Mobile Phone in English Language Acquisition for Kids of Non-Native English Speakers

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Abstract

Learning English has been getting more and more popular among non-native English speakers since early childhood. This study was a longitudinal observation and case study on English language acquisition among non-native English-speaking kids. The objective of the study was to find the effectiveness of mobile phones on English as a second language acquisition. Six children were observed from birth to eleven years old. Ten parents were interviewed. The present findings indicated mobile phones had a positive impact on English language acquisition as a second language. Parental guides and suitable videos were the major factors in developing the English language. The finding would benefit parents and English language educators to improve English learning as a second language for young kids.

Keywords: English, YouTube, second language, video, rhyme

Introduction

In contemporary times, the widespread use of mobile phones has transformed them into versatile communication devices and valuable educational tools. Beyond their role in communication, these devices have become instrumental in early English learning, gaining popularity among affluent non-native English-speaking parents (Murata 2021). The markets for Teaching English as a Second Language (ESL) and Teaching English as a Foreign Language (TEFL) have experienced significant growth (Schembri 2017). The introduction of a second language at a young age has yielded positive outcomes in language acquisition (Genesee 1978).

The accessibility of English learning resources has greatly improved due to the proliferation of mobile phones and the Internet, which have seamlessly integrated into modern-day life. Various educational content, such as YouTube videos featuring rhymes and cartoon clips tailored for children, has become readily available. Consequently, mobile phones and the Internet have evolved into effective tools for facilitating English learning.

Second language Acquisition

The process of acquiring a second language in children is intricate and influenced by various factors, including age, motivation, cognitive abilities, and exposure to the second language. Researchers have explored different theories and models to elucidate how children

acquire a second language, and their findings have informed the creation of effective language teaching methods.

One prominent theory in second language acquisition is the input hypothesis, as proposed by Krashen (1982). This theory posits that language learning occurs when learners encounter language input slightly beyond their current proficiency level, referred to as "comprehensible input." In line with this theory, children acquire a second language by being exposed to engaging and comprehensible language input, facilitating the gradual development of their linguistic skills.

Motivation is another critical aspect of second language acquisition in children. Studies have demonstrated that motivation significantly influences language learning, with motivated children more likely to attain higher proficiency levels (Dörnyei, 2009). Motivation can be influenced by factors such as parental support, peer pressure, and personal interest, varying among individual children.

Cognitive abilities also play a pivotal role in second language acquisition. Research indicates that children with strong working memory, attention control, and cognitive flexibility are more likely to achieve higher proficiency levels (Gathercole & Thomas, 2009). These cognitive abilities enhance information processing and storage, facilitating the learning of vocabulary, grammar, and pronunciation.

Exposure to a second language is a fundamental factor in language learning. Children exposed to a second language in diverse settings, including school, home, and community, are more likely to acquire the language quickly (Genesee, Paradis, & Crago, 2004). Exposure to native speakers further provides children with opportunities to practice their language skills and develop communicative competence.

In the current study, the English language acquisition of children was explored through the use of mobile phones and YouTube, serving as agents of exposure to the second language. The study tracked the English language development of children from a very early age, aiming to provide insights into the strengths and weaknesses of using mobile phones and YouTube for developing English as a second language.

Objectives

1. To investigate the kid’s English language acquisition through watching YouTube on a mobile phone.
2. To investigate the factors influencing language learning through mobile phones.
3. To investigate the mother tongue language delay due to the intervention of mobile phones.

Limitation

The present study involved only six kids as a sample size of the study. The researcher followed the growth of the kids, and it was a lengthy period in this longitudinal study. Therefore, the researcher was not able to track more kids in the study.

Background

This study was a descriptive, longitudinal, and observational study on six children from birth. The researcher tracked the kids’ English development. The first language of the

kids was Manipuri and English was their second language. The participants were from two rural backgrounds and literate families.

