0	13.33	20	0
2	13.33	13.33	13.33	13.33	0
3	6.66	0	13.33	13.33	0
1	6.66	0	6.66	6.66	0
2	20	13.33	13.33	13.33	0
3	6.66	0	0	0	0
1	20	6.66	20	20	0
2	20	13.33	20	13.33	20
3	6.66	0	6.66	13.33	0
1	6.66	0	20	6.66	0
2	20	20	13.33	13.33	0
3	6.66	0	13.33	13.33	0

1	6.66	0	13.33	6.66	0
2	6.66	13.33	6.66	13.33	0
3	6.66	0	6.66	13.33	0
1	20	6.66	20	13.33	6.66
2	13.33	13.33	13.33	13.33	20
3	6.66	0	6.66	13.33	13.33
1	6.66	0	13.33	13.33	0
2	20	0	6.66	13.33	13.33
3	6.66	0	0	0	6.66
1	6.66	0	20	20	6.66
2	20	13.33	20	20	13.33
3	6.66	0	0	0	0
1	6.66	0	13.33	20	0
2	13.33	13.33	20	13.33	0
3	6.66	0	0	0	0
1	6.66	0	20	20	0
2	6.66	20	13.33	6.66	0
3	6.66	0	0	13.33	0
1	6.66	0	13.33	20	0
2	13.33	3	6.66	6.66	0
3	6.66	0	6.66	13.33	0
1	6.66	0	20	6.66	0
2	13.33	6.66	6.66	13.33	13.33
3	6.66	0	0	0	0
1	6.66	0	13.33	6.66	0
2	20	6.66	13.33	6.66	0
3	6.66	0	6.66	6.66	0
1	6.66	0	20	20	0
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2	20	20	13.33	0	0
3	6.66	0	6.66	13.33	0
1	6.66	0	13.33	20	0
2	20	6.66	13.33	6.66	0
3	6.66	0	13.33	6.66	0
1	6.66	0	6.66	13.33	0
2	6.66	6.66	6.66	13.33	0
3	6.66	0	13.33	13.33	0
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2	6.66	0	13.33	13.33	0
3	6.66	0	0	0	0
1	6.66	0	20	20	0
2	20	6.66	13.33	13.33	0
3	13.33	6.66	13.33	13.33	0
1	6.66	0	13.33	20	0

2	20	6.66	13.33	13.33	0
3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	13.33	0
2	20	13.33	13.33	13.33	0
3	6.66	0	0	0	0
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3	13.33	20	13.33	13.33	0
1	6.66	0	13.33	20	0
2	20	13.33	13.33	13.33	0
3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	6.66	0
2	6.66	20	6.66	13.33	0
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1	6.66	0	13.33	6.66	0
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3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	13.33	0
2	6.66	6.66	6.66	13.33	6.66
3	13.33	0	20	13.33	0
1	13.33	6.66	20	20	0
2	6.66	6.66	13.33	13.33	13.33
3	6.66	0	13.33	13.33	0
1	6.66	0	20	6.66	0
2	6.66	0	13.33	13.33	0
3	6.66	0	6.66	13.33	0
1	6.66	0	20	20	0
2	20	13.33	20	20	0
3	6.66	0	20	20	0
1	13.33	20	0	13.33	0
2	20	6.66	0	0	0
3	6.66	0	0	0	0
1	6.66	0	13.33	13.33	0
2	13.33	0	20	13.33	0
3	6.66	0	6.66	13.33	0
1	6.66	20	13.33	13.33	0
2	13.33	0	0	0	0
3	6.66	0	0	0	0
1	6.66	0	13.33	6.66	0
2	20	0	13.33	6.66	0
3	6.66	0	0	0	0
1	6.66	0	13.33	6.66	0
2	20	13.33	0	0	0
3	6.66	0	0	0	0
1	6.66	0	13.33	20	0
2	20	0	20	13.33	0

