

The Impact of Limited Direct Social Interaction on The Development of Children's Language Instincts

Dewi Rahmadhani¹, Andi Hudriati², Madeline Yudith³

¹Universitas Muslim Indonesia; dewirahmadhani31@gmail.com

²Universitas Muslim Indonesia; andi.hudriati@umi.ac.id

³Universitas Muslim Indonesia; madeline.yudith@umi.ac.id

Abstract

Article information

Researcher found a phenomenon of children experiencing speech delays due to addiction to playing gadgets without parental supervision, where children rarely interact directly which will hinder children's language development. Therefore, the question arises about What is the impact of limited direct social interaction on the development of children's language instincts. This research uses the theory of "language instinct" by Steven Pinker, because this research aims to determine whether direct social interaction is still needed to support children's language instincts in the digital era, where in the current digital era many children are addicted to playing gadgets. The approach used in this research is a quantitative descriptive design. Data were obtained through questionnaire data by parents who were willing to share their experiences. The results of this research indicate that children who have limited exposure to social interaction, especially outside the family environment, tend to experience difficulties in language aspects. The results of this research indicate that direct interaction is still very much needed to support the development of children's language instincts.

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Introduction

Language is a series of communications that play a very important role in children's growth and development and also interacting in the real world also plays an important role in children's language development (Tambunan, Kabeakan, Sebayang, et al., 2024). However, in the current digital era, the use of gadgets and technology is increasingly widespread, especially in children who are still at an early age (Hidayati, Nugrahani& Suwanto, 2024). Therefore, researchers focus on the language of children who are addicted to playing gadgets, where researcher find related phenomena such as children who experience speech delays due to addiction to playing gadgets (Triani, Casman, Dewi, 2024). Thus, the object of this research includes parents who have children aged 3 to 8 years who aim to examine the impact of limited direct social interaction on the development of children's language instincts. In this research, researcher uses Steven Pinker's theory (1994), namely "language instinct", where this theory is in accordance with the problems in this research regarding the impact of limited direct social interaction on the development of children's language instincts.

Steven Pinker (Marby, 1995) stated that every human being has an innate ability to learn language, where humans have the ability to learn language through direct interaction. However, in today's digital era where children are accustomed

to gadgets and lack of direct interaction, it may be difficult to develop language aspects, therefore researcher uses Steven Pinker's "language instinct" theory in this research.

Steven Pinker argues that in reality every human being does not need to be taught to speak (Sihombing, 2022) but there is a phenomenon where children who are addicted to gadgets experience speech delays. This research will examine the phenomenon of children who experience speech delays which are suspected to be due to gadget addiction. This research aims to examine the extent to which the use of gadgets in the digital era will affect the development of children's language instincts.

Therefore, this research is important as teaching material for parents so that their children can balance the time spent using gadgets and interacting directly. Through Steven Pinker's theory which states that every human being is born with an innate ability to learn language or what is known as "Language Instinct" (Sihombing, 2022). This research is targeted to be able to present evidence based on real data about the impact of excessive gadget use on the development of children's natural language instincts.

Researcher assumes that the absence of this research has the potential to cause problems with the development of children's natural language instincts to be ignored. Without this research, this problem can be considered not serious, even though the long-term effects can affect children's speaking abilities, where children at an early age are in their golden age, namely from the age of 0-8 years, where at that time children will be very sensitive in receiving all stimuli. It is very important for us to maintain the development of children's natural language instincts who play gadgets excessively and without parental supervision, because the child's golden age will not return (Tambunan, Kabeakan, Sebayang, et al., 2024).

Method

In the method section, it explains the type of research, time and place of research, research subjects, procedures, data, instruments, and data collection techniques and data analysis techniques. Therefore, the researcher describes this section by explaining it in sub-chapters, with sub-subheadings, as follows:

This research uses a quantitative approach, where researcher uses a quantitative approach involving the collection of numerical data and objective data interpretation (Creswell, 2016). In this research, using a quantitative descriptive design, namely an approach that aims to describe phenomena or population characteristics based on numerical data collected from questionnaire data.

The time of this research is in accordance with the time of distribution of questionnaire data distributed to 15 respondents who were willing to share their experiences. The time of filling in the questionnaire data was from April 20 to April 22, 2025. The questionnaire data was filled in online, therefore, respondents filled in the questionnaire data in their respective places.

This research was conducted through the collection of questionnaire data filled out by parents who have children aged around 3 to 8 years, both those who experience speech delays suspected of being caused by excessive gadget use, and those who do not experience speech delays.

Researcher only focus on children aged 3 to 8 years who actively use gadgets.

