

Vol.03 No.04 (2025)

# THE IMPACT OF BIRTH STATUS ON EARLY LANGUAGE DEVELOPMENT: A COMPARATIVE PSYCHOLINGUISTIC ANALYSIS OF SINGLETONS AND TWINS

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## Abstract

Psycholinguistics is highly concerned with the development of language in early childhood, which is affected by a number of biological and environmental factors. Birth status is one of such factors, especially the disparity in the acquisition of language between a singleton and a twin. The research examines the influence of twin or singleton status on early language development. The qualitative methodology was chosen, which presupposed the observation of three pairs of twins and three singleton children, as well as interviews with parents. The analysis of the data was done with references to the Socio-Cultural Theory of Vygotsky, Nativism, Cognitivism, and Behaviorism in order to consider the developmental paths. The results indicate that twins particularly identical male twins have a tendency of developing language delay relative to singletons. The factors that may contribute to it are premature birth, shared attention, limited social exposure, and the development of a personal language (cryptophasia). Conversely, singleton children in favorable environments were found to be more advanced in their language abilities. The research concludes that despite the fact that twins are more exposed to language delays, specific interventions, parental support, and enriched surroundings can reduce such delays. These observations can be used in psycholinguistic studies and indicate the significance of early intervention in enhancing the developmental outcomes of twins.

**Keywords:** Psycholinguistics, Language Development, Twins, Singletons, Birth Status, Cryptophasia, Early Intervention

# Introduction

Psycholinguistics is a branch of cognitive science that investigates the mental and neurological processes that take place during language learning, production and understanding. It is a field that intersects between psychology and linguistics and deals with the way language is acquired, how it is stored in the mind and how it is applied in real time communication (Field, 2003). One of the key issues in psycholinguistics is to determine, how the language is acquired by infants and how this process is affected by different biological, cognitive, and social factors. Early childhood language development is a critical part of human development, and it establishes the path towards cognitive, emotional, and academic achievement in the future. It has a number of phases-cooing, babbling, one-word stage and two-word stage, which normally take place in the



Vol.03 No.04 (2025)

initial three years of life (Clark, 2009). This is because these formative years are said to be a critical period where the children are most open to receiving linguistic information and the brain is at a stage of organizing itself around the use of language (Lenneberg, 1967).

Birth status, singleton or twin child-has gained more research interest among the variables that affect early language acquisition. A study indicates that twins are more likely to develop language delays than singletons (Thorpe, Greenwood, Eivers, & Rutter, 2001). It is thought that this is due to factors like divided parent attention, less one-on-one interaction and less exposure to adult language (Tomasello & Farrar, 1986). Also, twins tend to create their own secret or independent language among themselves and it is called cryptophasia that can substitute normal language in the initial period of communication (Bakker, 1987).

Birth status not only determines the amount of linguistic input that a child gets, but also determines the quality of such input. Caregivers tend to give more individualized and responsive language interaction to singleton infants. On the contrary, twin infants tend to interact more with their co-twin and this can result in reduced exposure to the adult linguistic models and more dependence on one another as a source of communication (Largo et al., 2001). Such a distinctive twin relationship brings about a different route of language development, a route that requires special attention of psycholinguistic research. Although there has been an increase in the interest, there are still limited studies that have provided in-depth, observational, comparative analyses of linguistic behaviors of twins and singletons in early childhood, particularly in non-Western settings.

# **Statement of the Problem**

Although previous studies have already recognized the potential of language delays among twins, there is still a gap in the comparative studies that can be conducted on how the birth status affects the initial phases of language acquisition. This study aims to fill this gap by examining and comparing language acquisition of singleton and twin infants between 18 and 36 months of age through the psycholinguistic lens.

# **Research Aims**

This study will discuss how birth status affects early language acquisition using the comparison of linguistic patterns in twins and singleton infants. Precisely, the study explores the possibility of language delay in twins compared with single-born infants and the reasons that lead to language delay or facilitate the development of the language. It also tries to find out how twin pairs can come up with their own or secret language that is commonly known as the twin language and the degree to which this influences their general linguistic development. Moreover, the study will also reveal the reason as to why twins might be tempted to communicate with each other in their own common language and not with other people and the causes of these delays in language. Lastly, the study aims at suggesting some practical measures that parents and caregivers can implement to improve the language acquisition skills of twins and make their linguistic development more even.

# **Research Questions:**

- 1. What is the difference between early language development in twin babies and singleton babies? Which psycholinguistic and environmental factors have an impact on language acquisition among twins and singletons?
- 2. What is the difference between twins and singletons in terms of developing autonomous or self-generated language patterns?



Vol.03 No.04 (2025)

- 3. Why do twin infants more often than singletons tend to communicate with each other with the help of special linguistic forms?
- 4. What are the predisposing factors of language delay in twins versus singletons?
- 5. Which parental strategies are the most helpful in promoting language development in twins as compared to singletons?

# Significance of the Study

This study is an addition to the area of psycholinguistics because it provides a comparative, descriptive analysis of early language acquisition among twins and singletons. It is a good source of information to the parents, early childhood educators, and speech-language therapists, as it examines the effects of birth status on linguistic milestones. Furthermore, the scope of the research goes beyond the Western-centric population and introduces linguistic behavior within Urdu/Punjabi-speaking or in some way bilingual and multilingual contexts.

# **Literature Review**

# **Theoretical Framework**

The current study relies on a multidimensional theoretical framework by including the key theories of psycholinguistics and developmental psychology to examine early language development in twins and singletons. These are Vygotsky Socio-Cultural Theory, Usage-Based Theory of Language Acquisition by Tomasello, Critical Period Hypothesis by Lenneberg, Nativism by Chomsky, Cognitivism by Piaget, and Behaviorism by Skinner. All these theories offer a distinct perspective through which one can comprehend the cognitive, social and biological issues that shape the way language is acquired during early childhood.

# Vygotsky's Socio-Cultural Theory (1978)

Lev Vygotsky posited that the development of language was a social act. His theory states that communication with more knowledgeable others (parents, caregivers, peers) is a vital factor in cognitive and linguistic development. The main ideas of this theory are such concepts as Zone of Proximal Development (ZPD) and scaffolding, according to which children learn language most efficiently when they are guided by adults or cooperate with peers on the edge of their current ability. The theory is particularly applicable when it comes to the study of twin pairs who tend to have more interaction with their peers than adults. Although this kind of interactions between siblings can promote the growth of a secret or independent language (e.g., cryptophasia) it can reduce general linguistic exposure, which could slow the acquisition of conventional language. On the other hand, singletons, who tend to get more personalized adult attention, can be presented with more scaffolding and linguistic input.

# Tomasello's Usage-Based Theory of Language Acquisition

Michael Tomasello (2003) states that acquisition of language is based on social cognition and communicative intention. This theory holds that children acquire language through imitating how adults use language, reading communicative intentions, and noticing patterns in what they hear. It underplays innate grammar modules and focuses on frequency and context in language acquisition. This theory holds the notion that the quality and diversity of linguistic input have a lot of influence on language development. Twins can be less exposed to varied linguistic modeling, in particular when they largely depend on one another in terms of communication, thus having limited access to the adult-like language patterns. By contrast, singletons are likely to get more one-on-one input, and therefore find it less difficult to internalize syntactic patterns and vocabulary.



Vol.03 No.04 (2025)

# **Lenneberg's Critical Period Hypothesis (1967)**

Eric Lenneberg proposed that language acquisition has a critical period that is biologically determined, and usually spans the period between infancy and puberty. This is a period during which the brain is most open to language stimuli and learning a language comes most easily. Unless children have adequate exposure to language at this stage, they might never attain the proficiency of language. This theory highlights the importance of early intervention among children particularly twins who exhibit characteristics of delayed speech or poor vocabulary. The fact that the study found that some of the twin samples had delayed language development fits into this framework and indicates that when stimulation is missed or is weak during the critical period, then the consequences may be permanent unless corrected in time.

# **Chomsky's Nativism**

Noam Chomsky (1959, 1965) has put forward the theory of Universal Grammar and assumed that there exists an inborn Language Acquisition Device (LAD) which allows all humans to learn language naturally. He claimed that the speed and consistency with which children acquire the intricate grammatical rules in different cultures is an indication that there is an inborn linguistic ability. Although the theory by Chomsky gives a biological basis of language acquisition in both twins and singletons, the variations in language outcomes in this study mean that the environmental factors moderate the expression of the innate capacity. The theory provides a foundation through which the acquisition of language by twins, though with the same genetic endowment as singletons, can be studied to be behind that of the singletons because of the differences in environmental stimulation.

# Piaget's Theory of Cognitivism

Jean Piaget considered that language development is directly associated with cognitive development of a child. In his opinion, children go through stages (sensorimotor, preoperational, concrete operational and formal operational) and learn language as they form the mental structures required to comprehend and convey meaning. This theory is quite applicable in explaining individual cognitive differences between twin pairs and singletons. Twins can also be different in their cognitive maturity whereby one of them matures faster than the other.

# Skinner's Behaviorism

B.F. Skinner (1957) was focused on the importance of the environmental reinforcement and imitation in the language acquisition. Skinner believed that children acquire language through imitating the speech of adults and being reinforced (positively or negatively) according to what they say. The linguistic behavior is shaped by repetition, correction and reward. The theory is useful in explaining the significance of parent involvement and interest in language acquisition. In families with twins where the concentration is split, the reinforcement of proper speech can be weak or irregular and this can lead to late or disorderly speech. The instances of a better language development of the one twin as a result of parental attention directly correspond to Skinnerian principles.

Collectively, the six theories provide an extensive conceptual toolbox with which to examine and describe the varied language development trajectories of twin and singleton children. The theoretical framework is based on the biological, cognitive, social, and environmental approaches, which allows a complex explanation of the factors associated with early language delay or proficiency. It also has a foundation of suggesting specific interventions, including more adult-child interaction, speech therapy, or early educational interventions on at-risk children, notably twins.



Vol.03 No.04 (2025)

## **Review of Relevant Studies**

Psycholinguistics has paid much attention to the developmental patterns of early language learning, and much more attention is being paid to the role that birth status as a singleton or a twin can play in these patterns. A number of studies enlighten different linguistic, cognitive and social-emotional aspects of language development in children, which forms a good basis of the present study.

Tatlilioğlu and Tatlilioğlu (2021) provide a theoretical description of language development during early childhood, including its main stages and the influence of such factors as parental involvement, socio-economic status, health, and personality. They break down early linguistic development into three broad phases, namely Prelingual, Early Lingual, and Differentiation Period. The focus of their study on the significance of early exposure and family interactions in the development of language acquisition gives a basis on how the external variables can interact with the innate linguistic abilities.

Taking this argument further, Tanner (2012) examines the effect of prematurity, which is more prevalent among twins on language acquisition. The study, by using empirical comparison of 26 preterm and 26 full-term toddlers, concludes that premature children perform extremely poorly in receptive and expressive vocabulary. This strengthens the relationship between birth complications and language delays and the need of early intervention.

Including the longitudinal aspect, Wood et al. (2024) evaluate language, cognitive, and emotional development in 851 trios of siblings participating in the Twins Early Development Study (TEDS). Their within-family comparison shows that twins are always behind their singleton siblings in several developmental areas including language with small to moderate effect sizes. Interestingly, twins occasionally surpass singletons in language development at the age of 7, which indicates a compensatory developmental pattern. The validity of these findings is increased by the methodological rigor of the study especially the within-family design used.

In a qualitative study of 15 children between the ages of 2 and 5 in Indonesia, Safi-I and Harahap (2024) divide language development into four stages, namely babbling, holophrastic, sensorimotor, and preoperational stages. Their observations point to the fact that environment interactions and psycholinguistic factors play a great role in the results of language learning, thereby validating previous assertions of the role of context in acquisition.

Ketrez (2022) is a narrow research on articulation and vocabulary that compares Turkish-speaking twins and singletons at the age of three. This study demonstrates that twins have poorer articulation than singletons, and in twins, vocabulary size does not predict articulation accuracy as it does in singletons. This implies that linguistic subsystems have decoupled in twins and poses significant questions concerning the contribution of shared linguistic environments to language proficiency.

Thorpe (2006) compiles and examines the available literature on five key areas; the occurrence and causes of language delay in twins, the incidence of the use of private languages, intervention procedures, and future research directions. The results confirm that twins (particularly boys) are more susceptible to language delay, which is mostly caused by less enriched language environments. Although the phenomenon of a private or cryptophasia (twin language) exists, it is uncommon and is not usually the main factor of delay. The review recommends the improvement of the quality of linguistic input that the twins receive.

Shahzadi et al. (2021) compare the learning of the second language in twins and singletons in grades 3-8. With the help of such tasks as sentence formation and passage reading, and via the



Vol.03 No.04 (2025)

application of strict statistical methods (e.g., t-tests and ANOVA), the study reveals significant differences in the rate of language learning between the two groups. Their results are in accordance with the socio-cultural theory of Vygotsky, which demonstrated that the internal and external factors such as peer interactions and exposure to education have effects on the process of language acquisition. The gains of twins in second language are always lower, which indicates the necessity to consider their specific social situation in language learning.

Vaghchipawala (2023) looks at the role of birth order in the Big Five personality traits within the context of personality development. Although it is not directly connected with linguistic ability, this study confirms the idea that family status and sibling relationships influence the personality traits of openness and extraversion that indirectly impact language development due to differences in motivation and behavior.

In a similar way, Rohrer et al. (2015) use within-family design to study the personality difference by birth order. They discover some correlations between birth order and such characteristics as conscientiousness and openness. Although the effects are small, the study confirms the hypothesis that sibling sequence can influence developmental outcomes, which is why familial roles should be taken into account in language studies.

Khoshhal (2017) establishes a direct relationship between birth order and language learning behavior stating that the motivation, attitudes, and vocabulary development depends on the position of a child in the family. Examining the previous research (e.g., Saunders, 2003) the paper comes to the conclusion that firstborns tend to develop more positive attitudes towards the second language acquisition, which may be because of the increased parental attention and expectations.

Lastly, Yulianto and Ahmadi (2020) discuss the language development of Indonesian children at an early age, combining psychological and sociolinguistic factors. They note that language development at 0-6 years is influenced by a combination of factors such as cognition, biology and social interaction with specific focus on the largely ignored age bracket of 0-2 years. Their demand of further psycholinguistic work in this initial phase echoes with the current study on language acquisition in infants and toddlers in twins and singletons.

# **Rationale for the Current Study**

Even though the topic of early childhood language development is well-studied in the field of psycholinguistics, there is still a considerable gap in comparing studies of the influence of birth status, being a twin or singleton, on early language acquisition. The previous research (e.g., Tanner, 2012; Thorpe, 2006; Wood et al., 2024) has established that twins are more likely to experience delayed language development because of the premature birth, lack of parental interaction, and the development of the so-called private languages like cryptophasia. Yet, the majority of these studies are quantitative in nature, involve older children or do not pay attention to the naturalistic home settings. In addition, although studies have been conducted to investigate the impact of sibling relationship and birth order on personality and learning behaviors (e.g., Vaghchipawala, 2023; Khoshhal, 2017), not many have linked these factors to early language development in infants and toddlers. This paper fills this important gap by undertaking a qualitative, psycholinguistic comparison of the early language development of three twin pairs and three singleton infants by observation and parental interviews. The study will identify the impact of various birth statuses on the speech patterns, vocabulary and communicative interaction by contextualizing the language behaviors in the real life family and social settings.



Vol.03 No.04 (2025)

The results will provide useful information to linguists, educators, parents, and medical workers interested in learning how to promote the best language development at the very early age of life.

# Research Methodology

# **Research Design**

This research is a qualitative, comparative case study research, which is located in the field of psycholinguistics. The main aim is to compare the early language development in twin infant and singleton infant by naturalistic observation and care giver interviews. The best approach to be used in this study is qualitative because it would allow a deeper look into the language behaviors, the environment and the interaction between the caregivers and the child in a natural home setting. The design will enable the subtle meaning of the factors influencing language development that cannot be measured satisfactorily using quantitative measures.

# **Participants**

The sample of the study includes three pairs of twin infants (both identical and fraternal twins) and three singleton babies between 6 months and 6 years. The twins consist of two identical male pairs and one fraternal boy-girl pair, whereas the singleton babies are chosen to represent the children with and without siblings, which guarantees the variability in the social-linguistic environment of the children. Also, there is one family of two siblings whose age difference is small to investigate whether the language development in closely spaced births is similar to that of twins. Purposive sampling was employed to select all the participants, and the selection was done based on criteria like accessibility, consent of parent, and relevance to the research focus.

# **Data Collection Methods**

Two major data collection methods were used:

- 1. Naturalistic Observation: The observation of each child took place at home that is during normal activities like playing, feeding and playing with siblings or caregivers. The observation time extended to a few weeks so that the researcher was able to collect rich contextualized data on language use, communicative behaviors, phonological patterns, and interaction styles. Field notes were kept in detail on each session.
- 2. Semi-Structured Interviews with Parents: Deep interviews were carried out mostly with mothers and, where feasible, other caregivers. The interviews were on the birth history, health history, parental language input, child temperament, attention given, use of any personal language (if any) and any prior speech intervention or therapy. The interviews were audio-taped (with permission), transcribed and coded to be analysed thematically.

# **Data Analysis**

Thematic content analysis was used to analyze the collected data. The notes made during observation and the transcriptions of the interviews were re-read to provide the emergence of patterns in the use of language, social interactions, phonological and the formation of the private language. Themes of comparison between twin and singleton cases were created to identify similarities and differences in language paths. Cross-case comparison was also done to determine the effects of variables like birth complications, gender, parental attention and environmental stimulation on linguistic outcome.

# **Ethical Considerations**

The study was approved ethically before the collection of data. All participants were informed consent by the parents. During the research, anonymity and confidentiality were observed by giving all the child participants pseudonyms and by ensuring that sensitive data was stored in a

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# CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW

Vol.03 No.04 (2025)

secure manner. The research followed ethical research standards on children and vulnerable subjects.

# **Results**

The section is a report of the findings of the present qualitative research study that sought to examine the effects of birth status on early language development by conducting a comparative psycholinguistic study of twins and singleton babies. The research involved observational data and semi-structured interviews with the care givers of three pairs of twins and three singleton children.

# **Comparative Observations: Twins vs. Singletons**

This was done on the basis of home-based interactions, caregiver responses and developmental behaviors of the children participating in the study and the following observations were made:

**Twin Sample Overview** 

	1 will sample overview								
Sample	Twinning Type	Age	Social Interaction	Language Use	Syntax	Notes			
IΑ	Identical (boys)	2 years	Frequent interaction with each other, limited peer interaction	phonological issues	Not developed	One twin with better speech had more maternal attention due to health issues			
В			engagement	pronunciation	developed	Joint family, full-time caregiver, no health issues			
С	Fraternal (boy+girl)	5 years	socially	Girl: motivated to speak; Boy: delayed speech	Ο.	Boy received speech therapy and environmental change			

**Singleton Sample Overview** 

	ingleton sumple overview								
Sample	Sibling Age Gap	Δσρ	Social Interaction	Language Use	Notes				
A	1 year 6 months	2 years	Reduced attention after sibling birth	babbling	Regained language after therapy				
В		2-3	Limited attention due to multiple siblings	Delayed expressive and receptive language	No preschool learning, low confidence				
( '			Highly confident, responsive parents		Supportive environment, conversational parenting style				

# **Psycholinguistic and Environmental Factors**

The results indicate that the language development at an early age is significantly affected by the psycholinguistic and environmental factors:

**Health Conditions:** Language delay was strongly linked to premature birth and underlying health problems, particularly in twins.

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## CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW

Vol.03 No.04 (2025)

**Parental Attention:** Twins that were given less one-on-one attention (Sample A) showed inferior vocabulary and articulation.

**Social Environment:** Children who lived in the joint family system or had access to caregivers (Sample B, twins) developed more.

**Sibling Competition:** singleton children who had close-aged siblings (Sample A and B) also showed delays when they were not provided with personalized attention.

These results are in line with the argument by Tomasello and Farrar (1986) who state that joint attention and regular social contact promote language acquisition. On the same note, Lenneberg (1967) also stressed on the necessity of early exposure within the critical period of language development.

# Twin Language and Cryptophasia

One of the findings that was prominent in the twin pairs especially Sample A was the development of a private or autonomous language. Twins used to speak in jargon-like phrases that no other person could understand but they could understand each other. The phenomenon is in line with what Dodd and McEvoy (1994) referred to as cryptophasia.

**Types of Twin Language Observed:** 

Twin Language Type	Description	
	Incomprehensible, sentence-like murmurings	
Comprehensible	Understood by family members but unclear to outsiders	
Private Vocabulary	Peculiar terms used exclusively between twins	
Selective Mutism	Communication only between twins, not with others	

Such personal languages can occur because of the lower external linguistic stimulation and excessive dependence on the co-twin as a source of communication (Bakker, 1987). The example of twins in Sample A demonstrated the situation when maternal overload and deprivation of the variety of linguistic input may contribute to the development of this secretive form of communication.

# **Causes of Language Delay**

Both the twins and singleton children had language delay but the twins had it more. The key contributing factors were determined to be:

**Cryptophasia:** Twins have a tendency to speak in secret languages that put off exposure to formal grammatically structured language.

Less Adult Contact: The divided attention of twins restricts the amount and quality of adult child linguistic interactions.

**Prematurity and Medical Problems:** The preterm birth was linked to slow progress in auditory processing and language development (Sansavini, 2011).

**Socioeconomic Factors:** Delays were compounded by the fact that children in lower-income families had no access to early education and speech therapy.

# **Parental Strategies and Interventions**

Good interventions that enhanced language growth in both groups were:

**Conversation:** The parents in Sample C (singleton) showed adaptive conversation and less command-driven interaction, which produced more assertive and expressive children.

**Targeted Attention:** One-on-one interaction was enhanced by structured time and resulted in better outcomes in both twin and singleton cases.



Vol.03 No.04 (2025)

**Speech Therapy:** In Sample C (twins), the boy improved a lot after the professional therapy and environmental changes.

Parents should be advised to repeat and extend what the child says, make eye contact and face-to-face communication and employ storytelling, picture books and open-ended questions. These are the evidence-based early intervention strategies in language delay.

Twin infants are at higher risk of language delay when compared to singletons, particularly in situations where there is low interaction with adults and health challenges. The emergence of a so-called twin language can be a kind of coping strategy but it postpones the official linguistic development. The singleton children who lack attention because of sibling rivalry may also suffer the same setbacks as the twins. Both groups are at a considerably lower risk of being delayed through environmental enrichment, parental involvement, and therapeutic assistance.

# **Discussion**

This paper set out to explore the effect of birth status as a twin or singleton on early language development. Based on observational data and interviews of caregivers, the results show that there are clear differences in developmental patterns between twins and singletons children, which depend on numerous biological, environmental, and psychological factors. The findings are based on psycholinguistic theories such as Vygotsky Socio-Cultural Theory, Nativism, Cognitivism and Behaviorism theories, which help to know how language acquisition is influenced by both internal and external factors.