xxx

3	6.66	0	13.33	13.33	0
1	6.66	0	20	20	0
2	20	0	20	20	0
3	6.66	0	13.33	13.33	0
1	6.66	0	13.33	13.33	0
2	0	0	0	0	6.66
3	6.66	0	0	0	6.66
1	6.66	0	13.33	6.66	0
2	20	6.66	6.66	13.33	0
3	6.66	0	6.66	13.33	0
1	13.33	6.66	20	6.66	0
2	0	0	13.33	0	0
3	6.66	0	0	0	0
1	20	20	20	13.33	0
2	6.66	20	20	13.33	0
3	6.66	0	0	13.33	0
1	6.66	0	13.33	20	0
2	6.66	13.33	0	13.33	0
3	6.66	0	0	0	0
1	6.66	0	20	20	0
2	20	0	13.33	13.33	20
3	6.66	0	6.66	13.33	0
1	6.66	0	6.66	6.66	0
2	20	0	6.66	6.66	0
3	6.66	0	6.66	6.66	0
1	6.66	0	20	20	6.66
2	13.33	0	0	6.66	6.66
3	6.66	0	0	0	0
1	6.66	0	20	20	0
2	6.66	6.66	6.66	6.66	13.33
3	6.66	0	0	0	
1	6.66	0	13.33	13.33	
2	6.66	20	6.66	0	20
3	6.66	0	0	0	0
1	13.33	13.33	20	6.66	0
2	20	0	13.33	13.33	0
3	13.33	0	13.33	13.33	0
1	13.33	13.33	20	20	0
2	20	20	13.33	6.66	20
3	6.66	0	13.33	6.66	0
1	20	13.33	20	20	0
2	20	6.66	20	13.33	0
3	13.33	6.66	13.33	13.33	0
1	20	20	20	20	0
2	20	20	13.33	20	20
3	6.66	0	6.66	6.66	0

1	13.33	13.33	20	20	0
2	13.33	20	20	20	20
3	20	20	20	20	0
1	13.33	20	20	20	6.66
2	20	13.33	13.33	13.33	13.33
3	6.66	0	13.33	6.66	13.33
1	13.33	13.33	20	20	0
2	6.66	6.66	20	13.33	0
3	6.66	6.66	13.33	13.33	0
1	13.33	13.33	20	20	0
2	20	13.33	20	20	0
3	6.66	0	13.33	13.33	0
1	13.33	6.66	20	20	0
2	13.33	0	13.33	6.66	0
3	6.66	0	13.33	6.66	0
1	6.66	0	13.33	6.66	0
2	20	6.66	6.66	6.66	6.66
3	6.66	0	6.66	13.33	6.66
1	6.66	0	13.33	6.66	0
2	6.66	6.66	6.66	6.66	0
3	6.66	0	6.66	6.66	0
1	6.66	0	13.33	6.66	0
2	6.66	13.33	13.33	6.66	13.33
3	6.66	0	0	13.33	0
1	6.66	0	13.33	20	0
2	20	13.33	13.33	13.33	13.33
3	6.66	0	13.33	13.33	13.33
1	6.66	0	13.33	20	0
2	13.33	6.66	13.33	6.66	13.33
3	6.66	0	13.33	6.66	0
1	6.66	0	13.33	20	0
2	20	13.33	13.33	6.66	6.66
3	6.66	0	13.33	6.66	6.66
1	6.66	0	13.33	20	0
2	6.66	6.66	13.33	13.33	20
3	6.66	0	6.66	6.66	0
1	6.66	0	13.33	20	0
2	6.66	13.33	13.33	13.33	20
3	6.66	0	6.66	13.33	0
1	6.66	0	13.33	6.66	0
2	20	13.33	13.33	6.66	20
3	6.66	0	13.33	13.33	20
1	6.66	0	13.33	6.66	0
2	6.66	6.66	6.66	13.33	6.66
3	6.66	0	6.66	13.33	0
1	6.66	0	13.33	6.66	0

2	6.66	6.66	6.66	13.33	13.33
3	6.66	0	6.66	13.33	0
1	6.66	0	13.33	20	0
2	20	6.66	13.33	6.66	13.33
3	6.66	0	6.66	6.66	0
1	6.66	0	13.33	20	
2	13.33	13.33	13.33	13.33	20
3	6.66	0	0	0	0
1	13.33	0	20	20	0
2	20	0	13.33	13.33	20
3	6.66	0	6.66	13.33	0
1	6.66	0	6.66	6.66	0
2	20	0	6.66	6.66	0
3	6.66	0	6.66	6.66	0
1	6.66	0	20	20	0
2	13.33	0	0	20	6.66
3	6.66	0	0	6.66	0
1	6.66	0	20	20	0
2	6.66	6.66	6.66	6.66	13.33
3	6.66	0	0	0	0
1	6.66	0	13.33	13.33	0
2	6.66	6.66	6.66	6.66	20
3	6.66	0	0	6.66	0

