

**MORPHOSYNTACTIC ABILITY OF GENDER
MARKING IN URDU-ENGLISH
SIMULTANEOUS BILINGUALS: A
PSYCHOLINGUISTIC INVESTIGATION**

BY

ALISHBA GULL



NATIONAL UNIVERSITY OF MODERN LANGUAGES

ISLAMABAD

Dec, 2023

**MORPHOSYNTACTIC ABILITY OF GENDER
MARKING IN URDU-ENGLISH BILINGUALS: A
PSYCHOLINGUISTIC INVESTIGATION**

By

Alishba Gull

B. A., Islamia University of Bahawalpur, 2018

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF PHILOSOPHY

In English

To

FACULTY OF ARTS & HUMANITIES



NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

@Alishba Gull, 2023



NATIONAL UNIVERSITY OF MODERN LANGUAGES
ARTS & HUMANITIES

FACULTY OF

THESIS AND DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Arts & Humanities for acceptance.

Thesis Title: Morphosyntactic Ability Of Gender Marking In Urdu-English

Bilinguals: A Psycholinguistic Investigation

Submitted by: Alishba Gull

Registration #: 18MPhil/Eng Ling/S20

Master of Philosophy

Degree name in full

English Linguistics

Name of Discipline

Dr. Aneela Gill

Name of Research Supervisor

 Signature of Research Supervisor

Dr. Muhammad Safer Awan

Name of Dean (FAH)

 Signature of Dean (FAH)

 Date

AUTHORS'S DECLARATION FORM

I Alishba Gull

Daughter of Muhammad Naseem Chaudhary

Registration # 18MPhil/Eng Ling/S20

Discipline English Linguistics

Candidate of **Master of Philosophy** at the National University of Modern Languages do hereby declare that the thesis MORPHOSYNTACTIC ABILITY OF GENDER MARKING IN URDU-ENGLISH SIMULTANEOUS BILINGUALS: A PSYCHOLINGUISTIC INVESTIGATION submitted by me in partial fulfillment of MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of a degree, the work may be cancelled and the degree revoked.

Signature of Candidate

Name of Candidate

Date

ABSTRACT

Title: Morphosyntactic Ability Of Gender Marking In Urdu-English

Simultaneous Bilinguals: A Psycholinguistic Investigation

Bilingualism is an important aspect of today's bi/multilingual world community and empirical explorations into its various psycholinguistic mechanisms are crucial. In the context of Pakistan, the development of early bilingualism for children has lately become a trend among an ever-increasing number of parents and schools alike. The present study seeks to get empirical insights into the development of morphosyntactic development of Urdu-English early bilinguals. The study specifically aims at exploring the psycholinguistic mechanisms involved in the children's acquisition of gender marking ability in two languages, Urdu and English, which have distinct gender systems. For this purpose, the data has been collected from a sample of 48 early bilinguals from three local schools of Bahawalpur. The selected participants were categorized into two groups on the basis of gender, boys and girls, and further into three age groups within the broader age bracket of 4 to 10 years to conduct a fine-grained analysis of morphosyntactic ability in relation to gender, age of acquisition and the sequence of language acquisition. To explore their morphosyntactic ability of gender marking, the data was gathered with the help of three psycholinguistic experimental tests, which included: grammatical judgment task, picture naming task and translation task. The analysis of the data revealed that for simultaneous bilinguals, there is a clear interference between two distinct gender systems of Urdu and English. The results showed that simultaneous Urdu-English bilingual children face difficulty in assigning gender to Urdu inanimate nouns, which is clearly an influence of English gender system where inanimate nouns are gender neutral. The results of the study have important implications for elementary schools as well as for parents who encourage the children's active use of one language and downplay the other instead of helping the children maintain a balance in the use of both the languages.

Table of Contents

Chapters	Pages
THESIS AND DEFENSE APPROVAL FORM	ii
AUTHORS’S DECLARATION FORM	iii
ABSTRACT.....	iv
LIST OF TABLES	x
ACKNOWLEDGEMENTS	xii
DEDICATION.....	xiii
CHAPTER 1	1
INTRODUCTION.....	1
1.1 Background of the Study	2
1.2. Statement of the Problem.....	3
1.3. Research Objectives.....	4
1.4. Research Questions	4
1.5. Delimitation	4
1.6. Significance and Rationale of the Study.....	4
Pedagogical Implications of the Study:	5
1.7. Chapter Breakdown	5
CHAPTER 2.....	7
LITERATURE REVIEW	7
2.1. Language Acquisition in Children	7
2.2. Bilingualism in Childhood.....	9
2.2.1. Exposure to Languages	9
2.2.2. Dependence or Independence of Language Systems.....	10
2.2.3. Bilingual First Language Acquisition (BFLA)	11
2.2.3.1. The Process of BFLA.....	12
2.3. Gender as Morphosyntactic Feature and its Acquisition	13

2.3.1. Morphology and Syntax.....	13
2.3.2. Gender Representation in Mental Lexicon	13
2.4. Gender agreement in English and Urdu Languages	14
2.5. Number as Morphosyntactic Feature	15
2.6. Semantic Features Associated with Gender.....	16
2.7. Semantic Features Associated with Nouns	17
2.8. Gender Distinctions	17
2.9. Grammatical Gender.....	18
2.9.1. Examples of Gender.....	18
2.10. Gender in English	19
2.10.1. Pronominal Gender System	19
2.11. Gender Assignment.....	19
2.12. Criteria for Gender Assignment.....	20
2.12.1. Nouns, Adjectives and Determiners in Relation to Gender.....	21
2.12.2. Noun Phrase Challenge for L2 Learners.....	22
2.13. Grammatical Gender vs Natural Gender.....	22
2.13.1. Natural Gender in Urdu	22
2.14. Kinds of word order breaches	23
2.15. Research Gap	25
CHAPTER 3.....	27
RESEARCH METHODOLOGY	27
3.1. Research Design.....	27
3.2 Population	27
3.3. Population and Sampling	27
3.3.1. Rationale for Selecting Different Age Groups:	28
3.4. Criteria for Sampling	28
3.5. Data Collection	29

3.5.1. Grammatical Judgment Task (GJT).....	29
3.5.2. Picture Naming Task.....	30
3.5.3. Translation Task.....	31
3.6. Limitations	31
3.7. Data Collection Tools	31
3.8. Research site	31
3.9. Data Analysis Procedure.....	32
3.10. Theoretical Framework.....	32
CHAPTER 4.....	35
DATA ANALYSIS.....	35
4.1. Grammatical Judgment Task	35
4.1.1. Grammatical Judgment of English Sentences.....	36
4.1.1.1. Sequential Bilingual Girls’ Performance on Grammatical Judgment Task	37
4.1.1.2. Sequential bilingual boys’ performance on Grammatical Judgment task	38
4.1.1.3. Simultaneous Bilingual Girls’ Performance on Grammatical Judgment task.....	39
4.1.1.4. Simultaneous Bilingual Boys’ Performance on Grammatical Judgment Task.....	40
4.1.1.5. Neutral Objects in English	41
4.1.1.6. Neutral Pronouns used against Common Nouns (English).....	42
4.1.1.3. Gendered pronouns (English)	43
4.1.1.4. Gendered Proper Nouns (English)	44
4.1.2. Grammatical Judgment of Urdu Sentences.....	45
4.1.2.1. Sequential Bilingual Girls’ Performance on Grammatical Judgment Task	46

4.1.2.2. Sequential Bilingual Boys' Performance on Grammatical Judgment Task	47
4.1.2.3. Simultaneous Bilingual Girls' Performance on Grammatical Judgment Task	48
4.1.2.4. Simultaneous Bilingual Boys' Performance on Grammatical Judgment Task	49
4.1.3. Comparison of the Results from Two Groups on Urdu and English Sentences	53
4.1.3.1. Urdu common noun vs English common noun	53
4.1.3.2. Urdu proper noun vs English proper noun	54
4.1.3.3. Urdu gendered object vs English object	55
4.2.3.4. Abstract Noun vs English Abstract Noun	56
4.2. Picture Naming Task Analysis	57
Gender Neutral objects of English versus gendered objects of Urdu	58
4.3. Translation Task	65
4.3.1. English Neutral Verb vs Urdu Gendered Verb	70
4.3.2. English Neutral Adjective and Urdu Gendered Adjective	70
4.3.3. English Neutral Auxiliary Verb and Urdu Gendered Auxiliary Verb	72
4.3.4. English Neutral Verb -Transitive Verb combination and Urdu gendered combination	73
CHAPTER 5	75
FINDINGS AND DISCUSSION	75
5.1. Findings	75
5.1.1 Grammatical Judgment among Bilinguals	75
5.1.2. Morphosyntactic Production among Bilinguals	79
5.1.3. Bilingual Translation: The Mechanism Involved	80
5.2. Discussion	83
5.2.1 Grammatical Judgment: Strengths and Weaknesses of Bilinguals	84

5.2.2. Morphosyntactic Production: An Area for Improvement.....	87
CHAPTER 6.....	90
CONCLUSION	90
Future Recommendations	93
REFERENCES.....	94

LIST OF TABLES

Table 1. Specifications of English Sentences	36
Table 2. Sequential bilingual Girls performance on Grammatical Judgment Task.....	37
Table 3. Sequential bilingual Boys performance on Grammatical Judgment Task.....	38
Table 4. Simultaneous bilingual Girls performance on Grammatical Judgment Task	39
Table 5. Simultaneous bilingual boys' performance on Grammatical Judgment Task	40
Table 6. Grammatical Judgment of Neutral Objects	41
Table 7. Grammatical Judgment of Neutral Pronoun used against Common Noun....	42
Table 8. Grammatical Judgment of Gendered pronouns (English)	43
Table 9. Grammatical Judgment of Gendered proper nouns (English)	44
Table 10. Grammatical Judgment of Abstract Nouns.....	45
Table 11. <i>Specifications of Urdu Sentences</i>	45
Table 12. Sequential Bilingual Girls' Performance on Grammatical Judgment Task.	46
Table 13. Sequential Bilinguals Boys' Performance on Grammatical Judgment Task	47
Table 14. <i>Simultaneous Bilinguals Girls' Performance on Grammatical Judgment Task</i>	48
Table 15. <i>Simultaneous Bilingual Boys' Performance on Grammatical Judgment Task</i>	49
Table 16. <i>Gendered Common Nouns (Urdu)</i>	50
Table 17. <i>Gendered Proper Noun (Urdu)</i>	51
Table 18. <i>Animals / Insects (Urdu)</i>	51
Table 19. <i>Inanimate Gendered Objects</i>	52
Table 20. <i>Abstract Nouns</i>	52
Table 21. <i>Urdu common noun vs English common noun</i>	53
Table 22. <i>Urdu proper noun vs English proper noun</i>	54
Table 23. <i>Urdu gendered object vs English object</i>	55
Table 24. <i>Urdu Abstract Noun vs English Abstract Noun</i>	56
Table 25. <i>Specifications of Picture Naming Task Items</i>	57
Table 26. <i>Grammatical Modifiers for Orange</i>	58
Table 27. <i>English Grammatical Modifiers for orange</i>	58
Table 28. <i>Urdu Grammatical Modifiers for orange</i>	59
Table 29. <i>Grammatical modifiers for chair</i>	59

Table 30. <i>English Grammatical Modifiers for Chair</i>	59
Table 31. <i>Urdu Grammatical Modifiers for Chair</i>	60
Table 32. <i>Grammatical Modifiers for boy</i>	60
Table 33. <i>English Grammatical Modifiers for boy</i>	61
Table 34. <i>Urdu Grammatical Modifiers for boy</i>	61
Table 35. <i>Grammatical Modifiers for girl</i>	61
Table 36. <i>English Grammatical Modifiers for girl</i>	62
Table 37. <i>Urdu Grammatical Modifiers for Girl</i>	62
Table 38. <i>Grammatical Modifiers for monkey</i>	63
Table 39. <i>English Grammatical Modifiers for Monkey</i>	63
Table 40. <i>Urdu Grammatical Modifiers for Monkey</i>	63
Table 41. <i>Comparison of Urdu and English for Simultaneous Bilinguals</i>	64
Table 42. <i>Comparison of Urdu and English for Sequential Bilinguals</i>	65
Table 43. <i>English to Urdu for Simultaneous Bilinguals</i>	66
Table 44. <i>English to Urdu Translation for Sequential Bilinguals</i>	67
Table 45. <i>Urdu to English Translation by Simultaneous Bilinguals</i>	68
Table 46. <i>Urdu to English Translation by Sequential Bilinguals</i>	69
Table 47. <i>Comparison of Urdu and English Verbs for Sequential and Simultaneous Bilinguals</i>	70
Table 48. <i>Comparison of English and Urdu Adjective as used by bilinguals</i>	71
Table 49. <i>Comparison of English and Urdu Adjective as used by bilinguals</i>	72
Table 50. <i>Comparison of English and Urdu Adjective as used by bilinguals</i>	73
Table 51. <i>Comparison of English and Urdu Auxiliary as used by bilinguals</i>	74

ACKNOWLEDGEMENTS

“Attaining the impossible” is a phrase that comes to my mind while writing this acknowledgement. I am very grateful to Allah Almighty, the most merciful, the most beneficent who created resources for me to complete this time-taking task and many thanks to the Holy Prophet Hazrat Muhammad (S.A.W) who remained a guiding star throughout my life.

Doing research is not an easy task. However, I am lucky enough to have a mentor like Dr. Aneela Gill who supervised me for more than one and a half year. She has consistently challenged my ideas with the intent of bringing out the best in me. She has always given positive and constructive advice and has been extremely helpful in times of need; I am sincerely grateful for this. Under her kind supervision, I redefined the scope of my research work, chose experimental design of the study and became able to complete this task in two years.

Many thanks are due to all those who became a part of this journey in one way or the other. It is very difficult to find the right words of gratitude, appreciation, and thankfulness for each member of my family, especially my Parents without whose support, encouragement, love and prayers, I would have been unable to accomplish this dissertation. I owe special thanks to my brother Muhammad Saleem who pushed me to pursue my MPhil, and my other siblings whose moral support encouraged me to move forward. And lastly a special thanks to my lovely husband who helped me in the final process of defense. Once again, I am thankful to Allah without whose blessing I would not have been able to complete this difficult task.

DEDICATION

Lovingly, I dedicate my work to my beloved family members who have been a great support throughout my academic journey despite the ups and downs.

CHAPTER 1

INTRODUCTION

Pakistan has a multilingual population. Generally, people speak Urdu, Punjabi, Saraiki, Pashto, etc. as their local languages. English and Urdu are in the spotlight because they are used in media, education, and at the government level in Pakistan at official level. Moreover, these two languages are supported by the state which is why they are considered dominant languages.

Bilingualism is a term for people who speak two languages. Normally, the speakers' primary language or first language is one of the two languages, which qualify them as bilinguals. "Being bilingual" does not mean having a complete command of both languages. In addition, speakers rarely speak both languages with equal fluency (Myers-Scotton, 2006).

Bilinguals are those who speak two languages at a time. There are two types of bilinguals: simultaneous and sequential bilinguals. Learners who learn both languages at precisely the same time during early stages, for example, English and Urdu at the same time, are called simultaneous bilinguals. On the other hand, when learners learn a second language after fully acquiring their first language, they are called sequential bilinguals.

The present study intends to investigate the bilinguals' morphosyntactic ability of gender marking in Urdu and English languages. Urdu is a language that has grammatical gender but English lacks this feature. The main focus of this study is on morphology and syntax; both are used for constructing sentence structure and word formation. As morphosyntax is the relationship between morphology and syntax, morphemes and sentence structure play a main role in the morphosyntactic developmental analysis. Few morphosyntactic features are involved in agreement, e.g., number, gender, person, and case. The agreement between lexical items is referred to as grammatical number agreement. For example, news having 's' at the end is plural but in Urdu 'khabar' is singular. Gender is another feature of morphosyntax. In English,

moon has no gender but in Urdu, it is assigned masculine gender. For instance, ‘Chand acha lg raha hai’. A number of morphosyntactic features are there but this study focuses on the morphosyntactic feature of gender marking.

1.1 Background of the Study

In Pakistan, the English language has become the language of all class types, mostly use Urdu (Shamim & Rashid, 2019). Being the British colonizer’s legacy, the English language is still in power and use in Pakistan. As it is an international language, so it has become the official language of Pakistan due to colonization (Manan & David, 2014).

Seventy years have passed since decolonization, but still, English is used for official, judicial, and legislative purposes (Ansari, Mehmood & Mangool, 2015; Rahman, 2003). Soomro (2016) has said that English is taken as social capital and is spoken by people of high influence. Institutes that are teaching the English language play a vital role. Also, English language is a medium of instruction in schools. Umrani & Bughio (2017) further added that in Pakistan it is considered that the English language is a passport to a cheerful future. Manan & David (2014) have stated that the Urdu language is the lingua Franca in Pakistan as it is widely spoken in Pakistan, moreover, it is the national language of Pakistan. It is the identity of the Pakistani population.

Rahman (2006) has added that migrated people brought along with them Urdu language from India to Pakistan. then and after that, they took over the bureaucracy in Pakistan and Urdu became the national language and it now has the status of lingua franca in of Pakistan. It is the native language of those who migrated from India to Pakistan following the split of the Indo-Pak peninsula. Despite their numerical deficit, they controlled Pakistan's bureaucracy due to their education. Javed (2017) has stated that the Urdu language is playing a dual role as it is the language of instruction in institutes and the country’s lingua franca.

Tucker (1999) has brought to attention that more than one language is used in the education system in many countries due to the worldwide need of the present age. These languages are either majority or minority in their local and international usage.

As Pakistan is a multilingual country, where English and Urdu are of great importance. Children start speaking the Urdu language from an early age and when they go to school, they start learning the English language. The Urdu language has a different gender system than the English language. This study aims to find out that how children mark the gender system in both languages and do their 1st language hinders their 2nd language.

In general, a lot of research has been done on simultaneous bilingualism and sequential bilingualism; however, the present study is going to emphasis on the morphosyntactic development of gender agreement in Urdu and English simultaneous bilinguals and sequential. Previous research has been done on either Urdu or English, but they were not sufficient for a detailed investigation. This research is going to deal with both languages. It has focused on the cognitive side of children whether they have a separate language system or they mix up the gender agreement of both languages.

This study focuses on simultaneous bilinguals but to gain a deeper insight into their psycholinguistic mechanism of gender marking, this study will be drawing a comparison between simultaneous and sequential bilinguals. Simultaneous bilinguals are those who acquire two languages simultaneously while sequential bilinguals are those bilinguals who learned second the language after fully acquiring the first language. So, the current study will investigate the Urdu-English simultaneous bilinguals' ability of gender marking in Urdu and English. This study aims to investigate if bilinguals use two language systems separately or they mix them by applying one language's rules over the other language in terms of gender agreement.

1.2. Statement of the Problem

In terms of gender system, Urdu and English seem to be poles apart; whereas, Urdu uses grammatical gender, English does not. How Urdu-English simultaneous bilingual children mark gender in Urdu and English languages is what this study wants to explore. Since gender marking is a language-specific morphosyntactic ability, this research intends to explore how young Urdu-English simultaneous bilinguals accomplish the task of dealing with two contrasting gender systems at the same time and how they develop this ability. With the help of psycholinguistic experimental methods, the study aims to probe into Urdu-English simultaneous bilingual children's

morphosyntactic ability of marking gender for two grammatically distinct languages simultaneously.

1.3. Research Objectives

The present research has the following objectives:

- i. To determine the nature of morphosyntactic ability that is required by Urdu-English simultaneous bilinguals for marking gender in the two languages and if they mix up structures of both languages or not.
- ii. To find out how Urdu-English simultaneous bilinguals develop the morphosyntactic ability that is required for marking gender in the two languages.

1.4. Research Questions

The present research seeks to answer the following research questions:

Q1: What kind of morphosyntactic ability is required by Urdu-English simultaneous bilinguals for marking gender in the two languages?

Q2: How do Urdu-English bilinguals develop the morphosyntactic ability required for marking gender in the two languages simultaneously?

1.5. Delimitation

This research is delimited to forty-eight bilinguals whose languages are Urdu and English. The main focus was on simultaneous bilinguals but to make a contrast with sequential bilinguals, equal number of both bilinguals are included to this study. The population of the participants for the present study thus comprised children between 4-10 years of age. There are various morphosyntactic features but this research is delimited to gender agreement only.

1.6. Significance and Rationale of the Study

Pakistan is a country where people speak diverse languages at diverse places due to the requirement of that place. The English language is spoken in educational institutes and different government sectors. Children speak their mother tongue at home and English at school. Some children learn English from an early age at home and some learn it later in their school life. So, the current research aims to find out the

development of the language of those who learn English in their early life and those who learn after puberty age. This is done by analyzing their marking of gender agreement, as Urdu and English both have different gender systems. So, through this, it has been investigated whether their L1 rules interfere with their L2 or not. It is also investigated if early learning and more exposure are important in marking the gender agreement and that whether bilinguals have separate development systems or they mixed up the rules.

Pedagogical Implications of the Study:

- 1) It is beneficial for specifically psycholinguist students as it gives a detailed view of bilinguals' gender marking through using psychological methods.
- 2) This study will help students who are learning Urdu to English or English to Urdu as it caters to Nouns, adjectives, and verbs. This will help them to determine gender as well as its marking.
- 3) This study is significant for language teachers, as it gives an in-depth analysis of English and Urdu bilinguals.
- 4) This research is beneficial for understanding the early and late learning of the morphosyntactic development of gender agreement.
- 5) This study will help the students as well as the teachers to understand the cognitive development of the bilinguals.
- 6) This research has brought two languages under investigation which have not been put under investigation before. Although English and Urdu have been analyzed separately but together, they haven't been analyzed for gender agreement analysis.

