The Influence of Media in Children's Language Development

Salwa S. Al-Harbi¹

Correspondence: Salwa S. Al-Harbi, Cultural Mission of Saudi Araba, Fairfax, VA, USA. Tel: 1-214-621-6087. E-mail: salwa alharbi@hotmail.com

Received: October 23, 2014 Accepted: November 25, 2014 Online Published: March 19, 2015

Abstract

Along with the rise of child-targeted programming became the belief that TV would be a very effective educational tool that could subconsciously or at a subliminal level feed information to the young mind and, with that, vocabulary growth would occur. Much programming was created that dealt with the direct educating of children that tried to create a way of communication with the child as a target. The paper discusses the influence of TV in children's language development. It investigates the notion that children's educational TV programs may result in vocabulary learning. It stresses the values of these educational programs, but also emphasizes that TV and other screen media have become a reality of life, and it is wise to utilize them only as a supportive tool for educating children. The interactions of parents co-viewing such programs with their children are necessary to optimize the child's language learning from TV programs that target children. The paper concludes with the implications of the current research as well as suggestions for further research.

Keywords: TV, parent, interaction, children, language, acquisition

1. Introduction

The Influence of Media on Children's Language Development in the process of first language acquisition, the child spontaneously and gradually develops an ability to use language through interactive situations in his/her natural environment. In addition to the immediate members of the child's family, the child is exposed to language by means of screen media (Christakis, 2009).

Children's TV viewing started in the late 1990s to be strongly believed in as means of education. Nowadays, more than 90% of children view TV programs routinely (Christakis, 2009). Survey by Kaiser Family Foundation (2010) stated that children and young adults ranging from 8 to 18 years old spend about 7:38 hours a day using entertainment media (Rideout, Roberts, & Foehr, 2010). Accordingly, media have become an integral part of children and young adults' daily routine. A study done by Vittrup (2009) found that children spend up to 3.5 hours a day watching TV. According to Zimmerman, Christakis, and Meltzoff (2007b), 40% of 3-month-old infants and 90% of 24-month-old toddlers watch TV regularly.

Early learning is very critical in children's language development in both receptive and productive linguistic skills. Language acquisition through exposure is what is occurring in this stage of human life, where the language seeps into the child's mind unconsciously (Christakis, 2009). However, interaction in day-to-day experiences is a crucial activity for the acquisition to take place (Bronfenbenner, 1979). Children are influenced greatly by their immediate environment, i.e., by parents, siblings, and peers. But media has become part of the child's immediate environment as well, and its influence is undeniably significant. Krcmar, Grela, and Lin (2007) and Roseberry, Hirsh-Pasek, and Golinkoff (2009) saw that children can effectively learn vocabulary from video if it is associated with live social interactions. Krcmar et al. (2007) and Roseberry et al. (2009) also concluded that older toddlers can also learn new vocabulary from video alone (although Krcmar et al. (2007) saw children respond and pay more attention to adults either live or on TV). Additionally, Zimmerman, Christakis, and Meltzoff (2007a) stressed the notion that children do learn new vocabulary from some interactive children's TV programs. As such, Interaction plays an important role in language acquisition. Language is a thoroughly social phenomenon. The child can be exposed to the language by means of screen media but, without interaction, without using the language in his or her daily life to express himself or herself, the child will not acquire that specific language. This paper will focus on media and children's language development. It will examine the

¹ Cultural Mission of Saudi Araba, Fairfax, VA, USA

extent to which media influences children's language acquisition.

2. Theory of Language Acquisition

Language, according to the behaviorists, is a verbal behavior; behaviorists followed the empirical approach of John Locke and Skinner that posits that the mind is a blank slate and impressions from the outer world fill it. Thus, every person is shaped to suit his/her environment. Human culture is geographically or environmentally determined, and language development is nothing but imitation of the child's surroundings (Chomsky, 2006).