The procedure of this research began by distributing questionnaire data to 15 respondents, then the data collected for 3 days was made in the form of diagrams and percentages, then analyzed descriptively. The results of the research were concluded according to the data collected from the analysis of the questionnaire data.

The data sources in this research come from:

- a) Primary data collected from questionnaires filled out by parents and
- b) Secondary data obtained from related sources, such as previous studies on the influence of gadget use on children's language development and Pinker's linguistic theories.

The instruments used in this research are:

- a) Questionnaire for parents that will collect information about the duration of children's gadget use at home and children's social interaction habits.
- b) Children's language ability questionnaire based on the theory of "Language Instinct" by Steven Pinker.

The Questionnaire List:

Social & Language Interaction Question.

No Questions Answers

1. Frequency of face-to-face interactions between children and family at home
 - o Often ($\geq 3x/day$)
 - o Sometimes ($1-2x/day$)
 - o Rarely ($<1x/day$)

2. Children's social activities outside of school
 - o Courses/extracurricular activities
 - o Visits to family
 - o Rarely interact
3. Has the child ever shown difficulty in:
 - o Expressing thoughts verbally
 - o Understanding oral instructions
 - o Responding to conversations
4. Developments observed in children's communication since routinely using gadgets
 - o No significant development
 - o More new vocabulary
 - o More passive in conversation
 - o Not yet fluent in speaking

Parental Supervision Question.

No Questions Answers

1. How often do parents accompany their children when using gadgets?

- o Always
- o Often
- o Rarely
- 2. Parents' efforts to balance digital and non-digital activities
 - o Talking directly every day
 - o Inviting to play outside the house
 - o No special efforts

Data were collected from 15 respondents who had filled out the questionnaire data. Participants were free to provide responses to the information they had. Researchers have no control over the responses given by participants. This questionnaire data collection technique aims to collect information about participants' opinions about the impact of excessive gadget use on the development of children's language instincts in the digital era.

The data analysis technique in this research is thematic analysis which is an approach to observing phenomena based on schemes or topics from general data (Boyatzis. 1998). Researcher took steps to use thematic analysis with theory driven because this analysis has the potential to produce a structure based on theory, so it has the potential to produce detailed and structured results. Boyatzis (1998) explains that thematic analysis with theory driven begins by introducing thematic codes from previously selected theories. The steps of thematic analysis according to Boyatzis (1998) are, compiling all the data obtained properly, studying the topics in the data that have been compiled based on theory, examining topics that appear and do not appear in the data by observing the causes and drawing conclusions based on data analysis. Therefore, researcher uses a quantitative approach and analyze descriptively based on thematic analysis driven by theory.

Results and Discussion

The results of the research on the impact of limited direct social interaction on the development of children's language instincts have been answered through questionnaire data that has been filled out by 15 respondents and made in the form of a table regarding Social Interaction & Language and Parental Supervision and will be discussed and analyzed descriptively, table 1 and table 2 as follows:

Table 1. Social Interaction and Language Score

No	Questions	Answers	Percentage
1	Frequency of face-to-face interaction between children and family at home	• Often ($\geq 3x/day$)	86,7%
		• Sometimes (1-2x/day)	18,3%
		• Rarely ($< 1x/day$)	0%
2	Children's social activities outside of school	• Courses/extracurricular activities	66,7%
		• Visits to family	13,3%
		• Rarely interact	20%
3	Has the child ever shown difficulty in:	• Expressing thoughts verbally	46,7%
		• Understanding oral instructions	33,3%
		• Responding to conversations	20%

4	Developments observed in children's communication since routinely using gadgets	• No significant development	13,3%
		• More new vocabulary	53,3%
		• More passive in conversation	26,7%
		• Not yet fluent in speaking	6,7%

Table 1 discusses the social interaction and language score which presents 4 questions and questionnaire results where the first question is related to the frequency of face-to-face interaction between children and family at home, the results of the questionnaire data show that as many as 86.7% of parents filled out the questionnaire that the frequency of face-to-face interaction between children and family at home is often ($\geq 3x/day$), then there are 18.3% who admit sometimes (1-2x/day) and none who fill in rarely ($< 1x/day$). The results of this data show that out of 15 respondents most are very concerned about the frequency of face-to-face interaction between children and family at home.

The second question discusses children's social activities outside of school, where as many as 66.7% of parents who filled out the questionnaire data admitted that their children took courses/extracurricular activities, then as many as 13.3% visited family and there were 20% who rarely interacted. From the results of this data, it shows that the majority of children have interacted directly, but it is very unfortunate that there are as many as 20% of children who rarely interact which may hinder their language development. Where direct social interaction is very important in children's language development (Vygotsky, 1978). With a lack of direct interaction, children will rarely listen to language and not pay attention to lip movements which will have a negative impact on children's language development (Syifa, Setianingsih, Sulianto, 2019).

