

**“Pragmatics and Screens: The Impacts of Screen Time Usage on Pragmatic Development  
of Preschoolers”**

An Honors Thesis

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## Abstract

The research consists of a literature review and analysis of survey results. The survey was given to parents of preschoolers, in the age range of 2 ½ years old to 5 years old. The survey included questions regarding their child's gender, their child's screen time usage, and their child's pragmatic abilities. Pragmatic abilities refers to the way people use language in social situations and the way that language is interpreted. The pragmatic development was compared to the norms outlined in the Pragmatic Language Assessment Guidelines: A Best Practice Document developed by the Early Childhood Intervention Council of Monroe County (ECICMC) Standards and Guidelines Speech Sub-Committee to determine if increases in screen time usage delays the acquisition of typical pragmatic abilities. The pragmatic document was developed by a group of experienced Speech-Language Pathologists who reviewed current research, developmental information, and position papers from the American Speech Language and Hearing Association (ASHA) regarding pragmatics. Once the survey was completed the data was collected and analyzed. The amount of screen time and the level of pragmatic development were compared to determine if higher screen time usage equates to delayed pragmatic development in preschoolers. Participants who had higher screen time usage had lower pragmatic development scores in both of the survey's sections of "Yes" or "No" questions and pragmatic rating scale of "1" to "5".

*Keywords:* Pragmatics, Screen Time Usage, Preschoolers

## PRAGMATICS AND SCREENS

### Pragmatics and Screens: The Impacts of Screen Time Usage on Pragmatic Development of Preschoolers

Pragmatics can be defined as the rules associated with the use of language in conversation and broader social situations (American Speech-Language and Hearing Association, n.d.). Another name for pragmatics is social communication. Pragmatics are the basis of how something is said, the intentions of the speaker, the relationship between the speaker and listener, and the cultural expectations of the exchange. It is, by nature, a complicated and elusive part of communication.

Pragmatics are composed of three important aspects of the social use of language: using language for different functions or intentions (communication intentions), organizing language for discourse (conversation), and knowing what to say and when and how to say it (social conventions). Pragmatic rules govern linguistic, extralinguistic and paralinguistic aspects of communication such as word choice, turn taking, posture, gestures, facial expressions, eye contact, proximity, pitch, loudness, and pauses (Justice & Redle, 2014).

Pragmatic abilities are learned from viewing other communication partners modeling the appropriate behaviors. If a child lacks appropriate communication models they will have difficulty achieving appropriate and timely pragmatic development. There are several other necessary skills needed to help facilitate the development of pragmatics. Some of the skills are receptive and expressive language, pre-language skills, executive functioning, and self-regulation. Receptive language is the language people receive and comprehend. Expressive language is the language an individual spontaneously produces. Expressive language can take many forms such as

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spoken language, written language, or even sign language. Pre-language skills are those skills that are developed before expressive language such as facial expressions and gestures. These skills prepare a child to be an effective communicator (Pence & Justice, 170). Executive functions govern the organized, goal-directed execution of critical human behavior such as monitoring and controlling purposeful behaviors, overriding impulses, and controlling information processing (Pence & Justice, 2008). Self-regulation is the ability to obtain, maintain, and change one's emotions, behaviors, and attention to a specific task or situation in an appropriate manner. By three years of age most children have developed a good sense of self-regulation. (Kid Sense Child Development Corporation, n.d.).

Screen time is the amount of time an individual spends each day using a smartphone, a tablet, a video game console, or a television (Orlando, 2017). The average American child spends 5 hours a day watching television and when combined with other forms of screen usage it can total anywhere between 7 to 8 hours a day (Adler, L. C., & DiMaggio, J., 2017). There can be several different categories of screen time such as interactive, non-interactive, educational, and recreational. Interactive screen time would involve video games or video conversation. Non-interactive screen time includes activities such as watching a movie, a television show, or a YouTube video. Educational screen time is the usage of devices for the purpose of learning such as doing online homework. Finally, recreational screen time is identified as playing games on applications (apps) or online such as Candy Crush. According to the American Academy of Pediatrics (AAP), no screen time of any kinds is recommended for children under the age of 18 months. For children who are 18 months to 2 years old, it is recommended that

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they view only high-quality educational programming or applications and that an adult is present to guide them, aiding in the child's understanding of the programming. Children who are between 2 years old to 5 years old should engage in no more than 1 hour of adult supervised screen time per day. Children 6 years of age and older should have consistent limits set by an adult regarding the time spent engaging in screen time (Orlando, 2017).