1.7. Chapter Breakdown

The first chapter of the present study is an introductory chapter that has laid down the conceptual framework and the background of the present study. The second chapter deals with literature review including the review of empirical works dealing with the technical concepts recurring in the present study. Chapter 3 deals with the research methodology for the present study including the data type, the theoretical framework, the operationalization of the theoretical framework, the sample and population, the parameters of the study and the tools and techniques employed for data analysis. The fourth chapter puts forward all the data analyses. The fifth chapter

summarizes and breaks down the findings accompanied by discussion on the findings, and lastly the final chapter gives a conclusion to the present study along with future studies' recommendations.

CHAPTER 2

LITERATURE REVIEW

This chapter deals with literature review including the review of empirical works dealing with each of the technical concepts recurring in the present study. It includes the sections of language acquisition, bilingualism, exposure to languages at early age. It also discusses connection of morphology with syntax. It mainly focuses on gender agreement and gender as morphosyntactic feature

2.1. Language Acquisition in Children

Language is viewed as an extraordinary characteristic of individuals. Language is a vital part of our reality, it is found on each side of the world. It is a significant component of human exercise. Being a multipurpose instrument, language is utilized for correspondence, articulation, and making and reinforcing co-activity between individuals from the public. The importance of language can be seen from the differentiation that it makes between human beings and animals (Lieberman, 1998). As Yule (1996), proposed that human beings have different communication system, and their system has multiple properties, which mark a distinct difference between human and animal communication systems. Language acquisition is a part of the physical, social, and mental development of a child. While living among people and moving around he makes connections between his cognitive and social life through words and intrinsically learns how to use a language structure properly (Hickmann, 1986).

The child understands the world through his experience. In the beginning, he just looks at the present and his early language utterances indicate the concept of “now and here” but with time when he grows linguistically his experience increases, and he creates novel utterances which indicate his creativity and gives voice to his verbal thoughts (Clark, 2013). Birdsong (2018) has suggested that the age of acquisition and age of exposure are important. The attainment of a second language and age are interrelated because age is the factor that is important while learning a language. The age of acquisition is important as it is the age at which acquisition starts. David Singleton (2005) in his study, “The Critical Period Hypothesis: A coat of many

colors'', says that the capacity of acquiring a second language and some of its aspects. Puberty, it becomes difficult to acquire the second language. As Birdsong (2005), has suggested that age of acquisition is very much important as its effect is upon all the functions of language. Montrul (2002) and Polinsky (2006) have stated that children's first language is completed by the age of 3-4, and when these children enter schools then there comes a change in their L1 due to the L2 which is used at school.

Monolingualism is the term used for the speakers who only speak one language that they have acquired as their mother tongue or as their first language. On the other hand, Bilingualism is the term for the speakers who speak two languages. Normally the speakers' primary language or first language is one of the two languages that make them bilinguals. "Being bilingual" does not mean complete command of both languages. In addition, speakers rarely speak fluently two languages (Myers-Scotton, 2006).

There are very few people who speak more than one language "like a native". In general, these are people who have been raised as bilingual since childhood. There is a hypothesis which is called the critical age hypothesis. This hypothesis suggests that until the age of puberty, children can acquire any language to which they are exposed. After that, language acquisition becomes a more difficult and conscious process. This assumption is under discussion. (Myers-Scotton, 2006).

Acquiring a first language (L1) is a faster process than learning a second language (L2), but that does not mean it is a matter of days or months of practice. It takes 5-6 years and there is a solid indication that if a child does not come across any language by the age of 6-7, he is unable to acquire it in later years. Therefore, the first 5-6 years of a child's life are important in this regard. He becomes a competent speaker through Exposure, input, or interaction without any extra effort (Clark, 2013).

During this period of language acquisition, the learner has to go through various linguistic developmental stages called "universal stages" in which the rate of acquisition of the stages varies greatly. Describing developmental stages as stages, Brown (1973) states, "A stage is named; either for a process that is a major new development in this interval or for a non-action at that stage. For moderately broad development. "Dividing the language process into different stages helps researchers to generalize things.

2.2. Bilingualism in Childhood

Bilingualism is determined by the age of onset. If the child is exposed to both languages in early his life, then it is primary and if he is exposed later then it is secondary bilingualism (Albrecht, 2003 – 04). Hartop (2018), has stated that thinking about bilingual individuals, we often assume someone who has equal command of both languages. But the fact is that bilingual people rarely master both languages. Assuming a balanced bilingual is proficient in both languages is a mere myth as it is a very rare case if a person is equally proficient in both of his languages. As one language always dominates the other. Due to this language dominance, one language's grammatical rules are favored over the price of other languages and then these rules are applied to the other language due to the dominancy of one language. Furthermore, different kinds of bilingualism exist. Along these lines, there are a few different ways to depict the bilingual experience. Ortega, (2009) and May (2014) have defined bilingualism as using two languages and it is not important at what proficiency level the bilingual is. These bilinguals have learned languages through natural interaction or maybe through classroom interactions.

Goldstein (2015) has differentiated between simultaneous and sequential bilingualism, according to him, Simultaneous Bilingualism is when learners learn both languages at precisely the same time during early stages for example learning English and French at the same time. On the other hand, sequential bilingualism is when learners learn a second language after fully acquiring their first language.

Whatever belongs mentally together is conveyed linguistically by syntax. Different means are used by different languages to achieve this end, but basically, syntax plays a role in all languages. Syntactic knowledge shared by listeners and speakers of the same language connects different elements in a temporary sequence and serves a variety of ideas behind them (Eberhard et al., 2005).

2.2.1. Exposure to Languages

The difference in the population of bilinguals is mainly due to the type of languages and the amount of language to which bilinguals are exposed in their early years. Bilingual children have to split their earlier learning between two different languages and as a result, they are exposed less to either language as compared to monolinguals (Paradis & Genesee, 1996). While several studies have shown that the

quantity of exposure is a significant predictor of specific language outcomes in bilingual children, there is little agreement on which semantic regions should be impacted or how much. (see e.g., Sorace, 2011, for suggestions). In this manner, contrasts in how much information has been exposed to influence both bilingual youngsters' language capacities and the rate at which they obtain different semantic peculiarities comparative with monolinguals. There is proof that specific parts of bilingual youngsters' etymological improvement are impacted by how much language to which they are exposed, and explicit qualities thereof.

In order to acquire grammatical gender, Children need to know that

- (i) Determiner Phrase instantiates gender as it is a grammatical characteristic.
- (ii) The gender specification of the noun in question, i.e., gender attribution; and
- (iii) Gender marking on other parts of the DP, e.g., gender accordance or gender agreement (Carroll, 1989; Meisel, 2009).

2.2.2. Dependence or Independence of Language Systems

Language independence and dependency are opposing concepts in language processing. In this context, independence indicates that the two languages work in relative isolation, so that processing verbal items in one language has no effect on processing verbal items in the other. When two languages interact with one another in Processing in one language is influenced by processing in the other in a specific context. This differentiation and contrast are frequently mistaken in processes and representations, there is a dichotomy between language independence and language reliance. The language-independent representations or processes Language-independent ones are the same (shared) for both languages, but language-dependent ones are different (separate) for each language. Finally, linguistic representations or procedures are only available in one language, Language-specific ones, on the other hand, can be accessed in either language either in English or in Spanish (Francis, 2005).

Furthermore, a major issue in bilingualism research is the extent to which linguistic representations in the two languages are processed independently of each other. According to the modular or language-selective approach, L2 proficiency can be characterized by the ability to perform and process the second language's associated lexical, semantic and, other conceptual representations, without being influenced by L1 or native language (e.g., Frenck-Mestre & Prince, 1997; Gerard & Scarborough, 1989;

Kroll & Stewart, 1994; Scarborough, Gerard, & Cortese, 1984; Talamas, Kroll & DuFour, 1999).

Furthermore, the performance of a learner in activities requiring the handling of syntactic structures in the second language can be influenced by both a lack of lexical knowledge and the transfer of lexical knowledge from their first language. L2 learners having gender in their L1 may struggle with L2 gender acquisition, and their challenges come from the transfer of L1 lexical knowledge. Several SLA research have recently linked difficulties with gender agreement performance to a lack of lexical knowledge. (Grüter et al., 2013; Hopp, 2012; Sabourin & Stowe, 2008).

2.2.3. Bilingual First Language Acquisition (BFLA)

Meisel (1989) refers to it as bilingual first language acquisition when children hear two languages from birth. De Houwer (2005) uses the phrase as well indicating that she applies it to the study of children under the age of six who were exposed to two languages from birth and continued to hear these languages pretty regularly until the time of the reported study. Other researchers examining early bilingualism use the phrase bilingual child language acquisition to differentiate it from acquisition of only one language, which is simply referred to as child language acquisition. All of these language acquisition researchers aim to avoid referring to either language as L1 because both are the child's first languages. A distinct term is used by researchers for any youngster of preschool age who was exposed to language B more than one week after language A. This child demonstrates early second language learning. It is worth noting that a youngster who learns a sign language as well as an oral language as a first language falls into one of these groups as well. Secondly, several of the researchers imposed strict time constraints on what should be considered bilingual acquisition.

Bilingual First Language Acquisition (BFLA) refers to the development of language skills in young infants who are exposed to two languages from birth. BFLA infants acquire two languages simultaneously. In terms of the time when the children first heard the two languages, there is no difference. Therefore, it is best to use the notation BFLA while referring to these languages that do not imply a concept of 'first' and 'second' languages. By following Wölck (1987/88) these BFLA children's two languages will be referred to as Language A and Language Alpha.

2.2.3.1. The Process of BFLA

The process of BFLA is that BFLA children are exposed to Language A and Language Alpha from birth. It does not really guarantee that they will be able to communicate in these languages. BFLA children are not entirely unusual in speaking only one of the languages in which they have been dealt since birth. Children with BFLA who comprehend two languages but only speak one may be labeled as "passive" bilinguals despite the fact that understanding two languages and speaking one is not passive. If BFLA children do not learn to comprehend and/or communicate either of the languages that are spoken to them, this is a concern: they might have a hearing impairment or neurological problems. People frequently suppose that BFLA children are fluent in both of the languages. However, this is rarely the case. When assessing children's language skills, one must distinguish between comprehending and producing (De Houwer, 2009).

According to Meisel (1989), children who hear two languages from birth undergo a process called BFLA ('Bilingual First Language Acquisition'). As they learn two languages from the very beginning, there is no first language or second language but to distinguish between them, the languages in BFLA are named as language Alpha and language A. This terminology for naming languages has been borrowed from Wölck (1984).

According to the separate development hypothesis, children have the capability to understand two languages from their early life. Languages are developed independently and none of the languages affects each other. There is clear evidence supporting this hypothesis of separate languages in the youngster's utilization of a specific design that shifts across their two languages but utilizes the construction for language A while using lexical components from language B. For instance, in English a "yes-no" question includes the presence of a type of the supporting action word "do" toward the start of the sentence 'Do you need some tea?' In Dutch, there is no do (for example "*Wil Je thee? Want you tea?*"). All such contending constructions have led the researcher to infer that BFLA children have two separate systems for two languages (De Houwer, 2005).

2.3. Gender as Morphosyntactic Feature and its Acquisition

Many studies have been conducted on the acquisition of grammatical gender in synthetic languages, such as the languages of Indo-European family, e.g., Germanic, Romance, Slavic, and Indo-Iranian languages (Rodina & Westergaard, 2015). Savickiene & Kaledaite (2007) have further added that language complexity affects the acquisition of a language's gender system because when children encounter a morphological language where one morphological marker is being influenced by the other categories, then the gender differences are acquired late.

However, it has been found that in languages where the same gender is used for the suffixed noun and its modifier, that gender system is acquired by the children early (Clark, 2001). The morphological marking of gender and sex in German and English reflects a syntactic or grammatical property that might not be related to the male or female syntactic property in any masculine or feminine gender case. Aside from the auxiliary system, only a few English nouns are gendered (for example, actor, actress, waiter, waitress, host, and hostess). The markings on these nouns, like those on third individual pronouns, are determined by the referent's natural gender (Scheutz & Eberhard, 2004).

2.3.1. Morphology and Syntax

The relationship between morphology and syntax refers to grammatical categories that describe the morphological and syntactic features of words such as gender, number, case, tense, and aspect marking (Crystal, 2008). Example of morphology, boy in English is singular while adding 's' to it makes it plural 'boys'. Similarly, in Urdu language 'لڑکا' is singular while adding 'ے' to it makes it plural 'لڑکے'. Example of syntax in English 'he eats green apple' while in Urdu 'سیب سبز وہ' 'بے۔ کہاتا'. Along with this awareness, the purpose of the child's language acquisition process is to build a language theory that accurately conveys this grammatical knowledge (Fodor, 2001).

2.3.2. Gender Representation in Mental Lexicon

Native speakers, according to Jescheniak & Levelt (1994), have a means for retrieving grammatical gender: "to permit gender-marked anaphoric reference to freshly introduced discourse items, thus adding to the agency of the utterance" (1994,

841). A word's gender would be represented via a (recency-sensitive) link between its lemma and a generic gender representation (for example, a gender node). Because the issue of gender representation is critical to the current research.

Based on a review and analysis of linguistic theories and models of lexical retrieval, there are numerous significant gender disparities. First and foremost, there is a contrast between gender on determiner phrase parts and gender on nouns. Gender is simply a syntactic property on other DP elements, whereas gender on nouns is both a syntactic and a lexical characteristic. This is due to the fact that gender features on nouns are allocated a value from the lexicon, but adjectives and determiners are assigned a value only through the syntactic action of gender agreement. The word *carro* 'car' in Spanish has a masculine value from the lexicon, while an adjective like *Rojo* 'red' gets its gender value from the noun to which it is syntactically associated because it is unspecified for a gender value (Kirova, 2016).

2.4. Gender agreement in English and Urdu Languages

In English language, some nouns are neutral, some are feminine or masculine, while in Urdu, all the nouns are either masculine or feminine and there are specific rules which apply to gender agreement. Attitudes of English-speaking people towards gender show that pronouns expressing the gender of the nouns vary consistently and without hesitation. In any case, an assessment of information has uncovered that second language speakers of English appear to be conflicting in their determination of pronouns marking for gender. The second language English speakers in this survey did not reliably pick pronouns as indicated by the natural gender agreement of the antecedent noun or as per the fixed grammatical gender of nouns indicating ships and countries. The agreement on the gender of the noun probably occurs when there are some obvious syntactic markers in the sentence or when there are certain types of semantic markers with human names (Marcoux, 1973).

Urdu has both genders: grammatical and natural (Ranjan, 2013). The Urdu language has a binary opposition relationship in its gender agreement as masculine and feminine, masculine for boy لڑکا and feminine for girl لڑکی. Due to this only one value can be assigned to nouns and other items of linguistics got affected by this noun gender (Voeikova & Savickiene, 2001). Features of gender are available in Urdu nouns, which are markedness or unmarkedness. gender suffix is there for marked nouns. Through

these inflections. It can be analyzed if the noun is unmarked masculine, marked masculine, unmarked feminine, or marked feminine (Schmidt, 1999). Common nouns in Urdu and Punjabi have the same gender (Cummings & Bailey, 2005). Natural gender in English is mainly represented by the pronouns. But in many other languages, natural gender is expressed by articles, adjectives, noun endings and pronouns (Jarvis & Pavlenko, 2008).

2.5. Number as Morphosyntactic Feature

The agreement between lexical items is referred to as grammatical number agreement. For most English speakers, the word (suds) is grammatically plural, as words that agree with it are usually grouped: but in standard English, the word is Sudd and not suds, and some use suds instead of suds. In contrast, for most English speakers, the news is grammatically singular because words that agree with it are usually singular: people say there is the news and there is no news. Although the grammatical number often reflects the conceptual number, it is not entirely dependable. For example, speakers refer to grammatical plurals as conceptually singular references like scissors and pliers (Bock et al., 2001).

Morphology is an authoritative degree of language that is related to morphemes, the littlest phonological units that convey meaning. Morphological mindfulness (MA) is the capacity to consider and control morphemes and to utilize word arrangement rules to build and see morphologically complex words (Kuo & Anderson, 2006). Whether or not there is an ideal time window for language obtaining has been dependent upon constant discussion over numerous years. One noticeable proposition, the basic time frame theory (Lenneberg, 1967), states that if language obtaining begins adequately early (i.e., before adolescence), fruitful achievement is ensured and comparable across people.

Conversely, later onsets of obtaining—for instance, when learning a subsequent language (L2)— yield only local results and are subject to significant individual variability (Bialystok & Hakuta, 1999). This proposition has gotten impressive consideration in the intellectual sciences because, whenever affirmed, it would recommend that language obtaining follows an inherently indicated maturational timetable (Newport, Bavelier & Neville 2001). In any case, notwithstanding its

importance, the hypothesis that there is a critical or "sensitive" period in language development is yet disputable.

2.6. Semantic Features Associated with Gender

In essence, the semantic element associated with a gender-marked pronoun in English would be designated as male or female, depending on whether the pronoun's sex was masculine or ladylike. In any way, because sex is a notable quality of people, it is likely to be a component that is recalled for the applied representation of anything that implies a classification of people. Unlike "definitionally" female or male things (e.g., mother, sister, man) or gender marked pronouns, the semantic component associated with things, such as the butcher, would not be determined as male or female, in any case; rather, the strength of the particular of either quality would rely on the general occurrence of the male and female epitome of the applied classification on the planet. For example, if one has experienced more male models of butchers than female counterparts, there will be a more grounded detail of male gender related with the idea of butcher (Scheutz & Eberhard, 2004).

As a result, the underlying experience of the word butcher in a conversation would result in the establishment (e.g., enactment) of a symbolic idea of the butcher in the model of discourse with a more grounded portrayal of male gender than female gender. If butcher is the antecedent of a subsequent masculine pronoun, such as himself, no renewing of the gender related with the idea of the butcher is required. However, if butcher is the antecedent of a resulting ladylike pronoun, such as herself, then revising is required due to the discrepancy between the female sex indicated by the pronoun's female sexual orientation and the male sex that is unequivocally associated with the concept of the butcher. Updating the gender description linked with the conceptual representation of the antecedent noun is one of the primary causes of extended reading time when the gender of the noun corresponds to the antecedent noun's stereotype (e.g., Carreiras et al., 1996; Kerr & Underwood, 1984).

According to Corbett (1991), gender is the most confusing of the syntactic classes that intrigues monolingualists just as language specialists, and that it turns out to be more interesting the more it is researched. According to (Webster's Ninth New Collegiate Dictionary, 1991), Gender is defined as a subclass within a grammatical class (as a noun, pronoun, adjective, or verb) of a language that is partly arbitrary but

also partly based on distinguishable characteristics (such as shape, social rank, mode of existence, or sex) and that determines agreement with and selection of other words or grammatical forms.

2.7. Semantic Features Associated with Nouns

Specifically, when a noun, such as a butcher, is recognized, a token of the concept linked with the lexical representation of the butcher is established in the discourse model. This idea is thought to be made up of essential semantic aspects that represent the noun's core meaning or sense. In the case of butchers, the requirements would include animated, human, as well as many aspects establishing the core sort or categorization of individuals indicated by the term (e.g., those who cut meat). Gender characteristics are included in the combination of semantic information associated with a noun that identifies a human category. The semantic element addressing the central sense, or which means of items that must indicate a female or male classification, such as nun and priest, would have a component that is identified as female or male, independently (Scheutz & Eberhard, 2004).

2.8. Gender Distinctions

In some languages, all living and non-living things require gender distinctions, e.g., Urdu. So, it is not surprising that languages have developed verbal gender distinctions that correlate with biological distinctions in the case of living things. There are different words for distinct things in different languages. There are distinct words in different languages for father, mother, man, woman, male and female referents. (For example, in English, "she" and "he"; in French, "elle" and "il"). Languages differ in their use of gender differentiations for words that refer to entities that do not have biological sex. Corbett (1991) had differentiated between languages having semantic and formal gender systems.

English and Chinese languages fall into the first category because gender is encoded in linguistic elements only for referents with biological sex. Romance languages, for example, fall into the second category. All nouns in these languages are gender marked, either feminine or masculine. There is frequently a clear relationship between the sex of the referent and the gender of the noun and when nouns refer to animate entities (which we often refer to as conceptual gender).

The genders of numerous animal names and a handful of nouns referring to people, on the other hand, have no relation to the sex of the referent. Gender is marked on nouns in this class, however it appears to be a lexical element attribute, as it is on nouns relating to abstract things and objects. Gender marking is commonly used to construct long-distance relationships between sentence elements, i.e. to quantify agreement, regardless of a language's gender system. For instance, English nouns, subjects and pronouns agree in gender.

2.9. Grammatical Gender

Gender being a category of Noun has three types; feminine, masculine and neuter.

When it has masculine characteristics then it is masculine, feminine qualities then feminine and when it is not clear about the gender then it is assumed to be as neuter as in the case of hen, until and unless it is not clear if it is rooster or hen.

Man: Masculine gender

Woman: Feminine gender

Chicken: Neuter gender

(If the word does not appear to be masculine or feminine, it is a neuter word.)

