International Journal of Arts and Social Science www.ijassjournal.com
ISSN: 2581-7922,
Volume 7 Issue 6, June 2024

The Syntax Proficiency of Preschool Children at the Anak Atelier

Putu Mitha Saraswati[1], I Nengah Sudipa[2], I Nyoman Aryawibawa[3]
[1,2,3](Linguistics Department, Udayana University, Indonesia)

ABSTRACT: *This study applies a quantitative descriptive technique to assess the syntactic abilities of preschoolers at The Anak Atelier, with a focus on their ability to build sentences. Psycholinguistic theory and Brown's (1973) Mean Length of Utterance (MLU) notion guide the study, acknowledging the crucial role of the preschool years in the development of foundational language skills. Purposive sampling was used to choose twelve students from the Uluwatu class, ages four to six, for the study, which was carried out at the Anak Atelier. This study used production chores, interviews, audio recordings, and transcriptions as research tools. The analysis included looking for syntactic trends and calculating MLU. While there are individual differences, most kids show language skills that are in line with developmental expectations. The predominant syntactic pattern that emerges is declarative sentences with the pronoun-verb structure (PronP + VP). To assist healthy language development, recommendations include improving instructional materials, offering tailored treatments, and implementing a child-centered curriculum.*

KEYWORDS *-Psycholinguistics, Syntax, Mean Length of Utterance (MLU), Preschool Children*

I. INTRODUCTION

In an increasingly interconnected global environment, it is critical to understand the significance of language in uniting nations and enabling cross-cultural exchanges. Language functions not just as a means of communication but also as the basis for social connections that promote shared understanding and collective comprehension[1]. This highlights the significance of language in improving linguistic proficiency, specifically in organized language, and in promoting social cognitive development. [2]. While individuals have a natural capacity to understand and make sounds from the moment they are born, the development of organized language requires an ongoing process of active learning[3]. Therefore, dynamic engagements with parents, relatives, classmates, and the immediate surroundings can facilitate the development of organized language. The process of language acquisition occurs during a child's developmental phases, as they naturally learn linguistic skills through interaction with their social surroundings[4].

Linguistics is a vital discipline for comprehending and examining language and its evolution. Linguistics is a scientific discipline that investigates language, including its structure, function, and evolution[5]. Linguistics, as a scientific field, systematically studies the organization, grammar, sound patterns, and meaning of language. It is crucial for comprehending how children acquire language. Syntax, an essential element of linguistics, explores the arrangement of words in a phrase and assists in constructing sentences that adhere to grammatical rules[5]. This aspect of syntax includes the child's development from the ability to compose single words to more complex constructions, forming complete language expressions, such as oral stories or written paragraphs [6]. Psycholinguistics is crucial for comprehending language, especially when it comes to the development of children's language. Psycholinguistics is a multidisciplinary domain that integrates the fields of

psychology and linguistics to investigate the processes by which humans acquire, understand, and generate language[7]. In the context of children's language development, psycholinguistics aids in identifying the factors that influence syntactic development and offering appropriate intervention approaches [8]. One theory that measures language development, especially in children's language, is Mean Length of Utterance (MLU) Brown (1973). This is an approach used to understand and measure language development in children, particularly at the preschool stage [10]. [9]decided to use average sentence length as a means of dividing the developmental continuum, profitably counting the number of morphemes in sentences, rather than words, because Brown found counting the number of morphemes to be a more sensitive measure.

Previous research has identified factors influencing the process of understanding syntactic abilities and children's language proficiency, as this comprehension can determine a child's intelligence [11]. One of the concepts utilized in measuring children's language development is Mean Length of Utterance (MLU). MLU measures the number of words or morphemes used by children in their utterances or sentences. First, [12] studied the relationship between age and Mean Length of Utterance (MLU) in children aged 17 months to 5 years. They found a significant correlation between age and MLU, with age explaining most of the variation in MLU. These findings indicate that MLU can be used as an indicator of language development in children, which is relevant to current research on the syntactic abilities of preschool-aged children. Second, [13] showed that children with specific language impairment had lower MLU compared with children without language impairment. The results imply that MLU is a helpful measure of language development, assisting in the evaluation of language impairments in children. Previous studies have provided insights into the significance of MLU (Mean Length of Utterance) in comprehending language development. However, these studies have primarily concentrated on language acquisition rather than language learning. Learning, in contrast to acquisition, entails active cognitive processes, particularly in structured environments such as preschools. Prior research has not thoroughly examined the syntactic elements, necessitating additional inquiry. This study is to investigate the effectiveness of MLU (mean length of utterance) in promoting language acquisition among preschoolers in formal educational environments. The findings of this study will provide valuable information for educators on how to facilitate structured language development.

The study selected children between the ages of four and six as participants due to the recognition of this age range as a crucial stage in child development, commonly referred to as the "golden period of child development" [14]. Focusing on the characteristics of preschool children, especially in terms of cognitive development and speaking abilities, is important because they form a vital basis for preschool education [8]. Understanding how children of this age develop their language skills can help in designing educational approaches appropriate to their developmental stage [15]. The educational approach applied in preschool schools, such as The Anak Atelier school as one of the preschool schools in Bali, allows children to learn more than one language well which can provide opportunities for them to develop language skills naturally [16]. Therefore, the role of preschool schools in helping children develop their language skills is very significant [17].

Several recent studies have previously examined the use of MLU in the context of preschool children's language learning with an emphasis on more specific aspects of syntax. One of them is research by [18] highlights the importance of physical, psychological, and environmental factors in the acquisition of language and syntax in preschool children. The study found that children demonstrated higher levels of language proficiency than expected, with the ability to use a variety of syntactic structures. These findings provide positive indications regarding children's syntactic development, which is reflected through MLU measurements. However, recent research by [10] highlights the challenges facing children speaking two languages, especially in English language learning contexts. Although these children were able to speak both languages, a decline in grammatical abilities, as measured by MLUw, occurred when they received instruction in English. The differences in results between these two studies indicate the need for further research to understand the role of MLU measurements in measuring preschool children's syntactic abilities, especially in the context of English language learning.

This research aims to investigate the application of Mean Length of Utterance (MLU) in the context of language acquisition among preschool children at The Anak Atelier school. The study will address the observed

phenomena, as well as the gaps and inconsistencies found in prior studies. The objective is to examine the correlation between MLU and Brown's theory in children aged 4 to 6 years at the school, and to determine the prevailing syntactic structures in their speech. Therefore, researchers are conducting a study titled "The Syntax Proficiency of Preschool Children at The Anak Atelier".

II. THEORETICAL FRAMEWORK

2.1 Psycholinguistics

Psycholinguistics is an interdisciplinary study bridging psychology and linguistics [7]. Etymologically, psycholinguistics derives from two words: psychology, the study of human behavior (both physical and mental), and linguistics, the scientific study of language. Despite differing orientations, both disciplines share a significant commonality: a focus on language. Thus, [19]defines psycholinguistics as the study of the mental processes involved in human speech.[5]views psycholinguistics as the study of the relationship between language and human behavior and cognition. It encompasses the cognitive processes that produce grammatically correct and meaningful sentences from a vocabulary and grammatical structure, including the processes enabling the comprehension of expressions and words. Consequently, psycholinguistics examines how humans use language in thinking and communication.In the context of thinking, language functions to identify, organize, and develop thoughts. Human thinking processes cannot occur without a linguistic system. Conversely, in communication, individuals must consider the message to be conveyed. Thoughtless use of language can result in chaotic, unstructured, and incomprehensible communication. Therefore, society strives to avoid communication errors to prevent social issues like misunderstandings and conflicts, which can lead to division and tension[20].

2.2 Syntax

Syntax, a subfield of linguistics, investigates the formation of phrases, clauses, and sentences through the combination of words[21]. It entails the principles, processes, and structures that construct meaningful sentences, encompassing words, phrases, and clauses.[22] with [6]highlight that syntax governs how words form meaningful linguistic units, aiding children's progression from single words to complex language expressions, such as stories or paragraphs.Syntactic development in children occurs in two phases: the initial stage and the transition phase [22]. Initially, children produce unpattern language, using phonemes or scribbles for communication. As they transition, children employ single words (holophrastic) or two-word phrases (telegraphic) to convey intent, such as 'mummy play' to invite play. This phase reflects the burgeoning understanding of syntactic rules and word order. Moreover, early childhood is marked by significant semantic growth, with children acquiring new vocabulary at a rapid pace, learning approximately one new word every hour from 18 months to 6 years [22]. Thus, children aged 4-6 years demonstrate substantial development in language structure, progressing from unpattern expressions to fluent storytelling with complete sentence structures.

2.3 Mean Length of Utterance by Brown's Theory

Brown's theory on language acquisition, particularly the Mean Length of Utterance (MLU), is a significant framework for understanding and measuring language development in children, especially at the preschool stage [9], [10].Brown (1973)chose to count morphemes rather than words as a more sensitive measure of developmental progress, establishing criteria for what constitutes a morpheme.MLU is a quantitative metric used to evaluate language development, representing the average length of a child's utterances. It is calculated by dividing the total number of morphemes in utterances by the total number of utterances. For instance, for a 42-month-old child with the following utterances:

(1) go home now (3 morphemes)
(2) I live in Billingham (4 morphemes)
(3) mummy kissed my daddy (5 morphemes)
(4) I like your dogs (5 morphemes)

The total morphemes are 17, and with four utterances, the MLU is 4.25. Comparing this MLU to a reference table, we find it aligns with the expected MLU for children aged 41-46 months. Since the child is 42

months old, this suggests their expressive language skills are developing typically [9].In summary, a higher MLU indicates better language proficiency in children [23].Brown (1973)groups the stages of children's language acquisition based on the child's MLU into five different stages, which reflect the level of language complexity that the child has, namely:

Table 1. Five Stages of Grammatical Development(Brown, 1973)

No	Stages	MLU range	Age
1	*Stages* I	1.0 – 2.0	12 – 26 months
2	*Stages* II	2.0 – 2.5	27 – 30 months
3	*Stages* III	2.5 – 3.0	31 – 34 months
4	*Stages* IV	3.0 – 3.75	35 – 40 months
5	*Stages* V	3.75 – 4.5	41 – 46 months
6	*Stages* V+	4.5+	47+ months

Source :Brown (1973)

III. METHOD

This research adopts a quantitative descriptive approach with a focus on collecting data in the form of numbers to provide an objective picture of the variables studied. Qualitative data were obtained through production tasks that focused on children's speaking abilities. The research sample consisted of 12 children aged 4-6 years from The Anak Atelier, Bali, who were selected selectively using purposive sampling techniques. Purposive sampling technique is a technique for determining samples with certain considerations [24], [25]. From a population of 35 children at The Anak Atelier, especially in the Uluwatu class with an age range of 4-6 years, the selected respondents must meet several criteria, namely:

1. Children who attend school at The Anak Atelier, especially in the Uluwatu class, range in age from 4 - 6 years.
2. Children who are able to speak English fluently.
3. The children are from a mix-marriage.
4. Children's parents or guardians provided research permission.

Three distinct age groups, each representing the age range of the children, were interviewed as part of the data collection procedure. Children are interviewed in a relaxed setting, such a classroom or gathering place, where they can speak candidly about pre-selected subjects including learning resources and their goals. Additionally, meticulous transcription for additional study is made possible by the usage of mobile devices for audio recordings.The data analysis method involves calculating the Mean Length of Utterance (MLU) to evaluate children's language development as well as analyzing sentence structure patterns in their speech. The MLU formula is MLU = (Number of Morphemes) / (Number of Speeches). Research results are presented through a combination of formal and narrative approaches, using graphs, tables, figures and diagrams, followed by narrative explanations to deepen understanding of the research findings. This provides an edge in visualizing data and depicting findings comprehensively. Thus, this approach ensures accurate interpretation and in-depth understanding of the language development of preschool children at The Children's Atelier.

IV. RESULTS AND DISCUSSIONS

4.1 MLU's Results

The results of the MLU measurement in this research were carried out from interviews with twelve children at The Anak Atelier School. This research examines the language development of a 4-year-old boy (48 months) named Jona from Canada, who was the first respondent of twelve subjects in a project at The Children's Atelier School. Although Jona's spoken language is English, he has some understanding of the French sometimes spoken by some of his family members. Here are some sentences spoken by Jona out of 50 utterances as one of the examples for MLU calculation.

Table 2. Jona's MLU

No.	Utterances	∑Morphemes

1	Is this one?	3
2	This is my thick card.	5
3	Four and a half.	4
4	If someone is four and a half, that mean**s** they are much old**er**.	15
…	…	…
50	It**'s** because the map, a long time ago, it does**n't** exist.	13
	∑Morphemes	**276**

Source: Primary data from interviews, 2024

The focus of the research is the analysis of Jona's MLU, calculated based on the 50 sentences he uttered with a total of 276 morphemes, resulting in an MLU of 5.52. This value places Jona at the Stage V+ language development stage (4.5+ years) according to Brown's theory, indicating his ability to use complex sentences with richer vocabulary and language structures according to his age. In conclusion, Jona's language skills developed normally and in accordance with children's language development standards, providing important insights to support the process of effective language learning and development.

Table3. Georgie's MLU

No.	Utterances	∑Morphemes
1	I see a bunny.	4
2	Raise a hand.	3
3	Raise your hand.	3
4	I want to be a Karate lesson.	7
…	…	…
50	The picture.	2
	∑Morphemes	**193**

Source: Primary data from interviews, 2024

The table 3 shows the second respondent of the twelve participants at The Children's Atelier School in this study was a boy, Georgie, aged 4 years, from Serbia. Even though Georgie's daily language is English, both at home and at school, MLU analysis of the 50 sentences she uttered showed a total of 193 morphemes resulting in an MLU of 3.86. Even though quantitatively, Georgie's MLU is at Stage V according to Brown's theory, it is expected that at her age (48 months), or the equivalent of 4 years, she will reach Stage V+ which is more advanced in language development. This discrepancy confirms that Georgie's MLU evaluation does not conform to the model of language development proposed by Brown's theory. By implication, measures such as enriching the language environment, appropriate support, and individualized evaluation of Georgie's needs may help in resolving this discrepancy and expanding her language abilities effectively.

Table4. Nila's MLU

No.	Utterances	∑Morphemes
1	Sometimes German.	2
2	I know this picture already.	5
3	I can give the food to others to eat the food in the morning.	15
4	In the morning.	3
…	…	…
50	When God say**s** we need to celebrate it, then we have to do it.	15
	∑Morphemes	**295**

Source: Primary data from interviews, 2024

The third respondent in this study at The Children's Atelier School was Nila, a 4-year-old girl from Germany. Although her daily language is English, she has some understanding of German, spoken occasionally by her family. The MLU analysis of her 50 utterances revealed a total of 295 morphemes, resulting in an MLU value of 5.9. This value places Nila at Stage V+ according to Brown's theory, demonstrating her ability to use complex sentences and enrich her language expression effectively. The alignment of Nila's MLU with the

expected developmental stage confirms that she has mastered various aspects of language well, consistent with the standards for her age group, indicating her excellent language skills and significant achievements in language acquisition.

Table5. Brohm's MLU

No.	Utterances	∑Morphemes
1	I already had my birthday.	5
2	Canada.	1
3	I speak French and English.	5
4	When the parents come home, they celebrate Eid Mubarak.	10
…	…	…
50	Yeah, I remember I went somewhere really far during Christmas.	10
	∑Morphemes	**276**

Source: Primary data from interviews, 2024

The fourth respondent was Brohm, a 4-year-old boy from Canada. Despite primarily speaking English, he has some understanding of French, occasionally spoken by his family. The MLU analysis of his 50 utterances showed a total of 276 morphemes, resulting in an MLU of 5.52, placing him at Stage V+ according to Brown's theory. This reflects his ability to use complex sentences fluently and expressively. The alignment of Brohm's MLU with the expected developmental stage confirms that his language abilities have reached or even exceeded the developmental standards for his age, indicating very good language skills consistent with normal development.

The MLU calculations for subsequent respondents will only discuss the number of morphemes obtained from 50 utterances without displaying a table, as exemplified by Tables 1 and 2 representing the entire data for the remaining respondents.The fifth respondent, Sevy, a 5-year-old boy from Russia, actively participates in activities at The Children's Atelier School, where English is the primary language. Despite English being the main medium at home, Sevy also has some knowledge of Russian. The MLU analysis of his 50 utterances revealed a total of 345 morphemes, resulting in an MLU of 6.92, placing him at Stage V+ according to Brown's theory. This reflects his ability to produce complex sentences fluently and enrich his language expression. The alignment of Sevy's MLU with the expected developmental stage confirms that his language abilities have reached or exceeded the standards for his age, indicating potential for using language with higher complexity and expressiveness

The sixth respondent was Mira, a 5-year-old girl from Russia, who actively participates at The Children's Atelier School using English as the main medium. The MLU analysis of her 50 utterances showed a total of 214 morphemes, resulting in an MLU of 4.28, placing her at Stage V. According to Brown's theory, by the age of 60 months, Mira should have reached Stage V+. This indicates the need for appropriate approaches and support to facilitate optimal language development, including enriching the language environment, expanding social interactions, and individualized evaluation of her needs. Mira's MLU analysis highlights the discrepancy between her MLU results and the expected developmental stage, emphasizing the importance of tailored approaches to support more effective language development.

The seventh respondent was Seth, a 5-year-old boy from the Netherlands, who actively participates in activities at The Children's Atelier School, where English is the primary medium. The MLU analysis of his 50 utterances revealed a total of 325 morphemes, resulting in an MLU of 6.5, exceeding the standard for his developmental stage. This indicates that Seth's language abilities have reached or even exceeded the standards for his age, highlighting his potential for using language with greater complexity and expressiveness.

The eighth respondent, Jacquelyn, a 5-year-old girl from Indonesia, actively participates in activities at The Children's Atelier School, where English is the primary language. Although English is the main language at home, Jacquelyn also has some knowledge of Indonesian. The MLU analysis of her 50 utterances showed a total of 275 morphemes, resulting in an MLU of 5.5, placing her at Stage V+ according to Brown's theory. This demonstrates her ability to produce complex sentences fluently and enrich her language expression. The alignment of Jacquelyn's MLU with the expected developmental stage confirms that her language abilities have

reached or exceeded the standards for her age, indicating potential for using language with higher complexity and expressiveness.

The ninth respondent, Zion, a 6-year-old boy from France, actively participates in activities at The Children's Atelier School, where English is the primary language. Although English is the main language at home, Zion also has some knowledge of French. The MLU analysis of his 50 utterances revealed a total of 415 morphemes, resulting in an MLU of 8.3, the highest among the 6-year-old participants. This places him at a very advanced stage of language development according to Brown's theory, indicating his ability to produce very complex sentences and integrate various types of words and phrases with fluency. The alignment of Zion's MLU with the expected developmental stage confirms that his language abilities have exceeded the standards for his age, showing extraordinary potential in using language with high complexity and expressiveness.

The tenth respondent, Juno, a 6-year-old girl from Germany, actively participates in activities at The Children's Atelier School, where English is the primary language. Although English is the main language at home, Juno also has some knowledge of German. The MLU analysis of her 50 utterances showed a total of 292 morphemes, resulting in an MLU of 5.84, placing her at Stage V+ according to Brown's theory. This demonstrates her ability to produce long and complex sentences fluently and enrich her language expression. The alignment of Juno's MLU with the expected developmental stage confirms that her language abilities have reached or exceeded the standards for her age, indicating potential for using language with higher complexity and expressiveness.

The eleventh respondent, Nuno, a 6-year-old boy from Germany, actively participates in activities at The Children's Atelier School, where English is the primary language. Although English is the main language at home, Nuno has limited knowledge of German. The MLU analysis of his 50 utterances showed a total of 276 morphemes, resulting in an MLU of 5.52, placing him at Stage V+ according to Brown's theory. This indicates his ability to produce complex sentences fluently, reflecting a level of language proficiency appropriate for his age. The alignment of Nuno's MLU with the expected developmental stage confirms that his language abilities have reached or exceeded the standards for his age, indicating potential for using language with higher complexity and expressiveness.

The twelfth respondent, Dakota, a 6-year-old girl from Indonesia, demonstrated excellent language skills. The MLU analysis of her 50 utterances revealed a total of 264 morphemes, resulting in an MLU of 5.28. Dakota is able to produce complex sentences fluently, reflecting language skills appropriate for her age. The alignment of Dakota's MLU with the expected developmental stage confirms that her language abilities have reached or exceeded the standards for her age, indicating potential for using language with higher complexity and expressiveness.

In conclusion, the MLU measurements of the twelve children at The Children's Atelier reveal variations in the average length of their utterances, providing a comprehensive overview of language development in the 4-to-6-year age range. While most children, including Jona, Nila, Brohm, Seth, Jacquelyn, Zion, Juno, Nuno, and Dakota, align with Brown's theoretical stages, indicating advanced language abilities, some, such as Georgie and Mira, exhibit lower than expected MLUs, highlighting the influence of individual factors like social environment and interactions. This comprehensive analysis emphasizes the importance of considering individual differences in language development and the role of the social environment, experiences, and interactions in children's linguistic growth.

Table 6. Overall MLU Measurement Results

No.	Name	Age (years)	Age (months)	MLU Results	Results of Brown's Theory Stage	Appropriate stages of Brown's Theory
1	Jona	4 years	48 months	5.52	*Stage* V+	In accordance
2	George	4 years	48 months	3.86	*Stage* V	It is not in accordance with
3	Indigo	4 years	48 months	5.9	*Stage* V+	In accordance

4	Brohm	4 years	48 months	5.52	*Stage* V+	In accordance
5	Sevy	5 years	60 months	6.92	*Stage* V+	In accordance
6	Mira	5 years	60 months	4.28	*Stage* V	It is not in accordance with
7	Seth	5 years	60 months	6.5	*Stage* V+	In accordance
8	Jacquelyn	5 years	60 months	5.5	*Stage* V+	In accordance
9	Zion	6 years	72 months	8.3	*Stage* V+	In accordance
10	Juno	6 years	72 months	5.84	*Stage* V+	In accordance
11	Nuno	6 years	72 months	5.52	*Stage* V+	In accordance
12	Dakota	6 years	72 months	5.28	*Stage* V+	In accordance

Source: Primary data from interviews, 2024

The MLU measurements of twelve children at The Children's Atelier reveal variations in the average length of their utterances, offering a detailed overview of language development in children aged 4 to 6. The data analysis indicates that the majority of children, including Jona, Nila, Brohm, Seth, Jacquelyn, Zion, Juno, Nuno, and Dakota, align with Brown's theoretical stages of language development, specifically Stage V+ or Stage V. This alignment demonstrates their capability to produce long and complex sentences, showcasing proficient integration of various word types and phrases in their speech.

Conversely, some children, such as Georgie and Mira, exhibit MLUs that do not correspond with the expected stages according to Brown's theory, presenting lower than anticipated MLUs. This discrepancy suggests individual variations in language development, potentially influenced by factors such as social environment, personal experiences, and interactions with their surroundings.

In summary, while most children at The Children's Atelier show language development consistent with Brown's stages, indicating advanced syntactic abilities, the presence of individual variations underscores the impact of external factors on language acquisition. This comprehensive analysis underscores the importance of considering individual differences in language development and the influence of the social environment, experiences, and interactions on children's linguistic growth.

4.2 Syntactic Structures' Results

By considering the results of MLU calculations for children at The Children's Atelier, the next step is to analyze the most dominant syntactic structures in the speech of children aged 4 to 6 years. The results of the syntactic structures produced by the twelve children at The Anak Atelier School who were used as research samples are as follows:

Table 7. Overall Syntactic Structures' Results

No.	Name	Age (years)	MLU Results	Dominant Sentence Type	Results of the Most Dominant Syntactic Structure
1	Jona	4 years	5.52	*Declarative*	Pronoun Phrase – Verb Phrase
2	George	4 years	3.86	*Declarative*	Pronoun Phrase – Verb Phrase
3	Indigo	4 years	5.9	*Declarative*	Pronoun Phrase – Verb Phrase
4	Brohm	4 years	5.52	*Declarative*	Pronoun Phrase – Verb Phrase
5	Sevy	5 years	6.92	*Declarative*	Pronoun Phrase – Verb Phrase
6	Mira	5 years	4.28	*Declarative*	Pronoun Phrase – Verb Phrase
7	Seth	5 years	6.5	*Declarative*	Pronoun Phrase – Verb Phrase
8	Jacquelyn	5 years	5.5	*Declarative*	Pronoun Phrase – Verb Phrase
9	Zion	6 years	8.3	*Declarative*	Pronoun Phrase – Verb Phrase
10	Juno	6 years	5.84	*Declarative*	Pronoun Phrase – Verb Phrase
11	Nuno	6 years	5.52	*Declarative*	Pronoun Phrase – Verb Phrase
12	Dakota	6 years	5.28	*Declarative*	Pronoun Phrase – Verb Phrase

Source: Primary data from interviews, 2024

Table 3 encapsulates the findings from the measurement of Mean Length of Utterance (MLU) and the prevalent syntactic structures among the twelve children who participated in the study at The Children's Atelier School. The children, aged between 4 and 6 years, exhibited a range of MLU scores, with the lowest recorded by 4-year-old Georgie (3.86) and the highest by 6-year-old Zion (8.3). Generally, MLU tends to increase with age, albeit with some intra-age group variability. All children aged 5 and 6 years demonstrated MLU scores corresponding to Stage V+ per Brown's theoretical framework, indicative of advanced linguistic capabilities, whereas the 4-year-olds' MLU scores ranged between Stage V and Stage V+.

The predominant sentence type among the participants was declarative, with the most common syntactic structure being the Pronoun - Verb combination (Pron + VP). An elevated MLU signifies a child's capacity to produce more extended and intricate sentences. This is exemplified by Zion and Sevy, whose MLUs of 8.3 and 6.92, respectively, reflect their ability to seamlessly integrate diverse word types and phrases, contrasting with lower MLU children like Georgie (3.86). The prevalence of the Pronoun - Verb structure underscores the children's foundational proficiency in utilizing subjects (pronouns) and predicates (verbs) within declarative sentences. These findings suggest that despite MLU variations, all children have attained basic proficiency in constructing declarative sentences.

In conclusion, a positive correlation exists between MLU scores and the syntactic abilities of children at The Children's Atelier School. Higher MLU scores are indicative of the children's aptitude to generate longer, more complex, and well-structured sentences. Irrespective of MLU discrepancies, all children demonstrated fundamental proficiency in using declarative sentences with a Pronoun - Verb structure. This supports the hypothesis that increasing MLU correlates with enhanced syntactic abilities, reflecting normative and healthy language development in children aged 4 to 6 years.

V. CONCLUSIONS

Based on research conducted at The Children's Atelier, the majority of children aged 4 to 6 exhibit language abilities consistent with Brown's theoretical developmental stages, with MLU reflecting an increase in syntactic complexity as they age. The analysis indicates that the predominant syntactic structure in their utterances is the declarative sentence with a Pronoun - Verb (Pron + VP) pattern, demonstrating a preference for a straightforward and efficient subject-predicate arrangement. Although some children exhibit MLUs below the expected standards, this variation underscores the impact of individual factors such as social environment and interactions. Overall, the alignment between MLU and dominant syntactic structures suggests that these children have developed language skills appropriate for their age, though MLU provides only a broad indicator of language complexity, with vocabulary variation also playing a crucial role.

Recommendations for future research include the development of educational materials aligned with the language development stages of children aged four to six, individualized monitoring and tailored interventions for children with developmental variations, and the creation of specialized intervention programs to enhance the language skills of children with lower MLU scores. Additionally, a child-centered curriculum is advocated to support language development, considering syntactic preferences and individual language development levels.

REFERENCES

[1] M. Brantasari, "Pola Asuh Orang Tua terhadap Perkembangan Bahasa Anak Usia Dini," *murhum*, vol. 3, no. 2, pp. 42–51, Sep. 2022, doi: 10.37985/murhum.v3i2.119.

[2] F. Nasution, A. Siregar, T. Arini, and V. U. Zhani, "Permasalahan Perkembangan Bahasa Anak Usia Dini," *Jurnal Pendidikan dan Keguruan*, vol. 1, no. 5, pp. 406–414, 2023.

[3] A. A. I. A. L. Utami and I. N. Sudipa, "Mean Length of Utterance of Children at the Trihita Alam Eco School," *JH*, vol. 25, no. 3, p. 286, Aug. 2021, doi: 10.24843/JH.2021.v25.i03.p04.

[4] Hanna and A. Badara, *Pemerolehan dan Pembelajaran Bahasa Berbasis R & D*, 1st ed., vol. 1. Kendari: Universitas Halu Oleo Press, 2020. [Online]. Available: http://karyailmiah.uho.ac.id/karya_ilmiah/Aris_Badar2/8.Pemerolehan_dan_Pembelajaran.pdf

[5] H. Kridalaksana, *Kamus Linguistik*, 4th ed. Jakarta: Gramedia Pustaka Utama, 2013.
[6] I. Zulfa and H. Setiawan, "Analisis Pemerolehan Bahasa dengan Perhitungan MLU dan Kajian Aspek Sintaksis Anak Usia 2,8 Tahun," *Jurnal Pendidikan Tambusai*, vol. 5, no. 3, pp. 6552–6558, 2021.
[7] Andayani *et al.*, *Kajian Psikolinguistik*, 1st ed., vol. 1. in 1, vol. 1. Aceh: Yayasan Penerbit Muhammad Zaini, 2021. [Online]. Available: https://aktabe.ac.id/wp-content/uploads/2022/01/BUKU-Kajian-Psikolinguistik-2021.pdf
[8] I. P. Sudayasa *et al.*, *Psikologi Kognitif*, 1st ed., vol. 1. in 1, vol. 1. Jawa Tengah: Eureka Media Aksara, 2023.
[9] R. Brown, *A First Language: The Early Stages*. Amerika: Harvard U. Press., 1973. [Online]. Available: https://books.google.co.id/books/about/A_First_Language.html?id=0nOdAAAAMAAJ&redir_esc=y
[10] L. Hiebert and R. Rojas, "A Longitudinal Study of Spanish Language Growth and Loss in Young Spanish-English Bilingual Children," *Journal of Communication Disorders*, vol. 92, no. 1, pp. 1–15, Jul. 2021, doi: 10.1016/j.jcomdis.2021.106110.
[11] A. Hilmi and Khaerunnisa, "Pemerolehan Aspek Sintaksis Pada Anak Usia 1 Tahun yang Terlahir Prematur," *Bahasa: Jurnal Keilmuan Pendidikan Bahasa dan Sastra Indonesia*, vol. 5, no. 1, pp. 54–62, 2023, doi: https://doi.org/10.26499 /bahasa.v5.i1.574.
[12] J. F. Miller and R. S. Chapman, "The Relation between Age and Mean Length of Utterance in Morphemes," *J Speech Lang Hear Res*, vol. 24, no. 2, pp. 154–161, Jun. 1981, doi: 10.1044/jshr.2402.154.
[13] M. L. Rice, F. Smolik, D. Perpich, T. Thompson, N. Rytting, and M. Blossom, "Mean Length of Utterance Levels in 6-Month Intervals for Children 3 to 9 Years With and Without Language Impairments," *J Speech Lang Hear Res*, vol. 53, no. 2, pp. 333–349, Apr. 2010, doi: 10.1044/1092-4388(2009/08-0183).
[14] J. Piaget and B. Inhelder, *The Psychology of the Child*, 3rd ed. New York: Basic Books, 2018.
[15] H. Khairi, "Karakteristik Perkembangan Anak Usia Dini Dari 0-6 Tahun," *Jurnal Warna*, vol. 2, no. 2, pp. 15–28, 2018, [Online]. Available: https://onesearch.id/Record/IOS6197.article-87
[16] N. Nurhayati, A. Amiruddin, J. Juanda, and E. Elfira, "Penerapan Metode Storytelling Menggunakan Media Hand Puppet Untuk Meningkatkan Kemampuan Berhitung Anak Taman Kanak-Kanak," *Jurnal, Pendidikan*, vol. 7, no. 4, pp. 1140–1145, Dec. 2022, doi: 10.58258/jupe.v7i4.4618.
[17] N. Kamil, U. K. Dewi, Y. A. Shope, M. Afkarina, and K. N. Hayati, "Pembelajaran Berdiferensiasi pada Satuan PAUD di Negara Indonesia dan Inggris," *Jurnal Sinestesia*, vol. 13, no. 1, 2023, [Online]. Available: https://www.sinestesia.pustaka.my.id/journal/article/view/370
[18] H. S. Jamal and H. Setiawan, "Analisis Pemerolehan Bahasa pada Anak Usia 2,8 Tahun berdasarkan Mean Length Of Utterance dalam Aspek Fonologi Morfologi dan Sintaksis," *ED*, vol. 3, no. 6, pp. 3816–3827, Aug. 2021, doi: 10.31004/edukatif.v3i6.1249.
[19] S. Dardjowidjojo, *Psikolinguistik Pengantar Pemahaman Bahasa Manusia*, 2nd ed., vol. 1. Pustaka Obor Indonesia, 2014.
[20] Suhartono, S. Sodiq, and L. Setiawati, *Psikolinguistik*, 1st ed., vol. 1. Jakarta: Universitas Terbuka, 2010.
[21] W. Wiratnaningsih, "Perkembangan Bahasa pada Anak Usia Dini 4-5 Tahun Ditinjau dari Aspek Sintaksis dan Pragmatik di TK Anggrek Kencana Batang," *jkp*, vol. 2, no. 2, pp. 107–112, Aug. 2021, doi: 10.51651/jkp.v2i2.45.
[22] A. Sari, "Perkembangan Bahasa Anak Usia Dini 5-6 Tahun Ditinjau dari Aspek Sintaksis dan Pragmatik," *Jurnal Kualita Pendidikan*, vol. 2, no. 2, pp. 102–106, 2021, doi: https://doi.org/10.51651/jkp.v2i2.44.
[23] R. V. Losi, V. Tasril, R. Widya, and M. Akbar, "Using Storytelling to Develop English Vocabulary on Early Age Children Measured by Mean Length Of Utterance (MLU)," *IJEAL*, vol. 2, no. 1, pp. 179–187, May 2022, doi: 10.47709/ijeal.v2i1.1470.
[24] D. Firmansyah and Dede, "Teknik Pengambilan Sampel Umum dalam Metodologi Penelitian: Literature Review," *JIPH*, vol. 1, no. 2, pp. 85–114, Aug. 2022, doi: 10.55927/jiph.v1i2.937.
[25] Sugiyono, *Metodelogi Penelitian Kuantitatif dan Kualitatif Dan R&D*, 2nd ed., vol. 2. Bandung: ALFABETA, 2019.