Chomsky (2006), however, saw an additional side to the child's language acquisition other than the influence of the environment. Chomsky (2006) posited that there is actually a language organ in the brain that grows and reaches maturation and then starts to wane and wither away at about age 12; hence this is "the critical period." This gave a whole extra dimension to language acquisition and it gave acquisition importance and privilege over learning. Most importantly, it gave the individual's early years significance in reaching a level of perfection in linguistic competence. Thus, early learning is fundamental in language acquisition.

3. Children and Media Exposure

Media exposure is one means for children to receive linguistic input that can to some extent contribute to children's language development. Roseberry, Hirsh-Pasek, and Golinkoff (2009) conducted three studies to examine the influence of video on children's language development. Their sample consisted of 96 children (30 to 42 months old). The first of these studies investigated the notion of whether children learn vocabulary from video and social interactions together. The second study examined whether children can learn vocabulary from video alone, and the last study examined whether live social interaction had the same power of influence when the experimenter appeared on the TV screen as in person. Roseberry et al. (2009) concluded that older children can learn vocabulary from TV alone, whereas younger children can learn vocabulary only when supported by social interaction.

Clearly, exposure to language on TV can lead to the development of passive vocabularies, and interaction can turn these vocabularies active. In their study, Zimmerman, Christakis, and Meltzoff (2007a) focused on the effect of media exposure on children's language development. Children in this study were aged between 8 to 24 months. Zimmerman et al. (2007a) found that a small amount of vocabulary was learned if these children were exposed to children's education programs, such as *Baby Einstein* or the *Brainy Baby* series, for one hour daily. Similarly, Lingbarger and Walker (2005) found that some particular children's educational shows (e.g. *Dora the Explorer* and *Blue's Clues*) had a great positive impact on language production, while *Barney* and *Teletubbies* had less influence in children's vocabulary acquisition.

Learning at an early age, Barr and Linebarger (2010) noted, depends mainly on the influence of the context of linguistic social interactions and then on receiving and responding to the content presented on TV, since the child brings his social competence into interpreting and understanding the content viewed on TV. In the same vein, Linebarger and Vaala (2010) saw that bringing the plot, images, occasions, and events of the TV show home to children's daily experience was a way of capturing the child's attention. Linebarger and Vaala (2010) investigated how screen media affects children's language development by examining the abilities of infants and toddlers to see if they can learn from media. Linebarger and Vaala (2010) focused on three factors: "attributes of the child; characteristics of screen media stimuli; and the varied environmental context surrounding the child's screen media used" (p. 176). Linebarger and Vaala (2010) found that media's effect occurs if the child can identify with its content (i.e. it is similar to the child's daily life experiences). Linebarger and Piotrowski (2009) saw children's TV programming as the modern storyteller, and Linebarger and Piotrowski (2009) found in their study that exposure to children's TV programs helped children develop and enhance their narrative skills and a sense of chronology in retelling the story. In that skill, Linebarger and Piotrowski (2009) saw an important component of literacy. Further, Linebarger and Vaala (2010) noted that the repetition offered in the presentation style formed a link with children acquiring new vocabulary.

From this perspective, well-structured, directed children's TV programs are considered a very valuable educational tool, especially for economically disadvantaged children. Linebarger, Piotrowski, and Greenwood (2010) indicated yet another value in commercially available educational programs for children of the economically disadvantaged class. Linebarger et al. (2010) saw that reading print on the screen (in closed caption programs) developed not only literacy skills but also helped increase children's attention and better comprehension of content. Subsequently, these children could understand the meaning of new words. Similarly, Mendelsohn et al. (2010) concluded in their study that media in children's programs constitutes a positive source

for low income and immigrant families. Furthermore, Mendelsohn et al. (2010) saw that verbal interactions (questioning and commenting) between parents and young children may have a positive impact on children's language development, and also increases the child's attention to the content on the screen.

In a similar vein, while Linebarger, Piotrowski, and Greenwood (2010) saw that exposing children to non-educational TV programs meant less parenting—i.e., that there is an association between exposure to TV and decreased reading and learning activities at home, and parents became less inclined to read to their children—Tomopoulos et al. (2007) observed that children exposed to child-oriented educational programming experienced more reading and learning activities at home. Again, this in some sense falls within the category of parental integration with their children's learning experiences.