2.9.1. Examples of Gender

The gender of a noun in English influences the pronouns that are used with it (e.g., he, she, it) as well as the possessive determiners (e.g., his, her, its).

e.g.:

- The **man** painted **his** new bag, which **he** bought a day ago.
- The **girl** lost **her** pink frock, which **she** had worn at party.
- The **cat** chewed **its** leather neck collar, which **it** hated the most.

While there is many gender-specific nouns in English (for example, actor, actress, prince, princess), a regular noun (for example, parent, cousin, teenager, teacher) does not indicate its gender until it is replaced for a pronoun or used alongside a possessive determiner.

2.10. Gender in English

Modern English usually distinguishes between three genders: masculine, feminine, and neuter. They are separated on a strictly semantic basis, with humanness (animacy) and the gender of the relevant referents serving as the criterion. Such systems are also referred to as "natural gender systems."

2.10.1. Pronominal Gender System

The pronominal system is the sole area of English grammar where gender is evident, i.e., where agreement is triggered. Therefore, I shall refer to this system as "pronominal gender." For human male referents, masculine pronouns are used, feminine pronouns for human female referents, and neuter it is used for all other things. These pronouns, when used anaphorically, replace the respective nouns.

A. he: John, man, child, etc.

B. she: Mary, female, young lady, etc.

C. Stone, table, water, grass, etc. are examples.

The usage of gendered pronouns (he/she/it) is flexible and subject to additional criteria, notwithstanding the previously described obvious and straightforward norms. First, the pronouns he and she are routinely expanded to encompass animals. Depending on their sex, he and she may be used to refer to higher (often domestic) animals. Additionally, the male pronoun is used for creatures of uncertain sex. However, neutering is always a possibility for all species of animals (Siemund, 2002).

2.11. Gender Assignment

The assignment of a noun to a certain gender class may be based on phonological, morphological, or semantic criteria or a (sometimes complex) combination of these factors. Important and prevalent semantic criteria include animality and biological sex (Corbett, 1991).

Two broad questions and their respective replies will be considered. First, why is the degree of bilingualism of bilingual children different from that of those who learn a second language (L2) at an older age? In other words, is there an age beyond which second-language acquisition becomes less effective? Second, what variables account

for the problems and degree of success that later language learners encounter when adopting a second language?

It has been noted several times that the speech of adult bilingual speakers varies considerably more than the speech of adult monolingual speakers. Studies on the development of bilingual children reveal that the amount and kind of exposure play a vital role in explaining such diversity (e.g., Gathercole, 2007; Gathercole & Thomas, 2005; Pearson, Fernandez, Lewedeg, & Oller, 1997; Unsworth, 2013).

In addition, we assume that gender assignment in L1 and (potentially) L2 acquisition is governed in part by statistical learning mechanisms (Saffran, Aslin, & Newport, 1996) and partially governed by rules. This presumption implies that gender assignment varies across nouns in terms of correctness, because for some nouns, gender assignment follows certain statistical patterns, whereas for others, gender assignment runs counter to (or contradicts) such patterns, implying that rules must be learned item-by-item. If statistical learning is subject to input frequency, which we believe to be plausible, then L2 speakers who reside in the L2 country (and therefore have more exposure to the language and more opportunities to use it) should perform relatively better in terms of lexicon than non-resident L2 speakers.

2.12. Criteria for Gender Assignment

The criteria for the assignment of gender in gendered languages vary from language to language. Some languages include gender assignment rules based on the semantic domains and natural sex of nouns (e.g., English). In other languages, gender assignment is mostly based on formal features of nouns. There is no language with a strictly formal gender assignment system (Kupisch, Akpınar, & Stohr, 2013).

According to Corbett (1991, p. 49 and p. 59), French and German have a combination of formal and semantic gender assignment criteria, however not all researchers agree. Tucker, Lambert & Rigault (1977) proved that noun endings are significant markers of grammatical gender in French, yet some linguists continue to assert that gender assignment is arbitrary, at least for inanimate nouns (see Lyster, 2006 for an excellent overview of the debate).

Furthermore, adherents of the rule-based paradigm hold divergent views on the nature of these rules, particularly whether morphological and phonological rules can be

reliably distinguished. Even though first language acquisition is considered to be reasonably complete by the ages of 3 to 4, there is a significant shift to the majority language when minority language-dominant bilingual youngsters begin school. Language shift frequently occurs in the home, so that a family that previously used the minority language solely at home begins to use the majority language more when the children interact with classmates who speak the majority language and begin to use it with their siblings. This transition in language usage can have a considerable impact on the stability of the L1 system acquired in early life, causing sequential bilinguals to experience minority language (L1) attrition once teaching in the majority language (L2) begins. Bilingual infants raised up speaking both the dominant and minority languages since infancy — simultaneous bilinguals — might also be harmed by linguistic imbalance, even if they were proficient in both languages during their early linguistic development. According to adult research, if knowledge of the minority language does not reach age-appropriate proficiency, it risks remaining incomplete throughout adulthood (Montrul, 2002; Polinsky, 2006). Finally, bilingual children in elementary school are especially vulnerable to significant swings in language use, which can harm their linguistic ability in the minority language.

2.12.1. Nouns, Adjectives and Determiners in Relation to Gender

In the literature on syntax, there is agreement that nouns are lexically defined by a gender feature [feminine] (Carroll, 1989; Carstens, 1991), implying that gender is a non-interpretable (formal) property (Chomsky, 1995). Others have proposed that gender and number are functional categories in the Determiner Phrase, or DP, which comes before the noun phrase (Abney, 1987; Bernstein, 1993; Ritter, 1991).

Carstens (1991) defines nouns as the head of a noun phrase with an uninterpretable gender feature. The noun then elevates the Number phrase to D (for determiner), where it validates or evaluates gender traits in specifier-head (for noun-adjective concord) and head-head (for determiner-noun concord) connections. Gender traits are compared to those of other categories, such as determiners and adjectives, in these arrangements. Gender is thus assigned lexically to nouns, although gender agreement is a syntactic feature-checking method in languages such as Spanish.

Consequently, there are two potential sources of error for speakers when producing gender agreement: The first is lexical and concerns noun gender assignment, while the

second is syntactic and concerns the gender agreement rule between noun determiner and adjective. The gender of the determiner is frequently cited as evidence for lexical assignment of gender in language acquisition studies, as it appears that monolingual children predict the gender of nouns based on the gender of the determiner (Carroll, 1989; Lew-Williams & Fernald, in press). A gender error with the determiner, on the other hand, can be associated with agreement as well as assignment, albeit this is difficult to identify. (Dewaele & Veronique, 2001). A gender mismatch between the determiner and the adjective, on the other hand, is typically seen as evidence of an agreement or grammatical error.

2.12.2. Noun Phrase Challenge for L2 Learners

Even at the most advanced levels of competency, grammatical gender in noun phrases is a continuing challenge for L2 learners who begin acquiring the language after puberty (Bruhn de Garavito & White, 2002). Nonetheless, a recent study on the L2 and bilingual learning of neuter gender in Dutch by Hulk and Cornips (2006) reveals that, depending on their sociolinguistic circumstances, some bilingual children may be no different from adult L2 learners. Hulk and Cornips revealed that as compared to monolingual peers of the same age, ethnic minority L2 children aged 9-11 who have been exposed to Dutch as a dominant language since infancy fail to learn the neuter gender agreement with determiners.

2.13. Grammatical Gender vs Natural Gender

In terms of gender, it is critical to distinguish between grammatical and natural gender, as their representation and usage may differ among languages. Grammatical gender divides all nouns into two or more grammatical gender classes (male, female, neutral), with grammatical gender assignment being a language-based convention, whereas natural gender determines the biological gender of the referent. We were interested in natural gender in our study because English lacks a grammatical gender system (Kurinski & Sera, 2011).

2.13.1. Natural Gender in Urdu

In Urdu, the biological gender conveyed by a word (e.g., human, animal) typically specifies the gender of a noun (e.g., mother: maa; father: bap). However, it is also true

that certain Urdu terms are not gender-specific and must be acquired (Schmidt, 2004). For example, the Urdu word for 'labour' (kam) is masculine.

Researcher was also interested in children's ability to identify gender-related concerns in English in this study. The gender agreement was incorrect in 50% of the sentences (e.g., "She is a fine boy"), and the grammatical structure was unclear in the remaining phrases (e.g., "The boy slept in her own bed"). This enabled us to investigate children's capacity to distinguish grammatical and ambiguous gender formulations in the absence of sufficient sentence-level information to co-index the antecedent with its subsequent pronoun. The following research questions were posed: The performance of monolingual and bilingual youngsters on a grammatical judgement exam. Do potential monolingual

2.14. Kinds of word order breaches

Sentence-level gender agreement breaches are possible. Furthermore, these structures (word order, gender) were chosen because their representations in English, Spanish, and Urdu differ. (Davidson et al., 2019). Breaches of word order might take one of two kinds.

A) Agrammatical

They might be entirely agrammatical (e.g., "He walked to school") or

B) Asemantic

Asemantic with a breach of word order resulting in a semantic anomaly (e.g., "The television watched the children"). The first kind accounted for fifty percent of the word order violations, while the second type accounted for the remaining fifty percent.

C) Dubious Gender Agreement

Additionally, gender infractions took one of two kinds. The remaining half resulted in dubious gender agreement (**for example, "The guy played with her buddies**).

Additional instances may be found in Table 2. Per construction, twenty sentences were delivered, including 10 grammatically correct and 10 grammatically faulty examples of the sentence kinds listed above. Consequently, the grammaticality assessment test yielded six total scores: Word Order-Correct, Word Order-Incorrect

(Agrammatical), Word Order-Incorrect (Asemantical), Gender Correct, Gender-Incorrect (Incorrect Agreement), and Gender-Incorrect (Ambiguous Agreement).

Similarly, according to Davidson et al. (2010), children were instructed, "I'm going to read you a few lines and I'd like you to tell me whether each one seems appropriate." If a youngster responded, "No, that didn't sound right" or "You said it incorrectly," they were asked, "Tell me, if you can, what is wrong with the way I spoke the sentence?" All students participated in two 25-minute testing sessions administered on distinct, non-consecutive days. In a counterbalanced sequence, monolingual children performed the PPVT-III Form A and half of the grammaticality assessment problem in the first session. In the second session, monolingual children performed the remaining half of the grammaticality assessment test.

Structure Correct Inaccurate Word order "*The bunny consumed a carrot*".

The bicycle rode the ground. (Incorrect use)

The instructor read the book. To school, he walked. (Incorrect Grammar)

The woman watered the lawn. The television viewed the youngsters. The butterfly took flight and flew away. The meal consumed the child. (asemantical) Gender

The child rode his bicycle. He is a cruel boy. (incorrect agreement) She is a cruel young lady. She is a gentleman. The youngster misplaced his school assignments. The child interacted with her pals. The girl neglected to bring her umbrella with her. She played beside his companions. (ambiguous accord (Davidson et al., 2019))

In both German and English, *er* is a productive morpheme that can be combined with a verb stem to produce a noun signifying the actor or an instrument, with the latter frequently yielding compound nouns. The infinitives of the verbs *to talk* and *to print* in English combine with *er* to form the agentive noun *speaker* and the instrument noun *printer* or *laser printer*, respectively. Similarly, in German, the verbs in the infinitives *sprechen* (*to speak*) and *drucken* (*to print*) combine with *er* to get the nouns *Sprecher* (*speaker*) and *Drucker* (*printer*) or *Laser Drucker* (*printer*) (*laser printer*). In contrast to English *er* nouns, which have no grammatical gender, the majority of German *er* nouns are masculine. In addition, this morphological regularity interacts with a semantic regularity in which the gender of a noun referring to a human being corresponds to that entity's sex. Thus, in English, the agentive word *speaker* can refer to either a man or a

woman, but the comparable German term *Sprecher* refers to a man. The feminine inflection in is applied to the agentive noun *Sprecherin* to indicate a female speaker. (Scheutz & Eberhard, 2004)

According to Comrie (1999), gender assignment in languages is determined by two sorts of principles: semantic and formal. For example, in the English language, "nouns are assigned a gender based on their meaning" (pp. 458), i.e., according to a semantic principle. Nouns, on the other hand, have a grammatical gender in Urdu.

2.15. Research Gap

Montrul et al. (2008) studied gender agreement in adult L2 learners and Spanish heritage speakers related to the effect of age and the context of acquisition. Their study examined information on gender agreement in Spanish L2 students and heritage speakers, who contrasted in age and setting of language acquisition. The study also concluded that the steady trouble with grammatical gender in grown-up L2 learners is because of age. These records foresee that heritage speakers ought to be more precise on gender agreement than L2 learners because their Spanish language learning began earlier.

Scheutz & Eberhard (2004) studied *the* effects of morphosyntactic gender features in bilingual language processing. Their research was about how the two languages in the bilingual minds operated and how their processing was carried out. It was observed in their experiment that masculine nouns ending with *er* in German activated the same phenomenon in their L2 which was English.

Schulz & Grimm (2019) studied the role of age factor in language acquisition. They investigated the age effects in monolinguals or bilinguals. They investigated the subject-verb agreement by the age of three and after age six and the case marking. They concluded that simultaneous learners did not have any effect on their L2 due to their home language. They also suggested that late learners could become good at L2 by giving more time to their language learning.

Şeker (2018) had done his research on the bilingual acquisition of English and Turkish languages, it is a case study in which one of the research objectives of this study was to determine whether one language system lags behind or outnumbers the other throughout an infant's Turkish-English bilingual acquisition process while

growing up in a multilingual household or environment. More specifically, he wanted to see if there was a difference in language learning levels between bilinguals, and if so, what the explanations were.

Sinka & Schelletter (1998) had researched on Morphosyntactic development in bilingual children. This research examines the morphosyntactic development of two bilingual infants as well as the challenges generated by the debate over the unified system vs separate development hypothesis, focusing on nouns and verbs.

The above review of literature shows that there are some previous studies on the acquisition of morphosyntactic features in bilinguals. However, the studies have been conducted on German-English bilinguals and Spanish-English bilinguals but no research has been conducted on Urdu-English bilinguals to explore the development of their morphosyntactic ability of gender marking. More specifically, previous researches have not taken gender marking in bilinguals especially in Urdu and English bilinguals into account. The present study is an attempt at exploring the morphosyntactic development of the ability of gender marking in Urdu-English bilinguals. It has been observed that bilinguals with low proficiency in any of the two languages get confused while making gender in either language. This research intends to find out whether children who have acquired two languages, Urdu and English, from an early age make such mistakes or not and how they acquire the morphosyntactic features related to gender in two grammatically different languages simultaneously.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter provides the research methodology for this study including the research type, research design, research methods and tools used in the present study along with the sampling techniques and data collection and data analysis processes.

3.1. Research Design

This research uses mixed method design for investigating and analyzing the gender marking ability in simultaneous bilinguals. Both qualitative and quantitative methods are used. The data gathered through psycholinguistic experimental tests has been quantified and interpreted. The separate development hypothesis has been used as the theoretical framework for this research. To explore the development of morphosyntactic ability of gender marking in Urdu-English simultaneous bilinguals, three psycholinguistic experimental tests have been carried out, which include: grammatical judgment task, picture naming task and translation task.

3.2 Population

For this investigation, the target population comprises the bilinguals whose languages were Urdu and English. Two sets of bilinguals were selected: those who acquired both the languages at an early age and those who started learning their second language after acquiring their first language. Data was collected from 48 bilinguals, with 24 bilinguals in each group.

3.3. Population and Sampling

Purposive sampling has been used for this research as it proved helpful for the researcher to choose a sample according to the objectives of the research.

The sample of 48 participants is divided into two groups as follows:

- 24 simultaneous bilinguals belonging to three age groups and an equal number from both genders.
- 24 sequential bilinguals belonging to three age groups and an equal number from both genders.

S #	Age group	Sequential bilinguals		Simultaneous bilinguals	
1	4 to 5 years	4 girls	4 boys	4 girls	4 boys
2	6 to 8 years	4 girls	4 boys	4 girls	4 boys
3	9 to 10 years	4 girls	4 boys	4 girls	4 boys

Thus, there are 8 boys and 8 girls of each of the three age groups in both sequential bilinguals and simultaneous bilinguals.

3.3.1. Rationale for Selecting Different Age Groups:

As for this research purpose, 3 different age groups, consisting of 4 to 10 years old, 6 to 8 years old, and 8 to 10 years old have been selected to better understand language acquisition. These age groups have been selected following Unsworth (2013), as this study also studied a gender system of two languages and her population ranged from 3 to 17 years old.

3.4. Criteria for Sampling

The criteria for the selection of sequential bilinguals are given below:

- They learnt Urdu only, for first 3 years
- They learnt English later on in preschool or play group

The criteria for selection of simultaneous bilinguals are given below;

- They learnt Urdu and English simultaneously at home
- They spoke English equally as Urdu

This was determined on the first visit to the school. With the approval and permission of the principle after confiding the purpose and intent of the visit, class teachers of the junior classes up to grade 5 were asked to oversee and help with the survey and activity for data collection. Both the survey for sample construction and the activity involving data collection was done at the same day and time, one class at a time. The process took no more than thirty minutes in each class.

The initial question put to them was;

Q: “What language(s) do you speak?”

To which the response of most was ‘Urdu and English’. The next question asked was;

Q: “Which language did you learn first?”

To this question, they had mixed replies. Some reported to have learnt Urdu first while others reported to have learnt both English and Urdu at home. The first of these was categorized in the sequential bilinguals’ groups whereas the second was classified as simultaneous group. The questions were the same for classes Montessori, kindergarten, grades 1, 2, 3, 4 and 4; thus, the three age groups for the study to help add clarity in data analysis.

The children older than 7 years of age were asked additional questions;

Q: Which language did you speak until at home 7 years?

To this they replied along the lines of either ‘only Urdu’ or ‘both Urdu and English’.

This was done considering the principle of critical age of language acquisition which is 7 years of age for a child.

The participants were asked the status of their language usage with the help of the class teacher of each class. The students who showed interest in the questions, willingness in the activity presented to them and were fully certain about what language they spoke while growing up and to what extent were chosen for inclusion in the sample.

3.5. Data Collection

Data has been collected through two tasks: grammatical judgment task, picture naming task and translation task.

3.5.1. Grammatical Judgment Task (GJT)

This task has helped to analyze the awareness of gender agreement between nouns and their antecedents. This task has been adapted from (Davidson et al., 2019) in his research. It is a test of syntactic consciousness. All children took a grammaticality evaluation test in English and Urdu. In place of alternative measures of syntactic awareness (e.g., oral cloze task, replication of mistakes task), a grammaticality judgement test was administered for numerous reasons. First, the majority of young infants can respond to this sort of activity since it demands a minimal level of attentional control. However, by asking children to explain their replies, a more nuanced study of

their syntactic awareness abilities may be gained using this test. By doing so, one can access their knowledge analysis level (i.e., syntactic knowledge).

In addition, the grammaticality judgement exam is advantageous since it permits the evaluation of children's knowledge of a variety of grammatical constructs. The grammaticality judgement exam consisted of 40 English sentences, 20 of which were accurate and 20 of which were incorrect. Assessed were two distinct grammatical structures (word order and gender).

It was hypothesized that bilingual advantages (i.e., more accurate performance on an English grammaticality judgement test) would emerge when bilingual children's English receptive vocabulary proficiency was at or above their age level, whereas disadvantages might be observed for bilingual children whose English receptive vocabulary proficiency was below their age level. Based on previous research indicating that syntactic awareness skills and multilingual benefits in particular may necessitate adequate levels of language competency in early infants, this prediction was made (Cromdal, 1999; Davidson et al., 2010).

This task included 10 sentences in total out of which 5 were English, while five sentences were Urdu sentences. A few of the sentences were grammatical, and few were ungrammatical which were used by the researcher to assess the gender marking ability of the bilinguals' gender agreement. The respondents were asked about the grammaticality of the sentences and then sentences were marked as right or wrong by the respondents. The tool is given in appendix B.

3.5.2. Picture Naming Task

This task was used to investigate the awareness of gender agreement in bilinguals to fully investigate their awareness and development about gender agreement. This task has been adapted from Kirova (2016). 10 pictures depicting both the genders were presented along with the phrases containing masculine and feminine. This task was done in Urdu and English so that their development and ability can also be checked through this picture naming task. Participants were asked if the object is having feminine or masculine gender. They were asked to say two to three lines about the picture. The tool is given in appendix C.

3.5.3. Translation Task

A list of ten English sentences was given to the participants to translate into English. These sentences included different animate and inanimate entities, coupled with different verbs, auxiliaries and adjectives. Inanimate entities are neutral in English. This task was hence meant to see how sequential and simultaneous bilinguals deal with the morphosyntax of sentences involving such entities. Another list was then given to the participants which included the same sentences in Urdu, and were to be translated into English. The purpose of this was to compare how sequential and simultaneous bilinguals deal with Urdu morphosyntax. This data was analyzed

- a. in the form of a comparison of Urdu and English morphosyntax for each group
- b. comparison of both groups for each language
- c. cross-comparison of each grammatical category to pinpoint the problematic area in each language

The translation task is shown in the appendix D.