Appendix L

Tables and Figures

Table 1

Age-wise sample distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30 years	73	89.0	89.0	89.0
	31-40 years	5	6.1	6.1	95.1
	41 and above years	4	4.9	4.9	100.0
	Total	82	100.0	100.0	

Table 2

Marital status-wise sample distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	1.2	1.2	1.2
	Single	64	78.0	78.0	79.3
	Married	17	20.7	20.7	100.0
	Total	82	100.0	100.0	

Table 3

Number and Percentage of respondents in three Monthly Income levels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	159	64.6	64.6	64.6
	3.00	1	.4	.4	65.0
	6.66	35	14.2	14.2	79.3
	13.33	35	14.2	14.2	93.5
	20.00	16	6.5	6.5	100.0
	Total	246	100.0	100.0	

Table 3
Level wise responses to mediums of instructions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	26	10.6	10.6	10.6
	6.66	66	26.8	26.8	37.4
	13.33	98	39.8	39.8	77.2
	20.00	56	22.8	22.8	100.0
	Total	246	100.0	100.0	
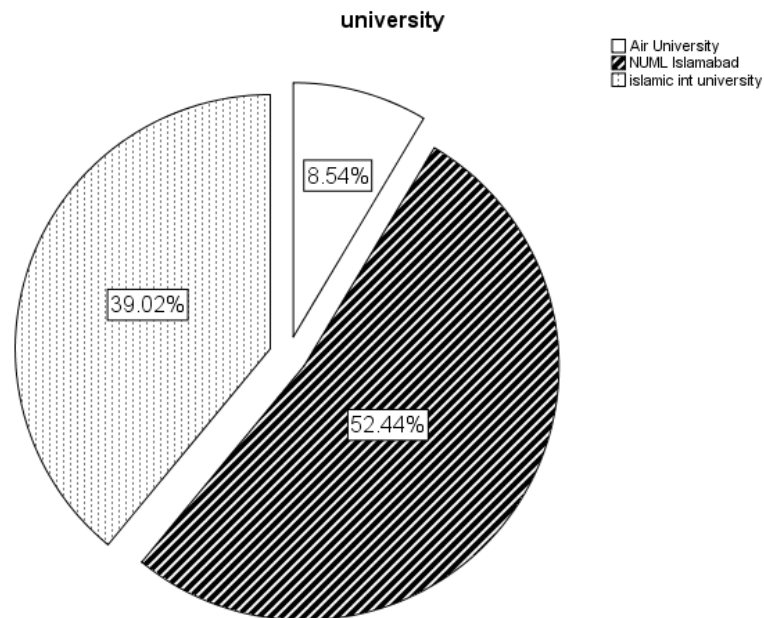
Figure 1: University wise distribution of the sample
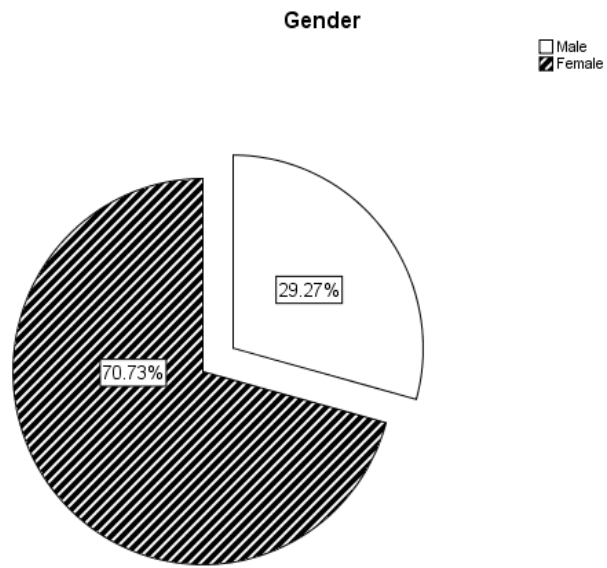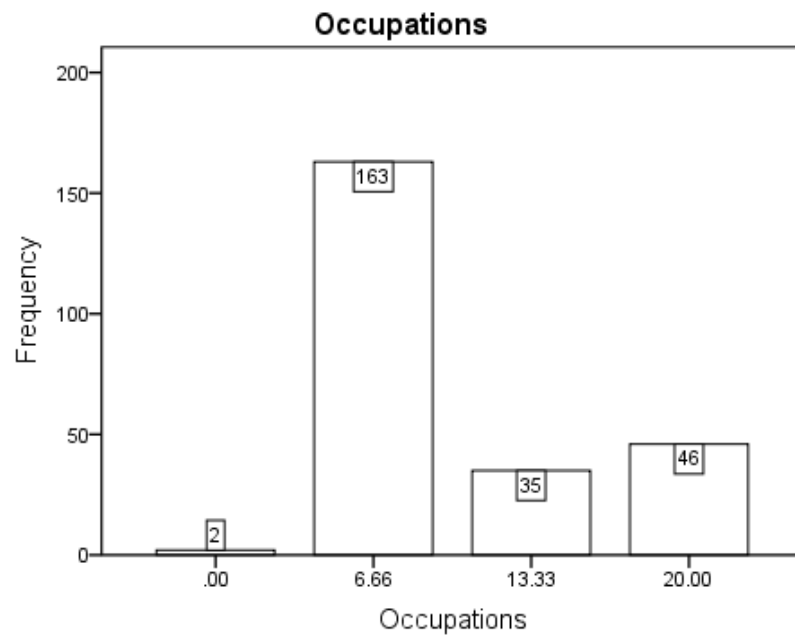
Figure 2: Gender-wise sample distribution

Figure 3: Overall level wise response to SES variable 1 (Occupation)
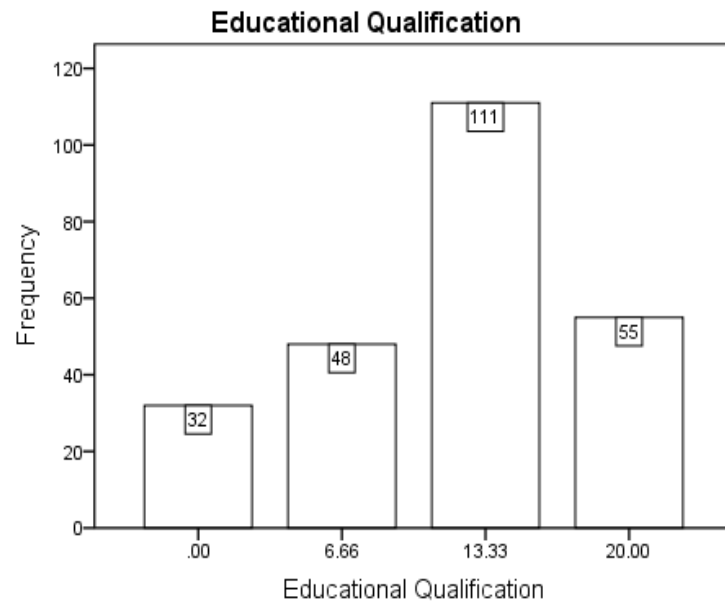
Figure 4:Overall level wise response to SES variable 3 (Educational Qualification)
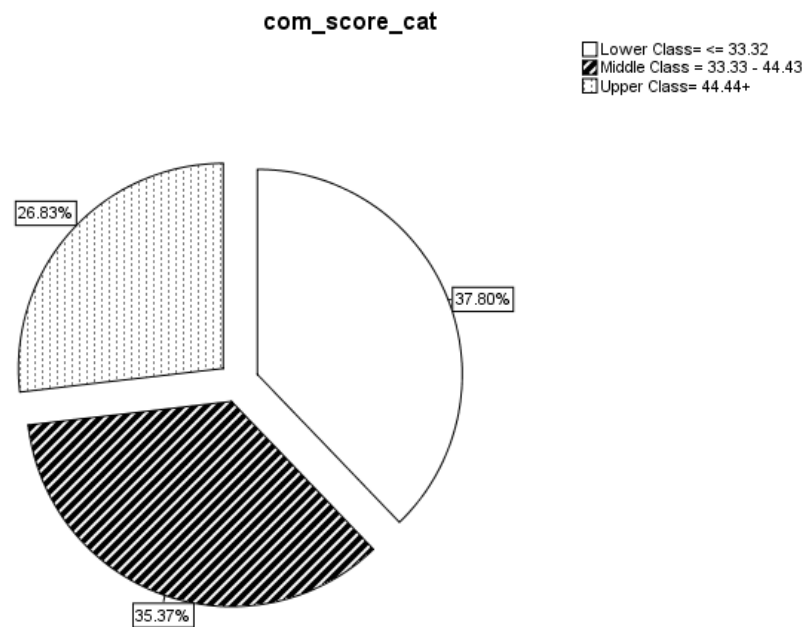
Figure 5:Division of SC data into three distinct Classes