In the third question related to children's difficulties in language, as many as 46.7% of parents who filled in that their children had difficulty expressing their thoughts verbally, and as many as 33.3% of parents who filled in that their children had difficulty understanding oral instructions, then as many as 20% had difficulty responding to conversations. The results of this questionnaire data show that most children still have difficulty expressing their thoughts and understanding language, where this data is filled in by parents who have children aged 3 to 8 years. In the research of Anggrasari and Rahagia (2020) which shows the importance of providing stimulation to children aged 3 to 5 years when they play, because the results of the research of Anggrasari and Rahagia (2020) show that gadgets have a negative influence on the language development of children aged 3 to 5 years. Thus, it can be seen the importance of direct interaction in children's language development.

In the fourth question which discusses the development of children's communication since routinely using gadgets, it shows that as many as 12.3% of parents who filled in that there was no significant development in the development of children's communication, as many as 53.3% who filled in that they got more new vocabulary, and as many as 26.7% who filled in that children were more passive in conversation and as many as 6.7% were

not yet fluent in speaking. The results of this questionnaire data show that as many as 53.3% of children get a lot of new vocabulary, from here it can be seen that the use of gadgets will have a positive impact depending on how they are used (Gee, 2007). However, there are some who do not experience development and are passive in speaking and are not yet fluent in speaking. Children who often use gadgets experience speech delays and difficulty in understanding vocabulary (Pasaribu, Yusnadi, Machmud, 2023), perhaps from here it can be seen that it is important for parents to supervise the use of gadgets in children.

Table 2. Parental Supervision Score

No	Questions	Answers	Percentage
1	How often do parents accompany their children when using gadgets?	• Always	26,7%
		• Often	33,3%
		• Rarely	40%
2	Parents' efforts to balance digital and non-digital activities	• Talking directly every day	33,3%
		• Inviting to play outside the house	60%
		• No special efforts	6,7%

Data from table 2 which discusses parental supervision. Which there are 2 questions and the results of the questionnaire data in table 2. This data shows that the duration of time parents accompany their children when using gadgets varies. Where there are 26.7% of parents always accompany and as many as 33.3% of parents often accompany and 40% of parents rarely accompany. The results of this questionnaire data show that it can be said that parents who pay attention to the content seen by children and parents who pay less attention to the content seen by children are almost balanced. However, it is still very important to accompany the content seen by children because children can consume negative things, where currently the internet is very easy to access and very wide (Tanfidiyah & Utama, 2019: 11).

Then the second question discusses parents' efforts in balancing children's digital and non-digital activities. Where there are 33.3% of parents who try to talk directly every day, then as many as 60% of parents invite their children to play outside the house and finally as many as 6.7% of parents do not have any special efforts. Thus, the data results show that as many as 93.3% of parents have tried to keep their children interacting directly, but as many as 6.7% of parents do not make special efforts, so that children who do not interact directly will have difficulty in maintaining the development of their language instincts. Where by interacting directly, children can learn to speak through direct interaction (Pinker: 1994). Lack of direct interaction of children in their golden age where children will be very, very easy to receive stimuli will have a negative impact on children's language development (Abida, 2024).

Based on the results of the data analysis in table 1, it turns out that gadgets also have a positive impact on the development of children's language instincts, where 53.3% have a positive impact, where children get new vocabulary, but that means there are 46.7% who have a negative

impact, such as children's language that does not develop and is passive in speaking. Therefore, direct interaction and the use of gadgets must be balanced so that the use of gadgets instead of having a negative impact can actually have a positive impact and maintain the development of children's language instincts.

Then table 2 shows data on parental supervision, where the analysis data from table 2 shows that parents who pay attention to their children's use of gadgets dominate, but there are still parents who do not pay attention to the use of gadgets for their children. Parental supervision of the use of gadgets in children is very important and should be balanced with direct interaction, because by interacting directly, children can learn to speak, according to Pinker's language instinct theory where every human being has the ability to learn language through direct interaction. Therefore, it is very important to pay attention to children's use of gadgets.

Conclusion

From the data results, it can be concluded that the impact of limited direct social interaction on the development of children's language instincts where children who lack interaction experience difficulties in the development of language instincts. Although Pinker argues that every human being has an innate ability to learn language, it turns out that the role of the environment is also very important in the development of children's language instincts. From this research the researcher hopes to contribute to linguistic development, especially regarding the influence of gadgets on children's language instincts according to Steven Pinker's Language Instinct theory and provide insight for parents about the impact of gadget use on the development of children's natural language instincts.

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