3.6. Limitations

As the study's main purpose was to find the morphosyntactic development of gender agreement in bilinguals, it is noted that children can understand the sentences and comprehend them well. But, some of them were unable to read properly, so the researcher had to read for them. The students of Class 1 were facing difficulties in comprehending some of the sentences but they showed positive response and attitude. Also, during the pilot study, it was realized that it was necessary to read the sentences in front of the students which was taking much time. That is why, for further data collection, a small number of sentences were selected.

3.7. Data Collection Tools

Data was collected through experimental tasks such as picture naming task, grammatical judgment task and translation tasks administered with the participants on three separate worksheets.

3.8. Research site

The research was conducted in English medium schools of Bahawalpur: The City School, Army Public School, and Bloomfield Hall School.

3.9. Data Analysis Procedure

Noun agreeing with a pronoun, or its antecedent has been considered as correct for English gender marking. Adjectives, pronouns, and articles agreeing with their antecedent or noun were considered as right gender agreement for Urdu gender marking. Data was analyzed by checking the gender agreement and then looking at the grammatical rules of Urdu and English languages. Tables were made to put the numerical value against the given sentences or tasks and then numbers were allocated according to the number of correct sentences. If a student has marked 4 right answers out of 4, then 4 numbers were given to him and this is how numerical values are gathered.

3.10. Theoretical Framework

This research is primarily based on bilinguals and the criteria to choose them has been inspired by the definition by American Speech–Hearing Association ASHA (2004) that defines bilingualism is the use of two languages by an individual. Bilingual Acquisition, on the other hand, refers to the process of learning two mother tongues simultaneously.

The insight for this study has been taken from the work of De Houwer (2005), namely: separate development hypothesis. The Separate Development Hypothesis essentially expresses that exceptionally youthful bilinguals utilize two separate linguistic frameworks, one for every language, when they communicate in their two languages. From birth or soon after the birth, two or more languages might be spoken with children at the same time. Children around their second birthday start showing the morphosyntactic development signs in their production. Basically, this hypothesis proposes that from birth, if children are exposed to two languages, they develop two separate morphosyntactic systems. It further proposes that "the morphosyntactic development of one language does not have any fundamental effect on the morphosyntactic development of the other (De Houwer, 1990).

De Houwer (2005) stated that young bilingual children mirror the syntactical development of both languages they're exposed to, and they're able to construct sentences that are easily understood in both languages; from a very young age, the morphosyntactic development of one language has no significant impact on the morphosyntactic development of the other.

According to De Houwer (2005), "a situation referred to as bilingual acquisition, children undergo a double acquisition process in which two morphosyntactic systems are acquired as fundamentally independent closed systems known as "Separate Development Hypothesis (SDH)" (p.1). As a result, infants who are exposed to two languages from birth develop two unique grammatical systems (while ignoring phonology or lexicon) (De Houwer, 2005, p.1). In contrast, "research in the 1970s suggested the Single-System Hypothesis," which held that multilingual infants "systematically apply the same syntactic rules to both languages." Kroll and De Groot (2009), p.20.

For addressing the separate development hypothesis, there are some methodological requirements. It is necessary to investigate the extent to which the unilingual utterance of a child from language A use the morphosyntactic features from language A (one language) and to which extent the child in unilingual utterance from language alpha uses the morphosyntactic features from language alpha (the other language) (De Houwer, 2005).

Many researchers (e.g., De Houwer, 2009; Genesee, 2003) suggest that a child has innate language ability and biological ability to differentiate between languages and the ability to learn or learn them efficiently for both input and output (Baker, 2001).

Furthermore, according to De Houwer (2005), the hypothesis predicts that infant bilinguals will exhibit the same structures in their languages at the same developmental period as monolingual speakers of the languages. She claims that similar comparisons have been made for Basque, Dutch, English, French, German, and Spanish to date. Nonetheless, other scholars believe cross-linguistic effect exists in early bilinguals (Döpke, 2000), albeit some types of influence may be more superficial (e.g., some instances of word order) and have minimal long-term impact on the grammatical frame.

According to Meisel (1989), Children go under the process called BFLA ('Bilingual First Language Acquisition') who hear two languages from birth. As they learn two languages from start so there is no 1st language or second language but to distinguish between them so the languages in BFLA are named as language Alpha and language A. This terminology for naming languages had been borrowed from (Wölck, 1984).

According to the separate development hypothesis, children have the capability to understand two languages from their early life. Languages should be developed independently and none of the language should affect each other. There is clear evidence supporting this hypothesis of Separate languages in the youngster's utilization of a specific design that shifts across their two languages, however, utilizes the construction for language A while using lexical components from language A. For instance, in English a "yes-no" question includes the presence of a type of the supporting action word "do" toward the start of the sentence Do you need some tea? In Dutch, there is no do (for example "*Wil Je thee? 'Want you tea?'*"). All such contending structures should be concentrated in this manner to infer that the children have two separate frameworks (De Houwer, 2005).

Furthermore, De Houwer (2005) is of the view that young bilinguals should show similar constructions in their dialects at the similar formative stage as monolingual speakers of the dialects do. She reports that such correlations have been attempted to date for Basque, Dutch, English, French, German, and Spanish. However, a few scientists guarantee that there is a cross-etymological impact on early bilinguals (Döpke , 2000) though certain aspects of the impact might be shallower (for example a few examples of the word 'request') and might be of minimal super durable outcome to the syntactic frame.

Based on the claim of Guillelmon & Grosjean (2001), there is growing evidence that in languages where there is a gender agreement, congruent gender marks usually speed up the processing of the following nouns, which are related to congruent markings (or no marking at all). This impact is presently studied in monolinguals; however, little has been done concerning how bilinguals respond to gender orientation arrangements. So, this research has attempted to find out if bilinguals show a similar impact and regardless of whether it relies upon when they acquired and began utilizing the gender marking language on a routine basis.

Furthermore, De Houwer (2005) after conducting longitudinal studies on morphosyntactic development in bilingual infants published in the last 15 years concluded that no child produced the type of language repertoire predicted to develop in bilingual children according to transfer theory. Another study, conducted by Paradis, Nicoladis & Crago (2007) revealed that bilingual-monolingual differences are determined by the amount of information received by bilinguals in the two languages.

CHAPTER 4

DATA ANALYSIS

The chapter is divided into three sections. The first section presents the data from task one, grammatical judgment task, which requires the participants to grammatically judge the given sentences by marking them as either correct or incorrect. The second section presents the data from the second task, Picture Naming Task which requires the participants to produce gender-correct/ incorrect sentences. The third section deals with the task is a translation-based task that deals with translating Urdu to English and vice versa.

4.1. Grammatical Judgment Task

This task included 8 sentences in English and 5 in Urdu. Two of sentences in English involve proper nouns, one of them involves an object, while two involve gendered pronouns as the subject. One of the 8 sentences involved an abstract noun whereas two involved common nouns. These have been tabulated under different sections for comparison.

4.1.1. Grammatical Judgment of English Sentences

The details and specifications of the sentences as mentioned in the same order as the task sheet, are tabulated below.

Table 1. Specifications of English Sentences

S #	English sentence	Subject/ objected being referred to	Grammatical Category	Gender Category	Sentence Correctness
1.	Hina is eating her snacks	Hina (a girl)	Gendered proper noun	Feminine	Correct
2.	This is my chair and I like her	Chair	Neutral object	Neutral	Incorrect
3.	He is going to school because she is a student	He (a boy)	Gendered pronoun	Masculine	Incorrect
4.	It is a good girl	Girl	Gendered common noun	Feminine	Incorrect
5.	Qasim is a good boy. He does his homework	Qasim (a boy)	Gendered Proper noun	Masculine	Correct
6.	The boy is fat.	Boy	Gendered common noun	Masculine	Correct
7.	The girl is shouting.	Girl	Gendered common noun	Feminine	Correct
8.	I had a dream. He was very scary.	Dream	Neutral abstract noun	Neutral	Incorrect

4.1.1.1. Sequential Bilingual Girls' Performance on Grammatical Judgment Task

The performance of sequential bilingual girls on Grammatical Judgment task has been shown in detail in the table below.

Table 2. Sequential bilingual Girls performance on Grammatical Judgment Task

S #	English Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	Hina is eating her snacks	4/4	100 %	4/4	100 %	4/4	100 %
2.	This is my chair and I like her	0/4	0 %	2/4	50 %	3/4	75 %
3.	He is going to school because she is a student	0/4	0 %	2/4	50 %	3/4	75 %
4.	It is a good girl	0/4	0 %	2/4	50 %	3/4	75 %
5.	Qasim is a good boy. He does his homework	4/4	100 %	4/4	100 %	4/4	100 %
6.	The boy is fat.	4/4	100 %	4/4	100 %	4/4	100 %
7.	The girl is shouting	4/4	100 %	4/4	100 %	4/4	100 %
8.	I had a dream. He was very scary.	3/4	75 %	4/4	100 %	4/4	100 %

The table above gives us a clear picture of the variation and improvement of performance as we go from smaller age groups towards the bigger age group. Similarly, another point to note here is the fact that the proper nouns are identified better by these bilinguals as compared to the neutral objects like chair, which have been mistaken for gendered objects. This is seen more among the smaller age groups and relatively less as we move towards the higher age groups.

4.1.1.2. Sequential bilingual boys' performance on Grammatical Judgment task

The performance of sequential bilingual boys on Grammatical Judgment task has been shown in detail in the table below.

Table 3. Sequential bilingual Boys performance on Grammatical Judgment Task

S #	English Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	Hina is eating her snacks	4/4	100 %	4/4	100 %	4/4	100 %
2.	This is my chair and I like her	0/4	0 %	¼	25 %	¾	75 %
3.	He is going to school because she is a student	0/4	0 %	2/4	50 %	¾	75 %
4.	It is a good girl	0/4	0 %	¼	25 %	¾	75 %
5.	Qasim is a good boy. He does his homework	4/4	0 %	4/4	100 %	4/4	100 %
6.	The boy is fat.	4/4	100 %	4/4	100 %	4/4	100 %
7.	The girl is shouting	4/4	100 %	4/4	100 %	4/4	100 %
8.	I had a dream. He was very scary.	2/4	50 %	4/4	100 %	4/4	100 %

The table above gives very similar results as those of the sequential bilingual girls. A positive variation and improvement of performance is seen as we go from smaller age groups towards the bigger age group. Again, the proper nouns are properly identified by these bilinguals whereas neutral objects like chair have been mistaken for gendered ones more by the smaller age groups and relatively less as we move towards the higher age groups.

4.1.1.3. Simultaneous Bilingual Girls' Performance on Grammatical Judgment task

The performance of simultaneous bilingual girls on Grammatical Judgment task has been shown in detail in the table below.

Table 4. Simultaneous bilingual Girls performance on Grammatical Judgment Task

S #	English Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	Hina is eating her snacks	4/4	100 %	4/4	100 %	4/4	100 %
2.	This is my chair and I like her	4/4	100 %	4/4	100 %	4/4	100 %
3.	He is going to school because she is a student	4/4	100 %	4/4	100 %	4/4	100 %
4.	It is a good girl	4/4	100 %	4/4	100 %	4/4	100 %
5.	Qasim is a good boy. He does his homework.	4/4	100 %	4/4	100 %	4/4	100 %
6.	The boy is fat.	4/4	100 %	4/4	100 %	4/4	100 %
7.	The girl is shouting.	4/4	100 %	4/4	100 %	4/4	100 %
8.	I had a dream. He was very scary.	4/4	100 %	4/4	100 %	4/4	100 %

From the table above, it is seen that simultaneous bilingual girls identified everything including gendered common and proper nouns, neutral nouns and pronouns on the task, precisely and correctly. The result of simultaneous girls for all constructions included on the grammatical judgment task is thus 100%.

4.1.1.4. Simultaneous Bilingual Boys' Performance on Grammatical Judgment Task

The performance of simultaneous bilingual boys on Grammatical Judgment task has been shown in detail in the table below.

Table 5. Simultaneous bilingual boys' performance on Grammatical Judgment Task

S #	English Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	Hina is eating her snacks	4/4	100 %	4/4	100 %	4/4	100 %
2.	This is my chair and I like her	2/4	50 %	4/4	100 %	4/4	100 %
3.	He is going to school because she is a student	4/4	100 %	4/4	100 %	4/4	100 %
4.	It is a good girl.	2/4	50 %	3/4	75 %	4/4	100 %
5.	Qasim is a good boy. He does his homework	4/4	100 %	4/4	100 %	4/4	100 %
6.	The boy is fat.	4/4	100 %	4/4	100 %	4/4	100 %
7.	The girl is shouting	4/4	100 %	4/4	100 %	4/4	100 %
8.	I had a dream. He was very scary.	3/4	75 %	4/4	100 %	4/4	100 %

Like simultaneous bilingual girls, the simultaneous bilingual boys also identified the gendered proper nouns correctly, like the sentences involving Hina (a girl) and Qasim (a boy). This is the case for all age groups in the larger group. However, it can be seen that the smaller age groups mistook the neutral object 'chair', which is visible in the youngest age group. Similarly, 50% of the participants of the youngest age group misjudged the sentence 'it is a good girl' while 75% of the second age group misjudged the same. Again, the eldest age group performed the best on this sentence in particular and on the task in general.

The in-depth analysis of the various parameters from the grammatical judgment task to be compared, like neutral objects, gendered proper nouns, gendered common nouns, gendered pronouns, neutral pronouns etc. is given in the following sections.

4.1.1.5. Neutral Objects in English

Neutral objects in English were included in sentence 2 of the grammatical judgment task. Which reads “this is my chair and I like her”. The correct version of it would be the replacement of ‘her’ at the end with ‘it’. In the task, the results for this incorrect sentence are as follows.

Table 6. Grammatical Judgment of Neutral Objects

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 yrs	7-8 Yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 Yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence: This is my chair and I like her.	4/4	4/4	4/4	2/4	4/4	4/4	0/4	2/4	3/4	0/4	1/4	¾
	100 %	100 %	100 %	50%	100 %	100 %	0 %	50 %	75 %	0 %	25%	75 %

From the table above, it can be seen that simultaneous bilingual girls and boys performed better than the sequential bilingual girls and boys in this construction. Similarly, within the simultaneous bilingual group, the girls performed better than the boys and their result was 100%. Within the simultaneous bilingual boys’ group, the higher age groups performed better than the lower age groups. Same this the case for the sequential bilinguals, the female children performed better than the male children. Within the female sequential bilingual children, the higher age groups performed better than the lower ones. Similarly, the higher age groups performed better than the lower age groups among the male sequential bilinguals.

4.1.1.6. Neutral Pronouns used against Common Nouns (English)

The neutral pronoun was included in sentence 4 of the grammatical judgment task. The comparative performance of the simultaneous and sequential bilinguals can be seen in the table below.

Table 7. Grammatical Judgment of Neutral Pronoun used against Common Noun

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 Yrs	7-8 Yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence: It is a good girl.	4/4	4/4	4/4	2/4	3/4	4/4	0/4	2/4	3/4	0/4	1/4	3/4
	100 %	100 %	100 %	50 %	75 %	100 %	0 %	50 %	75 %	0 %	25 %	75 %

It is clear from the table above that simultaneous bilinguals performed better for this sentence involving the neutral pronoun than the sequential bilinguals. Among the simultaneous bilinguals the girls score came back as 100% whereas among the boys, different age groups gave different results. The performance correlates with age such that the higher the age group, the better the performance.

4.1.1.3. Gendered pronouns (English)

Gendered pronouns were included in sentence of the grammatical judgment task. The sentence reads ‘He is going to school because she is a student’ which shows the clash and non-concordance of the two pronouns used. The performance of the sequential and simultaneous bilinguals for this sentence is in the following table.

Table 8. Grammatical Judgment of Gendered pronouns (English)

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 Yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 Yrs
Sentence: He is going to school because she is a student.	4	4	4	4	4	4	0	2	3	0	2	3
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	50 %	75 %	0 %	50 %	75 %

For this construction the simultaneous bilinguals understanding of the non-concordance showed better than the sequential bilinguals. Both boys and the girls in this group scored hundred percent, whereas among the sequential bilinguals, the lowest age group (4-6 years) showed the lowest score.

4.1.1.4. Gendered Proper Nouns (English)

Gendered proper nouns are included on the grammatical judgment task in sentences 1 and 5. The performance of the simultaneous and sequential bilinguals as well as the comparison of the various age groups among boys and girls can be seen in the table below.

Table 9. Grammatical Judgment of Gendered proper nouns (English)

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 Yrs	7-8 yrs	9- 10 yrs	4-6 yrs	7-8 yrs	9- 10 yrs	4-6 Yrs	7-8 Yrs	9- 10 yrs	4-6 yrs	7-8 yrs	9- 10 yrs
Sentence: 1. Hina is eating her snacks.	4	4	4	4	4	4	4	4	4	4	4	4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
2. Qasim is a good boy. He does his homework.	4	4	4	4	4	4	4	4	4	4	4	4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

It is evident from the table above that both the genders among the bilinguals, i.e. the boys and the girls, all the age groups and both sequential and simultaneous bilinguals made no mistake with the sentences involving proper noun like Hina and Qasim. The result for these sentences is 100%.

Table 10. Grammatical Judgment of Abstract Nouns

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence:	4	4	4	4	4	4	3	4	4	2	4	4
	100 %	100 %	100 %	100 %	100 %	100 %	75 %	100 %	100 %	50 %	100 %	100 %

4.1.2. Grammatical Judgment of Urdu Sentences

Among the Urdu sentences, three involve objects, one has an abstract noun while one involves the gendered common noun ‘girl’. For reference, the details and specifications mentioned in the same order as the task sheet, are tabulated below.

Table 11. Specifications of Urdu Sentences

S #	Urdu sentence	Subject/object being referred to	Grammatical category	Gender category	Sentence Correctness
1.	<i>Larki ghar jar raha hy</i>	Larki/ girl (a feminine common noun)	Gendered common noun	Feminine	Incorrect
2.	<i>Larka cricket khail raha hy.</i>	Larka/ boy (a masculine common noun)	Gendered common noun	masculine	Correct
3.	<i>Mei ne saib kha li hy</i>	Saib/ apple (an object)	Gendered object	masculine	Incorrect
3.	<i>Kursi toot gya hy</i>	Kursi/ chair (an Object)	Gendered object	Feminine	Incorrect
4.	<i>Sabzi acha hota hy</i>	Sabzi/ Vegetables (An object)	Gendered object	Feminine	Incorrect
5.	<i>Mujhe need aa raha hy</i>	Neend/ sleep (An abstract noun)	Gendered Abstract noun	Feminine	Incorrect
6.	<i>Gaye doodh deta hy.</i>	Gaye/ Cow (animal, gendered)	Gendered noun, an animal	Feminine	Incorrect
7.	<i>Makri ooper bethi hy.</i>	Makri/ Spider (insect, Gendered)	Gendered noun, an insect	Feminine	Correct

4.1.2.1. Sequential Bilingual Girls' Performance on Grammatical Judgment Task

The performance of sequential bilingual girls on the grammatical judgment task is shown in the table below.

Table 12. Sequential Bilingual Girls' Performance on Grammatical Judgment Task

S #	Urdu Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	<i>Larki ghar jar raha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
2	<i>Larka cricket khail raha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
3.	<i>Ali Acha bacha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
4.	<i>Mei ne saib kha li hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
5.	<i>Kursi toot gya hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
6.	<i>Sabzi acha hota hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
7.	<i>Mujhe need aa raha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
8.	<i>Gaye doodh deta hy.</i>	3/4	75 %	4/4	100 %	4/4	100 %
9.	<i>Makri ooper baithi hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %

The table above summarizes the results of simultaneous bilingual girls. On all the sentences but one, all the age groups have scored a 100%. In sentence 8 which reads 'gaye doodh deta hy, age groups 4-6 and 7-8, 75% of the participants correctly identified it as wrong and 25% of both age groups wrongly identified it as correct. The noteworthy point here is that they did not mistake other objects or proper nouns.

4.1.2.2. Sequential Bilingual Boys' Performance on Grammatical Judgment Task

The performance of sequential bilingual boys on the grammatical judgment task is shown in the table below.

Table 13. Sequential Bilinguals Boys' Performance on Grammatical Judgment Task

S #	Urdu Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	<i>Larki ghar jar raha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
2.	<i>Larka cricket khail raha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
3.	<i>Ali acha bacha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
4.	<i>Mei ne saib kha li hy</i>	3/4	75 %	4/4	100 %	4/4	100 %
5.	<i>Kursi toot gya hy</i>	3/4	75 %	4/4	100 %	4/4	100 %
6.	<i>Sabzi acha hota hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
7.	<i>Mujhe need aa raha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
8.	<i>Gaye doodh deta hy.</i>	3/4	75 %	3/4	75 %	4/4	100 %
9.	<i>Makri ooper baithi hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %

In the table above, boys of all three age groups correctly identified the sentences involving the common nouns larka, larki, the proper noun sabzi, the abstract noun need, the objects sabzi, and the animate noun makri. The lowest age group however, misjudged the object saib and kursi, and the animate object gaye.

4.1.2.3. Simultaneous Bilingual Girls' Performance on Grammatical Judgment Task

The performance of simultaneous bilingual girls on the grammatical judgment task is shown in the table below.