The first important discovery is that twins are typically lagging behind in language development in comparison to singleton children, which is also consistent with previous research, including Thorpe (2006), Wood et al. (2024), and Tanner (2012). Twins, particularly identical boys in Sample A, showed impairment in vocabulary, articulation delay, and use of unintelligible or personal speech (cryptophasia) as Dodd and McEvoy, (1994) noted. These language delays may be explained by a number of reasons such as premature birth, health issues, and parental attention split which were common in the cases that were observed. On the contrary, singleton infants especially in families where parents have a high level of interaction and distractions are minimal showed faster phonological, lexical, and syntactic development. Strangely enough, in Samples A and B the phenomenon of private language (cryptophasia) among twins was noticed. Although this type of autonomous communication enhances the twin bonding, it can be a barrier to the wider language development since it minimizes the exposure to the outside linguistic stimulus. This agrees with previous literature by Thorpe (2006) and Rohrer et al. (2015) who believe that a private language can be used to strengthen phonologically disordered speech instead of promoting normal linguistic development.

The other important theme that was identified in the data was the role of parental attention and the type of caregiving. Language development was more developed in families where twins were given special attention as caregivers, as in the case of Sample B, where the extended family and professional care was provided. This confirms the idea of Vygotsky about the Zone of Proximal Development, because this concept underlines the role of guided interaction in language learning. Twin pairs or singleton children who underwent caregiver stress, lack of stimulation, or sibling rivalry (as observed in the singleton Sample A and B) on the other hand exhibited regressive or delayed language use. This also proves the socio-environmental results of Yulianto and Ahmadi (2020) and Safi and Harahap (2024). The data also indicate gender variations in language development as witnessed in the fraternal twin pair in Sample C. The girl was more motivated and more skilled in language which corresponds to the study by Tanner (2012)



Vol.03 No.04 (2025)

according to which male twins are more prone to language delays. Nevertheless, there was an improvement in the positive direction after environmental enrichment and speech therapy, which indicated that language impairment in twins is not chronic and can be corrected with intervention in line with the arguments of Shahzadi et al. (2021).

Moreover, the research paper outlines the effect of birth order and sibling spacing on language outcomes. The singletons who had siblings of a similar age, particularly in cases when the parental attention was divided (Sample A and B) experienced the same delay as twins, confirming the results of Khoshhal (2017) regarding the interaction between birth order and cognitive-linguistic development. On the other hand, singleton children who do not have siblings, particularly those who have good parent interaction (Sample C), were confident and fluent with language. The findings all support the fact that birth status does not predetermine language delay but when combined with health, attention, social environment, and family dynamics, it forms a complex web of factors. The findings emphasize the need of early intervention, responsive parenting, and parental/educator awareness about developmental needs of twins and singletons.

Overall, the present study provides a very useful empirical input to the psycholinguistic domain because it provides a highly context-sensitive perspective on language development in various birth statuses. It embraces a multifactorial approach to language acquisition, which entails biological predispositions (Nativism), environmental input (Vygotsky theory), cognitive readiness (Cognitivism) and learned behavior (Behaviorism). The results do not only cover a gap in comparative psycholinguistic studies, but also can be applied in practice to the development of focused early language intervention programs in twins and children with a small age difference between them.

## Conclusion

This study explored the effects of birth status on early language development by comparing singleton children and twins in a qualitative perspective. The results indicate that twin children, in particular, identical males, have more language delays caused by such factors as a lack of parental attention, prematurity, and the application of the so-called private language (cryptophasia). Conversely, singletons are generally more linguistically competent when they grow up in socially stimulating homes with active parents. Based on the Socio-Cultural Theory of Vygotsky, Nativism, Cognitivism, and Behaviorism, the study emphasizes the fact that language is developed both biologically and environmentally. Interestingly, twins are not permanently delayed and it is possible to overcome the delays with the help of targeted parental support and early intervention. The study shows the necessity of awareness and specific measures to facilitate language development in children, in particular twins.

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Vol.03 No.04 (2025)

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