Family Background

In this study, six kids from three families were observed from birth. Each family had two kids. All the families lived in the villages of Manipur, India. Their mother tongue was Manipuri. It is a state language spoken in Manipur. In the first family, both parents were teachers. The father of the kids taught at university, and the mother was teaching at primary school. In the second family, the mother was a high school teacher and the father was self-employed. In the third family, the father of the kids was a part-time teacher and the mother was a self-employed housewife.

Characteristics of the kids and learning activities
Family 1:

There were two kids. They were twin kids. One baby was a baby boy and another one was a baby girl. Parents allowed the kids to use mobile phones as early as one year old. Parents selected YouTube video content focusing on rhyme singing related to English language learning. The parents bought ABC letter blocks made from wood to learn ABC letters. The baby girl could recognize and read ABC at the age of one and a half years through self-learning from mobile phone YouTube. She had better development of nerve and muscle coordination by this time and she could swipe the screen of the mobile phone to choose the rhyme she liked. She also could count from one to ten. Around two years and seven months, the baby girl had acquired 300-350 English vocabulary (with some phrases and short sentences).

On the other hand, the baby boy had very limited English words. By the age of one and a half years old, he could recognize only two to three English alphabet letters from the wooden block. However, around two and a half years of age, the boy started picking up more vocabulary and by the time of two years and seven months, he had a similar amount of vocabulary to the baby girl.

During the early development stage, the most frequently mentioned word was ‘No’. By this time of their age, they were familiar with many rhyme songs such as Head shoulder knees and toes; the wheels on the bus go round and round, round and round, Mummy finger, mummy finger, where are you, and many more. The parents often used English words and phrases with the kids. All their learning was from mobile phones and YouTube. When the parent asked something, the two kids always responded in English. They hardly used their mother tongue, around three-four words. Both kids did not develop their mother tongue, Manipuri. The mother spoke in an Indian accent of English; however, the kids spoke a native-like English accent exactly as they heard on YouTube. Both of the kids have a strong urge of desire to watch YouTube on their mobile phones. They had slow development of their mother tongue despite quick learning of English. The two kids started attending formal school at three years and six months. At the time of writing this article, they were both completed four years of age. When they started going to school, their English accent started becoming an Indian accent. By the time of four years, both become more fluent in their mother tongue and have less use of the English language due to the influence of neighbors and surroundings.

Family 2:

In family 2, there were two girls aged six, and ten years old. The girls were very fond of mobile phones and YouTube. The parents put more restrictions on using mobile phones. The older girl grew up watching TV cartoon programs with limited access to a mobile phone. She learned English through TV serial English programs and mobile phone YouTube videos. Her parents reinforced self-learning by speaking English sometimes. However, learning was mostly through watching TV and mobile phone. The older girl watched mostly authentic native speakers' English. Therefore, she developed a very native-like English pronunciation. She had strong communication in spoken English. By the age of six years old. Both girls-the younger and older sisters developed their mother tongue comparatively early. When the older baby was three years old, she went to the preschool learning center. When she became older, her native-like English pronunciation started losing. Schools and surrounding external factors influenced her English pronunciation.

The second baby, six years old was not much fond of TV and more restrictions were imposed on the mobile phone. She had developed a good mother tongue and she did not use English regularly, however, she also had strong communication skills in spoken English. She liked mobile phones but parental restrictions did not allow her to access freely to mobile phones. Both older and younger sisters developed strong communication skills in English, however, a clear indication was that the English accent changed and was impacted by the neighbor and school environment.

Family 3:

In this family, there were two kids. The older one was an 11-year-old girl and the second was a seven-year-old boy. Both children loved watching mobile phone YouTube videos. The children acquired words and phrases commonly used in rhyme videos. The parents were not guiding much in rhyme and language learning. The kids were more exposed to video content for fun and entertainment. The kids had little English language acquisition in communication skills. The accent of English was Indian English despite watching YouTube videos. They watched video content not related to English language learning.