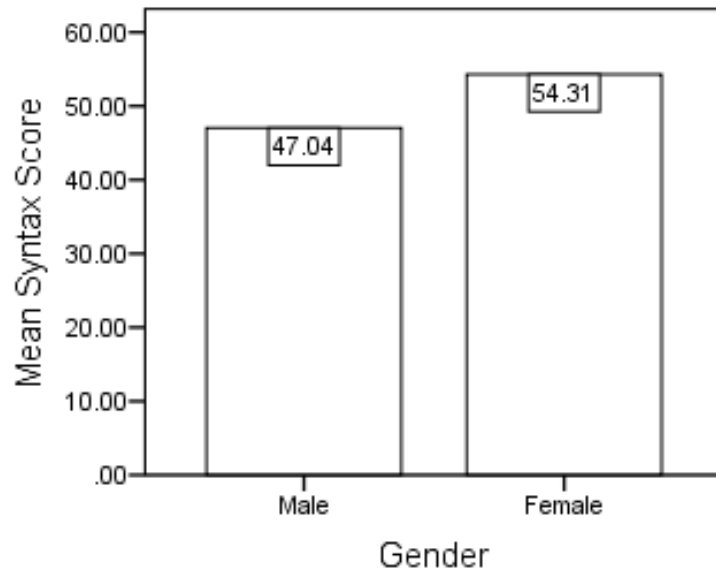
Figure 6: Mean difference of Syntax Score in male and female
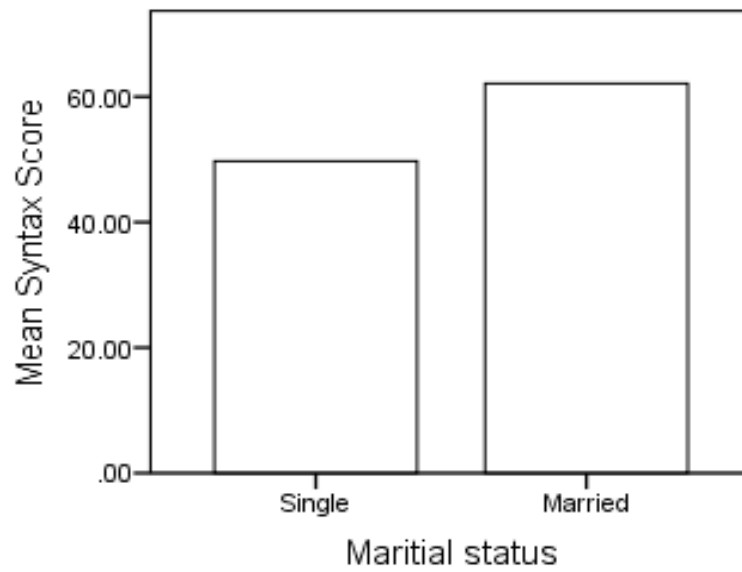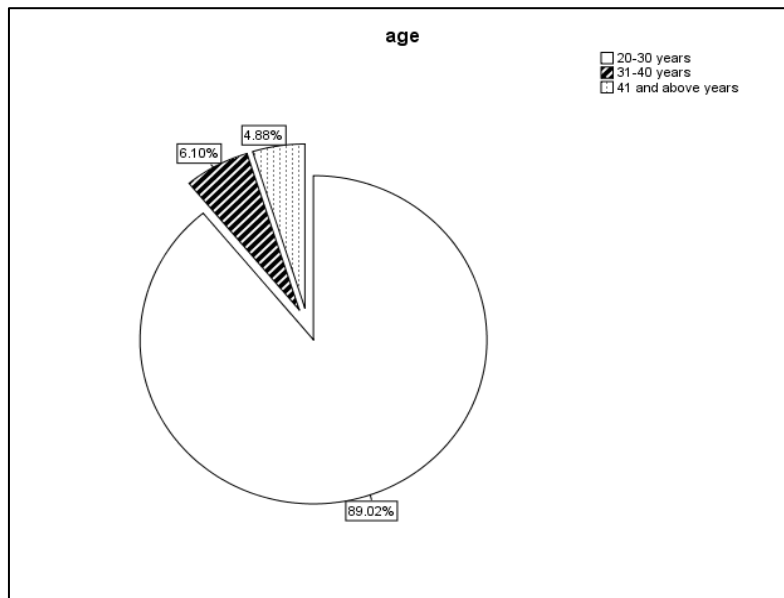

Figure 7: Mean Difference between Single & Married

Figure 8:Number of Sample in each age group