4. Children's Interaction and Media Exposure

The idea that listening to a language leads to the ability to orally produce the language has been a rule of thumb, or rather conventional wisdom. But it is not entirely true. Listening can only expand the reservoir of passive vocabulary; words are understood but are not actively ready for use in speech (Zimmerman et al., 2009). Interaction with others, however, is the means of turning these passive vocabularies active. Several current studies have stressed the significance of interactions with the content of children's TV programs as a way of developing the child's linguistic competence.

Accordingly, another group of studies took the position that, despite the many claims of producers of children's education programs and their contribution to children's language development, simple raw exposure of the child to these media will not lead to language development or acquisition of vocabularies. Preliminary studies have shown that infants imitate fewer actions directed through TV educational programs than they do a live adult's demonstration. Accordingly, Krcmar, Grela, and Lin (2007) and Zimmerman et al. (2009) found that children can learn vocabulary from video effectively if it is associated with live social interactions. Krcmar, Grela and Lin (2007) studied the notion of whether TV has a role to play in children's language acquisition. Krcmar et al. (2007) also investigated the influence of interaction with adults (when toddlers are watching live presentations on TV) on their language development. Krcmar et al. (2007) concluded that toddlers were more successful in acquiring new vocabulary while watching live TV presentations than children's educational TV programs. Along the same line, Bittman, Rutherford, and Brown (2011) argued that parental participation in tandem with the child's media use is more significant in creating the interactive context and opportunity for using the presented vocabularies in interactive situations to increase the child's linguistic ability. Accordingly, Bittman et al. (2011) saw importance in the age-appropriate guided interaction associated with the child's TV exposure habits.

Parents' interaction with their children during exposure to media is required for children's language development; however, in child-targeted TV programs, this interaction factor is limited. Mendelsohn et al. (2010) concluded that the absence of in-person interaction during media exposure showed an absence of educational benefits in two-year-old children. In a study conducted on 61 toddlers, Barr and Wyss (2008) examined the notion of whether label along with voiceover is presented in children's educational programs to facilitate imitation. Their study examined whether the effect of language learning from these programs would be facilitated if children interacted with their parents, who were co-viewing the same show with them. Barr and Wyss (2008) argued that label with voiceover and/or parental interaction had a positive result in children's imitation and vocabulary learning. Accordingly, label plus voiceover or parental interaction resolved the limitations that exist in child-targeted TV programs. Similarly, Zimmerman et al. (2009) conducted a study to assess the relation between adult verbal input, television viewing, adult-child (2-48 months) interaction, and children's language development. Zimmerman et al. (2009) concluded that raw exposure of children to TV programs is not effective in children's language development. Adult-child interaction, however, showed a strongly positive relationship with children's language development.

5. Recommendations for Future Research

None of the reviewed studies mentioned the importance and influence of computerized screen media such as iPads, Kindles, and many others of this sort. It has been noticed that the majority of educational TV programmers have created other methods to interact with children and achieve their educational goals. They have created their own websites and offered short clips, games, and other verbal and visual interactions; they have also created applications for other devices like the Apple iPad. Most importantly, they continue to update and improve their content and approach; they have also created a platform to communicate with parents and receive their suggestions and feedback. Examples of these are Nick Jr. Boost, ABC mouse, PBS Sprout, PBS Kids, and many others. Future research might take these new media interactions into consideration and measure

the extent of their effectiveness in creating a sort of social interaction in language development. Another form of research might take into consideration the universality of these shows. For example, how do they impact the language development of children from non-English speaking societies, and do they achieve a level of first language acquisition in those locales?