Table 14. *Simultaneous Bilinguals Girls' Performance on Grammatical Judgment Task*

S #	Urdu Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	<i>Larki ghar jar raha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
2.	<i>Larka cricket khail raha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
3.	<i>Ali acha bacha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
4.	<i>Mei ne saib kha li hy</i>	2/4	50 %	¾	75 %	4/4	100 %
5.	<i>Kursi toot gya hy</i>	3/4	75 %	4/4	100 %	4/4	100 %
6.	<i>Sabzi acha hota hy</i>	3/4	75 %	¾	75 %	4/4	100 %
7.	<i>Mujhe need aa raha hy</i>	2/4	75 %	2/4	50 %	3/4	75 %
8.	<i>Gaye doodh deta hy.</i>	2/4	75 %	2/4	50 %	3/4	75 %
9.	<i>Makri ooper baithi hy.</i>	1/4	25 %	¾	75 %	4/4	100 %

The above table shows that all three age groups of simultaneous bilingual girls made no mistake in common nouns larka, larki, and the proper noun Ali. The eldest of the three age groups also correctly identified the objects kursi and sabzi, and the animate object makri, but misjudged the abstract noun need, the animate object gaye and the object saib. Similarly, the object saib, sabzi, kursi, the abstract noun need, and the animate objects gaye and makri were largely misjudged and misidentified by the lower and middle age groups. The one thing common to all was the accurate identification of common and proper nouns.

4.1.2.4. Simultaneous Bilingual Boys' Performance on Grammatical Judgment Task

The performance of simultaneous bilingual boys on the grammatical judgment task is shown in the table below.

Table 15. *Simultaneous Bilingual Boys' Performance on Grammatical Judgment Task*

S #	Urdu Sentence	Age 4-6 years		Age 7-8 years		Age 9-10 years	
1.	<i>Larki ghar jar aha hy</i>	4/4	100 %	4/4	100 %	4/4	100 %
2.	<i>Larka cricket khail raha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
3.	<i>Ali acha bacha hy.</i>	4/4	100 %	4/4	100 %	4/4	100 %
4.	<i>Mei ne saib kha li hy</i>	2/4	50 %	3/4	75 %	3/4	75 %
5.	<i>Kursi toot gya hy</i>	3/4	75 %	3/4	75 %	4/4	100 %
6.	<i>Sabzi acha hota hy</i>	2/4	50 %	3/4	75 %	3/4	75 %
7.	<i>Mujhe need aa raha hy</i>	2/4	50 %	3/4	75 %	3/4	75 %
8.	<i>Gaye doodh deta hy</i>	1/4	25 %	2/4	50 %	3/4	75 %
9.	<i>Makri ooper baithi hy.</i>	2/4	50 %	3/4	75 %	4/4	100 %

Like simultaneous bilingual girls, all three age groups of the simultaneous boys also correctly identified the common nouns larki and larki, and the proper noun, Ali. The highest age group also correctly identified the animate object makri, but at the same time misjudged the animate object gaye, the abstract noun need, the objects kursi, saib, sabzi. All the other age groups largely misjudged all but the three subjects mentioned. The misjudgment was greater among the lowest age group.

The parameters for analysis are thus;

- Gendered objects (Urdu)
 - Material nouns
 - Abstract nouns
 - Animals / Insects
- Gendered proper nouns (Urdu)
- Gendered common nouns (Urdu)

All the above-mentioned parameters have been compared for sequential and simultaneous bilinguals in order to look for the patterns along which their gender marking development is similar or different.

Table 16. Gendered Common Nouns (Urdu)

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			Boys		
Age group	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 Yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence:	4	4	4	4	4	4	4	4	4	4	4	4
<i>Larka cricket khail raha hy.</i>	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
<i>Larki ghaar ja raha hy.</i>	4	4	4	4	4	4	4	4	4	4	4	4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

The above table shows that gendered Urdu common nouns like *larka* and *larki* have been correctly identified by both the groups, i.e., sequential and simultaneous bilinguals irrespective of their ages and genders.

Table 17. Gendered Proper Noun (Urdu)

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			boys		
Age group	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence: <i>Aliacha bacha hy.</i>	4	4	4	4	4	4	4	4	4	4	4	4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Like gendered common nouns, the proper noun referring to a male child has also been correctly identified by both groups of bilinguals.

Table 18. Animals / Insects (Urdu)

Parameter	Simultaneous						Sequential					
Gender	Girls			Boys			Girls			boys		
Age group	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 Yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
Sentence: <i>Makri cooper beth hy.</i>	1/4	3/4	4/4	2/4	3/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
	25 %	75 %	100 %	50 %	75 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
<i>Gayedoodh deta hy.</i>	2/4	2/4	3/4	1/4	2/4	3/4	3/4	4/4	4/4	3/4	3/4	4/4
	50 %	50 %	75 %	25 %	50 %	75 %	75 %	100 %	100 %	75 %	75 %	100 %

The above table shows that sequential bilinguals seem to have relatively less difficulty in identifying gendered animate entities like 'gaye' and 'makri', which again is more prevalent among the lower age groups. The simultaneous bilinguals have shown lack of grammatical judgment for these items. The following table shows the comparison of sequential and simultaneous bilinguals for gendered inanimate objects.

Table 19. *Inanimate Gendered Objects*

Sentence	Simultaneous						Sequential					
	Girls			Boys			Girls			Boys		
Age Group	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Kusri toot gaya hy</i>	3	4	4	3	3	4	4	4	4	3	4	4
	75%	100%	100%	75%	75%	100%	100%	100%	100%	75%	100%	100%
<i>Sabzi achi hoti hy</i>	3	3	4	2	3	3	4	4	4	4	4	4
	75%	75%	100%	50%	75%	75%	100%	100%	100%	100%	100%	100%
<i>Mei ne saib kha li hy</i>	2	3	4	2	3	3	4	4	4	3	4	4
	50%	75%	100%	50%	75%	75%	100%	100%	100%	75%	100%	100%

The above table shows that sequential bilinguals have little to no difficulty in grammatically judging gendered inanimate objects in Urdu, however, the simultaneous bilinguals seem to have a lot of difficulty more for the boys than the girls, and for the lower age groups than the higher ones.

The table below shows the comparison of sequential and simultaneous bilinguals for Urdu abstract nouns.

Table 20. *Abstract Nouns*

Sentence	Simultaneous						Sequential					
	Girls			Boys			Girls			Boys		
Age Group	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 Yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Mujhe neend aa rha hy</i>	2	2	3	2	3	3	4	4	4	4	4	4
	50%	50%	75%	50%	75%	75%	100%	100%	100%	100%	100%	100%

From the table above, it is seen that sequential bilinguals scored a hundred percent in the grammatical judgment of Urdu items like 'neend' which is an abstract noun. The simultaneous bilinguals performed poorly on this item.

The table above shows the comparison of Urdu and English common noun as used comparatively by simultaneous and sequential bilingual girls and boys. The result for this variable came back 100 % for all the participants from all the categories.

4.1.3.2. Urdu proper noun vs English proper noun

The simultaneous and sequential bilinguals' correctness in the use of grammatical components of the sentence have been compared for English and Urdu sentence involving proper nouns, in the table below.

Table 22. *Urdu proper noun vs English proper noun*

Sentence	Simultaneous						Sequential					
	Girls			Boys			Girls			Boys		
<i>English Sentence</i>	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Hina</i>	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
<i>Qasim</i>	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
<i>Urdu Sentence</i>	Simultaneous						Simultaneous					
	Girls			Boys			Girls			Boys		
	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Ali</i>	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

The table above shows the comparison of proper noun as used in English and Urdu, by simultaneous and sequential bilingual girls and boys. The result for this variable, like the common noun, came back 100 % for all the participants from all the categories.

4.1.3.3. Urdu gendered object vs English object

Objects in Urdu are gendered in the sense that the grammatical elements that modify an object in a given sentence become gendered in accordance with the object. On the other hand, English object is not gendered. The comparison of sequential and simultaneous bilinguals' judgment of Urdu and English gendered objects is given in the table below.

Table 23. Urdu gendered object vs English object

Sentence	Simultaneous						Sequential					
	Girls			Boys			Girls			Boys		
<i>English Sentence</i>	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>This is my chair and I like her.</i>	4/4	4/4	4/4	2/4	4/4	4/4	0/4	2/4	3/4	0/4	1/4	3/4
	100%	100%	100%	50%	100%	100%	0%	50%	75%	0%	25%	75%
<i>Urdu Sentence</i>	Simultaneous						Simultaneous					
	Girls			Boys			Girls			Boys		
	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Kursi</i>	3/4	4/4	4/4	3/4	3/4	4/4	4/4	4/4	4/4	3/4	4/4	4/4
	75%	100%	100%	75%	75%	100%	100%	100%	100%	75%	100%	100%
<i>Sabzi</i>	3/4	3/4	3/4	2/4	3/4	3/4	4/4	4/4	4/4	4/4	4/4	4/4
	75%	75%	75%	50%	75%	75%	100%	100%	100%	100%	100%	100%
<i>Saib</i>	2/4	3/4	4/4	2/4	3/4	3/4	4/4	4/4	4/4	3/4	4/4	4/4
	50%	75%	100%	50%	75%	75%	100%	100%	100%	75%	100%	100%

4.2.3.4. Abstract Noun vs English Abstract Noun

Like other grammatical elements of the sentence, the abstract noun of Urdu is also gendered as opposed to the neutral abstract noun of English. The grammatical judgment of English and Urdu abstract noun by simultaneous and sequential bilinguals is shown in the table below.

Table 24. Urdu Abstract Noun vs English Abstract Noun

Sentence	Simultaneous						Sequential					
	Girls			Boys			Girls			Boys		
English Sentence	4-6 Yrs	7-8 Yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>I had a dream. He was scary.</i>	4/4	4/4	4/4	2/4	3/4	3/4	3/4	4/4	4/4	2/4	4/4	4/4
	100%	100%	100%	50%	75%	75%	75%	100%	100%	50%	100%	100%
Urdu Sentence	Simultaneous						Simultaneous					
	Girls			Boys			Girls			Boys		
	4-6 Yrs	7-8 yrs	9-10 yrs	4-6 Yrs	7-8 yrs	9-10 Yrs	4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
<i>Mujhe neend arha hy</i>	2/4	2/4	3/4	2/4	3/4	3/4	4/4	4/4	4/4	4/4	4/4	4/4
	50%	50%	75%	50%	75%	75%	100%	100%	100%	100%	100%	100%

The above table shows the comparative English and Urdu grammatical judgment of the simultaneous and sequential bilinguals in case of English and Urdu abstract nouns. In Urdu, the abstract noun is gendered while in English it is neutral. The results show that all the sequential bilingual identified the gender of the abstract noun in Urdu correctly whereas the lower age group among these bilinguals mostly misidentified the same. Among the simultaneous bilinguals, however, the case appeared to be the opposite. They correctly identified the anomaly in the English sentence in which the neutral abstract noun 'dream' was written as masculine. They however mostly misidentified the Urdu abstract noun instead, which was mentioned (wrongly) as masculine. This was more evident in the lower age groups among simultaneous bilinguals.

4.2. Picture Naming Task Analysis

Having evaluated the sequential and simultaneous bilinguals' performance on the judgment task, the second task designed for the analysis is a picture naming task which is a production task. This task is based on five pictures, some involving actions and some not involving any action. The first of these shows a girl running fast and stumbling, the second shows an orange, the third shows a boy doing his homework, the fourth a chair and the fifth and last of them pictures a monkey eating a banana. A brief description of the specifications of these pictures is given below.

Table 25. *Specifications of Picture Naming Task Items*

S #	Picture Description	Gender of the subject involved	Grammatical Gender of the subject involve for Urdu version	Grammatical Gender of the subject involve for English version
1	A girl running fast and stumbling	Feminine	Feminine	Feminine
2	An orange	Neutral	Masculine	Neutral
3	A boy doing his homework	Masculine	Masculine	Masculine
4	A chair	Neutral	Feminine	Neutral
5	A monkey eating banana	Neutral	Masculine	Neutral

Gender Neutral objects of English versus gendered objects of Urdu

The English version of the description of an orange takes the pronoun “it” and adjectives like ‘good, tasty, delicious, healthy’ all of which are not gendered. The auxiliary verbs used for chair include ‘is, are’, which are also neutral as shown.

Table 26. *Grammatical Modifiers for Orange*

English Grammatical element		Item Used	
1	Pronoun	It, they, these	<i>Ye</i>
2	Auxiliaries	Has, have, is, are	<i>Hota hy, hote hain</i>
3	Adjectives	Tasty delicious healthy sweet sour	<i>taza, Acha, sehatmand</i>

The following table shows the grammatical elements in the English description of the orange as used by the participants.

Table 27. *English Grammatical Modifiers for orange*

Grammatical element	English Item Used	Sequential bilinguals						Simultaneous bilinguals						
		Girls			Boys			Girls			Boys			
1	Pronoun	It, they, these	3	4	4	2	3	4	4	4	4	4	4	4
2	Auxiliaries	Has, have, is, are	4	4	4	4	4	4	4	4	4	4	4	4
3	Adjectives	Tasty delicious healthy sweet sour	4	4	4	4	4	4	4	4	4	4	4	4

From the above table it is clear that both simultaneous and sequential bilingual girls and boys of all age groups seem to have no difficulty in producing the right gender of the object involved. However, there seems to be a difficulty in producing the right pronouns to refer to the orange cataphorically and anaphorically in the lower age groups among sequential bilinguals. The use of he/she and him/her instead of it/they (anaphoric reference) and it/them (anaphoric reference) was seen among these participants.

Table 28. Urdu Grammatical Modifiers for orange

Grammatical element	Urdu Item Used	Sequential bilinguals						Simultaneous bilinguals						
		Girls			Boys			Girls			Boys			
1	Pronoun	Ye	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	<i>Hota hy, hote hain</i>	4	4	4	4	4	4	2	3	3	2	2	3
3	Adjectives	<i>taza, Acha, sehatmand</i>	4	4	4	4	4	4	2	3	3	2	2	3

The second object in the picture naming task was a broken black chair. The grammatical modifiers for this object are given in the table below along with the item used by the participants.

Table 29. Grammatical modifiers for chair

S #	English Grammatical Element	English Item used	Urdu Item Used
1	Pronoun	It, this	Ye
2	Auxiliary verb	Has, is,	Hui hy
3	Adjectives	Useful	Kali

Table 30. English Grammatical Modifiers for Chair

Grammatical element	English Item Used	Sequential bilinguals						Simultaneous bilinguals						
		Girls			Boys			Girls			Boys			
1	Pronoun	It, this	3	4	4	2	4	4	4	4	4	4	4	4
2	Auxiliaries	Has, is,	4	4	4	4	4	4	4	4	4	4	4	4
3	Adjectives	Useful	4	4	4	4	4	4	4	4	4	4	4	4

The above table shows that simultaneous bilinguals showed better production of pronouns, auxiliaries and adjectives in the English descriptions of chair. The lower age groups in the sequential bilinguals used erroneous English pronouns for chair, like she/he. The following table shows the comparison of the Urdu pronoun, auxiliary verb and adjective as used by the sequential and simultaneous bilinguals for 'chair'.

Table 31. Urdu Grammatical Modifiers for Chair

Grammatical element		Urdu Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	<i>Ye</i>	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	<i>Hui hy</i>	4	4	4	4	4	4	3	3	4	2	3	4
3	Adjectives	<i>Kali</i>	4	4	4	4	4	4	3	3	4	2	3	4

The above table shows that sequential bilinguals produced all three of the grammatical elements correctly while describing orange in Urdu. The simultaneous bilinguals produced by erroneous structures with respect to their use of auxiliaries and adjectives, which was more the case with the lower age groups. The pronouns by the same participants were seen to be correct.

Boys and girls are gendered entities but they take neutral modifiers among all grammatical categories expect for pronoun. In Urdu, they take a number of gendered grammatical modifiers. These are shown in the tables 32, 33 for boy and in tables 34, 35 for girl.

Table 32. Grammatical Modifiers for boy

English Grammatical Element		English Item Used	Urdu Item Used
1	Pronoun	he, his	<i>Wo, ye</i>
2	Auxiliaries	Has, is	<i>Kar raha hy</i>
3	Adjectives	Intelligent, responsible, good	<i>Laik, qabil, acha, zaheen</i>

Table 33. *English Grammatical Modifiers for boy*

Grammatical Element		English Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	he, his	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	Has, is	4	4	4	4	4	4	4	4	4	4	4	4
3	Adjectives	Intelligent responsible good	4	4	4	4	4	4	4	4	4	4	4	4

The above table shows that both sequential and simultaneous bilingual girls and boys of all age groups showed a 100% performance with respect to English pronouns, auxiliaries and adjectives in producing English descriptions for the gendered entity boy. The following table gives a comparative breakdown of bilinguals for Urdu grammatical elements for boy.

Table 34. *Urdu Grammatical Modifiers for boy*

Grammatical Element		Urdu Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	<i>Wo, ye</i>	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	<i>Kar raha hy</i>	4	4	4	4	4	4	4	4	4	4	4	4
3	Adjectives	<i>Laik, qabil, acha, zaheen</i>	4	4	4	4	4	4	4	4	4	4	4	4

Table 35. *Grammatical Modifiers for girl*

Grammatical element		English Item Used	Urdu Item Used
1	Pronoun	she, her	<i>Wo, ye</i>
2	Auxiliaries	Has, is	<i>Bhag rahi hy</i>
3	Adjectives	Small, young	<i>Choti</i>

Table 36. *English Grammatical Modifiers for girl*

Grammatical element		English Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	she, her	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	Has, is	4	4	4	4	4	4	4	4	4	4	4	4
3	Adjectives	Small, young	4	4	4	4	4	4	4	4	4	4	4	4

The above table shows that all the participants made the gender correct usages of English pronoun, auxiliary and adjective for ‘girl’ in the same way as they did for ‘boy’. The table below shows the participants Urdu description for girl.

Table 37. *Urdu Grammatical Modifiers for Girl*

S #	Grammatical element	Urdu Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	<i>Wo, ye</i>	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	<i>Bhag rahi hy</i>	4	4	4	4	4	4	4	4	4	3	4	4
3	Adjectives	<i>Choti</i>	4	4	4	4	4	4	4	4	4	3	4	4

Pronouns are seen to be used correctly for ‘girl’ by all the participants. The problem arises in the use of Urdu auxiliary for ‘girl’ by the simultaneous bilingual boys as was the case with their use of Urdu adjectives for ‘girl’. The simultaneous bilingual girls however, showed no such discrepancy.

The following table shows English and Urdu grammatical modifiers for the gendered animate entity ‘monkey’.

Table 38. *Grammatical Modifiers for monkey*

Grammatical element		English Item Used	Urdu Item Used
1	Pronoun	It, they	<i>Ye</i>
2	Auxiliaries	Has, is	<i>Hota hy, hote hain</i>
3	Adjectives	Clever, naughty	<i>Chota, chalak, hoshyar</i>

Table 39. *English Grammatical Modifiers for Monkey*

	Grammatical element	English Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	It, they	3	4	4	2	2	4	4	4	4	4	4	4
2	Auxiliaries	Has, is	3	4	4	2	2	4	4	4	4	4	4	4
3	Adjectives	Clever, naughty	4	4	4	4	4	4	4	4	4	4	4	4

The following table shows the comparison of sequential and simultaneous bilinguals' use of Urdu grammatical modifiers for the gendered animate entity 'monkey'.

Table 40. *Urdu Grammatical Modifiers for Monkey*

S #	Grammatical element	Urdu Item Used	Sequential bilinguals						Simultaneous bilinguals					
			Girls			Boys			Girls			Boys		
1	Pronoun	<i>Ye</i>	4	4	4	4	4	4	4	4	4	4	4	4
2	Auxiliaries	<i>Hota hy, hote hain</i>	4	4	4	4	4	4	2	3	4	2	2	3
3	Adjectives	<i>Chota, chalak, hoshyar</i>	4	4	4	4	4	4	2	3	4	2	2	3

Form the table above, it can be seen that sequential bilinguals scored highly on all grammatical modifiers for monkey in Urdu, that is, on pronouns, auxiliary and adjectives. The simultaneous bilinguals showed weaker performance than the sequential bilinguals. The boys from this group showed weaker performance than the girls.

Having broken down data in form of comparison of sequential and simultaneous bilinguals for items and their grammatical elements in each language, the following table accumulates the data in form of comparison of English and Urdu for all

grammatical elements as used for each item in both languages by simultaneous bilinguals only.

Table 41. *Comparison of Urdu and English for Simultaneous Bilinguals*

Grammatical Element		Urdu			English		
		4-6 yrs G+B	7-8 yrs G+B	9-10 yrs G+B	4-6 yrs G+B	7-8 yrs G+B	9-10 yrs G+B
Auxiliary verb	O	2+2 =4	3+2 =5	3+3=6	4+4=8	4+4=8	4+4=8
	C	3+2 =5	3+3 =6	4+4=8	4+4=8	4+4=8	4+4=8
	B	4+4 =8	4+4 =8	4+4=8	4+4=8	4+4=8	4+4=8
	G	4+3 =7	4+4 =8	4+4=8	4+4=8	4+4=8	4+4=8
	M	2+2 =4	3+2 =5	4+3=7	4+4=8	4+4=8	4+4=8
Pronoun	O	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	C	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	B	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	G	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	M	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
Adjective	O	2+2 =4	3+2 =5	3+3 =6	4+4 =8	4+4 =8	4+4 =8
	C	3+2 =5	3+3 =6	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	B	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	G	4+3 =7	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	M	2+2 =4	3+2 =5	4+3 =7	4+4 =8	4+4 =8	4+4 =8

The above table shows that simultaneous bilinguals produced auxiliaries, pronouns, adjectives perfectly correctly for all objects, animate or inanimate, gendered or neutral in English. In Urdu, however they seemed to face challenge in producing adjective and auxiliaries mainly for entities like orange, chair and monkey. The explanation for this may be the fact that these objects are neutral in English.

The following table shows a similar breakdown for sequential bilinguals.

Table 42. *Comparison of Urdu and English for Sequential Bilinguals*

Grammatical Element		Urdu			English		
		4-6 yrs G+B	7-8 yrs G+B	9-10 yrs G+B	4-6 yrs G+B	7-8 yrs G+B	9-10 yrs G+B
Auxiliary verb	O	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	C	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	B	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	G	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	M	4+4 =8	4+4 =8	4+4 =8	2+2=4	4+2=6	4+4=8
Pronoun	O	4+4 =8	4+4 =8	4+4 =8	3+2 =5	4+3 =7	4+4 =8
	C	4+4 =8	4+4 =8	4+4 =8	3+2 =5	4+4 =8	4+4 =8
	B	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	G	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	M	4+4 =8	4+4 =8	4+4 =8	3+2=5	4+2=6	4+4 =8
Adjective	O	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	C	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	B	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	G	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8
	M	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8	4+4 =8

Sequential bilinguals showed a hundred percent performance in producing auxiliaries, pronouns and adjectives for all entities in Urdu, however, they faced difficulties in producing the correct auxiliaries and pronouns for these entities in English. Since modifiers such as auxiliaries are neutral in English but gendered in Urdu, there seems to be a plausible explanation for such mistakes by this bilingual group.

4.3. Translation Task

In this task, the participants were asked to translate English sentences into Urdu and vice versa. Entities included in this task were cow, dog (animals) chair, sun (objects) Ahmad, Sana (humans with gender) he, she (gendered pronouns humans) and lion, cat in continuous action for evaluation of the auxiliary and the regular verbs.

The English sentences that were to be translated into Urdu are as follows.

Table 43. *English to Urdu for Simultaneous Bilinguals*

S #	Sentence	Girls			Boys		
		4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
1	Cow eats grass. (verb)	2	3	4	2	2	4
2	The dog barked. (verb)	3	4	4	2	4	4
3	The chair is small. (adjective)	3	4	4	3	4	4
4	The sun is big. (adjective)	2	3	4	2	3	4
5	Ahmad is working. (transitive verb)	4	4	4	4	4	4
6	Sana is playing. (transitive verb)	4	4	4	4	4	4
7	She is alone. (adjective)	4	4	4	4	4	4
8	He is alone. (adjective)	4	4	4	4	4	4
9	Cat is drinking milk	3	4	4	3	4	4
10	Lion is roaring	3	4	4	2	3	4

The above table shows that both boys and girls from the simultaneous bilingual group correctly translated the sentences that contain obviously gendered entities like Ahmad (boy), Sana (girl) and he, she. The lower age groups however mistranslated entities like cow, dog, lion, cat and inanimate objects like chair and sun.

Table 44. *English to Urdu Translation for Sequential Bilinguals*

S #	Sentence	Girls			Boys		
		4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
1	Cow eats grass.	4	4	4	3	4	4
2	The dog barked.	4	4	4	4	4	4
3	The chair is small.	4	4	4	4	4	4
4	The sun is big.	4	4	4	4	4	4
5	Ahmad is working.	4	4	4	4	4	4
6	Sana is playing.	4	4	4	4	4	4
7	She is alone.	4	4	4	4	4	4
8	He is alone.	4	4	4	4	4	4
9	Cat is drinking milk	4	4	4	4	4	4
10	Lion is roaring	4	4	4	4	4	4

The above table shows both male and female sequential bilinguals properly translated all sentences included animate or inanimate subjects with the exception of 'cow', which was mistranslated by a sequential bilingual participant of the lowest age group.

The Urdu sentences that were to be translated into English are as follows.

Table 45. Urdu to English Translation by Simultaneous Bilinguals

S #	Sentences	Simultaneous					
		Girls			Boys		
		4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
1	<i>Gaye ghaas khati hy</i>	4	4	4	4	4	4
2	<i>Kutta bhonka</i>	4	4	4	4	4	4
3	<i>Kursi choti hy</i>	4	4	4	4	4	4
4	<i>Suraj bara hy</i>	4	4	4	4	4	4
5	<i>Ahmad kaam kar raha hy</i>	4	4	4	4	4	4
6	<i>Sana khail rahi hy</i>	4	4	4	4	4	4
7	<i>Wo akeli hy</i>	4	4	4	4	4	4
8	<i>Wo akela hy</i>	4	4	4	4	4	4
9	<i>Billi doodh pi rahi hy</i>	4	4	4	4	4	4
10	<i>Shair dhaarr raha hy</i>	4	4	4	4	4	4

The table above shows that simultaneous bilinguals have no difficulty in translating Urdu constructions into English constructions because in doing that, they are translating a language with gendered entities into a language that has mostly neutral modifications (except the pronoun) for all entities.

Having broken down English to Urdu translation for sequential to simultaneous bilinguals, we now proceed to analyzing Urdu to English translations for the two groups. The following table shows Urdu to English translation for sequential bilinguals.

Table 46. Urdu to English Translation by Sequential Bilinguals

S #	Sentences	Girls			Boys		
		4-6 yrs	7-8 yrs	9-10 yrs	4-6 yrs	7-8 yrs	9-10 yrs
1	<i>Gaye ghaas khati hy</i>	4	4	4	4	4	4
2	<i>Kutta bhonka</i>	4	4	4	4	4	4
3	<i>Kursi choti hy</i>	4	4	4	4	4	4
4	<i>Suraj bara hy</i>	4	4	4	4	4	4
5	<i>Ahmad kaam kar raha hy</i>	4	4	4	4	4	4
6	<i>Sana khail rahi hy</i>	4	4	4	4	4	4
7	<i>Wo akeli hy</i>	4	4	4	4	4	4
8	<i>Wo akela hy</i>	3	4	4	4	4	4
9	<i>Billi doodh pi rahi hy</i>	4	4	4	4	4	4
10	<i>Shair dhaarr raha hy</i>	4	4	4	4	4	4

The general pattern seen in the study has shown that sequential bilinguals' first acquired language (Urdu) seems to influence English, in the production process especially in referring to entities like chair, table, sun, vegetable etc., in the sense that since these are gendered in Urdu and neutral in English, the sequential bilinguals perceive them as gendered in English as well. But in the table above, it is evident that in translation, they do not show the same. This might be due the fact that picture naming was open ended and the translation task is close-ended. It might be hypothesized that had the translation construction contained cataphoric pronouns, the results would probably have been different.

4.3.1. English Neutral Verb vs Urdu Gendered Verb

Verbs in Urdu are gendered, like its gendered animals and living things. The case is opposite for English, where animals and things are neutral as are the verbs modifying them.

The case of English ‘Cow eats grass’ translation into Urdu ‘Gaye ghaas khati hy’ and vice versa has been given in the table below followed by English ‘Dog barked’ into Urdu ‘Kutta bhonka’ and vice versa.

Table 47. Comparison of Urdu and English Verbs for Sequential and Simultaneous Bilinguals

S #	English to Urdu ‘Cow eats grass’ to ‘Gaye ghaas khati hy’ ‘Dog barked’ to ‘Kutta bhonka’												Urdu to English ‘Gaye ghaas khati hy’ to ‘Cow eats grass’ ‘Kutta bhonka’ to ‘Dog barked’											
	Sequential						Simultaneous						Sequential						Simultaneous					
	Girls			Boys			Girls			Boys			Girls			Boys			Girls			Boys		
	a	B	c	d	e	f	a	b	c	d	e	f	a	b	c	d	e	f	a	b	c	d	e	f
1	4	4	4	3	4	4	2	3	4	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	4	4	4	4	4	3	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Serial no. 1 in the above table represents translation for *cow eats grass* and *gaye ghaas khati hy*, whereas serial no. 2 represents the second item, that is, *dog barked* and *kutta bhonka*. In translating from Urdu to English, the simultaneous bilinguals did well whereas in translation from English to Urdu, they did not since Urdu grammatical modifiers are gendered like most of the entities they refer to. In translating from English to Urdu, sequential bilinguals performed well, as they did when translating from Urdu to English. This might be because English has limited and only neutral adjectives and auxiliaries.

4.3.2. English Neutral Adjective and Urdu Gendered Adjective

In the case of the English sentence ‘Chair is small’ vs the Urdu sentence ‘kursi choti hy’, we see that these sentences are the translated versions of each other. English has neutral adjective, i.e. ‘small’ goes with chair, which is ‘kursi’ in Urdu and is feminine, the way we have with the table, which is ‘maiz’ in Urdu and is masculine.

Since objects are neutral in English, all the other components in the English sentence modifying the objects are also neutral.

The case is different for Urdu. Subjects including non-living things (objects) are gendered. Hence chair or ‘kursi’ in Urdu is also gendered and is feminine. Due to this, all the components in the Urdu sentence that modifies the subject, which is a gendered object in case of Urdu is also gendered accordingly. Thus, we have feminine adjectives for feminine objects and masculine adjectives for masculine objects. In Table 48 we have a comparison of translations from Urdu ‘*Kursi choti hy*’ to *English Chair is small* and vice versa, which is followed by the Urdu ‘*Sooraj bara hy*’ translation into *Sun is big* and vice versa.

Table 48. Comparison of English and Urdu Adjective as used by bilinguals

S #	English to Urdu <i>Chair is small to Kursi Choti hy</i> <i>Sun is big to Sooraj bara hy</i>												Urdu to English <i>Kursi choti hy to chair is small</i> <i>Sooraj bara hy to sun is big</i>											
	Sequential						Simultaneous						Sequential						Simultaneous					
	Girls			Boys			Girls			Boys			Girls			Boys			Girls			Boys		
	a	B	c	d	e	f	a	b	c	d	e	f	a	b	c	d	e	f	a	b	c	d	e	f
1	4	4	4	4	4	4	3	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	4	4	4	4	4	2	3	4	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4

The above table shows sequential bilinguals correctly translated item 1 from English into Urdu as well as from Urdu into English. The simultaneous bilinguals correctly translated both items from Urdu (a gendered language) into English (the language that they are better at, and which has neutral modifiers), however, they mostly mistranslated both items from English to Urdu which has gendered auxiliaries, verbs and adjectives for inanimate objects like sooraj and kursi.

The case of ‘*He/She is alone*’ vs ‘*Wo akeli/akeli hy*’ is another case of adjectives for comparison. In these cases, the adjective modifies a clearly gendered pronoun referring to a male or a female human. This is a case in which adjective modifies the pronoun “she” which is feminine in English and is used to refer to a female. The same is translated into ‘wo’ which is used to refer to both male and female in Urdu. Yet, for English feminine pronoun ‘she’, a neutral adjective alone is used which can be used to

refer to a masculine pronoun as well. Also, although Urdu pronoun ‘wo’ is neutral, the adjective that modifies it can be masculine or feminine, i.e. Akela or Akeli in the present case. The two translations have been compared for the two groups of sequential and simultaneous bilinguals in the following table.

Table 49. *Comparison of English and Urdu Adjective as used by bilinguals*

S #	English to Urdu <i>‘She is alone’</i> into <i>‘Wo akeli hy’</i> <i>‘He is alone’</i> into <i>‘Wo akela hy’</i>												Urdu to English <i>‘Wo akeli hy’</i> into <i>‘She is alone’</i> <i>‘Wo akela hy’</i> into <i>‘he is alone’</i>																	
	Sequential						Simultaneous						Sequential						Simultaneous											
	Girls			Boys			Girls			Boys			Girls			Boys			Girls			Boys								
1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

The above table shows that sequential bilinguals seem to have no difficulty in translating from Urdu to English and retaining the correct gender in both English and Urdu adjective for animate entities like human beings.

4.3.3. English Neutral Auxiliary Verb and Urdu Gendered Auxiliary Verb

Auxiliary verb is neutral in English. Examples of English auxiliary verbs are is, are, was were. They are the same for masculine and feminine animate and inanimate entities. In Urdu however, the case is opposite, that is, the auxiliary verbs are gendered according to the entity they modify. To make things even more complex, the inanimate entities in Urdu are also gendered, which implies that they take either masculine or feminine auxiliaries.

- a. The cases of *‘Ahmad is working’* vs *‘Ahmad kaam kar raha hy’*
- b. *‘Sana is playing’* vs *‘Sana khail rahi hy’*

Table 50. Comparison of English and Urdu Adjective as used by bilinguals

S #	English to Urdu												Urdu to English											
	'Ahmad is working' to 'Ahmad kaam kar raha hy'												'Ahmad kaam kar raha hy' to 'Ahmad is working'											
	'Sana is playing' to 'Sana khail rahi hy'												'Sana khail rahi hy' to 'Sana is playing'											
Sequential			Simultaneous									Sequential			Simultaneous									
Girls			Boys			Girls			Boys			Girls			Boys			Girls			Boys			
1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

The table above shows that for named animate entities (male and female humans) both simultaneous and sequential bilinguals showed a 100 % performance.

4.3.4. English Neutral Verb -Transitive Verb combination and Urdu gendered combination

In English, the combination of the verb and transitive verb is neutral like both these components in isolation, but the case is opposite for Urdu, in which, verbs are gendered in isolation for example khailti or kheli, but when they occur together with transitive verbs in case of continuous tense for example in khail rahi hy, the verb becomes neutral whereas the gender projection is transferred onto the transitive verb which is Rahi in this case. The case of English continuous action and Urdu continuous action is compared for sequential and simultaneous bilinguals in the following table.

Table 51. Comparison of English and Urdu Auxiliary as used by bilinguals

S #	English to Urdu <i>Cat is drinking milk to billi doodh pi rahi h</i> <i>Lion is roaring to sher dhar raha hy</i>												Urdu to English <i>billi doodh pi rahi h to cat is drinking milk</i> <i>sher dhar raha hy to lion is roaring</i>											
	Sequential						Simultaneous						Sequential						Simultaneous					
	Girls			Boys			Girls			Boys			Girls			Boys			Girls			Boys		
1	4	4	4	4	4	4	3	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	4	4	4	4	4	3	4	4	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4

Animate entities are quite tricky in the sense that English speakers view and treat them as neutral, but Urdu speakers have genders not only for them but for every grammatical element that modifies such entities in the Urdu sentence. In the above table, simultaneous bilinguals translated these constructions with tremendous ease from Urdu into English, but in translating from English to Urdu, they seemed to face challenges. The sequential bilinguals however, easily translated from English to Urdu and from Urdu to English.

CHAPTER 5

FINDINGS AND DISCUSSION

This chapter mainly presents the findings obtained from data analysis and discusses the findings with reference to the findings of the previous studies. This chapter consists of three main sections: grammatical judgment among bilinguals, morphosyntactic production among bilinguals and the mechanisms involved in bilingual translation. Strengths and weaknesses of bilinguals have also been discussed in this chapter which gives an in-depth sense of their weak and strong areas.

5.1. Findings

The study explored the morphosyntactic ability of Urdu-English simultaneous bilinguals for marking gender in the two languages. To make a comparison, the data has also been gathered from simultaneous and sequential bilinguals. The data analysis was divided into three parts which dealt with three tasks based on perception, production, and differentiation. The first task consisted of grammatical judgment among bilinguals, of these required the students to mark the given sentences as correct or incorrect; the second task was morphosyntactic production among bilinguals, that was based on producing sentences with gender-correct/ incorrect morphosyntactic features, and the third required mechanism involved in bilingual translation that was English to Urdu and Urdu to English translation. Each of these analyses are discussed and summarized in the sections below.

5.1.1 Grammatical Judgment among Bilinguals

With respect to the grammatical judgment of English constructions among bilinguals, data from sequential bilingual boys and girls showed positive variation and improvement of performance in going from smaller age groups towards the bigger age group. The proper nouns were properly identified by these bilinguals whereas neutral objects like chairs were mistaken for gendered ones more by the smaller age groups and relatively less as we move toward the higher age groups. Furthermore, it was seen that simultaneous bilingual girls identified everything including gendered common and proper nouns, neutral nouns, and pronouns on the task, precisely and correctly in English.

Grammatical judgment requires many different gendered and neutral entities to be covered in both languages. This was taken care of in the present research and at least one animal (neutral/gendered), male human, female human and object (neutral/gendered) were included in the task to get a holistic view of the grammatical judgment of the participants for comparison. It was seen that like simultaneous bilingual girls, the simultaneous bilingual boys also identified the gendered proper nouns correctly, like the sentences involving Hina (a girl) and Qasim (a boy). This is the case for all age groups in the larger group. However, it can be seen that the smaller age groups mistook the neutral object 'chair', which is visible in the youngest age group. Similarly, half of the participants of the youngest age group misjudged the sentence 'it is a good girl' while more than half of the second age group misjudged the same. Again, the eldest age group performed the best on this sentence in particular and on the task in general.

The in-depth analysis of the various parameters from the grammatical judgment like neutral objects, gendered proper nouns, gendered common nouns, gendered pronouns, neutral pronouns, etc. were compared. For neutral objects in English, it was seen that simultaneous bilingual girls and boys performed better than the sequential bilingual girls and boys in English constructions involving neutral objects. Similarly, within the simultaneous bilingual group, the girls performed better than the boys and their result was 100%. Within the simultaneous bilingual boys' group, the higher age groups performed better than the lower age groups. Same this the case for the sequential bilinguals, the female children performed better than the male children. Within the female sequential bilingual children, the higher age groups performed better than the lower ones. Similarly, the higher age groups performed better than the lower age groups among the male sequential bilinguals.

As an additional object for investigation, neutral pronouns used against English common nouns were compared. It was seen that simultaneous bilinguals performed better for this sentence involving the neutral pronoun than the sequential bilinguals. Further among the simultaneous bilinguals, the girls scored better than the boys, with all three age groups scoring hundred percent. Whereas among the boys, different age groups gave different results. The performance correlates with age such that the higher the age group, the better the performance.

Apart from neutral pronouns, Gendered pronouns were included in the judgment task. The sentence which read ‘He is going to school because she is a student’ showed non-concordance of the two pronouns used. For this construction, the simultaneous bilinguals' understanding of the non-concordance showed better than the sequential bilinguals. Both boys and the girls in this group scored a hundred percent, whereas, among the sequential bilinguals, the lowest age group (4-6 years) showed the lowest score.

In addition to gendered pronouns, gendered proper nouns were also included. It was evident from the results that both the genders among the bilinguals, i.e. the boys and the girls, all the age groups, and both sequential and simultaneous bilinguals showed 100% precision with the sentences involving proper nouns which were names of a boy and a girl.

Among the Urdu sentences, three involve objects, one has an abstract noun while one involves the gendered common noun ‘girl’. Sequential Bilinguals showed high performance. In the Urdu sentence involving a cow ‘*gaye*’ which is gendered, the lower age groups mostly misjudged it. The point worth noting here is that these lower age groups did not mistake any other object or proper noun. Among the boys, all three age groups correctly identified the sentences involving the common nouns, the proper noun (inanimate object), the proper noun (animate object), and the abstract noun. The lowest age group, however, misjudged gendered objects like *saib* and *kursi*, and the animate object. This indicated two factors. First, a sequential bilingual’s grammatical judgment performance enhances with age. Girls appear to show slightly better performance in grammatical judgment than boys of the same age groups.

As for the Simultaneous Bilinguals Grammatical Judgment, results showed that all three age groups of the simultaneous bilingual girls made no mistake in common nouns *larka*, *larki*, and the proper noun Ali. The eldest of the three age groups also correctly identified the objects *kursi* and *sabzi*, and the animate object *makri*, but misjudged the abstract noun *neend*, the animate object *gaye*, and the object *saib*. Similarly, the objects *saib*, ‘*sabzi*’, ‘*kursi*’, the abstract noun ‘*neend*’, and the animate objects ‘*gaye*’ and ‘*makri*’ were largely misjudged and misidentified by the lower and middle age groups. The one thing common to all was the accurate identification of common and proper nouns.

Like the simultaneous bilingual girls, all three age groups of the simultaneous boys also correctly identified the common nouns *larki* and *larki*, and the proper noun, *Ali*. The highest age group also correctly identified the animate object *makri*, but at the same time misjudged the animate object *gaye*, the abstract noun *neend*, the objects *kursi*, *saib*, *sabzi*. All the other age groups largely misjudged all but the three subjects mentioned. The misjudgment was greater among the lowest age group.

This brings us to the comparative performance of bilinguals in Urdu and English Sentences. In the case of the Urdu common nouns as opposed to the English common nouns, the results showed that all the participants from all the categories correctly judged this variable. Moreover, like the common noun, all the participants from all the categories did not show any difficulty judging the proper as well. Abstract nouns were also compared for both groups. Like other grammatical elements of the sentence, the abstract noun of Urdu is also gendered as opposed to the neutral abstract noun of English. The findings showed that all the sequential bilinguals identified the gender of the abstract noun in Urdu correctly whereas the lower age group among these bilinguals mostly misidentified the same. Among the simultaneous bilinguals, however, the case appeared to be the opposite. They correctly identified the anomaly in the English sentence in which the neutral abstract noun ‘dream’ was written as masculine. They however mostly misidentified the Urdu abstract noun instead, which was mentioned (wrongly) as masculine. This was more evident in the lower age groups among simultaneous bilinguals.