In a 2009 study conducted by Christakis et al., the authors concluded that audible television viewing in a 2 month old to 48 month old decreased the overall adult speech and child vocalizations that occur in a typical day. The decrease in number of adult language models the children encounter can impact the development of the child's language skills. Due to audible television viewing, a child is less likely to produce the early vocalizations or babbling associated with typical language skill development. In a 2008 study conducted by Chonchaiya and Pruksananonda, it was found that children who began watching television before their first birthday typically end up watching more than 2 hours of television each day and were more than 6 times as likely to develop a language delay. This statistic is compared to a child who engaged in no television watching before the age of one. This study indicated that the earlier a child began engaging in screen time the increased odds that a delay in language would develop. Another factor that impacts language development and by extension pragmatic development is the amount of screen time usage each day. The longer a child is exposed to screen time results in decreased interactions that occur with conversational partners in their environment. In the 2009 study conducted by Christakis et al., the effect per hour of television is one-fourth of the standard deviation for vocalization number, duration, and conversational turns. This results in a 500 to 1000 word decrease of words spoken by adults per hour of television

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viewed. This displays the detrimental effect of each additional hour of screen time exposure. Overall it appears that numerous sources are concerned about the effects of screen time usage on developing children and Speech-Language Pathologists and Audiologists are no different. According to a study conducted by the American Speech-Language-Hearing Association (ASHA) as a part of ASHA's Healthy Communication and Popular Technology Initiative, Speech-Language Pathologists and Audiologist ranked their top concerns caused by screen time usage as reduced opportunities for social interaction, impaired social development, and delayed speech or language development (American Speech-Language-Hearing Association, 2018).

### **Review of the Literature**

Children are increasingly engaged with all forms of technology. Radesky and Christakis (2016), reported that children today are "digital natives". According to the authors, these children are born into a society that revolves around all types of media technology and their exposure to it starts at an early age. At 4 months of age children begin to regularly interact with all forms of media in their daily lives. It is a surprising fact that before a child can speak or walk, they are being captured by screens. It was also identified that infants and toddlers are unlikely to learn anything from simply viewing educational programming or applications. They need to have these skills reinforced by an adult either while viewing the media or shortly thereafter. The authors state that as a child ages this becomes less true although most marketed educational applications do not have content that matches all of their educational claims. Often the application's material has no review from a development specialist, have no direct curriculum, and only focus on much simpler skill sets such as ABCs or colors. Recent guidelines as displayed in the



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article by Radesky and Christakis (2016), indicate that applications need to implement fewer distracting features, to allow children to engage with the content rather than just simply the features. Another guideline is for applications to be geared towards a dual audience of both children and adults which will provide greater opportunities for familial engagement. The final guideline recommendation is to create ways that the application allows the content learned to be a transferable skill in the world outside of the application. If the child is unable to transfer the knowledge and skills they learn using an application then the skills become essentially useless.

The Canadian Paediatric Society conducted research in conjunction with their Digital Health Task Force on the impacts of childhood development in a society with ever increasing usage of technology. At the age of 2 years old children begin to comprehend the digital content they are exposed to. It was reported that although this is true infant and toddlers face difficulty when transferring 2-D information from a screen to 3-D format in a real world environment. This is in stark contrast to the fact that at this age children are able to deeply learn skills during face-to-face interactions with their parents and others. The Canadian Paediatric Society further noted that as a child ages they are more able to transfer the skills learned in a 2-D environment to a real world setting but this is only true if the content is quality programming and co-viewed with parents or caregivers. After the co-viewing with a parent, the content needs to be reviewed and put into practice in the real world setting. There are numerous impacts of screen time usage on a developing child. The Canadian Paediatric Society states that one of the major impacts on development is social interaction. The exposure to background TV has been found to negatively impact language use and acquisition, attention,

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cognitive development, and executive function in children under the age of 5 years old. The high television exposure also results in decreased parent-child interactions and the quality of those interactions. In addition children experienced less opportunities for play when the amount of background television exposure increased. Less opportunities for play can decrease a child's opportunity to engage in development and implementation of new skills.

The World Health Organization has issued a preview to the final draft of the 11th revision of the International Classification of Diseases (ICD-11). This document will be presented at the World Health Assembly in May of 2019. The 11<sup>th</sup> edition is not scheduled to go into effect until 2022, but the World Health Organization released the advance preview to allow professionals time to prepare and train for the 11<sup>th</sup> editions implementation. In the preview to the final draft the ICD-11 includes a condition known as gaming disorder. This disorder will be added to the collection of mental health disorders:

*Gaming disorder is characterized by a pattern of persistent or recurrent gaming behavior ('digital gaming' or 'video-gaming'), which may be online (i.e., over the internet) or offline, manifested by: 1) impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context); 2) increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities; and 3) continuation or escalation of gaming despite the occurrence of negative consequences. The behavior pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning. The pattern of*

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*gaming behavior may be continuous or episodic and recurrent. The gaming behavior and other features are normally evident over a period of at least 12 months in order for a diagnosis to be assigned, although the required duration may be shortened if all diagnostic requirements are met and symptoms are severe (ICD-11).*

Although the World Health Organization has not officially released the 11<sup>th</sup> edition of the International Classification of Diseases it appears that there is already much controversy surrounding the addition of gaming disorder.

Another very prominent health organization, the American Psychiatric Association, which publishes the Diagnostic and Statistical Manual of Mental Disorders (DSM), has been working on ways to include a similar type of disorder into their manual. In 2013, the latest update to the DSM was released, but did not include an official diagnosis category for such a disorder. In the manual it was listed as Internet Gaming Disorder but as a condition for further study. The classification of a condition for further study signifies that the American Psychiatric Association will continue with more research and an official diagnosis may be included in future editions. The DSM-5 lists the diagnosis criteria as the repetitive use of Internet-based games, often with other players that leads to significant issues with functioning. Five of the following criteria must be met within one year of receiving a potential diagnosis:

- Preoccupation or obsession with Internet games.
- Withdrawal symptoms when not playing Internet games.
- A build-up of tolerance—more time needs to be spent playing the games.

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- The person has tried to stop or curb playing Internet games, but has failed to do so.
- The person has had a loss of interest in other life activities, such as hobbies.
- A person has had continued overuse of Internet games even with the knowledge of how much they impact a person's life.
- The person lied to others about his or her Internet game usage.
- The person uses Internet games to relieve anxiety or guilt—it's a way to escape.
- The person has lost or put at risk an opportunity or relationship because of Internet games.

Internet gaming disorder is most prevalent in males ages 12 to 20 according to the American Psychiatric Association. This disorder is more prevalent in Asia compared to North America and Europe. It was also noted in the DSM-5 that Internet gaming disorder can produce comorbidity due to neglected health. There are a few other diagnoses that can co-occur with Internet Gaming Disorder which are Attention-deficit/hyperactivity disorder (ADHD), Obsessive Compulsive Disorder (OCD), and major depressive disorder. Internet gaming has been defined as an addiction by the Chinese government. There have been several medical journals that document the treatment for this addiction. Most of the medical journal articles were published in Asia but a few reports have come from the United States such as the DSM-5. The introduction of the diagnosis criteria and inclusion in such prominent medical texts indicates the technology use has reached an epidemic level.

In the book "Internet Addiction in Children and Adolescents: Risk Factors, Assessment, and Treatment", the authors, Young and Abreu, discuss some of unknown

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complications that exist when an internet disorder develops. After numerous neurological and neuroimaging studies researchers have concluded that the prefrontal cortex plays a significant role in the development of an Internet addiction. According to Brand, Young, & Laier (2014), this prefrontal cortex involvement is similar to other addictive disorders leading researchers to believe that a biological causation that is linked to this form of addictive behavior. There is also another study conducted by Brand, Young, & Laier, that points to changes to not only the prefrontal cortex but also areas of the brain such as the cortical and subcortical regions. According to the information in the group of studies above, these structural brain changes cause changes to occur with executive functioning in regards to reasoning and planning. This change in the executive functioning skills is much more profound and noticeable in young developing children due to their executive functioning skills not being fully developed compared to an adult's executive functioning skills. During the first few years of life brain development is rapid and extremely responsive to the influences of life experiences. The use of screen time is an environmental factor that influences the brain development of young children. The book introduces a new term Problematic Interactive Media Use (PIMU). Problematic Interactive Media Use is a syndrome that is does not need to be classified as an addiction nor does it have to be linked to a specific device type. The behaviors associated with PIMU are "compulsive use of, increasing tolerance to, and negative reactions to being removed from interactive screen media use, which impairs the individual's physical, mental, cognitive, and/or social function." (Young & Abreu, 2017, p.9). Researchers feel that PIMU is the results of symptoms of an already established psychiatric diagnosis manifesting itself through technology. Some of the most commonly coexisting disorders

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are attention deficit hyperactivity disorder (ADHD), anxiety disorder, oppositional defiant disorder, substance use, and depression. It is recommended that treatment for these disorders are provided and not thought of as less pressing due to the presentation of the disorder through technology use (Young & Abreu, 2017).

### **Research Question**

Dose a link exist between preschoolers pragmatic development and screen time usage?

### **Methods**

A survey was distributed to parents of children who range in age from 2 1/2 years old to 5 years old and they were asked to complete the survey (Appendix A). A sample size of 14 parents was surveyed. The survey was handed out at the Language and Learning Center at California University of Pennsylvania and the Preschool Storytime at the South Park Public Library. The survey consisted of questions regarding their child's gender, their child's screen time usage, and their child's pragmatic abilities. Once the survey was completed the data was collected and analyzed. The pragmatic development was compared to the norms that are outlined in the Pragmatic Language Assessment Guidelines: A Best Practice Document developed by the Early Childhood Intervention Council of Monroe County (ECICMC) Standards and Guidelines Speech Sub-Committee (Appendix B). This document was developed by a group of experienced Speech-Language Pathologists who reviewed current research, development information and position papers from the American Speech-Language-Hearing Association regarding pragmatics (Marasco, O'Rourke, Riddle, Sepka, & Weaver, 2004). There are few standardized test that measures pragmatic abilities in preschool age children. Past

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attempts at developing standardized methods of testing pragmatic abilities have resulted in tests that measure a child's linguistic or cognitive skills. One way to assess a child's pragmatic abilities in addition to a standardized assessment is to use developmental normative and observations of children in a variety of settings with different communication partners. These observations should come from different observers such as a parent, a teacher, or a Speech-Language Pathologist. The three areas of language development that the Pragmatic Language Assessment Guidelines: A Best Practice Document developed by the Early Childhood Intervention Council of Monroe County (ECICMC) evaluates is communication intentions/engagement, nonverbal rules of conversation, and verbal rules of conversation. The pragmatic language skills are also compared to the developmental normative for preschoolers. The amount of screen time and the level of pragmatic development was compared to determine if higher screen time equates to delayed pragmatic development in preschool age children.

### **Results**

Family members completed a survey on the 14 survey participants. The age ranges of the participants surveyed ranged from 2 1/2 years old to 5 years old (Figure 1). Participants included 4 males and 10 females (Figure 2).

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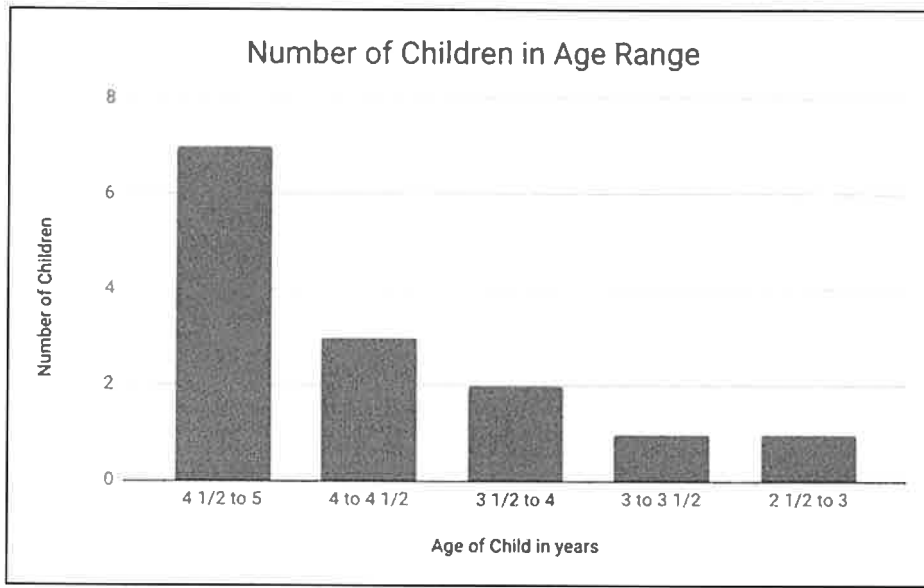


Figure 1 Number of children who participated in the survey who were in each of the age ranges.

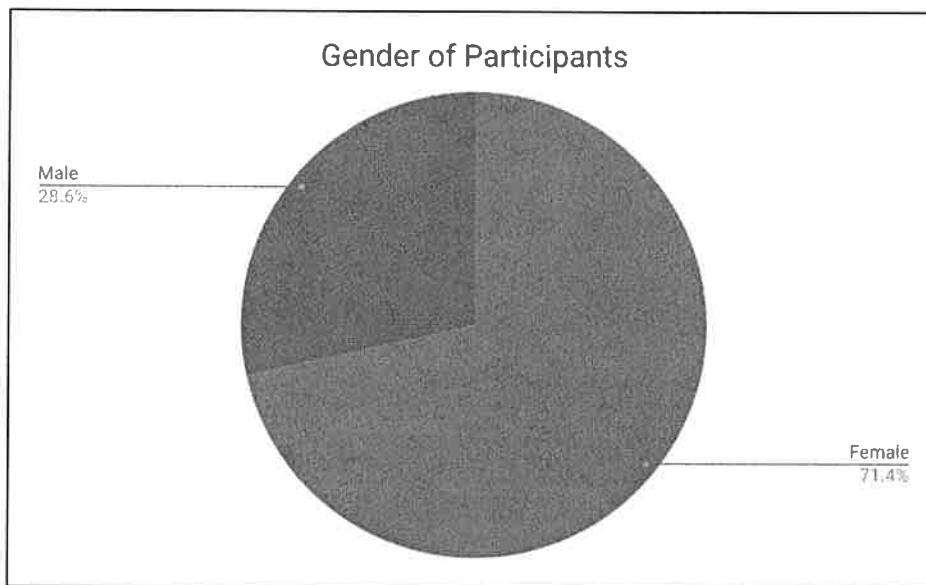


Figure 2 Breakdown of gender of 14 participants included 4 males and 10 females.

Survey responses of the 14 participants of the number of hours of television or videos watched ranged from less than 1 hour to more than 3 hours, with most children viewing from 1 to 2 hours (Figure 3).