Language learning and the silent period

In this case study of longitudinal observation, one frequently observed phenomenon of language acquisition was that kids learned words and phrases. They used the vocabulary they heard frequently on YouTube, but they kept the words out of use soon after they stopped watching that particular video. Thus, those phrases and words become redundant soon after a short period. This did not mean they forgot the vocabulary. They kept silent from using the words if they did not watch the particular video or cartoon video for a long time. However, when the right circumstances came, they suddenly used the word. They kept the learned English words without using them. Therefore, they acquired the language but kept it silent. The kids started telling the words when they saw them as objects on the sign board, or as real objects while traveling.

Literature Review

The acquisition of a second language in children is a complex process influenced by various factors, including age, motivation, cognitive abilities, and exposure to the second language. Researchers have investigated diverse theories and models to understand how

children acquire a second language, and their findings have guided the development of effective language teaching methods.

A notable theory in second language acquisition is the input hypothesis, proposed by Krashen (1982). This theory suggests that language learning occurs when learners are exposed to language input slightly above their current proficiency level, known as "comprehensible input." According to this theory, children acquire a second language by encountering engaging and comprehensible language input, facilitating the gradual development of their linguistic skills.

Motivation is another crucial aspect of second language acquisition in children. Studies have shown that motivation significantly impacts language learning, with motivated children more likely to achieve higher proficiency levels (Dörnyei, 2009). Motivation can be influenced by factors such as parental support, peer pressure, and individual interests, varying among individual children.

Cognitive abilities also play a pivotal role in second language acquisition. Research indicates that children with strong working memory, attention control, and cognitive flexibility are more likely to achieve higher proficiency levels (Gathercole & Thomas, 2009). These cognitive abilities enhance information processing and storage, facilitating the learning of vocabulary, grammar, and pronunciation.

Exposure to a second language is a fundamental factor in language learning. Children exposed to a second language in diverse settings, including school, home, and community, are more likely to acquire the language rapidly (Genesee, Paradis, & Crago, 2004). Exposure to native speakers further provides children with opportunities to practice their language skills and develop communicative competence.

Language Delay

Research also indicates that extended exposure to videos and TV programs can heighten the risk of delaying a child's acquisition of their mother tongue language (Perdana et al., 2017). Moreover, studies have shown that children between the ages of two and four exhibit suboptimal learning outcomes when exposed to touchscreen devices and TV, a phenomenon termed "transfer deficit" (Hipp et al., 2017). Similar instances of language delay were observed in children spending increased time watching TV in other studies (Chonchaiya & Pruksananonda, 2008), including research involving South Korean toddlers (Byeon & Hong, 2015). Some evidence suggests that frequent mobile phone use may also contribute to language delay in young children. Chonchaiya and Pruksananonda's (2008) study revealed that children aged 6 months to 2 years, spending more time on screens, exhibited lower language scores at age 2 compared to their peers with less screen time, indicating a potential link between excessive screen time and language delay. Additionally, Zimmerman and Christakis (2007) found that each additional hour of daily television viewing among children aged 8 to 16 months correlated with decreased language development scores at 14 months.

While these studies do not specifically focus on the impact of mobile phone use, they suggest that prolonged screen time in general may negatively affect language development in young children. Furthermore, the American Academy of Pediatrics (AAP) recommends that children under 18 months of age should refrain from all screen time except for video chatting

with family and friends (AAP, 2016). Further research is necessary to comprehensively understand the influence of mobile phone use on language development in young children.

Research Methodology

Research Design

The study was a longitudinal study with a daily observation of the progress of English development among the children of non-native English speakers. As the researcher talked with the parents of the kids as well as directly with the kids, there was a regular update on the daily progress of the kids. Ten parents of the kids were also interviewed on the phone.

Research Population and Sample

The population of the study was non-native English speakers from the village of Manipur, India. There were six participants in this study. The selection of the participant kids was on a convenient sampling method. They were two baby boys and four girls. Ten parents who had children aged between three to eleven years old were included in the population. Table 1 shows the participants' profiles.