This indicates that both Urdu and English have gendered common nouns like *larki* in Urdu and *girl boy* in English. The performance of sequential and simultaneous bilinguals on the grammatical judgment of common nouns of Urdu and English was judged as used comparatively by simultaneous and sequential bilingual girls and boys. The result for this variable came back 100 % for all the participants from all the categories. In the case of Urdu and English proper noun findings showed that for this variable, like the common noun, results came back 100 % for all the participants from all the categories. Urdu gendered object vs English object Objects in Urdu are gendered in the sense that the grammatical elements that modify an object in a given sentence become gendered in accordance with the object. On the other hand, English object is not gendered.

5.1.2. Morphosyntactic Production among Bilinguals

Having evaluated the sequential and simultaneous bilinguals' performance on the judgment task, the second task designed for the analysis is a picture naming task which is a production task. This task is based on five pictures, some involving actions and some not involving any action. The first of these shows a girl running fast and stumbling, the second shows an orange, the third shows a boy doing his homework, the fourth a chair and the fifth and last of them pictures a monkey eating a banana. A brief description of the specifications of these pictures is given below.

In the comparison of gender-neutral objects of English versus gendered objects of Urdu, it is seen that the English version of the description of an orange takes the pronoun "it" and adjectives like 'good, tasty, delicious, healthy' all of which are not gendered. The auxiliary verbs used for chair include 'is, are', which are also neutral. Both simultaneous and sequential bilingual girls and boys of all age groups seem to have no difficulty in producing the right gender of the object involved. However, there seems to be a difficulty in producing the right pronouns to refer to the orange cataphorically and anaphorically among the lower age groups among the sequential bilinguals. The use of he/she and him/her instead of it/they (anaphoric reference) and it/them (anaphoric reference) was seen among these participants.

The second object in the picture naming task was a broken black chair. It was seen that simultaneous bilinguals showed better production of pronouns, auxiliaries, and adjectives in the English descriptions of chairs. The lower age groups in the sequential bilinguals used erroneous English pronouns for chair, like she/he. It was seen that sequential bilinguals produced all three of the grammatical elements correctly while describing orange in Urdu. The simultaneous bilinguals were produced by erroneous structures with respect to their use of auxiliaries and adjectives, which was more the case with the lower age groups. The pronouns by the same participants were seen to be correct.

Boy and girl are gendered entities but they take neutral modifiers among all grammatical categories except for pronouns in English. However, in Urdu, they take a number of gendered grammatical modifiers. It was seen that both sequential and simultaneous bilingual girls and boys of all age groups showed 100% performance with respect to English pronouns, auxiliaries, and adjectives in producing English

descriptions for the gendered entity boy. It was seen that all the participants made the gender-correct usages of English pronouns, auxiliaries, and adjectives for ‘girl’ in the same way as they did for ‘boy’. Urdu pronouns were seen to be used correctly for ‘girl’ by all the participants. The problem arises in the use of the Urdu auxiliary for ‘girl’ by the simultaneous bilingual boys as was the case with their use of Urdu adjectives for ‘girl’. The simultaneous bilingual girls, however, showed no such discrepancy.

In the case of English and Urdu grammatical modifiers for the gendered animate entity ‘monkey’, it could be seen that sequential bilinguals scored highly on all grammatical modifiers for the monkey in Urdu, that is, on pronouns, auxiliary, and adjectives. The simultaneous bilinguals showed weaker performance than the sequential bilinguals. The boys from this group showed weaker performance than the girls.

Having broken down data in form of a comparison of sequential and simultaneous bilinguals for items and their grammatical elements in each language, we now discuss the data in form of a comparison of English and Urdu for all grammatical elements as used for each item in both languages by simultaneous bilinguals only. The data showed that simultaneous bilinguals produced auxiliaries, pronouns, and adjectives perfectly correctly for all objects, animate or inanimate, gendered or neutral in English. In Urdu, however, they seemed to face challenges in producing adjectives and auxiliaries mainly for entities like orange, chair, and monkey. The explanation for this may be the fact that these objects are neutral in English.

Sequential bilinguals showed a hundred percent performance in producing auxiliaries, pronouns, and adjectives for all entities in Urdu, however, they faced difficulties in producing the correct auxiliaries and pronouns for these entities in English. Since modifiers such as auxiliaries are neutral in English but gendered in Urdu, there seems to be a plausible explanation for such mistakes by this bilingual group.

5.1.3. Bilingual Translation: The Mechanism Involved

The second question of the present research inquired about how Urdu-English bilinguals develop the morphosyntactic ability required for gender marking simultaneously. The third activity in the analysis, which was the translation task, was designed specifically to answer this question. In this task, the participants were asked to translate English sentences into Urdu and vice versa. Entities included in this task

were a cow, dog (animals) chair, sun (objects) Ahmad, Sana (humans with gender) he, she (gendered pronouns humans), and lion, and cat in continuous action for evaluation of the auxiliary and the regular verbs.

The English sentences that were to be translated into Urdu included at least one from all categories; male and female humans referred to by pronouns, male and female humans referred to by proper nouns, male and female humans referred to by common nouns, feminine animate entities, masculine animate entities other than humans, and gendered objects. Results showed that both boys and girls from the simultaneous bilingual group correctly translated the English sentences that contained obviously gendered entities like Ahmad (boy), Sana (girl) and he, she. The lower age groups however mistranslated entities like a cow, dog, lion, and cat and inanimate objects like chairs and sun. Moreover, both male and female sequential bilinguals also properly translated all English sentences including animate or inanimate subjects with the exception of ‘cow’, which was mistranslated by a sequential bilingual participant of the lowest age group.

The Urdu sentences included in the task were essentially the Urdu versions of the same English sentences but were administered on separate worksheets to the participants. The findings showed that simultaneous bilinguals had no difficulty translating Urdu constructions into English constructions because in doing that, they are translating a language with gendered entities into a language that has mostly neutral modifications (except the pronoun) for all entities.

Having broken down English-to-Urdu translation for sequential to simultaneous bilinguals, we now proceed to analyze Urdu-to-English translations for the two groups. The general pattern seen in the study showed that sequential bilinguals’ first acquired language (Urdu) seemed to influence English, in the production process especially in referring to entities like chairs, tables, sun, vegetables, etc., in the sense that since these are gendered in Urdu and neutral in English, the sequential bilinguals perceive them as gendered in English as well. But in the analysis, it was evident that in translation, they do not show the same. This might be due to the fact that picture naming was open-ended and the translation task is close-ended. It might be hypothesized that had the translation construction contained cataphoric pronouns, the results would probably have been different.

Having looked at wholesome sentences, it was important to evaluate and comparatively study the English and Urdu grammatical elements like verbs, auxiliaries, pronouns, adjectives, etc. used against each gendered or neutral entity in English and Urdu. Verbs in Urdu are gendered, like gendered animals and living things. The case is the opposite for English, where animals and things are neutral as are the verbs modifying them. The case of the English ‘Cow eats grass’ translation into Urdu ‘*Gaye ghaas khati hy*’ and vice versa and that of the English construction ‘Dog barked’ into Urdu ‘*Kutta bhonka*’ and vice versa has been discussed. In this case in translating from Urdu to English, the simultaneous bilinguals did well whereas, in translation from English to Urdu, they did not since Urdu grammatical modifiers are gendered like most of the entities they refer to. In translating from English to Urdu, sequential bilinguals performed well, as they did when translating from Urdu to English. This might be because English has limited and only neutral adjectives and auxiliaries.

In the case of the English sentence ‘*Chair is small*’ vs the Urdu sentence ‘*kursi choti hy*’, we see that these sentences are the translated versions of each other. English has neutral adjective, i.e. ‘small’ goes with chair, which is ‘*kursi*’ in Urdu and is feminine, the way we have with the table, which is ‘*maiz*’ in Urdu and is masculine. Since objects are neutral in English, all the other components in the English sentence modifying the objects are also neutral.

The case is different for Urdu. Subjects including non-living things (objects) are gendered. Hence chair or ‘*kursi*’ in Urdu is also gendered and is feminine. Due to this, all the components in the Urdu sentence that modifies the subject, which is a gendered object in case of Urdu is also gendered accordingly. Thus, we have feminine adjectives for feminine objects and masculine adjectives for masculine objects. In the comparison of translations from Urdu ‘*Kursi choti hy*’ to *English Chair is small* and vice versa, which is followed by the Urdu ‘*Sooraj bara hy*’ translation into *Sun is big* and vice versa the analysis showed that sequential bilinguals correctly translated item 1 from English into Urdu as well as from Urdu into English. The simultaneous bilinguals correctly translated both items from Urdu (a gendered language) into English (the language that they are better at, and which has neutral modifiers), however, they mostly mistranslated both items from English to Urdu which has gendered auxiliaries, verbs and adjectives for inanimate objects like *sooraj* and *kursi*.

The case of *'He/She is alone'* vs *'Wo akeli/akeli hy'* is another case of adjectives for comparison. In these cases, the adjective modifies a clearly gendered pronoun referring to a male or a female human. This is a case in which adjective modifies the pronoun "she" which is feminine in English and is used to refer to a female. The same is translated into 'wo' which is used to refer to both male and female in Urdu. Yet, for English feminine pronoun 'she', a neutral adjective alone is used which can be used to refer to a masculine pronoun as well. Also, although Urdu pronoun 'wo' is neutral, the adjective that modifies it can be masculine or feminine, i.e. Akela or Akeli in the present case. The two translations were compared for the two groups of sequential and simultaneous bilinguals, the results of which showed that sequential bilinguals seemed to have no difficulty in translating from Urdu to English and retaining the correct gender in both English and Urdu adjective for animate entities like human beings.

Auxiliary verb is another feature whose treatment in English and Urdu was compared for both groups of bilinguals. It must again be noted that auxiliaries are neutral in English and remain the same for masculine and feminine animate and inanimate entities. In Urdu however, the case is opposite, that is, the auxiliary verbs are gendered according to the entity they modify. To make things even more complex, the inanimate entities in Urdu are also gendered, which implies that they take either masculine or feminine auxiliaries. The comparison of the cases of *'Ahmad is working'* with its Urdu version *'Ahmad kaam kar raha hy'* and that of *'Sana is playing'* with its Urdu version *'Sana khail rahi hy'* shows that both simultaneous and sequential bilinguals can easily identify named animate entities (male and female humans) which may be due to their obvious genders.

5.2. Discussion

The findings raise a number of important points for discussion, concerning not only the importance of the age of acquisition effects in the ultimate attainment but also with regards to the interpretation of Age of Acquisition effects and bilingualism effects in general. In the present research, we see that it is increasingly difficult for simultaneous bilinguals of young age to deal with their passive language, which in the present case was Urdu. The simultaneous bilinguals chosen for the present study had English as their active spoken language. They were found to be better at it than they were in the passive language that they were growing up listening to. To make a contrast

and comparison with simultaneous bilinguals, sequential bilinguals were also added in this study, just to bring a clear idea about simultaneous bilinguals. As from the results it can be seen that the simultaneous bilinguals in the higher age groups showed a relatively better understanding of the grammar of their passive language Urdu, than the younger bilinguals from the same group. With regards to English, the simultaneous bilinguals had it as their active L1, and were known to speak and use to abundantly since the beginning, they had no trouble producing gender correct sentences in it or judging sentences in it.

5.2.1 Grammatical Judgment: Strengths and Weaknesses of Bilinguals

With respect to the grammatical judgment of English constructions among bilinguals, the findings showed that sequential bilingual boys' and girls' performance improves as we go from smaller age groups towards the bigger age group which shows that age is an important factor among sequential bilinguals, in distinguishing the right grammar from wrong grammar in terms of morphological syntax. As Hartop (2018), has argued that bilinguals do not have command over two languages, assuming bilingual's proficiency on both languages is just a myth. As Scheutz & Eberhard (2004) studied *the* effects of morphosyntactic gender features in bilingual language processing. Their research was about how the two languages in the bilingual minds operated and how their processing was carried out. It was observed in their experiment that masculine nouns ending with *er* in German activated the same phenomenon in their L2 which was English.

Furthermore, it can be seen by Urdu-English bilinguals that they didn't have proficiency over both languages, they made mistakes. Simultaneous bilinguals were good at that language which they start a bit earlier or on which they were conducting their daily affairs.

As Birdsong (2018) has suggested that the age of acquisition and age of exposure are important. The attainment of a second language and age are interrelated because age is the factor that is important while learning a language. The age of acquisition is important as it is the age at which acquisition starts. Sequential bilinguals faced problem in either Urdu or English languages. Proper nouns do not seem to be a problematic area in grammatical judgment for sequential bilingual girls or boys. In this regard, even the smallest of age groups seem not to have an issue. Neutral objects,

however, appear to be the problem area when it comes to the grammatical judgment of sequential bilingual girls and boys. As sequential bilinguals for the present study were those who learned Urdu at home and English later at schools, this explains why they mistake neutral objects of English for gendered ones. In this regard as well, age seems to improve the problem. In contrast, from the findings it seems that simultaneous bilinguals identify Urdu gendered common naming object nouns, imprecisely in Urdu whereas and they do it correctly in English. This can be explained as an overwhelming effect of English that drags on to affect the lesser used language of the two, i.e., Urdu. Proper nouns like names of boys or girls, or the common noun of boy/girl themselves are correctly identified by both sequential and simultaneous bilinguals, girls and boys of all age groups. This can be because they have a better consciousness of biologically gendered agencies, but not of artificially gendered ones.

Kupisch, Akpınar & Stohr (2013) have argued that gender assignment criteria vary from language to language. In some languages gender assignment is based on formal features and some based on semantic domains and natural sex of nouns like in Urdu, gender assignment is based on auxiliaries, adjectives and pronouns, while in English it is mainly based on pronouns.

The various parameters from the grammatical judgment include subjects like neutral objects, gendered proper nouns, gendered common nouns, gendered pronouns, neutral pronouns, etc. For neutral objects in English, simultaneous bilinguals appear to be better equipped than sequential bilinguals in judging English constructions involving the neutral object. Within both bilingual groups, the girls perform better than the boys. Within both groups, the higher age groups are better than the lower age groups in grammatical judgment. The higher age groups perform better than the lower age groups among all bilinguals belonging to either category (sequential or simultaneous).

An additional object for investigation is the judgment of neutral pronouns used against English common nouns. Simultaneous bilinguals again appear better in sorting out such construction involving the neutral pronoun, than sequential bilinguals. Further among the simultaneous bilinguals, the girls are better at sorting out such ambiguous constructions than the boys. The performance, in sum, correlates with age such that the higher the age group, the better the performance.

Gendered pronouns must also be considered in the judgment task. For sentences showing non-concordance of the two pronouns, 'he' in the first clause and 'she' in the second, for instance, the simultaneous bilinguals have a better understanding of the non-concordance than the sequential bilinguals. In addition to gendered pronouns, both the genders among the bilinguals and all the age groups among both sequential and simultaneous bilinguals can correctly judge the sentences involving proper nouns which are names of a boy and a girl.

Among the Urdu sentences, sequential bilinguals perform better than they do in English sentences. In the Urdu sentence involving gendered entities like a cow, the lower age groups among sequential bilinguals mostly misjudge it as a feminine object. This may be due to the fact that it is feminine in Urdu. This seems to be mostly the case with lower age groups, who do not seem to have problems with any other noun. Among the boys, all three age groups appear to be able to correctly identify the Urdu sentences involving the common nouns, the proper noun for inanimate objects, the proper noun for animate objects, and the abstract noun. The lowest age group, however, can sometimes misjudge gendered objects from Urdu like fruits and furniture, etc. This indicates two factors. First, sequential bilingual's grammatical judgment performance improves with age. Secondly, girls have a slightly better grammatical judgment than that of boys of the same age groups.

The argument for sequential bilinguals' comparative performance in Urdu and English seems to rest on the proposition that sequential bilinguals perform better in Urdu than they do in English and thus can correctly identify the grammatical gender of all Urdu objects. But Urdu seems to make its projection on their grammatical judgment of English. They tend to bring gender into English sentences that are supposed to be neutral. As for the simultaneous bilinguals' grammatical judgment of Urdu sentences, all three age groups of the simultaneous bilingual girls easily evaluate gendered Urdu common nouns for human children for example, and the proper nouns naming a girl/boy. The eldest of these bilingual children also seem to be able to correctly identify even the gendered Urdu objects like fruit, vegetables, and furniture, and the animate objects like names of insects but may misjudge the abstract nouns in Urdu. The one thing common to all is the ability to accurately identify common and proper nouns pertaining to human beings. Among the simultaneous bilinguals, the lower age groups appear to struggle with correct identification or judgment of gender.

This brings us to the comparative performance of bilinguals in Urdu and English Sentences. In the case of the Urdu common noun as opposed to the English common noun, all the participants from all the categories can correctly judge this variable, which shows that they can identify gender for humans by looking at the pronouns, common or proper nouns used for them. Abstract nouns are a problematic area for simultaneous bilinguals in their Urdu usage, whereas it is a problem for sequential bilinguals in their English usage. Like other grammatical elements of the sentence, the abstract noun of Urdu is also gendered as opposed to the neutral abstract noun of English. Sequential bilinguals can identify the gender of the abstract noun in Urdu correctly whereas the lower age group among these bilinguals appear to mostly misidentify it. Among the simultaneous bilinguals, however, the case appeared to be the opposite. They correctly identified the anomaly in the English sentence in which the neutral abstract noun ‘dream’ was written as masculine. They however mostly misidentified the Urdu abstract noun instead, which was mentioned (wrongly) as masculine. This was more evident in the lower age groups among simultaneous bilinguals. This indicates that nouns that have no agency are usually mistaken by bilinguals in their passive language, which in case of sequential bilinguals was English and in case of simultaneous bilinguals was Urdu.

5.2.2. Morphosyntactic Production: An Area for Improvement

Grammatical judgment of a language in terms of morpho-syntax and the actual production of the language are indeed two very different things. Having evaluated the sequential and simultaneous bilinguals’ performance on the judgment task, the second task designed for the analysis is a picture naming task which is a production task. This task is based on five pictures, some involving actions and some not involving any action. If the gender-neutral objects of English are compared to the gendered objects of Urdu, it appears that the participants face difficulty in producing the right pronouns to refer to the orange cataphorically and anaphorically among the lower age groups among the sequential bilinguals. The use of he/she and him/her instead of it/they (anaphoric reference) and it/them (anaphoric reference) points to this fact. The sequential bilinguals can produce almost all of the grammatical elements correctly while describing them in Urdu. The simultaneous bilinguals tend to produce erroneous structures with respect to their use of auxiliaries and adjectives, which can more be the case with the lower age groups.

The entities boy and girl are gendered entities but take neutral modifiers among all grammatical categories of English expect for pronouns. In Urdu, they take a number of gendered grammatical modifiers. In these cases, both sequential and simultaneous bilingual girls and boys of all age groups can perform well with respect to English pronouns, auxiliaries, and adjectives in producing English descriptions for the gendered entity boy. All the bilinguals can make the gender correct usages of English pronouns, auxiliaries, and adjectives for 'girl' in the same way as they can for 'boy'. Urdu pronouns can correctly be used for 'girl' irrespective of sequential or simultaneous bilingualism. In the case of English and Urdu grammatical modifiers for the gendered animate entities like animals and insects etc., sequential bilinguals are able to place correct grammatical modifiers like pronouns, auxiliary and adjectives etc. for these in Urdu. Simultaneous bilinguals seem to face difficulty in producing these in Urdu. Within such comparisons, boys appear to be more erroneous than the girls. The explanation for such errors of simultaneous bilinguals in Urdu may be the fact that these objects are neutral in English, which is their dominant language, and which makes its projection on Urdu constructions when such bilinguals attempt it. Sequential bilinguals tend to perform better in producing auxiliaries, pronouns and adjectives for all entities in Urdu, however, they may face difficulties in producing the correct auxiliaries and pronouns for these entities in English. The reason for this may be that modifiers such as auxiliaries are neutral in English but gendered in Urdu.

In the third activity in the analysis, which was the translation task, the participants were asked to translate English sentences into Urdu and vice versa. Entities included in this task were animals, objects, humans with gender, and gendered pronouns humans in continuous action for evaluation of the auxiliary and the regular verbs. Results reveal that most of both boys and girls from the simultaneous bilingual group can correctly translate English sentences that contain obviously gendered human entities. The lower age groups however can tend to mistranslate non-human gendered entities and inanimate objects.

For Urdu sentences, it can be said that simultaneous bilinguals tend to easily translate Urdu constructions into English constructions because in doing that, they are translating a language with gendered entities into a language that has mostly neutral modifications (except the pronoun) for all entities. But as already discussed, they cannot

smoothly translate sentences in the sequence the vice versa. This might be because English has limited and only neutral adjectives and auxiliaries.

CHAPTER 6

CONCLUSION

The present study sought to get empirical insights into the development of morphosyntactic ability of Urdu-English simultaneous bilinguals of Pakistan with the aim to figure out the psycholinguistic mechanism which involves the child's age, gender and sequential of language acquisition with his/her bilingual proficiency, in addition to the question of whether or not, and how the two languages interfere in the child's system. The present study mainly focused on simultaneous bilinguals. However, to study simultaneous bilinguals in isolation was not likely to yield reliable results. That is why equal number of simultaneous and sequential bilinguals were taken for this study.

This study endeavored to find answers to the following research questions:

Q1: What kind of morphosyntactic ability is required by Urdu-English bilinguals for marking gender in the two languages?

Q2: How do Urdu-English bilinguals develop the morphosyntactic ability required for marking gender in the two languages simultaneously?

The answer to the first question is based on the divide between the two types of bilingual's groups, which yielded very different results. The difference in the results that both these groups yielded should be taken to mean that different kinds of bilinguals may require a different morpho-syntactic ability for marking gender in the two languages. Let's take the case of sequential bilinguals included in the study. The Sequential bilinguals who had Urdu as their earlier acquired language of two, and also as their more active language, seemed to mark gender with tremendous ease, in Urdu sentences, but then Urdu also seemed to leave its mark on their English constructions in all three tasks, judgment/perception, production, and differentiation. Urdu is a largely gendered language in terms of grammatical categories like auxiliaries, adjectives, pronouns etc. seemed to clash with English in the translation task as well as in the judgment and the production tasks. For English sentences, based on the results from these bilinguals, it is evident that they can perform better on grammatical judgment task more than any of the other tasks. Which brings us to the conclusion that in order to

develop children's' morphosyntactic abilities, grammatical judgment can prove to be very beneficial. Children can easily detect errors when they see one, but when it comes to production, they can produce wrong sentences in terms of morpho-syntax and grammatical gender markers. In the production tasks, the impact of Urdu on English for sequential bilinguals seem to be maximum, as compared to the other tasks, including translation and grammatical judgment. The passive language of sequential early bilingual children should/can therefore be fixed by showing them wrong constructions and letting them detect the errors as opposed to following the bottom up approach which involves teaching them the constructions themselves, and expecting them to apply the same.

As for simultaneous bilinguals, they faced the same problem with Urdu sentences as the sequential bilinguals did with English sentences. It must be noted here that the simultaneous bilinguals in the present study had Urdu as their passive first language, and English as their active one. Since English is largely a gender-neutral language in terms of the grammatical categories that modify the subject, translation from English to Urdu leaves them two options, either masculine or feminine auxiliaries, verbs, and adjectives. Because of the absence of neutral auxiliaries, verbs, and adjectives in the target language Urdu, which tends to leave them confused and thus make wrong selections. Thus, for simultaneous bilinguals, all three tasks seem to be somewhat challenging in Urdu, but for English constructions, they seem to make no mistake. For example, in translating Urdu into English, they automatically switch from gendered morpho-syntax of the Urdu constructions to the neutral ones of English. they can do perfectly well on production task (picture naming task) and the grammatical production task as well for English.

To answer the second question, based on the extensive discussion in the previous chapter, it can be said that both categories of bilinguals develop their morphosyntactic ability required for gender marking such that the passive language of the two is influenced by the active language of the two. In the case of simultaneous bilinguals, English is the active language which negatively affects their gender marking in Urdu sentences, whereas in sequential bilinguals, their dominant language Urdu, negatively affects their gender marking ability in English.

Bilingualism is an important aspect of today's multilingual world community and the scientific understanding of its various technicalities can prove significant in

language planning, pedagogy, and in raising linguistically adequate and well-equipped individuals that our society is very much in need of. In countries like Pakistan, which has multiple languages, like the various local languages specific to area and geography, the national language Urdu and the official language English, operating at many levels simultaneously, the constant struggle is faced by the multi-linguals in managing these languages at the same time. Instilment of early bilingualism among the younger generation has lately become the latest trend among an ever-increasing number of Pakistani parents, in an effort to equip their children for schools at an early age and thus to ensure maximum language-dependent academic outcome.

The findings showed that a child who morphosyntactically acquired a largely gender-neutral language like English is faced with challenges when he/she tries to put his passive language (Urdu) into use, because the latter is a largely gendered language with respect to morphosyntax. This has important implications for parents who prioritize and encourage their children's active use of English over that of Urdu.

Future Recommendations

The present study attempted to provide as much insight into early bilingualism as it could in the time constraints and resources, but there is still room for further research in this domain. Here some future recommendations are given below.

1. This study dealt with the morphosyntactic feature of gender only. Further researches may take other morphosyntactic features into account, such as: number, case tense and study their development in bilinguals. and multilinguals
2. This study did not cater to the speakers of local languages. Similar studies can be conducted with multilingual speakers, both simultaneous and sequential, in order to explore their morphosyntactic development.
3. Future researchers can also work on morphosyntactic ability of individuals suffering from different kinds of aphasias,
4. Future researchers can embark upon the same concepts of early bilingualism and compare the performance of bilinguals with respect to gender marking through morpho-syntactic abilities, with those of the adult learners of English as a foreign language and thus figure out the mechanism involved behind language learning and language acquisition.

REFERENCES

- Albrecht, E. (2003 - 04). *"I can speak German - und Deutsch". The Development and Use of Code-Switching among Simultaneous and Successive English-German Bilingual Children* (Dissertation Ludwigs-Universität Freiburger). Retrieved from d-nb.info/ 975221000/34
- Al-Dubib, Dalal A. (2013). *Error Analysis of Subject-Verb Agreement in the Writing of EFL Saudi Female Students: A Corpus-Based Study*. Al-Imam Mohammad Ibn Saud Islamic University: Saudi
- American Speech–Hearing Association, <https://www.asha.org/practice/multicultural/issues/bll.htm>. Erişim: 13.12.2017, 09.53.
- Baig, F. Z., Aslam, M. Z., Yaseen, T., Ahmad, H. S., Murtaza, M., & Abbas, M. J. (2020). Practicing Language Therapy for Effective Simultaneous Bilingualism: Case Studies. *International Journal of English Linguistics*, 10(1), 230-240.
- Birdsong, D. (1999) Introduction: Whys and why nots of the Critical Period Hypothesis. In D. Birdsong (ed.), *Second language acquisition and the Critical Period Hypothesis* (pp. 1–22). Mahwah, NJ: Erlbaum.
- Birdsong, D. (2018). Plasticity, variability and age in second language acquisition and bilingualism. *Frontiers in psychology*, 9, 81.

- Birdsong, D., & Molis, M. (2001). On the evidence for maturational constraints in second-language acquisition. *Journal of Memory and language*, 44(2), 235-249.
- Bock, J. K., Eberhard, K. M., Cutting, J. C., Meyer, A. S., & Schriefers, H. (2001). Some attractions of verb agreement. *Cognitive Psychology*, 43, 83–128
- Brown, R. (1973). *A First Language: The Early Stages*. London: Allen & Unwin.
- BRUHN, De GARAVITO, J., & WHITE, L. (2002). The L2 acquisition of Spanish DPs. The status of grammatical features. In A. T. Pérez-Leroux & J. Liceras (Eds.), *The acquisition of Spanish morphosyntax: The L1 /L2 connection* (pp.151 –176). Dordrecht: Kluwer.
- Cacciari, C., Carreiras, M., & Barbolini Cionini, C. (1997). When words have two genders: Anaphor resolution for Italian functionally ambiguous words. *Journal of Memory & Language*, 37, 517-532.
- Carroll, S. (1989). Second language acquisition and the computational paradigm. *Language Learning*, 39, 535 –594.
- Carroll, S. (1989). Second-language acquisition and the computational paradigm. *Language Learning*, 39, 535-594.
- Carstens, V. (1991). *The morphology and syntax of determiner phrases in Kiswahili*. Unpublished Ph.D. thesis, Department of Linguistics, University of California, Los Angeles.
- Chomsky, N. (1995). *The minimalist program*. Cambridge, MA: MIT Press.

- Clark, B. A. (2013). *First and Second Language Acquisition in Early Childhood*.
Retrieved from <http://ecap.crc.illinois.edu/pubs/katzsym/clark-b.pdf>
- Clark, E. V. (2001). Morphology in Language Acquisition. In A. Spencer & A. M. Zwicky (Eds.), *The Handbook of Morphology* (pp. 276 - 286). Blackwell.
- Comrie, B. (1999). Grammatical gender systems: a linguist's assessment. *Journal of Psycholinguistic Research*, 28 (5), 457-466
- Corbett, G. (1991). *Gender*. Cambridge, U.K.: Cambridge University Press.
- Corbett, G. (2000). *Number*. UK: Cambridge University Press.
- Costa, A., Kovacić, D., Fedorenko, E. & Caramazza, A. (2003). The gender congruency effect and the selection of freestanding and bound morphemes: Evidence from Croatian. *Journal of Experimental Psychology: Learning Memory and Cognition*, 29, 1270–1282.
- Crystal, D. (Ed.). (2008). *A Dictionary of Linguistics and Phonetics* (6th ed.). USA, UK, Australia: Blackwell.
- Cummings, T. F., & Bailey, G. T. (2005). *Punjabi Manual and Grammar: A Guide to the Colloquial Panjabi of the Northern Panjabi* (N.Ahmad, Pub.) .Lahore: Sang-e-Meel Publications. (Original work published in 1925).
- Davidson, D., Vanegas, S. B., Hilvert, E., Rainey, V. R., & Misiunaite, I. (2019). Examination of monolingual (English) and bilingual (English/Spanish; English/Urdu) children's syntactic awareness. *Journal of child language*, 46(4), 682-706.

- De Houwer, A. (1990) *The Acquisition of Two Languages from Birth: A Case Study*. Cambridge: Cambridge University Press.
- Dewaele, J.-M., & Véronique, D. (2001). Gender assignment and gender agreement in advanced French interlanguage: A cross-sectional study. *Bilingualism: Language and Cognition*, 4, 275 – 296.
- Döpke, S. (2000) Generation of and retraction from cross-linguistically motivated structures in bilingual first language acquisition. *Bilingualism: Language and Cognition* 3: 209–26.
- Ellis, R. 1986. *Understanding second language acquisition*. Oxford: Oxford University Press.
- Fauziati, Endang. (2009). *Readings on Applied Linguistics: A Handbook for Language Teachers and Teacher Researchers*. Surakarta; Era Pustaka.
- Flege, J. E., Yeni-Komshian, G. H., & Liu, S. (1999) Age constraints on second-language acquisition. *Journal of Memory and Language*, 41, 78–104.
- Fodor, J. A. (2001). *The Mind Does Not Work that Way: The Scope and Limits of Computational Psychology*. Cambridge, MA: MIT Press.
- Francis, W. S. (2005). Bilingual semantic and conceptual representation. *Handbook of bilingualism: Psycholinguistic approaches*, 251-267.
- Franceschina, F. (2001). Morphological or syntactic deficits in near-native speakers? An assessment of some current proposals. *Second Language Research*, 17, 213 –247.

- Franceschina, F. (2005). *Fossilized second language grammars. The acquisition of grammatical gender*. Amsterdam: John Benjamins.
- Gathercole, V.M. (2007). Miami and North Wales, so far and yet so near: A constructivist account of morphosyntactic development in bilingual children. *International Journal of Bilingual Education and Bilingualism*, 10, 224–247.
- Gathercole, V.M., & Thomas, E.M. (2005). Minority language survival: Input factors influencing the acquisition of Welsh. In J. Cohen, K.T. McAlister, K. Rolstad, & J. MacSwan (Eds.), *Proceedings of the 4th International Symposium on Bilingualism (ISB4)* (pp. 852–874). Somerville: Cascadilla Press
- Goldstein, B. A. (2012). *Bilingual Language Development & Disorders in Spanish-English Speakers*. Baltimore, MD: Paul H. Brookes Pub.
- Grosjean, F. (2001). The bilingual's language modes. In J. Nicol (Ed.), *One mind, two languages: Bilingual language processing* (pp. 1-22). Oxford: Blackwell.
- Guillelmon, D., & Grosjean, F. (2001). The gender marking effect in spoken word recognition: The case of bilinguals. *Memory & cognition*, 29(3), 503-511.
- Hakuta, K., Bialystok, E., & Wiley, E. (2003). Critical evidence: A test of the critical-period hypothesis for second-language acquisition. *Psychological science*, 14(1), 31-38.
- Hartop, N. E. (2018). *Bilingual language acquisition & development and how bilingualism is addressed in the American school system* (Doctoral dissertation).

- Hickmann, M. (1986). Psychosocial aspects of language acquisition. In P. Fletcher, & M. Garman (Eds.), *Language Acquisition: Studies in First Language Development* (2nd ed., 9 - 29). London: Cambridge University Press.
- Hulit, L. M., Fahey, K. R., & Howard, M. R. (2015). *Born to talk: an introduction to speech and language development*. Boston: Pearson
- Hulk, A., & Cornips, L. (2006). Neuter gender and interface vulnerability in child L2/L1 Dutch. *Paths of Development in L1 and L2 acquisition: In honor of Bonnie D. Schwartz*, 107-134.
- Hull, R., & Vaid, J. (2005). Clearing the cobwebs from the study of the bilingual brain. *Handbook of bilingualism: Psycholinguistic approaches*, 480-496.
- Indrayani, N. (2016). Language development at early childhood. In *International Conference on Education (IECO) FKIP UNMUH JEMBER* (Vol. 1, No. 1).
- Jarvis, S., & Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. New York: Routledge.
- Jescheniak, J.-D. & Levelt, W. J. M. (1994). Word frequency effects in speech production: retrieval of syntactic information and of phonological form. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 20 (4), 824-843.
- Johnson, J. S. & Newport, E. L. (1989) Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21, 60 –99.

- Kirova, A. (2016). *Lexical and morphological aspects of gender and their effect on the acquisition of gender agreement in second language learners*. Rutgers The State University of New Jersey-New Brunswick.
- Kroll, J. F., & De Groot, A. M. (Eds.). (2009). *Handbook of bilingualism: Psycholinguistic approaches*. Oxford University Press.
- Kuo, L., & Anderson, R. C. (2006). Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist, 41*(3), 161–180.
- Kupisch, T., Akpınar, D., & Stöhr, A. (2013). Gender assignment and gender agreement in adult bilinguals and second language learners of French. *Linguistic Approaches to Bilingualism, 3*(2), 150-179.
- Kurinski, E., & Sera, M. D. (2011). Does learning Spanish grammatical gender change English-speaking adults' categorization of inanimate objects? *Bilingualism: Language and Cognition, 14*, 203–20.
- Lenneberg, Eric. 1967. *Biological foundations of language*. New York: Wiley.
- Levelt, W. J. M. (1989). *Speaking: from intention to articulation*. Cambridge, MA: MIT Press.
- Lieberman, Philip. (1998). *Eve Spoke: Human Language and Human Evolution*. New
- Long, M. H. (1990) Maturational constraints on language development. *Studies in Second Language Acquisition, 12*, 251–85.

- Marcoux, D. R. (1973). Deviation in English Gender. *American Speech*, 48(1/2), 98–107. <https://doi.org/10.2307/3087897>
- May, S. (2014). *The Multilingual Turn: Implications for SLA, TESOL and Bilingual Education*. New York, NY: Routledge.
- Montrul, S., Foote, R., & Perpiñán, S. (2008). Gender agreement in adult second language learners and Spanish heritage speakers: The effects of age and context of acquisition. *Language learning*, 58(3), 503-553.
- Moyer, A. (1999) Ultimate attainment in L2 phonology. *Studies in Second Language Acquisition*, 21, 81–108.
- Myers-Scotton, C. (2006). *Multiple voices: An introduction to bilingualism*. Blackwell Pub.
- Newport, E. L., Bavelier, D., & Neville, H. J. (2001). Critical thinking about critical periods: Perspectives on a critical period for language acquisition. *Language, brain and cognitive development: Essays in honor of Jacques Mehler*, 481-502.
- Ortega, L. (2009). *Understanding Second Language Acquisition*. London: Hodder.
- Owens, Robert. (n.d). *Language Development: An Introduction*. Pearson.
- Paradis, J., Nicoladis, E., & Crago, M. (2007). French-English bilingual children's acquisition of the past tense. In Proceedings of the 31st Annual Boston University Conference on Language Development (Vol. 2, pp. 497-507).

- Pienemann, M. (1998a). *Language processing and second language development: Processability Theory*. Amsterdam-Philadelphia: John Benjamins.
- Rodina, Y., Westergaad, M. (2015). Grammatical gender in bilingual Norwegian-Russian acquisition: The role of input and transparency. *Bilingualism: Language and Cognition*, 1 - 18.
- Rogers, M. (1987). Learners' difficulties with grammatical gender in German as a foreign language. *Applied Linguistics*, 8, 48-74.
- Saffran, J., Aslin, R., & Newport, E. (1996). Statistical learning by 8-month-old infants. *Science*, 274, 1926–1928.
- Savickiene, I., & Kaledaite, V. (2007). The role of a child's gender in Language Acquisition. *Esti Rakenduslingvistika Ühingu Aastaraamat*, 3, 285 - 297.
- Scheutz, M. J., & Eberhard, K. M. (2004). Effects of morphosyntactic gender features in bilingual language processing. *Cognitive Science*, 28(4), 559-588.
- Schmidt, R. L. (1999). *Urdu: An Essential Grammar* (1st ed.). London & New York: Routledge.
- Schmidt, R. L. (2004). *Urdu: an essential grammar*. New York: Routledge.
- Schulz, P., & Grimm, A. (2019). The age factor revisited: Timing in acquisition interacts with age of onset in bilingual acquisition. *Frontiers in Psychology*, 9, 2732.

- Şeker, E. (2018). Bilingual acquisition of English and Turkish languages: A case study of a Turkish infant named Ertuğrul Dolunay. *Journal of Language and Linguistic Studies*, 14(2), 183-192.
- Shami, Ibrahim Ali A. (2014). *University Students' Errors in Using Subject Verb Agreement in Writing. Riyad; Al-Nasser University.*
- Shamim, F., & Rashid, U. (2019). The English/Urdu-medium divide in Pakistan: Consequences for learner identity and future life chances. *Journal of Education and Educational Development*, 6(1), 43-61.
- Shulman, B. B., & Capone, N. C. (2010). *Language Development: Foundations, Processes, and Clinical Application*. USA: Jones & Bartlett Learning.
- Siemund, P. (2002). *Pronominal Gender in English: A Study of English Varieties from a Cross-*
- Siemund, P. (2008). *Pronominal gender in English. Routledge Studies in Germanic Linguistics. Routledge (Taylor and Francis), New York.*
- Tomasello, M. (2003). *Constructing a language: A usage-based theory of language acquisition*. Cambridge, MA: Harvard University Press.
- Tomasello, M. (2004). Lunchtime Debate: Where does language come from? 29th Annual Boston University Conference on Language Development, Boston, M.A.
- Van Berkum, J. (1996). *The psycholinguistics of grammatical gender*. Nijmegen: Nijmegen University Press.

Voeikova, M., & Savickiene, I. (2001). The acquisition of the first case oppositions by a Lithuanian and a Russian child. *Wiener Linguistische Gazette*, 67 - 69.

Webster's Ninth New Collegiate Dictionary. (1991). Springfield, MA: Merriam-Webster.

Wilton, A. (2009) . Multilingualism and foreign language learning. Handbook of foreign language communication and learning (pp.45-78).Berlin: Mouton de Gruyter.

Yule, G. (1996). *The Study of Language*. Cambridge: Cambridge University Press.

APENDIX A

Name

Age

Class

Gender

This analysis is basically designed to check the bilinguals understanding of gender marking in English and Urdu. Students should be from 1 or 2 class.

Grammatical Judgment of English Sentences

English grammatical/ ungrammatical Sentences

Please tick right in front of the right sentences and wrong in front of the wrong sentences.

1. Hina is eating her snacks.
2. This is my chair and I like her.
3. He is going to school because she is a student.
4. It is a good girl.
5. Qasim is a good boy. He does his homework.
6. The boy is fat.
7. The girl is shouting.
8. I had a dream. He was scary

Grammatical Judgment of Urdu Sentences
1-Larki ghar jar raha hy
2-Larka cricket khail raha hy.
3-Ali Acha bacha hy.
4-Mei ne saib kha li hy
5-Kursi toot gya hy
6-Sabzi acha hota hy
7-Mujhe need aa raha hy
8-Gaye doodh deta hy.
9-Makri ooper baithi hy.

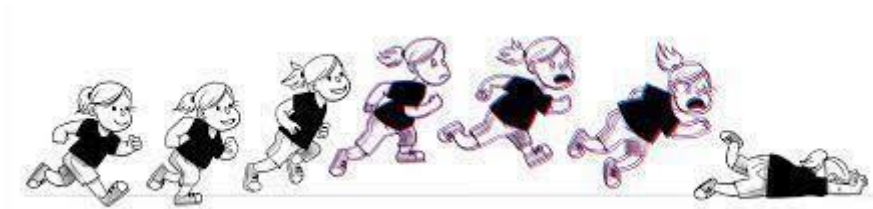
10-Gaye ghaas khati hy
Urdu to English Translation by Simultaneous Bilinguals
1-Kutta bhonka
2-Kursi choti hy
3-Suraj bara hy
4-Ahmad kaam kar raha hy
5-Sana khail rahi hy
6-Wo akeli hy
7-Wo akela hy
8-Billi doodh pi rahi hy
9-Shair dhaarr raha hy

Urdu grammatical/ungrammatical sentences

1. وہ لڑکی گھر جا رہا ہے۔
2. مین نے سیب کھا لی ہے۔
3. کرسی ٹوٹ گیا ہے۔
4. مجھے نیند آ رہا ہے۔
5. سیزی اچھا ہوتا ہے۔

Task#2 Picture Naming Task

1. What is happening in this picture? Briefly explain in two to three lines in English as well as in Urdu.



2. Two to three lines on this object in Urdu and English.



3. What is this boy doing? Explain in English and Urdu aswell.



4. What is this object? It is used for what? Briefly explain in English and Urdu aswell



5. What is this girl doing? Briefly explain in English and Urdu aswell.