6. Implications

Barr, Danziger, Hilliard, Andolina and Ruskis (2010) noted three important elements in children's TV viewing: content, context, and the amount of daily TV viewing time. Barr et al. (2010) examined the attitudes of the parents of 308 children 6 to 18 months old toward these three factors. Barr et al. (2010) found that parents were least concerned about the amount of TV exposure. Accordingly, this paper can benefit parents by imparting an understanding of the role media plays in education. It will help parents understand the benefit of educational children's programs, and stresses the notion of parental co-viewing and interaction with their children in creating a context to discuss the content of the viewed show and optimize a better understanding of the presentation. According to Christakis (2009), "parents themselves need to be better informed about what activities really do promote healthy development in their young children" (p. 13). It is important for parents to understand that media is a tool to transmit messages to a large number of people, and so one has to look at it critically to eliminate its perceived negativity. Therefore, it is necessary for parents to be selective when it comes to the content of the shows and setting limited times for their children's TV watching.

7. Conclusion

Accordingly, from the previous studies one can infer two major points. The first is that educational TV programs for children are an undeniably useful tool. They become a resource and an affordable alternative means of instruction for children from low income families. They are also useful for the children of immigrant families because, in a sense, they are primary methods of exposing children to the host culture and its language. This kind of linguistic exposure offers at the least the building blocks of not only the intonation of the language but also the passive vocabularies. The second point is that language is a social phenomenon and it is naturally used in social communicative settings. As such, interaction with the viewing material is crucial for this new learning process to transform the newly acquired linguistic skills from passive to active. Therefore, a great number of the aforementioned studies found importance in parents' participation in their children's viewing habits in order to take that learning into an interactive context. Hence, interactions with others and with the viewing material are crucial for the educational program to be particularly effective.

References

- Barr, R., & Linebarger, D. L. (2010). Special issue on the content and context of early media exposure. *Infant and Child Development*, 19, 553-556. http://dx.doi.org/10.1002/icd.716
- Barr, R., & Wyss, N. (2008). Reenactment of televised content by 2-year olds: Toddlers use language learned from television to solve a difficult imitation problem. *Infant Behavior & Development*, 31(4), 696-703. http://dx.doi.org/10.1016/j.infbeh.2008.04.006
- Barr, R., Danziger, C., Hilliard, M. E., Andolina, C., & Ruskis, J. (2010). Amount, content and context of infant media exposure: A parental questionnaire and diary analysis. *International Journal of Early Years Education*, 18(2), 107-122. http://dx.doi.org/10.1080/09669760.2010.494431
- Bittman, M., Rutherford, L., & Brown, J. (2011). Digital natives? New and old media and children's outcomes. *Australian Journal of Education*, *55*(2), 161-175. http://dx.doi.org/10.1177/000494411105500206
- Bronfenbrenner, U. (1979). The ecology of human development. Cambridge, MA: Harvard University Press.
- Chomsky, N. (2006). *Language and mind* (3th ed.). New York, NY: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511791222
- Christakis, D. (2009). The effects of infant media usage: What do we know and what should we learn? *Acta Paediatrica*, 98(1), 8-16. http://dx.doi.org/10.1111/j.1651-2227.2008.01027.x
- Krcmar, M., Grela, B. G., & Lin, Y. (2007). Can toddlers learn vocabulary from television? An experimental approach. *Media Psychology*, 10, 41-63.
- Linebarger, D. L., & Piotrowski, J. (2009). TV as storyteller: How exposure to television narratives impacts at-risk preschoolers' story knowledge and narrative skills. *British Journal of Developmental Psychology*, 27(1), 47-69. http://dx.doi.org/10.1348/026151008X400445

- Linebarger, D. L., & Vaala, S. E. (2010). Screen media and language development in infants and toddlers: An ecological perspective. *Developmental Review*, 30(2), 176-202. http://dx.doi.org/10.1016/j.dr.2010.03.006
- Linebarger, D. L., & Walker, D. (2005). Infants' and toddlers' television viewing and language outcomes. *American Behavioral Scientist*, 48(5), 624-645. http://dx.doi.org/10.1177/0002764204271505
- Linebarger, D., Piotrowski, J., & Greenwood, C. R. (2010). On-screen print: The role of captions as a supplemental literacy tool. *Journal of Research in Reading*, 33(2), 148-167. http://dx.doi.org/10.1111/j.1467-9817.2009.01407.x
- Mendelsohn, A. L., Brockmeyer, C. A., Dreyer, B. P., Fierman, A. H., Berkule-Silberman, S. B., & