

Analyzing Morphosyntactic Developmental Stages: A Case of Special Needs in Dhaka



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CERTIFICATE OF APPROVAL

I hereby declare that this thesis is the student's own work and effort. All sources of information incorporated here have been duly acknowledged. This thesis has been submitted with my approval.

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DECLARATION

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

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Abstract

This thesis aims to provide a detailed analysis of the morphosyntactic developmental stages to observe in autistic children on Dhaka. Autism is a complex neurodevelopmental condition that affects social interaction as well as communication. Children with autism have diverse language and communication impairments. While language development in typically developing children has been extensively studied, understanding the unique characteristics and challenges faced by autistic children in acquiring morphosyntactic skills is essential for tailored interventions and support. This research paper will explore the various stages of morphosyntactic development in autistic children which draws upon a diverse range of linguistic data and previous studies in the field. In this study, the researcher has used quantitative study method. This paper has come to a conclusion with some proposals on the steps that should be taken by us to overcome the limitations which were found during the research.

Chapter 01: Introduction

1.1. Introduction

Autism Spectrum Disorder (ASD) is a complex neurodevelopment condition that impacts social interaction, communication and behavior. It affects children from diverse backgrounds worldwide, including in Dhaka which is the capital city of Bangladesh. Language development is a pivotal aspect of a child's growth, which enables them to express emotions, thoughts and needs effectively. However, autistic children often face distinctive challenges to acquire language skills, particularly in the realm of morphosyntax, which involves the rules governing the structure of words and sentences.

The research paper focuses on the analysis of morphosyntactic developmental stages in special needs children in Dhaka. By exploring the language development of this specific population, we aim to increase our understanding of the linguistic characteristics and challenges faced by individuals with autism in this region. This research holds a significant importance to contribute to the existing body of knowledge on autism and their language development, while also having practical involvement for designing tailored interventions and support systems for special need children in Dhaka.

1.2. Background

In recent years, Autism has gained increased attention due to its rising commonness and its impact on special needs children and their families. In Bangladesh, the commonness of Autism has been increasing steadily. The field of child development and psychology is a topic of growing concern. Language development is a crucial and critical aspect of early childhood, and

variations from typical language acquisition trajectories can inhibit individuals' ability to interact with others, educational engagement, and participate in various social activities.

1.3. Statement of the Problem

While there is plenty of research on typically developing children and their language development, there is a lack of comprehensive studies on morphosyntactic development in special needs children in Dhaka. Understanding the specific linguistic challenges faced by this population is vital for formulating effective strategies that can foster their communication skills and overall development. By addressing this research gap, we aim to focus on the unique language profiles of special needs in Dhaka and contribute to the broader knowledge base on autism.

1.4. Objectives of the research

The primary objectives of this thesis are as follows:

- a) To analyze the morphosyntactic developmental stages observed in autistic children in Dhaka.
- b) To explore the factors influencing morphosyntactic development in this population.
- c) To compare the morphosyntactic development of autistic children in Dhaka with typically developing peers.
- d) To identify effective intervention and support strategies for promoting language skills in autistic children in Dhaka.

1.5. Research Questions

- (1) What are the standard stages and features for syntactic development of children?

- (2) What are the features of morphological development of children?
- (3) How do the Autistic Care Institutions in Dhaka assist in syntactic development?
- (4) Are the parents aware of their children's Linguistic Development?

1.6. Significance of the Study

The research finding will hold several implications for various collaborators. For therapists, educators and parents, understanding the morphosyntactic developmental stages of autistic children in Dhaka will facilitate the design of appropriate and targeted interventions to support their language learning needs. Additionally, this study can inform policymakers and organizations working in the field of autism about the unique linguistic challenges faced by autistic individuals in Dhaka, encouraging the development of evidence-based interventions and support services.

1.7. Scope and Limitations

This thesis will focus on children who are diagnosed by Autism Spectrum Disorder, residing in Dhaka, Bangladesh, within a certain age range. It will involve data collection through language assessments, observations, and interviews with caregivers and educators. However, it is essential to acknowledge that the scope of the study might be restrained by the availability of participants as well as resources. Furthermore, due to the complexity of autism and individual differences, the study may not capture the full diversity of language profiles within the autistic population in Dhaka. Nonetheless, this research seeks to contribute valuable insights into the morphosyntactic development of autistic children in the specific context of Dhaka.

Chapter 02: Literature review

In this research, Chapter 2 has started with an introduction of autism with different physiological theories of language acquisition of children. Then it emphasizes on the syntactic development and the principles of language and speech therapy. This research helps to evaluate autistic children with linguistic disabilities to develop crucially in the sector of linguistic development both from the philosophic and linguistic perspective.

2.1. Autism

Autism spectrum disorder (ASD) is a developmental disability and it is caused by differences in the brain. Some people with autism have a common difference which is genetic condition. Other causes are not yet known properly. Scientists believe that there are many causes of autism. The causes act together to change the most common ways people develop.

Autistic people may behave, interact, communicate, and learn in ways that are different from other people. The abilities of people who have autism can vary significantly. For example, some autistic people may have advanced conversation skills whereas others may be nonverbal. Some people who have ASD need a lot of help in their daily lives; and some of them can work and live with little or no support.

Autism symptoms in children begin before the age of 3 and can last throughout their life. In some case, symptoms may improve over time. Some symptoms of ASD children are shown within their first 12 months of life. In the case of others, symptoms may show up after 24 months of age or later. Some children with autism can meet developmental milestones and gain new skills until around 18 to 24 months of age, and then their gaining new skills are stopped or they

start to lose the skills they once had. Language in autism Current descriptions has primarily focused on four areas:

- (a) Absence of verbal abilities (e.g., the failure to acquire spoken language during the lifespan), which is the outcome for between 50–75% of affected individuals. (Rapin, 1991)
- (b) Delays of early language with words, the rest is produced in average age of 38 months (Howlin, 2003), in the place of typical time of 12–18 months. These types of delays are one of the diagnostic criteria of autistic children.
- (c) Typical features of language production which includes echolalia and jargon. (Tager-Flusberg & Calkins, 1990)
- (d) High-level discourse and pragmatic abilities (Bartak, Rutter, & Cox, 1975; Bartolucci, 1982; Lord & Paul, 1997).

As autistic children become adolescents and young adults, they may face difficulties maintaining and developing friendships, communicating with others, or behaviors which they have to face in school or on the job. Healthcare providers may provide some attention to them because they also have conditions like anxiety, depression, or attention-deficit/hyperactivity disorder. These conditions mostly occur with people of ASD than in people without ASD.

2.2. Chronological history of autism

The term ‘autism’ is derived from Greek word ‘autos’ which means ‘self’. It is a difficult to understand and appreciate other’s ideas, beliefs and perspectives as if one’s own perspective is the only true and correct view (Baron-Cohen, 2008, p.16). Paul Eugen Bleur, a Swiss psychiatrist was the first one, who used the term ‘Autos’. There are some differences between Kanner’s and Bleur’s use of the term ‘autism’. Leo Kanner, who is the child psychologist, first explained the

‘classic autism’ in 1943. He used the term “autism” to explain the clinical condition of the children but Bleur used the term in the case of patients in the early adolescence and adulthood (Blake, Hoyme and Crotwell, 2013, p.58-59).

Leo Kanner’s Classic Autism: Classic autism is also sometimes called ‘Kanner’s autism’ after Leo Kanner, who was a great psychiatrist of children. Blake et al. (2013) argued that Kanner had first described these children in 1943 by publishing a clinical report entitled “Autistic Disturbance of Affective Contact”. He recognized 11 children from his clinic in Baltimore who had what he called ‘autistic aloneness’, showing so little interest in people that they could be considered as the furniture in his office. All of them shared the same types of behavior, interest or language delay and disorder. The children were extremely autistic and aloof and they refused to being contacted by their parents, doctors and they were preferred to be alone (p.58-59).Baron-Cohen (2008) also added that they had difficulties in anticipating how someone will feel or what they might think, knowing how to react to another person’s behavior. They also shared the difficulties in reading other people’s emotional expressions and accepting that there may be other perspectives, not just their own correct perspective. They tended to use inappropriate speech in the social context and only understood the literal meaning of the speech. Among the language disorders, there was a language delay because there were some children who did not have the obvious language until age 3. Some of them had the echolalia speech, inappropriate intonation and faulty sentence structure and the incorrect use of personal pronouns. However, echolalia speech, language delay and below average IQ or learning disabilities are more typical in Classic autism than Asperser syndrome (p.17-19).

Bruno Bettelheim’s Parentectomy: In the 1960s, he portrayed the autistic kids as living in the ‘glass of bubble’ which is unreachable. He viewed autism as a reaction to an ‘unaffectionate

maternal relationship'. His controversial view led to a form of treatment which is called 'parentectomy' which refers to the idea of removing the child from his or her parents, in the hope that the social development of a child would recover and flourish with foster parents who could be more affectionate. However, his ideas and treatments created huge controversy and fell into disrepute when it was recognized that the removal of the children from their biological parents did not help for an obvious improvement in the children's social development. It was also said that the parents of children with autism were no less caring and affectionate than other parents (Baron-Cohen, 2008; Blake et al., 2013).

Niko Tinbergen's Holding Therapy: Nobel Prize-winning etilogist Niko Tinbergen reinforced Bettelheim's view in his book in 1983. He argued that any emotional trauma that disrupts the child's earliest attachment to their mother; for example brief separations on a long car journey for a particularly anxious child could cause autism. There was no proof or evidence for his view that the autism itself arose following a trauma of some kind, though many children with autism showed high level of anxiety, He also introduced the controversial treatment which is called 'holding therapy' that is the forced hugging to break the tendency of child's repulsion to being touched or held or hugged. However, this therapy has been questioned on ethical grounds because often the child finds it very distressing to be forced into social contact in this way (Baron-Cohen, 2008, p.20-21).

Autistic children have sensory difficulties in one or more of the five senses of sight like hearing, touch, taste and smell. There is a lack of clear understanding due to the invisible nature of the condition, although consciousness of autism has risen. It is true that there are no miracle cures for autism with linguistic disability but it is treatable in long term within a proper linguistic therapy. Early identification of linguistic feature and treatment can have a positive impact on

children with autism. It is the parents' first and foremost duty with the concerns to identify early feature and to provide treatment immediately.

2.3. Sociolinguistic Perspectives on Special Needs

Sociolinguistic perspectives on special needs explore the interplay between language, society, and individuals with diverse linguistic abilities and disabilities. This branch of sociolinguistics seeks to understand how language use and language attitudes are shaped by and, in turn, shape the experiences of individuals with special needs within different social and cultural contexts.

The key areas of focus within sociolinguistic perspectives on special needs include language variation, identity formation, language attitudes, language policy, and language planning.

- **Language Variation:** Sociolinguistics examines how language varies across different social groups and contexts. In the case of individual with autism, this perspective investigates that how language use might vary among children with various disabilities, for example, Down syndrome, Autism Spectrum Disorder or impairments of specific language. Understanding these variations helps in altering language interferences and educational strategies to face the specific needs of disable children.
- **Formation of Identity:** Language plays a pivotal role to shape individual's sense of identity. For special needs children, their self-concept and how they perceive themselves within the broader social fabric is influenced by their linguistic abilities and experiences. Sociolinguistic research in this area explores how language can empower or mark out children with disabilities, and how other aspects of their identity is interacted by linguistic identity.
- **Language Attitudes:** Sociolinguistics investigates on societal attitudes toward different language varieties. In the context of individual with special needs, this research examines

attitudes towards disabled individuals' linguistic abilities and communication styles.

Understanding language attitudes can lead to the development of more comprehensive and accepting environments for special needs children.

- **Language Policy:** Sociolinguistic research in the area of Autism assesses language policies and practices in institutional and educational settings that serve to special needs individual. The impact of language policy on the linguistic development and educational experiences of individuals with disabilities is examined by it.
- **Language Planning:** Sociolinguistics also contributes to language planning efforts concerning special needs children. It addresses questions on how to develop and apply effective communication strategies, alternative communicative systems, and comprehensive language practices to support individuals with autism in their linguistic and social interactions.

In summary, sociolinguistic perspectives on special needs offer valuable perceptions into the complex relationship between language, disability, and society. These insights can inform the development of more inclusive educational programs, communication strategies, and policies that empower individuals with special needs to participate fully in linguistic and social contexts. By understanding the sociolinguistic dimensions of special needs, we can work towards fostering a more inclusive and accepting society that values linguistic diversity and individual differences.

2.4. Psycholinguistic perspective on special needs

American Psychologist B.F. Skinner in 1959, proposed this theory which is also known as Stimulus-Response-Theory. The theory is an explanation for language acquisition in human and

thought that entire system is based on operant conditioning. According to his theory, human learn the correct language by chance and then get the approval. The theory says that, there are no innate abilities and there is no proof of innate abilities. Language is a conditioned behavior, the stimulus response processes. Behavioral Theory claims that the child's language acquisition occurs through the process of reinforcement and imitation. The child hears it and imitates it for reinforcement of the child's verbal behavior.

The development of language emphasizes on the role of communication and social interaction between the child in developing stage and adults who are linguistically knowledgeable. The more they interact and communicate with adult, the more they learn and develop their linguistic ability. It is largely based on the socio-cultural theories of Soviet psychologist and semiotics (1896-1934) Lev Vygotsky.

According to Vygotsky, language develops because human beings are motivated to interact socially, and caregivers support their interactions with them. Vygotsky's social theory regards that children learn through social interaction. Vygotsky formulated a practice-oriented model of education for special needs children.

According to this model, through communicative practice knowledge is socially constructed. According to social constructionists, communication is a social process of constructing reality and not a cognitive epistemological process (Pearce 1995). From this perspective "knowledge is not something people something people do together, not possess in their heads" (Gergen 1985:270). According to Vygotsky, higher mental functions are not independently constructed by children in early ontogenesis, but "rather than that, the development of mental process is mediated by adults in the context of social interactions with children" (Karpov 2005:10).

2.5. Stages in First Language Acquisition

By born, human does not have suddenly acquisition the grammatical aspects of his first language in his brain and completely with its rules. Human being can acquire the native language through some stages, and every stage is passed near to adult's language. Six stages considered in children's first language acquisition, they are given below:

1. Pre-talking stage Cooing (0-6 months): According to Bolinger (2002:283), in pre-talking stage, children starts cooing vowel-like sounds and they start responding to human sounds more definitely, they turns head and eyes in search for speaker and some chuckling sounds. Producing vowel-like sounds such as [u] and [o] in the sounds of "oh", "uh", and "ah", typical of "cooing".

2. Babbling stage (6-8 months): Infants produce as consonant-vowel combinations, Steinberg in babbling stage (2003:147). Not all the speech sounds are same in language of the world such as [ma-ma-ma] or [da-da-da] and [ba-ba-ba] or [na-na-na]. (Hutauruk, P-54).

3. Holophrastic stage (9-18 months): Fromkin (1983:328) defined holophrastic from holo "complete" or "undivided" plus phrase "phrase" or "sentence". In holophrastic stage, children use their first single word which represent to a sentence. Children express particular emotional state using one word. For example, "daddy".

4. The two-word stage (18-24 months): In two-word stage, children make mini sentences with simple semantic relations. According to Fromkin (1983:329), children start to form actual two-word sentences, with the relations between the two words showing definite syntactic and semantic relations and the intonation contour of the two words extending over the whole utterance rather than being separated by a pause between the two words. Basically, at this age a child is able to produce the consonant sounds like [j], [p], [b], [d], [t], [m], and [n]. (Hutauruk, P-54).

5. Telegraphic stage (24-30 months): In this stage, the child begins to produce utterances that are longer than two words, these utterances are “sentence-like”; they have hierarchical, constituent structures which is similar to the syntactic structures found in the sentences produced by adult grammar. (Hutauruk, P-55).

6. Later multiword stage (30+months): According to Bolinger (2002:283) fastest increase in vocabulary occurs in this stage with many new additions everyday; no babbling at all; utterances are communicative. There is a great variation among children occurs in this stage. It seems to understand everything said within hearing and directed to them. (Hutauruk, P-55).

2.6 Linguistic Characteristics in Autism:

Language characteristics in Autism Spectrum Disorder refer to the distinct patterns and challenges that individuals with autism experience in their language development and communication abilities. Here is some key language characteristics commonly observed in ASD:

- **Delayed Language Acquisition:** Many autistic or special needs children experience delays in the development in expressive language skills, such as speech sounds, vocabulary, and sentence formation. They may start speaking and communicating later than a normal child and their early language may be limited or repetitive.
- **Echolalia:** Echolalia is common language feature in Autism Spectrum Disorder, which is characterized by word repetition, phrases, or sentence heard previously. Echolalia can be immediate repeating or delayed repetition of something after some time has passed.
- **Pronoun Reversal:** Individuals with Autism Spectrum Disorder may struggle with using appropriate pronouns. They often refer to themselves as “you” or “he/she” instead of using “I” or “me”.

- **Literal Understanding:** Children with Autism Spectrum Disorder tend to have difficulty on understanding figurative language jokes, sarcasm, and idioms. They often explain language literally, which can be a matter of misunderstandings in social interactions.
- **Social Communication Difficulty:** Children with autism may have challenges in understanding or using nonverbal communication, for instance gestures, facial expressions and physical language. This shortage can impact their ability to engage in corresponding conversations and understand the emotions of others.
- **Limited Eye Contact:** Many individuals with autism have reduced or atypical eye contact during conversations that may impact their social communication skills and connection with others.
- **Repetitive Language:** Repetitive language patterns, including preservative speech and scripted language, are common in individuals with ASD. They seem to repeat the same words or phrases again and again, even when they are not relevant to the current context.
- **Impaired Pragmatics:** Pragmatics refers to the rules and conventions of language use in social contexts. Individual with ASD may struggle with turn-taking in conversations, maintaining topic coherence, and adjusting their language appropriately based on the listener's needs.
- **Impaired Theory of Mind:** Theory of Mind is the ability to understand and attribute mental states like intentions, beliefs, and emotions. Autistic individual often face difficulty with mind theory that can impact their understanding of others' perspectives in communication.

- **Hyperlexia or Hypolexia:** Some individuals with ASD may demonstrate advanced reading skills(hyperlexia) while having difficulty with comprehension or expressive language (hypolexia).

It is essential to recognize that the language characteristics in ASD can manifest differently in each individual, and some individuals may exhibit strengths in certain areas of language despite challenges in others.

2.7. Morphological Development and Special needs

According to SookWhan Cho and WillamO'Grandy (1987) children's language acquisition is one of the most intriguing phenomena studied by linguists which are a major achievement. In recent decades, a large amount of research on linguistics has focused on how children master on human language complexities. Linguistic developmental is considered as 'linguistic acquisition' that includes the acquisition of grammar. Children's acquisition of morphology is one major concern in this regard (p. 464).

Nelson notes that the child's early nouns most often refer to objects that are not fixed, unmovable parts of his environment. Generally the early vocabulary a child use includes nouns and words related to action. Also, words refer to attributes of locations, objects or states, such as pretty, big, all gone, outside, hot and a few 'social' words like please, yes, no, and ouch. There are also several functional words for example auxiliary verbs, interrogative words, prepositions, articles, etc. The particular words vary from child to child (Nelson, 1973, 1975). In McNeill's view the young child already knows a great deal about the grammatical relations which convey simple sentences. Greenfield and Smith (1976) have proposed a modification of this hypothesis

that is adults typically use the situational contexts in which children's utterances occur as a guide to interpreting them. That is, the utterance itself is only a part of what the child is expressing. That is, the child does not know much about the language per se, that is, the syntax by which the language expresses relationships. Rather, the child's knowledge is better conceptualized as semantic or conceptual (Foss, D. J., and Hakes, D. T., 1978, pp. 234 -238).

Very few studies are done to investigate the grammatical aspect of language acquisition for special needs children. There are some studies to find out the acquisition of grammatical morphology of special needs children and it has been found out that autistic children face some specific problems using different grammatical morphemes. It has been found that autistic children are more likely to omit certain morphemes, particularly articles (a, the), auxiliaries and copula verbs, past tense, third-person present tense, and present progressive (Belkadi, 2006, p.5; Tager-Flusberg et al., 2005, p.345). Tager-Flusberg et al. (2005) also found that autistic children face difficulty to mark past tense. They can perform well on the present progressive form. But they are significantly impaired on the past tense elicitation trials (p.345)

Moreover, the language disorder in pragmatics also includes the features of grammatical impairments faced by the autistic children. For example, personal pronouns reversal-for example the use of "I" instead of "you" and vice-versa and the misuse of prepositions such as "in", "on", "under", "next to", before, after and so on (Belkadi, 2006, p.4). for example, when a child asks for a drink for himself, he says, "Do I want a drink of water?" because he does not understand the difference between the personal pronouns of "I" and "you". Pronoun reversal errors may not occur in all autistic children, but it is more common in autistic individuals than in any other population (Kjelgaard&Tager-Flusberg, 2001, p.2).in autistic children, difficulty in using

pronouns is generally viewed as part of a more general difficulty with deixis which is the aspect of language that regulates shifting reference between the speaker and the listener. For example, in labeling a person by his name for example, “James”, the label remains the same without regard to who is speaking whereas, for pronouns, whether James is referred to as “I” or “you” depends on whether he is the speaker or the listener during a particular conversation. This error in using pronouns results from the difficulty to understand discourse roles and social communicative functions. Pronoun errors in autism take place. Because of the difficulties that autistic children have in conceptualizing notions of self and other as they are embedded in shifting discourse role between speaker and listener ((Tager-Flusberg et al., 2005, p.345-346).

The acquisition and understanding of the internal structure of words, including prefixes, suffixes, and other linguistic elements that convey meaning are the part of morphological development. During early childhood, children begin to grasp the rules and patterns that govern word formation and inflection. Here are some linguistic and cognitive features that contribute to morphological development:

Inflection: in the context of linguistics, refers to the process of adding affixes (prefixes, suffixes, infixes, etc.) or making internal changes to words to convey grammatical information.

Inflectional morphology modifies a word's form to indicate various grammatical features, such as tense, aspect, mood, number, case, and gender. These modifications help to clarify the relationship between words in a sentence and they provide important syntactic information.

Examples of inflection in English:

- Walk (base form)
- Walked (past tense)

- Walking (present participle, indicating ongoing action)
- Walks (third person singular form)

For instance, the verb "to eat" is "খাওয়া".

Present tense: আমি খাই (amikhai) - "I eat."

Past tense: আমি খেয়েছি - "I ate."

Derivation: In this process of linguistics, new words are formed from existing words through the addition of affixes (prefixes, suffixes, infixes, or circumfixes) or other internal modifications. It is one of the elementary processes in morphology, which involves the study of the structure of words and implies how the words are formed.

Derivation allows to create new words that are related with the original word in meaning but often have different grammatical functions or semantic variation.

For example:

Noun to verb: "teach" (verb) → "teacher" (noun)

Adjective to noun: "friend" (noun) → "friendly" (adjective)

Verb to adjective: "happy" (adjective) → "happiness" (noun)

In bangla, গান (gan) - to sing → গায়ক (gayok) - singer

পড়া - to read → পাঠক - reader

Compounding: Compounding is another important aspect of morphology. It deals with the process of forming new words by combining two or more existing words to create a single lexical unit with a meaning which is clear-cut. Compounding is a frequent word-formation process in many languages and it plays a vital role in expanding vocabulary and expressing complex concepts briefly.

Some examples of compound words in English are given:

Toothbrush: "tooth" + "brush"

Sunflower: "sun" + "flower"

Football: "foot" + "ball"

Bookshelf: "book" + "shelf"

Blackboard: "black" + "board"

Compounding can take place in various grammatical categories, such as nouns, verbs, adjectives and adverbs. The elements which is combined in a compound can be either full words or morphemes (prefixes, roots, or suffixes). In some languages, compounding can result in extremely long words, carrying complex meanings.

Compounding in Bangla:

বই (boi) - book + মেলা (mela) - fair → বইমেলা (boimela) - book fair

দূর (dur) - far + বাস (bash) - residence → দূরবাস (durbash) - distant residence (usually used for someone who lives far away)

মাছ (mach) - fish + ভাত (bhat) - rice → মাছভাত (machbhat) - a traditional Bangla meal of fish and rice

Ablaut: It typically involves the alteration of vowel sounds within a root or a word stem, producing different forms that convey distinct grammatical functions or meanings. The changes in vowels can be achieved through vowel lengthening, shortening, or shifting to a different vowel altogether. Ablaut is sometimes used in combination with other morphological processes for example adding prefixes or suffixes, to create a variety of word formations.

Some examples of ablaut in English are given below:

Sing, sang, sung - The vowel in the stem changes (i → a → u) which indicates different verb tenses.

Foot, feet - The vowel in the stem changes (oo -> ee) which indicates pluralization.

Go, went, gone - The vowel in the stem changes (o -> e -> o) which indicates different verb tenses.

Germinating: In morphology, "germination" deals with a linguistic process or phenomenon which involves the formation of new words from existing ones. It is a habitual word formation process where affixes such as prefixes, suffixes, infixes, etc are added to base words and then it creates new words with different grammatical functions or meanings.

Example of germination in morphology is given:

One example of germination in morphology is the formation of the word "driver" from the base word "drive." In this case, the suffix "-er" is added to the base word "drive" to create the noun "driver," which refers to a person who drives.

Base word: Drive

Affix: -er

Resulting word: Driver.

Another example is the word "given" formed from the base word "give" by adding the suffix "-en," meaning to make or become dark.

Base word: give

Affix: -en

Resulting word: given.

Example of germination in Bengali:

Base word: গাছ (gaach) - meaning "tree"

Germinated word: গাছগুলো (gaachgulo) - meaning "trees" (plural form)

In this example, the word "গাছগুলো" is formed after adding the suffix "-গুলো" with the base word "গাছ". This suffix "-গুলো" is used to indicate the plural form of the noun, thus changing the meaning from "tree" to "trees."

Another example:

Base word: বাড়ি (bari) - meaning "house"

Germinated word: বাড়িতে (barite) - meaning "in the house"

In this case, the word "বাড়িতে" (barite) is formed by adding the suffix "-তে" (-te) to the base word "বাড়ি". The suffix "-তে" is used to indicate the location or direction which means "in the house."

Blending: Blending is a process in morphology which occurred by the combining parts of two or more words to create a new word with a meaning which is a combination of the original words. This is a familiar phenomenon in many languages and is used to form new words efficiently. It is especially frequent in languages with rich inflectional and derivational systems.

One good example of blending in English is "brunch," which is the combination of "breakfast" and "lunch." Other examples are given:

"Smog" - from "smoke" and "fog"

"Spork" - from "spoon" and "fork"

"Guesstimate" - from "guess" and "estimate"

Example in Bangla: "বাংলাদেশ" (Bangladesh)

The word "বাংলাদেশ" is a blend of two words:

"বাংলা"- refers to the Bengali language.

"দেশ"- which means "country" or "land."

When combined, the word "বাংলাদেশ" is formed, representing the country of Bangladesh, which is the land of the Bengali speakers.

Shortening: Shortening in linguistics, is a morphological process which involves the reduction or truncation of a word. It is a process of word formation in which a longer word or part of a word is shortened to create a new word or morpheme. Shortening is frequently used in informal language, colloquial speech, and in various linguistic contexts like slang and texting.

Examples include:

"advertisement" → "ad"

"telephone" → "phone"

"television" → "TV"

"can't" (cannot)

"don't" (do not)

Some examples of shortening in Bangla are given below:

"করব" is the shortened form of "করবো" that means "I will do."

"খাব" is the shortened form of "খাবো" which means "I will eat."

"কি খবর?" (kikhabar?) is the Shortened form of "কি খবর আছে?" (kikhabar ache?) Which means

"What's the news?"

"অনেক" (onek) is the shortened form of "অনেকটা" (onekta) which means "a lot" or "very."

"সাবধান" (sabdhan) - Shortened form of "সাবধানথাকো" (sabdhanthako) which means "Be careful."

Lengthening: Lengthening in linguistics is a morphological process which involves the continuation or addition of sounds to a word. This phenomenon typically takes place in the

formation of inflected or derived forms of words. However, lengthening can affect vowels, consonants, or both, depending on the language and specific rules governing the process.

Example:

Base form: "hop"

Past tense: "hopped"

In this example, the base word "hop" ends in the voiceless consonant /p/. In forming the past tense, the /p/ sound is lengthened before adding "-ed," which results in the word "hopped."

Another example is given:

Base form: "walk"

Past tense: "walked"

Again, the base word "walk" ends in the voiceless consonant /k/. Before adding "-ed" to make the past tense, the /k/ sound is lengthened, resulting the word "walked."

Example:

Base form: খেলা (khela) - "to play"

Past tense: খেললাম (khelalam) - "I played"

In the example, the base word "খেলা" (khela) ends in the consonant sound /l/. Before adding the suffix "-লাম" ("-lam") to make the past tense, meaning "I played," the /l/ sound is lengthened, resulting in the word "খেললাম" (khelalam).

Reduplication: In Linguistics, reduplication is a morphological process found in many languages where a part of a word, often a morpheme or a portion of a word, is repeated to create a new form with a modified meaning. Reduplication is used in various purposes, such as intensification, pluralization, indicating repetition, or forming new words with related meanings.

An example of reduplication in English is given below:

Word: "bye-bye"

Meaning: Goodbye or Farewell. Here, the word "bye" is reduplicated to "bye-bye," that intensifies the meaning of parting or saying goodbye.

Reduplication can make more complex patterns or repetition of specific parts of the word to show various aspects of meaning. It is a common morphological phenomenon found in many languages, each with its own unique rules and purposes for utilizing reduplication.

Example of reduplication in Bangla:

Original Word: খুশি (khushi) - Meaning: "happy"

Reduplicated Form: খুশিখুশি which means "very happy" or "extremely happy"

Here, the reduplication of the word "খুশি" results in "খুশিখুশি", which increase the meaning of "happy" to convey a stronger sense of being "very happy" or "extremely happy."

Original Word: ঘুম (ghum) - Meaning: "sleep"

Reduplicated word ঘুমঘুম (ghum-ghum), which means "to doze off" or "to nap"

In the case, the reduplication of the word "ঘুম" results in "ঘুমঘুম", that indicates the iterative aspect which suggests the action of "dozing off" or "napping."

Affixation: In linguistics, it is a morphological process where affixes are attached to a base word to create a new word or alter the meaning of the existing word. Affixes are bound morphemes.

They cannot stand alone and must have to be attached to a base. They can be prefixes which are added to the beginning of a word, suffixes which are added to the end of a word, or infixes which are inserted within a word, though this is rare in English.

Here are some examples of affixation in English:

- Prefixation:

Un + happy = Unhappy

Pre + view = Preview

Dis + like = Dislike

- Suffixation:

Walk + ing = Walking

Friend + ly = Friendly

Help + ful = Helpful

- Infixation (rare in English):

Fan-freakin'-tastic (here, "freakin'" is an infix inserted in the word "fantastic")

Here are some examples of affixation in Bengali:

Prefixation:

অপরাধ (aparadh) means "crime" or "offense." When you add the prefix "অ" (a) to it, you get অপরাধী (aparadhi), which means "criminal."

শক্তি (shakti) means "power" or "strength." When you add the prefix "অপ" (opa) to it, you get অপশক্তি (opashakti), which means "powerless" or "weakness."

Suffixation:

মানুষ (manush) means "person" or "human." When you add the suffix "-দের" (-der) to it, you get মানুষদের (manushder), which means "people" or "humans."

রঙ (rong) means "color." When you add the suffix "-টা" (-ta) to it, you get রঙটা (rongta), which means "a color."

2. 8. Syntactic Development and Special Needs

Syntactic development is the process through which individuals acquire and refine their understanding and use of grammar and sentence structure in a language as they grow and learn.

It is a crucial aspect of language development and occurs as children progress from early language stages to more complex and sophisticated linguistic abilities.

Here are some key points related to syntactic development and grammar:

- **Early Language Stages:** In this stage of language development, a child typically uses single words or short phrases to express their needs and ideas. They rely on gestures and intonation to convey meaning. At this stage, they may understand basic sentence structures and simple word order.
- **Telegraphic Speech:** As children develop further, they begin using two-word sentence. These combinations usually consist of a subject and a verb, such as "Mommy eat," "Dog barks," etc. The child's utterances gradually become longer and more syntactically complex.
- **Grammar Acquisition:** Children gradually acquire the rules and patterns of their native languages grammar through exposure and interaction with others. They internalize grammatical structures without explicit instruction, a process known as implicit language learning.
- **Overgeneralization:** During the process of language acquisition, children may overgeneralize certain grammar rules. For instance, children might say "mouses" instead of "mice." These errors are considered normal in the language development process, and with time and exposure, children typically refine their grammar and correct these overgeneralizations.

- **Development of Complex Sentences:** As children progress in their syntactic development, they begin using more complex sentence structures. They incorporate different types of clauses, such as relative clauses (e.g., "The girl who is wearing a red hat") and complement clauses (e.g., "He said that he would come").
- **Mastery of Morphological and Syntactic Rules:** Children gradually master the morphological and syntactic rules of their language, including verb conjugations, noun plurals, verb tenses, word order, and sentence formation.
- **Critical Period:** There seems to be a critical period for language development during early childhood, where the brain is highly receptive to acquiring language. After this period, language acquisition becomes more challenging and less flexible.
- **Acquisition of Second Language:** The process of acquisition of the second language follows similar patterns like first language acquisition, though it may depend on the age of the learner and the other factors.
- **Sociocultural Influence:** The syntactic development of a child's language can be influenced by the linguistic environment they are exposed to, including the language models they interact with and cultural norms.

Overall, syntactic development plays a fundamental role in language acquisition journey of a child and it is a complex and dynamic way that continues throughout a person's lifetime as they encounter new linguistic challenges and contexts.

The syntactic abilities of autistic children are a matter of controversy, because few studies have examined grammatical abilities in autism, with mixed findings (Eigsti et al. 2007). According to some studies (Fein & Waterhouse 1979; Howlin, 1984a, 1984b; Tager-Flusberg et al., 1990), syntactic development of autistic children is delayed. But it follows a normal trajectory with

respect to normally-developing children, while others (Bartolucci, 1976; Bartolucci& Albers, 1974; Bartolucci et al 1980; Dalgleish 1975) declare that, syntax is deviant in a more fundamental way. In more recent studies, the general conclusion seems to be that syntax is indeed deviant and not only delayed (Condouris et al. 2003; Rapin& Dunn, 2003; Kjelgaard&Tager-Flusberg, 2001).

However, as Eigsti et al. (2007) concludes: “a comprehensive investigation of language in a well-controlled sample of autistic children, compared with both typically developing and developmentally delayed groups, is needed”. One point is uncontroversial in these discussions that syntax of a special need is usually simpler than that of their age and IQ matched others. Kjelgaard and Tager-Flusberg (1999) claimed that 25% of autistic children with a normal nonverbal IQ score more than two standard deviations below the mean on standard measures of grammatical ability.

Different linguistic and non-linguistic development has been shown below following different period of language acquisition of ordinary children. It will be very easy to identify autistic feature after knowing this chart. At the same, time this charts reflecting on the development of syntactic level at later development period.

1. Pre-talking stage(0-6 months)

- **Linguistic Feature:** The pre-talking stage refers to the developmental phase in infants' lives before they start producing recognizable words or engaging in meaningful verbal communication. During this stage, babies are acquiring the foundational skills necessary for language development. Infants begin to make different types of cries and vocalizations, which serve as their earliest forms of communication. Around 2 to 4 months of age, babies

start making cooing sounds and vowel type sounds like “uh”, “oh”, ‘eh’.. These are typically vowel-like sounds that babies make in response to their caregivers.

- **Non-Linguistic Features:** Infants begin to establish and maintain eye contact with caregivers, which is essential for building connections and forming social bonds. Eye contact also plays a vital role in joint attention, where both the caregiver and the child focus on the same object or event. Children start to mimic and respond to different facial expressions like smiles, frowns, and other facial signs help children to convey emotions and intentions even before they can use words. Infants tend to develop the ability to point at objects of interest or reach out to grasp them.

2. Babbling Stage (6-8 months)

- **Linguistic Feature:** This stage is a vital phase in infant’s language development, which occurs typically in 6 and 12 months of age. During this stage, infant engage in vocalizations, characterized by repetitive and varied combinations of sounds. While these sounds may not yet resemble recognizable words, they are important precursors to the development of language. In the babbling stage, babies experiment with their vocal apparatus, produces a wide range of sounds including consonants, vowels, and combinations of both. This playful exploration helps babies to develop control over their vocal cords and mouth muscles. Infants often engage in reduplicated or canonical babbling, which involves repeating the same consonant-vowel syllable in a string [ma-ma] or [da-da] and [ba-ba] or [na-na]. The repetition helps them practice sound patterns and motor control.
- **Non-Linguistic Features:** The babbling stage also involves various non-linguistic features that contribute to a child’ overall communication and cognitive development. These features

encompass aspects beyond language sounds and structure. Babies in the babbling stage often engage in exploratory behavior using their mouths and hands. They put objects in their mouths, touch and manipulate objects, and explore their environment through sensory experiences. Infants use babbling to engage in social interactions with caregivers and others around them. They might babble while making eye contact or looking at faces, indicating an early form of turn-taking and communication. Babies start to develop the ability to share attention with others during the babbling stage. They might look at an object, babble about it, and then look at their caregiver to share the experience. This joint attention is a foundational skill for social interaction and language development. They might babble differently when they are happy, excited, or frustrated, allowing caregivers to understand their emotional states.

3. Holophrastic Stage (1-1.5 years)

- **Linguistic Feature :** In the age between 1-3 months, a child starts to Coo, makes gurgling sounds, turns head toward sounds, begins to babble with expression and copies sounds it hears, cries in different ways showing hunger, pain, or being tired Responds to sounds by making sounds. Age between 1-6 month: Strings vowels together when babbling ('ah,' 'eh,' 'oh' etc) begins to say consonant sounds (jabbering with "m," "b"), sometimes responds to simple spoken requests. In the age between 1-12 month a child uses simple gestures such as shaking head indicating 'no' or waving like 'bye-bye', Makes sounds by changing tone (sounds more like speech), Says "mama" and "dada" and exclamations like "uh-ah!", sometimes tries to say words you say, understands "no". In the age between 1-1.5 years a child makes a lot of different sounds for example "mama" and "baba", they copy sounds and

gestures of others, uses fingers to point at things, says several single words, says and shakes head “no”, points to show what he wants.

- **Non-Linguistic Features:** At the age between 1-3 Months, it begins to smile at people, can able calm herself, may bring hands to mouth and suck on hand, and tries to look at parent. He can pay attention to faces, begins to follow things with eyes and can recognize people at a distance. At the age between 1-6 Months, it can smile spontaneously, especially at people, likes to play with people, it might cry when playing stops, can copy some movements and facial expressions, uses hands and eyes together, such as seeing a toy, and reaching for it, follows moving things with eyes from side to side. At the age between 1-12 Month, a child can respond to other people’s emotions and often seems happy, it likes to look at self in a mirror, is shy or nervous with strangers, cries when mom or dad leaves, has favorite things and people, hands you a book when he wants to hear a story. At the age between 1-1.5 years, a child repeats sounds or actions to get attention to others, may be clingy with adults, has favorite toys, may be afraid of strangers, shows some affection to familiar people, plays simple pretend, can point to show others something interesting, Explores alone but with parent close by.

4. Two- words Stage 1.2- 2years.

- **Linguistic Feature:** In this age children develop their two-word stage Two words or incomplete phrases ‘Daddy hat’, ‘Mama water’ and uses several single or two words, he says

or shakes head pointing “no”, can show someone the object what he wants, knows names of familiar people and his body parts, says several single words.

- **Non Linguistic Feature:** In the stage, a child may have temper tantrums, he may be afraid of strangers, shows affection to familiar people, plays simple pretend, such as feeding his doll, he may cling to caregivers facing new situations, may points to show others something interesting. He may knows about what ordinary things are for; for instance, telephone, brush, spoon, he may get the attention of others, shows interest in a doll by pretending to feed, points to his body part, scribbles on his own, can sits when you say “sit down “or follow another instructions. He may walks alone or may walk up steps and run, pulls toys while walking, can change dresses, drinks from a cup, and eats with a spoon.

5. Telegraphic Stage (2-2.5 years)

- **Linguistic Development:** in the stage, a child can use first syntactic subject-VP patterns, like ‘I lost a shoe’, I see a bird etc., can point to things in a book, Repeats words overheard in conversation, can point to pictures or things when they are named.
- **Non Linguistic Development:** a child may stand on tiptoe, kicks a ball, begins to run, climbs onto furniture without help, walks up and down stairs, throws ball overhand, imitates others, specially adults or older children, sometimes gets excited playing with other children, shows more and more independence.

6. Later Development

- **Linguistic Development:** Negation, inversion, WH-questions, passivizationetc, he may name the most familiar things, he may understands words like “in,” “on,” and “under”, can

say first name, age, and sex, can name a friend, saying words like “I,” “me,” “we,” and “you” and some plurals such as cats, dogs, balls etc, tries to talk well enough for strangers to understand most of the time, makes conversation using 2 to 3 sentences.

- **Non-Linguistic Development:** Copies his friends or others, shows affection for friends and loving persons, takes turns in games, shows concern for friend who are crying, understands the idea of “mine” and “his” or “hers”, tries to show emotions, separates himself easily from mom and dad, may get upset with major changes, can put on dress or undress himself. He can work toys with buttons, levers, and moving parts, can fix puzzles with 3 or 4 pieces, understands what “two” or “three” means, can copy a circle or color, turns book pages one at a time, can build more than 6 blocks, screws or unscrews jar lids or turns door handle.

Chapter 03: Research Methodology

3.1. Data Collection Procedure

A researcher can choose whether he would work on qualitative or quantitative or mixed method based on the type of research. As a brief, qualitative research is concerned with patterns and structures, and how something is. Quantitative research points on how much or how many there is of a particular characteristic or item. A big advantage of quantitative research is, quantitative research enables us to compare relatively large number of things or people by using a comparatively easy index.

There is some elementary difference between qualitative and quantitative research studies.

Qualitative studies are inductive by the nature. In qualitative study, theory is derived from the result of our research. Qualitative researchers seek to learn from details of the testimonies those they are studying and also call their informants. In Qualitative study, conclusions are drawn by compiling, comparing and evaluating feedback and input of the informants. Qualitative research often seems to focus on answering the “why” behind a phenomenon, correlation or behavior.

In contrast, quantitative data are arithmetically analyzed to develop a statistical picture of a trend or connection. Such statistical results may focus on cause-and-effect relationships. They may either confirm the study’s original hypothesis or disprove it. The outcome can spark awareness and action, whether positive or negative. Quantitative research is often shed light on answering the questions of “what” or “how” in regards to a phenomenon, correlation or behavior.

In this research paper, enough detail about a study design is provided for it to be replicated for verification and reassurance. If the interest is in focusing in the measurement of the magnitude of that variation, ‘how many people have a particular value, belief, etc?’ the quantitative approach is more appropriate. It is important to combine qualitative one with qualitative ones for a good

quantitative research, when ascertaining the nature and extent of diversity and variation in a phenomenon.

The research starts with a small observation of Special Needs Children and working its way to some physiological theory with standard stage of language acquisition and morphological development of linguistic abilities. In this methodology, the relevant known theory is derived from the textual data to my quantitative research of many Autistic School in Dhaka City.

In order to fulfillment of this thesis, I have selected an institution so that I can get available special needs children to verify their morphosyntactic abilities as well as their linguistic and non-linguistic disabilities following different standard stages of language acquisition. This will allow me to make a comparative research between the theoretical hypothesis and real life experience with autistic children. Therefore, this research will help us to make a best finding and actual morphosyntactic development of children with autism inside Dhaka city as well as the whole country.

AlorPakhi Foundation – Research Institution for special children and Neurodevelopment Disabilities situated at Justice LalMohon Das Lane, Sutrapur. It was formed by a group of enthusiastic parents of children with special needs. ‘AlorPakhi Foundation’ was formed with the aim of rehabilitating, educating and training children, and their fullest potential. The aim of this society is to make the special children independent and help to make them active members of the society, and make them enable to integrate and contribute to the development and establishing their rights as citizens of the country.

‘AlorPakhi Foundation’ is a non-government, nonpolitical organization which provides services and essential education to children with autism and supports their families to improve their

quality of life. 'AlorPakhi Foundation' provides world class intervention clinic, therapeutic services -speech and language therapy, music therapy, and special schooling facilities for autism children.

The participants

a. Students: There were 25 students from 6 different levels in this research. The researcher observed the students during their classes and tried to find out their communicative and linguistic difficulties from their conversation and interaction with teachers. The age range of the special needs students was from 7 to 15 years old and they were belonging from pre-academic and early intervention sections.

b. Teachers: All these teachers of this institute were given a basic training on how to deal with special needs children give them proper education and had the basic knowledge on different social and psychological difficulties of special children that they have to face in day-to-day life. The questionnaires were filled up by 15 trained up teachers and the interview was possible to collect from 12 teachers. The participation of teacher in this interview is fewer than the questionnaire because it was really difficult to interview the teachers for a long time because they have to remain busy in charge of each student and they had to spend their whole time with those special children from the beginning to the end of their school time.

Morphological feature chart for observation:

Serial Number	Name	Age	Features	Yes (1)	May be (2)	No (3)
1		14	Inflection			
			Derivation			
			Compounding			
			Ablaut			
			Germinating			
			Blending			
			Shortening			
			Lengthening			
			Reduplication			
			Affixation			
2		9	Inflection			
			Derivation			
			Compounding			
			Ablaut			
			Germinating			
			Blending			
			Shortening			
			Lengthening			
			Reduplication			
			Affixation			
3		7	Inflection			
			Derivation			
			Compounding			
			Ablaut			
			Germinating			
			Blending			
			Shortening			
			Lengthening			
			Reduplication			
			Affixation			
4		15	Inflection			
			Derivation			
			Compounding			
			Ablaut			
			Germinating			
			Blending			

5		12	Shortening			
			Lengthening			
			Reduplication			
			Affixation			
			Inflection			
			Derivation			
			Compounding			
			Ablaut			
			Germinating			
			Blending			
			Shortening			
			Lengthening			
			Reduplication			
			Affixation			

Observation Chart for Linguistic Development:

Standard Stages		Rating	Student 1	Student 2	Student 3	Student 4	Student 5
Pre-talking stage	Linguistic Feature for Syntactic Development: producing vowel-like sounds, while babbling like, 'oh', 'uh', 'ah'	Yes					
		Maybe					
		No					
	Non-Linguistic Feature for Syntactic Development: Infants naturally pay close attention to faces and facial expressions, Interactions with caregivers and others	Yes					

		May be					
		No					
Babbling Stage (6-8 months)	Linguistic Feature for Syntactic Development : Sounds produced by infants such as [ma-ma-ma] or [da- da-da] and [ba-ba-ba] or [na-na-na] but not all the speech sounds are same in language of the world	Yes					
		May be					
		No					
	Non-Linguistic Feature for Syntactic Development : Cooing, smiling at people, tries to look at parents etc	Yes					
		May be					
		No					

Holophrastic Stage (1-1.7 years)	Linguistic Feature for Syntactic Development: Only single words like ‘dada’, ‘mama’, copies sounds he hears, Strands vowels together when babbling such as “ah,” “eh,” “oh” and, consonant sounds like jabbering with “m,” “b”	Yes					
		May be					
		No					
	Non-Linguistic Feature added to Syntactic Development: Cooing, smiling at people, trying to calm herself when anger, trying to look at parents, standing, holding on, sitting without support, pulling to stand Crawls etc.	Yes					
		May be					
		No					

Two- words Stage 1.5- 2years)	Linguistic Feature for Syntactic Development: Two words or incomplete phrases ‘Daddy hat’, Mama water, saying single or two words, Saying or shaking head pointing “no”, Pointing objects and remembering names	Yes					
		May be					
		No					
	Non-Linguistic Feature added to Syntactic Development: Starting to walk, can help to dress or undress himself, drinking from a cup, remembering everyday things, pointing to get the attention of others.	Yes					
		May be					
		No					

Telegraphic Stage (2-2.5 years)	Linguistic Feature for Syntactic Development: Subject-VP patterns, I lost a shoe', I see a bird etc., pointing anything in a book, repeating words overheard in conversation, pointing to pictures or things when they are named	Yes					
		Maybe					
		No					
	Non-Linguistic Feature added to Syntactic Development: standing on tiptoe, kicking a ball, beginning to run, climbing onto and down from furniture without anyone's help, walking up and down stairs holding on, throwing balls overhand	Yes					
		Maybe					
		No					

Later Developm ent Stage (2.5 and above years)	Linguistic Feature for Syntactic Development: Negation, inversion, WH- questions, passivization etc, understanding preps like “in,” “on,” and “under”, saying first name, age, and sex, nameing a friend	Yes					
		May be					
		No					
	Non-Linguistic Feature to Syntactic Development: Able to work toys with buttons, levers, and moving parts, making believe with dolls, animals, and people, climbs well, runs easily,	Yes					
		May be					
		No					

3.2. Data Analysis

The research have taken teachers’ and parents’ interviews at Alorpakhi Foundation to collect some basic information. I simply asked questions about different area of the victimized children and noted down every answer to my notebook. Besides, I have listed some morphological and

syntactic features. In the chart presented below, different linguistic and non-linguistic development has been shown following different period of language acquisition of special need children. It will be very easy to identify autistic feature after knowing this chart. At the same time, this chart reflects on the development of syntactic level at later development period.

Linguistic Development Feature Finding:

Standard Stages		Rating	Labiba khan Age 14	Samiha Akter Age 9	Sushanto Banik Age 7	Fahria nHossa in Age 15	Rezwan Ahmed Age 12
Pre-talking stage	Linguistic Feature for Syntactic Development producing vowel-like sounds, while babbling like, 'oh', 'uh', 'ah'	Yes(1)		1			1
		Maybe (2)			2		
		No (3)	3			3	
	Non-Linguistic Feature for Syntactic Development Infants naturally pay close attention to faces and facial expressions, Interactions with caregivers and others	Yes (1)	1		1		1
		Maybe (2)				2	
		No (3)					
Babbling Stage (6-8 months)	Linguistic Feature for Syntactic Development Sounds produced by infants such as [ma-ma-ma] or [da-	Yes (1)			1		1
		Maybe(2)	2			2	

	da-da] and [ba-ba-ba] or [na-na-na] but not all the speech sounds are same in language of the world	No(3)		3			
	Non-Linguistic Feature for Syntactic Development Cooing, smiling at people, tries to look at parents etc	Yes (1)	1	1			
		May be (2)					2
		No (3)			3	3	
Holophrastic Stage (1-1.7 years)	Linguistic Feature for Syntactic Development Only single words like ‘dada’, ‘mama’, copies sounds he hears, Strands vowels together when babbling such as “ah,” “eh,” “oh” and, consonant sounds like jabbering with “m,” “b”	Yes (1)	1				1
		May be (3)				2	
		No (3)		3	3		
	Non-Linguistic Feature added to Syntactic Development , Cooring, smiling at people, trying to calm herself when anger, trying to look at parents, standing, holding on, sitting without support, pulling to stand Crawls etc.	Yes(1)	1	1			1
		May be (2)			2	2	
		No (3)					

Two-words Stage 1.5-2years)	Linguistic Feature for Syntactic Development Two words or incomplete phrases ‘Daddy hat’, Mama water, saying single or two words, Saying or shaking head pointing “no”, Pointing objects and remembering names	Yes (1)	1				1
		Maybe (2)				2	
		No (3)		3	3		
	Non-Linguistic Feature added to Syntactic Development Starting to walk, can help to dress or undress himself, drinking from a cup, remembering everyday things, pointing to get the attention of others.	Yes (1)	1				
		Maybe (2)			2	2	
		No(3)		3			3
Telegraphic Stage (2-2.5 years)	Linguistic Feature for Syntactic Development Subject-VP patterns, I lost a shoe’, I see a bird etc., pointing anything in a book, repeating words overheard in conversation, pointing to pictures or things when they are named	Yes (1)	1			1	
		Maybe (2)					2
		No(3)		3	3		

	Non-Linguistic Feature added to Syntactic Development standing on tiptoe, kicking a ball, beginning to run, climbing onto and down from furniture without anyone's help, walking up and down stairs holding on, throwing balls overhand	Yes (1)	1	1			
		May be (2)			2		
		No (3)				3	3
Later Development Stage (2.5 and above years)	Linguistic Feature for Syntactic Development Negation, inversion, WH-questions, passivization etc, understanding preps like "in," "on," and "under", saying first name, age, and sex, naming a friend	Yes(1)	1				
		May be (2)			2	2	
		No (3)		3			3
	Non-Linguistic Feature added to Syntactic Development Able to work toys with buttons, levers, and moving parts, making believe with dolls, animals, and people, climbs well, runs easily	Yes (1)				1	

Language Development of special needs:

1. **Pre-talking stage (0-6months):** In pre-talking stage, most of them can produce vowel like speech sounds such as 'ah', 'uh', 'oh'. Some of them are able to coo, smile at people or look

at parents and some are not. Infants can pay close attention to faces and facial expressions, Interactions with caregivers and others.

2. **Babbling stage (6-8 months):** In this stage, most of them can produce speech sounds such as [ma-ma] or [da-da] and [ba-ba] or [na-na]. Some of them are able to make coo sound, smile at people or look at parents and some are not.
3. **Holophrastic Stage (1-1.7 years):** From observation most of them can utter vowel sounds “ah”, “eh”, “oh” and no babble “mama”, “baba”, “dada”. They do not respond with loud sounds, can’t watch things as they move, and aren’t able to bring hands to their mouth. But sometimes they are able to Cooing, smiling at people, trying to calm herself, trying to look at parent, they can stand, hold on, able to get into sitting position, can sit without support etc.
4. **Two- words Stage 1.2- 2years:** All of them can’t use 2-word phrases for instance, “drink milk”, Doesn’t able to play any games involving back-and-forth play, doesn’t able to respond to own name, sometimes can’t recognize familiar people, can’t look where someone point, can’t transfer toys from one hand to another hand; can’t crawl, stand when supported. They can’t search for things that she sees someone hide. Some of them may say single words like “mama” or “dada”, but can’t learn gestures such as waving or shaking head, or can’t point to things. They sometimes lose skills they once had.
5. **Telegraphic Stage (2-2.5 years):** They can’t use Subject-VP or syntactic patterns such as ‘I lost a shoe’, ‘I see a bird’ etc. In a book, they can’t point to things, repeat words again and again in conversation; they can’t point to things or pictures when they are named. What to do with common things they does not know, like a toothbrush, mobile, spoon, they can’t copy actions and words, does not follow simple instructions, not able to walk steadily, sometimes

loses skills she once had. They can't do negation, inversion, WH-questions, passivization etc, understands preposition like "in," "on," "under", etc.

6. **Later Development Stage (2.5- 3 and above years):** they have no negation, inversion, WH –questions, passivization etc. They falls down a lot and face trouble with stair, drools or they have very unclear speech. They cannot work with simple toys like peg boards, simple puzzles or turning handle. They do not speak in full sentences, doesn't understand simple instructions, doesn't play pretend or make-believe, not able to play with other children or with toys, can't make eye contact, loses skills he once had.

Morphological feature for special needs:

Serial Number	Name	Age	Features	Yes (1)	May be (2)	No (3)
1	Labiba Khan	14	Inflection			3
			Derivation		2	
			Compounding			3
			Ablaut	1		
			Germinating	1		
			Blending			3
			Shortening			3
			Lengthening		2	
			Reduplication		2	
			Affixation	1		
2	SamihaA kter	9	Inflection	1		
			Derivation	1		
			Compounding		2	
			Ablaut		2	
			Germinating	1		
			Blending			3
			Shortening	1		
			Lengthening	1		
			Reduplication			3
			Affixation		2	
3	Sushanto Banik	7	Inflection			3
			Derivation	1		
			Compounding	1		
			Ablaut		2	
			Germinating	1		
			Blending	1		
			Shortening		2	
			Lengthening		2	
			Reduplication		2	
			Affixation	1		

4	Fahrian Hossain	15	Inflection	1		
			Derivation			3
			Compounding	1		
			Ablaut		2	
			Germinating	1		
			Blending	1		
			Shortening	1		
			Lengthening		2	
			Reduplication	1		
			Affixation		2	
5	Rezwan Ahmed	12	Inflection			3
			Derivation			3
			Compounding			3
			Ablaut		2	
			Germinating		2	
			Blending	1		
			Shortening		2	
			Lengthening		2	
			Reduplication	1		
			Affixation	1		

There are list of some special needs feature verifying morphological development of language acquisition. However, I have developed this list only selecting the name of autistic children who has a minimum or maximum morphological problem:

Case 1: Labiba Khan

Age	14 Years
Early Feature	After the age of 3, Small eye contact, responding, speech only Ma and Baba.

Mental Age	Childish
Interest	playing with friends, Visiting Outside of House, Interest on other's book, pen, toy, food etc.
Morphology features	Not able to use any 'Inflection' words. Sometimes he may make 'Derivation' and 'Lengthening', 'Shortening' and 'Reduplication'. She can use 'Ablaut' as well as 'Germinating'. She can make 'Blending' and 'Affixation'.

Case 2: SamihaAkter

Age	9 Years
Early Feature	After the age of 3, Exciting behave, responding
Mental Age	Childish
Interest	Playing lonely, Visiting Outside of House and screaming.
Morphology features	Not able to use any words from morphological features such as 'Blending', 'Reduplication'. Sometimes he may make 'Compounding' and 'Affixation' and 'Ablaut'. She can use 'Derivation' as well as 'Germinating', 'Shortening' and 'Lengthening'.

Case 3: SushantoBanik

Age	7 Years
Early Feature	At the age of 2, No eye contact , Lately develop on speech
Mental Age	Childish

Interest	Playing with friends, Visiting Outside of House, Screaming Loudly
Morphological Development	Not able to use words from 'Inflection'. Sometimes he may make 'Ablaut', 'Shortening', 'Lengthening' and 'Reduplication'. He can use 'Derivation' as well as 'Germinating', 'Blending' and 'Affixation'.

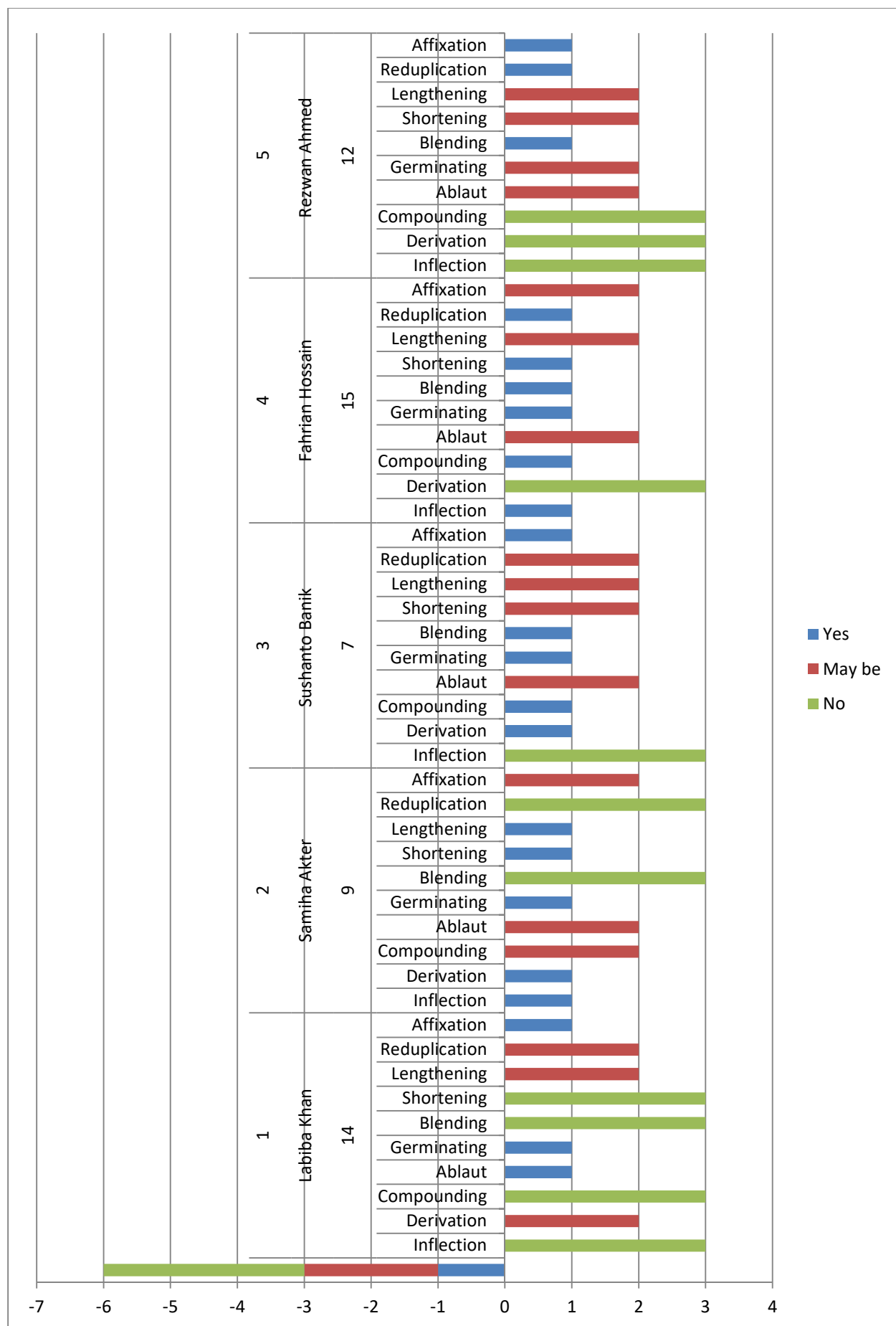
Case 4: Fahrian Hossain

Age	15 Years
Early Feature	At the age of 2, exiting Behave, responding
Mental Age	Childish
Interest	Word repetition, no full sentence, always asking for permission to do anything he likes, screaming
Morphological Development	Not able to use words from 'Derivation'. Sometimes he may make 'Ablaut', 'Lengthening' and 'Affixation'. He can use 'Inflection' as well as 'Compounding', 'Germinating', 'Blending', 'Reduplication' and 'Shortening'.

Case 5: RezwanAhmed

Age	12 Years
Early Feature	At the age of 2, Speech disorder, responding
Mental Age	Childish
Interest	playing with friends, Visiting Outside of House, Interest on

	other's book, pen, toy, food etc.
Morphological Development	Not able to use words from 'Derivation', 'Inflection' and 'Compounding'. Sometimes he may make 'Ablaut', 'Lengthening', 'Shortening' and 'Germinating'. He can use 'Affixation' as well as 'Compounding', 'Germinating', 'Blending' and 'Reduplication'.



Chapter 04: Research Findings and Discussion

4.1. Findings

From the findings of this study, we can conclude by stating that the morphosyntactic competence of the children with autism is in a trouble. The data indicate that, there are so many varieties of linguistic disable children with normal children. In some may have early linguistic feature like in pre-talking stage making vowel sounds like ‘uh’, ‘oh’, ‘ah’ and in babbling stage babbling with ‘baba’ or ‘ma’, but do not have any two-word stage or any of the stage. On the other hand, some may have developed early feature in later age. There are children who can only read sentence but cannot apply in real life. One can speak sentence but have a big problem of repetition of same word in a single sentence. As it has shown the non-linguistic activity of ordinary children where autistic have a variety of disabilities in the sector of cognitive, social and emotional.

The children tend to show an immaturity with respect to their chronological age in their morphosyntactic skills. In the given morphological feature chart, morphological development of special needs have shown. Analyzing the crucial difficulties in morphology, we see that most of the children face problem making or we can say that they can’t use ‘Inflection’ ‘Compounding’ and ‘Blending’ in their using language. Some of them can’t make ‘Derivation’ and ‘Shortening’. Most of the children face some problem of making ‘Lengthening’, ‘Ablaut’, ‘Affixation’ and ‘Reduplication’. Sometimes they can use those morphological features or sometimes they face problems. 80% student can use ‘Germinating’. 60% students can use ‘Blending’. 40% student can use ‘Shortening’, ‘Compounding’, ‘Inflection’ and ‘Derivation’. Only 20% student can use ‘Lengthening’ and ‘Ablaut’. Morphological development in individuals with autism can vary widely depending on the individual's cognitive profile, language abilities, and other factors.

Some individuals with autism may experience delays or differences in morphological development compared to their neurotypical peers.

4.2. Recommendation of the study

Children with Autism are special need students and they have the right to the service and supports. Perfect identification of disabilities by Autism Specialist, Teaching and Learning Methodology, Conducting longitudinal studies that track the morphosyntactic development of individuals with special needs over an extended period can provide deeper insights into the progression of their linguistic abilities. Long-term observations can help identify patterns, plateaus, and potential growth spurts in language acquisition, contributing to a more comprehensive understanding of their developmental trajectory. Expanding the scope of research to include comparative studies between individuals with special needs and typically developing individuals in Dhaka can offer a better perspective on the linguistic differences and challenges faced by the former group. Comparisons with age-matched peers can help pinpoint specific linguistic milestones that might be delayed or deviate from typical development. Providing training for educators and special education professionals on how to facilitate effective language development among individuals with special needs can have a lasting impact. Equipping teachers with the necessary skills and knowledge can ensure a supportive learning environment.

At the same time government should takes some necessary steps to build up social awareness about autism so that parents can easily identify their child's different standard stage of language acquisition. Government also should take some necessary steps to develop speech and language therapy treatment in rural area and well experienced trainer or therapist must be available in all autistic school in Bangladesh.

Chapter 05: Conclusion

At the end of the research, it can say that the study on Analyzing Morphosyntactic Developmental Stages in the context of special needs in Dhaka contributes valuable knowledge to the field of linguistics, education, and special needs intervention. The findings underscore the complexity of linguistic development in this population and the need for tailored, culturally sensitive approaches to support their growth. By recognizing the individuality of developmental trajectories and the impact of socio-cultural factors, educators, researchers, and policy makers can work together to increase the linguistic outcomes and over all quality of the life for individuals with special needs in Dhaka and beyond.

Limitation of this Study

They cannot afford all the Autistic children coming to these organizations for their space limitation and they do not have extra playground for children without building. They have a fund limitation that they have no own complex to provide teachers. They also have a limitation of machinery and tools. There is a social awareness limitation remaining on Dhaka city still now. Cause, I get more than three students around Mohammadpur who does not have the ability to join in some popular Autistic Care in Dhaka city for poverty. Even, their parents have no idea about free treatment of underprivileged children. Due to lack of trained professionals, it is really impossible to reach autistic children. They do not have easy access to a tertiary level hospital. There is no well-trained available Autistic Specialist or Therapist inside in Dhaka city. There is no available doctor who is well educated on Autism at Thana and District level of Bangladesh.

Therefore, misdiagnosis and mistreatment still occur for the less availability of specialist.

Another challenge that has to overcome is in education.

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