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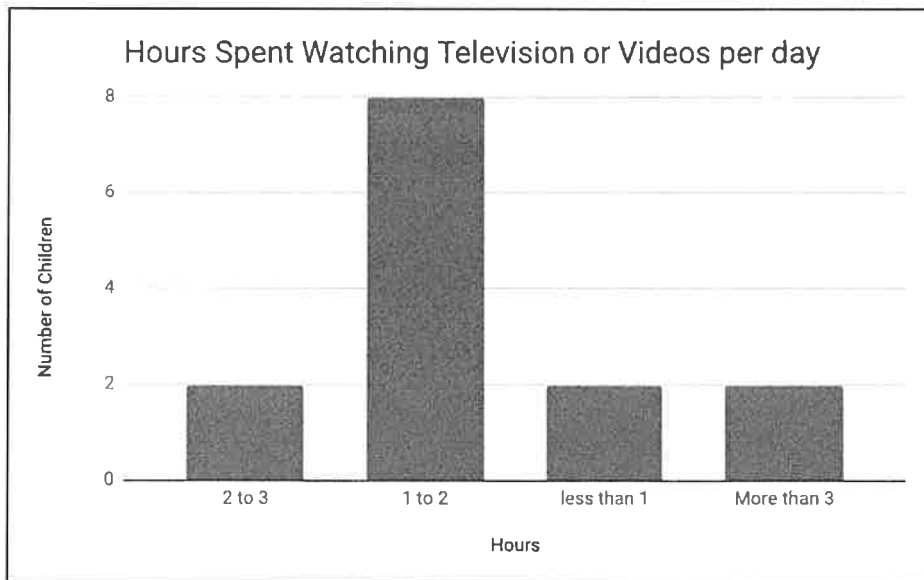


Figure 3 The average response to the number of hours of the 14 participants for the number of hours of television or videos watched per day.

Survey responses for the 14 participants of the number of hours of spent playing video games each day ranged from less than 1 hour to 1 to 2 hours, with most children playing less than 1 hour of video games per day (Figure 4).

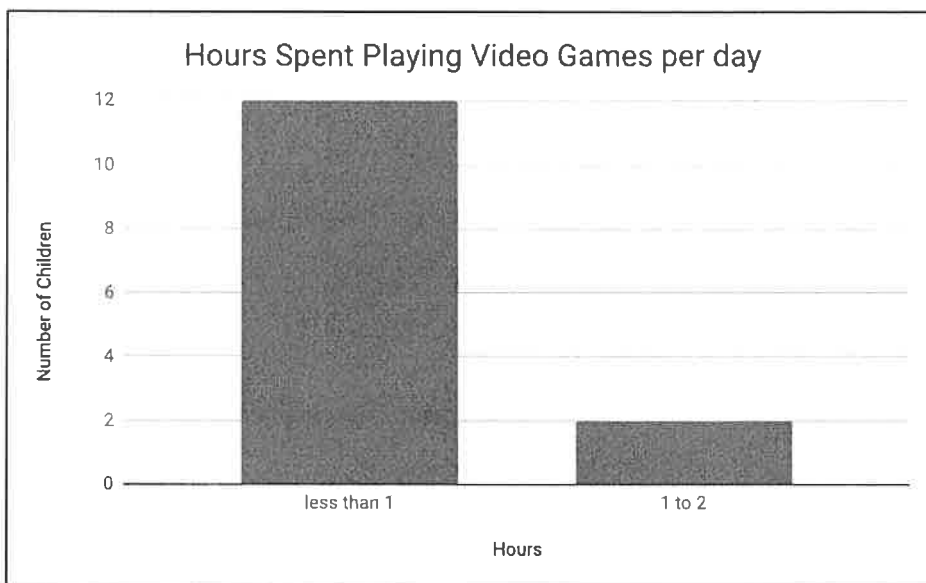


Figure 4 The number of children who played between less than 1 hour to 1 to 2 hours of video games per day.

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Survey responses for the 14 participants of the number of hours of using applications on a smart phone each day ranged from less than 1 hour to 2 to 3 hours, with most children using applications on a smart phone for less than 1 hour per day (Figure 5).

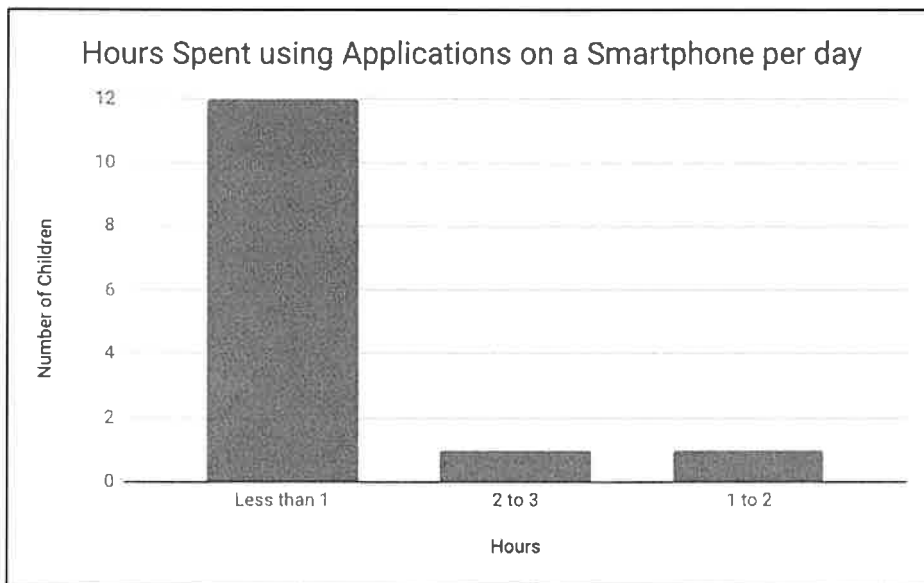


Figure 5 The number of children who used applications on a smart phone between less than 1 hour to 2 to 3 hours per day.

The survey consisted of “Yes” or “No” questions and questions using a ranking system of 1 to 5 with 1 indicating “never” and 5 indicating “always”. Figure 6 displays the distribution of the 14 participant responses to the “Yes” or “No” questions. The average number of “Yes” responses from the participants was 6 “Yes” responses. Children with a higher number of “Yes” responses displayed a lower number of hours of screen time usage overall. This was especially true of the number of hours of television or videos watched. It appears that there is a slight correlation with hours of screen time usage when compared to the child’s average pragmatic abilities with response to “Yes” or “No” questions.

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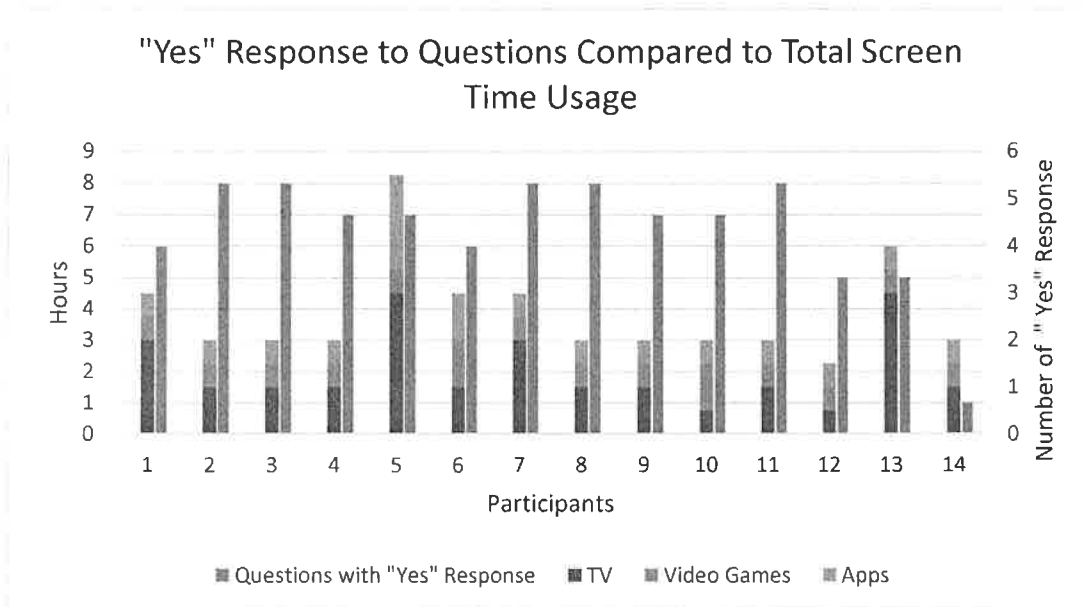


Figure 6 The average number of yes response from the participants about the child's pragmatic abilities compared to the total number of hours of screen time usage for each of the three technology categories.

Figure 7 displays the distribution of participant responses to the survey questions using a ranking system of "1 to 5". The average participant response to the ranking system was a "4". A ranking of "4" indicates the parents of the 14 children felt that almost always their child was able to produce a specific pragmatic skill. It appears that there is a slight correlation with the amount of screen time usage and higher pragmatic ability ranking. The children who watched 1 to 2 hours of television had higher average responses to the questions with the ranking scale. This is also true of children with lower video game playing or application usage, those children tended to have higher pragmatic rankings. The children who have higher total hours of screen time usage from the three categories of technology displayed lower pragmatic survey rating averages.

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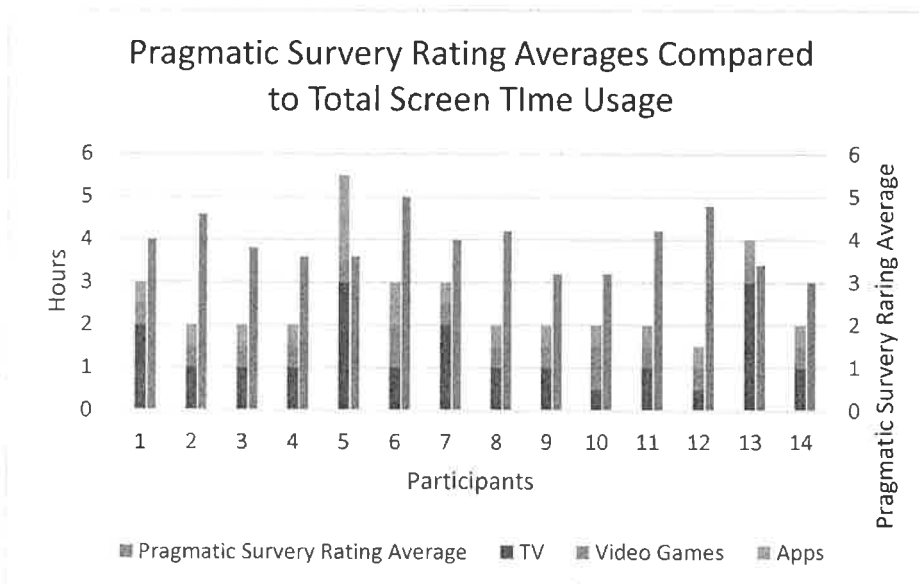


Figure 7 The pragmatic survey rating averages about the child's pragmatic abilities compared to the total number of hours of screen time usage for each of the three technology categories.

### Discussion

After analysis of the survey results it appeared that there was a slight difference in pragmatic development for preschoolers who have higher screen time usage. Although the results did not provide an extremely clear correlation this could be the result of a number of factors. One of the major factors is that the Pragmatic Language Assessment Guidelines: A Best Practice Document developed by the Early Childhood Intervention Council of Monroe County (ECICMC) was developed in 2004. Due to this factor the information in the document could possibly be out of date. The impact of screen time usage in 2004 was relatively low for preschoolers. 65% of Americans owned a cell phone in 2004 and 35% American did not own a cell phone at all. Of the 65% of Americans that owned cell phones those phones had limited capabilities compared to the smartphones of 2019. In addition to that 35% of homes in the United States did not have any internet connection in 2004 (Fischer-Baum, 2017). These statistics are in stark comparison to the nearly 100% of homes in the United States that have an internet connection in 2019. The

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availability and usage of technology has changed dramatically from 2004 to 2019 resulting in the data used to develop the pragmatic development guidelines in 2004 out of date. Using a more up to date pragmatic development guidelines may result in different pragmatic abilities desired for the particular age group surveyed.

Another factor that impacted the results is the population surveyed. The survey was completed by parents of children in the Language and Learning Center at California University of Pennsylvania and the preschool Storytime at the South Park Public Library. This lack of diversity of survey participants could have caused the responses to the survey to all be relatively similar. In further studies having a larger population size and survey participants with more diverse backgrounds could aid in providing a more varied response to the survey questions.

After closer review of the survey the questions that were developed did not have a high enough sensitivity. Sensitivity can be defined as “the probability of correctly identifying some condition or disease state” (Salkind, 2010). The questions that were used in the survey were too broad in the regards to the development of pragmatic development in preschoolers. Also, the questions asked were geared towards the age range of 2 ½ to 5 years of age which resulted in some of the questions not being completely applicable to the children towards the older range of ages. Narrowing the age range of the survey’s participants could provide a more accurate picture of development since pragmatic abilities can vary greatly in the chosen age range.

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## Appendix A

12/7/2018

General Information

## General Information

Please complete this section of the survey to the best of your abilities regarding the demographic data of your child.

## 1. How old is your child?

Mark only one oval.

- 2 1/2 years old to 3 years old
- 3 years old to 3 1/2 years old
- 3 1/2 years old to 4 years old
- 4 years old to 4 1/2 years old
- 4 1/2 years old to 5 years old

## 2. What gender is your child?

Mark only one oval.

- Female
- Male
- Prefer not to say
- Other: \_\_\_\_\_

## Technology Use

## 3. On average how much time does your child spend watching television or videos per day?

Mark only one oval.

- less than 1 hour
- 1 hour to 2 hours
- 2 hours to 3 hours
- More than 3 hours

## 4. On average how much time does your child spending playing video games per day?

Mark only one oval.

- less than 1 hour
- 1 hour to 2 hours
- 2 hours to 3 hours
- More than 3 hours

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General Information

5. On average how much time does your child spend using applications (apps) on a smartphone or tablet per day?

Mark only one oval.

- Less than 1 hour
- 1 hour to 2 hours
- 2 hours to 3 hours
- More than 3 hours

### Pragmatics

Please rate your child's skills based on the following scale of 1 - 5. A score of 1 indicates never and a score of 5 indicates always.

6. Your child's likelihood to initiate a conversation with a unfamiliar conversation partner.

Mark only one oval.

- 1      2      3      4      5
- 

7. Your child's likelihood to engage in turn taking skills in conversations

Mark only one oval.

- 1      2      3      4      5
- 

8. Your child's use of appropriate distance when conversing with others.

Mark only one oval.

- 1      2      3      4      5
- 

9. Your child's likelihood to participate in appropriate story telling abilities ie. staying on topic, providing necessary details

Mark only one oval.

- 1      2      3      4      5
- 

10. Your child's ability to engage in proper greetings ie. "hello" or "goodbye".

Mark only one oval.

- 1      2      3      4      5
- 

### Yes or No

## PRAGMATICS AND SCREENS

12/7/2018

General Information

Please answer the following yes/ no questions regarding your child's skills.

11. Does your child assume the role of another person will in play? ie mother or father cat or dog

*Mark only one oval.*

- Yes  
 No

12. Does your child maintain appropriate eye contact when talking with others?

*Mark only one oval.*

- Yes  
 No

13. Does your child use different language styles when talking to very young children, children their own age, or adults?

*Mark only one oval.*

- Yes  
 No

14. Is your child able to use words such as; this, that, here, and there appropriately?

*Mark only one oval.*

- Yes  
 No

15. Is your child able to describe the function of objects to others?

*Mark only one oval.*

- Yes  
 No

16. Is your child able to appropriately respond to questions involving time? ie When do you go to bed? or What time of day do your eat breakfast?

*Mark only one oval.*

- Yes  
 No

17. Does your child ask permission to use other's belongings?

*Mark only one oval.*

- Yes  
 No

18. Does your child use the phrases "thank you", "please", and "you're welcome" appropriately?

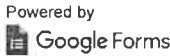
*Mark only one oval.*

- Yes  
 No

# PRAGMATICS AND SCREENS

12/7/2018

General Information



## PRAGMATICS AND SCREENS

**Appendix B**

Normative data according to Pragmatic Language Assessment Guidelines: A Best

Practice Document developed by the Early Childhood Intervention Council of Monroe

County (ECICMC).

<b>Birth to 3 months</b>	<b>3 to 6 months</b>	<b>6 to 9 months</b>	<b>9 to 12 months</b>
Briefly looks at people	Fixes gaze on face	Initiates vocalizing to another person	Shouts or coughs to attract attention
Follows moving person with eyes	Responds to name by looking for voice (4 to 8 months)	Enjoys being played with (4 to 8 months)	Shakes head “no” and pushes undesired objects away
Quiets in response to sound (responds more readily to speech rather than non-speech)	Regularly localizes source/speaker	Differentiates vocalizations for different states : hunger, anger, contentment (4 to 8 months)	Waves “bye”
Smiles/coos in response to another smile/voice (1-4 months)	Occasionally vocalizes in response to speech	Recognizes familiar people	Affectionate to familiar people
Excites when caregiver approaches (1-4 months)		Cries when parent leaves the room	Begins directing others’ behavior physically and through gestures (pats, pulls, tugs on adult)
Aware of strangers and unfamiliar situations (1-4 months)		Imitates familiar sounds and actions	Uses pointing to learn new vocabulary (people in environment label things as child points)

## PRAGMATICS AND SCREENS

Cries differentially when tired, hungry or in pain			Extends arms to be picked up
Quiets when picked up			Participates in games such as “peek-a-boo” and “pat-a-cake”
			Reaches to request an object
			Begins to vary behavior according to emotional reactions of others; repeats actions that are laughed at
			Participates in vocal play, using content and expression

## PRAGMATICS AND SCREENS

<b>12 to 18 months</b>	<b>18 to 24 months</b>	<b>2 to 3 years</b>	<b>3 to 4 years</b>	<b>5 to 6 years</b>
Bring objects to show an adult	Uses simple words or short phrase to express the intentions listed at the 12-18 month level	Engages in short dialogues	Engages in longer dialogues	Uses indirect request
Request objects by pointing and vocalizing or possibly using a word approximation	Names objects in front of others	Verbally introduces and changes topic of discussion	Assumes the role of another person in play	Correctly uses deictic items such as this, that, here, there
Solicits another's attention vocally, physically and possibly with a word	Says "What's that?" to elicit attention	Expresses emotion	Uses more fillers to acknowledge partner's message	Uses twice as many effective utterances as 3 year old to discuss emotions and feelings
Gesturally requests action/assistance	Begins using single words and two-word phrases to a command, indicate possession, and express problems	Begins using language in imaginative ways	Begins code switching when talking to very young children	Narrative development characterized by unfocused chains; stories have sequence of events but no central character or theme
Says "bye" and possibly a few other conversational ritual words such as "hi",	Much verbal turn taking	Begins providing descriptive details to facilitate comprehension	Uses more elliptical response	Tells a story by looking at pictures

## PRAGMATICS AND SCREENS

“thank you”, and “please”				
Protest by saying “no”, shaking head, moving away, frowning or pushing objects away		Uses attention- getting words such as “hey”	Request permission	Describes functions of objects
Comments on object/action by directing listener’s attention to it with a point and vocalization or word approximation		Clarifies and request clarification	Begins using language for fantasies, jokes, teasing	Communications cause-and-effect relationships
Labels objects		Prenarrative development begins with heaps (collection of unrelated items) and sequences	Makes conversational repairs when listener has not understood	Uses contingent queries to maintain a conversation
Answers simple wh questions with vocal response (may be unintelligible)			Corrects others	Creates interest in listener by indirect reference
Acknowledges speech of another by giving eye contact, vocally responding or repeating word said			Primitive narratives: events follow from central core/use of inference in stories	Communicates knowledge about the world to peers and adults
Teases, scolds, warns using gestures plus a vocalization or word approximation			Topic maintenance for 3 turns and provides explanations	Tells 2 familiar stories without pictures for help; includes all important parts



## PRAGMATICS AND SCREENS

			Requests more information to keep conversation going	States a problem
			Appropriate eye contact	Sustains a topic for 4 turns
			Terminates conversation appropriately	Provides information that is relevant to the listener
			Uses in directives/hints to get listener to do/get something	Responds appropriately to question involving time concepts
			Refines speech to insure listener has background information	Will answer/ask "where", "when", "why", "how many", "what do you do?", "why do we?"
			Role playing, temporarily assumes another's perspective- jokes with conversation partner, provides warning, teases	Extends topic
				Asks permission to use other's belongings
				Uses terms such as "thank you", "please", and "you're welcome" appropriately
				Recognizes another's need for help and provides assistance