Table 1. Profile of six participant children in the study

Participant	Family	Gender	Age	Time spent on mobile phone (hour/day)	N
1	Family 1	boy	4	3<	6
2		girl	4	3<	
3	Family 2	girl	6	0-1	
4		girl	10	0-1	
5	Family 3	boy	7	1-2	
6		girl	11	1-2	

Tools for Data Collection

Conversation, showing pictures and models of objects, and seeing real objects while traveling were the modes of evaluation of the kid's English language learning. The researcher communicated frequently with the parents of the kids involved in the present study. The researcher interacted frequently with kids. The researcher interacted and talked with the parents of six kids. The researcher also used the interview method to collect data.

Data Collection

The data for children's learning were collected through frequent interaction with the kids, listening, and observing the language used by the kids. The progress of the language and the number of vocabularies used were recorded. The researcher directly spoke in English on a daily basis with one family and weekly interaction with the kids from the other two families. Ten randomly selected parents were interviewed with unstructured questions about mother tongue delay. The data were collected at different intermittent when the participating kids grew up.

Data Analysis

Words, vocabulary, and sentences used by the kids were counted. Through direct communication with participating kids ranging from daily conversation to weekly conversation, the researcher kept updating the progress of the kids' English language

development. Two older kids aged nine and ten had attained good communication skills with wide ranges of the topic in social, cultural, geography, and science-related topics. The youngest among the six kids had acquired commonly heard English words. These were vocabulary understood by them. Color: red, blue, yellow, pink, orange. Animal: dog, cat, cow, horse, buffalo, tiger, lion, elephant, chicken, duck, fish. Fruit: orange, lemon, pineapple, apple, strawberry, watermelon. Food & drinks: water, milk, candy, yummy, cake, cookie, pizza. Counting: One to ten. Letter: A to Z. Daily used words: Mummy, Papa, baby, no, ok, naughty, good, hungry, go, come, bed, sleep. They could use short sentences and phrases. They are familiar words used in rhyme songs. The following data analysis took place when the youngest participants were 2 years and seven months old.

Table 2. Data analysis, Set-I: Mobile phone usage and language proficiency acquired among the kids.

Family	**Kid**	**Age**	**A daily mobile phone used time**	**Language Proficiency**
1	Girl	2 years & 7 months	2 hours	About 350 English vocabulary and phrases. Color, 1-10 counting, food and drink, fruit, yous, vehicle, animal, items in the home, terms used in rhyme song. Native-like English accent. Two to three words in the mother tongue.
	Boy	2 years & 7 months	2 hours	About 350 English vocabulary and phrases. Color, 1-10 counting, food and drink, fruit, yous, vehicle, animal, items in the home, terms used in rhyme song. Native-like English accent. Two to three words in the mother tongue.
2	Girl	9 years	1 hour	Good English fluency. She could respond to a range of topics from daily conversation, and personal information to social and science topics. She also watched English-language TV channels.
	Girl	5 years	1 hour	She could communicate basic level, personal information, food and drinks, fruit, animals, household items, and shopping. Adopt an English accent from YouTube.
3	Girl	10 years	2-3 hours	Basic conversation. A wide range of vocabulary was picked up from YouTube. Contents chosen from YouTube were mostly for fun and entertainment.
	Boy	6 years	2-3 hours	Commonly used household item in the English word. Very little communication in conversation. Contents chosen from YouTube were mostly for fun and entertainment.
Summary: Total number of family=3 Total number of kids=6				

Age range: Youngest 2.7 years & Oldest 10 years old.

Another set of data from the same participants was collected after one year when they were older. The following changes could be seen in language development.

Table 3. Data analysis, Set-II: Mobile phone usage and language proficiency acquired among the kids.

Family	**Kid**	**Age**	**A daily mobile phone used time**	**Language Proficiency**
1	Girl	4 years	3 hours	Less use of English. More use of mother tongue. Accent change from native English to Indian English. YouTube content was more fun and entertaining. Less focus on English learning rhyme. She even started English familiar when she was younger.
	Boy	4 years	3 hours	Less use of English. More use of mother tongue. Accent change from native English to Indian English. YouTube content was more fun, entertaining, and non-language video content. Less focus on English learning rhyme. Less speaking in English
2	Girl	10.5 years	1 hour	Good English fluency. She could respond to a range of topics from daily conversation, and personal information to social and science topics. She also watched English-language TV channels. She used iPad and school course-related content from online resources. Her English comprehension is better, but her native-like English accent was gone due to the influence of friends and teachers at school.
	Girl	6.5 years	1 hour	She developed stronger communication skills in English. She showed much better speaking and listening skills.
3	Girl	11.5 years	2-3 hours	She has better English skills than before. Speaking and listening have not shown much improvement as the video content was related to fun and entertainment.
	Boy	7.5 years	2-3 hours	Very little development in communication skills. Contents chosen from YouTube were mostly for fun and entertainment.
Summary: Total number of family=3 Total number of kids=6 Age range: Youngest 4 years & Oldest 11.5 years old.				

Ten parents' feedback collected through the interview based on their personal experiences was analyzed.

Research Findings

English language acquisition took place effectively through watching YouTube on a mobile phone. The kids imitated a native English speaker's accent, exactly as they heard in the YouTube video and they sounded like a native accent. Two kids from family 1, showed effective learning of English and kids responded more in English than their mother tongue during the conversation. Two kids from family 2 also showed the development of English language skills. With limited exposure to mobile phones, the kids developed the English language and mother tongue equally. Another two kids from family 3, showed the least development of English skills. The kids from three families developed the English language at different paces. Choosing a suitable rhyme video guided by parents had a strong impact on English language acquisition. Mother tongue language delay happens due to the intervention of mobile phones that all 10 parents agreed that more exposure to mobile delayed mother tongue development.

Discussion

The main factors for improving English as a second language were, selecting suitable English learning rhyme songs, cartoon videos for English learning, and reinforcement by parents by speaking English more frequently. More effective language acquisition took place when the video selection was guided by the parents focusing on learning videos of rhyme songs. The parental role in choosing the right nursery rhyme could be a key point. When the kids became older, they chose video content as more fun and entertainment content. This has brought slower English language acquisition. One clear indication was that all the kid's accents changed from native-like English accents to Indian accents due to influence from neighbors, surroundings, and school. Mother tongue delaying was happening due to less interaction with humans, however, it did not happen in Family 2. Mother tongue delay could be related to surroundings, family culture, or genetics as family-1 and family-3 having mother tongue delaying issues was blood-related family, but such genetical factors could not be concluded as the present study did not touch on genetic aspect rather than simply assumption. Parents should be worried about the health of the eyes when exposed to a bright screen, which was witnessed by blinking eyes after watching for a longer period. When the kids became older, their accents changed to local accents influenced by the surroundings and school. Slower mother tongue development was found due to less interaction and conversation with people.

Conclusion

Second language acquisition takes place effectively by watching YouTube videos. Despite English being the second language of the kids, they acquired more English than their first language in one family. They naturally developed English language skills and used more English than their mother tongue when they were guided to rhyme for learning. YouTube rhyme was a good source for developing the English language for young kids of non-native speakers of English. However, the kids' accents and pronunciation slowly changed to local English accents after attending school due to the influence of their surroundings. Slow mother tongue development happened due to the interruption of mobile phones.

Implications

Mobile phones could be used effectively in English language acquisition by kids. Parents could select suitable video and rhyme, YouTube content for language learning contents rather than playing video content just for fun and entertainment.

Suggestions

Similar studies are suggested to cover more case studies, and more populations to be able stronger evidence of generalization of the findings.

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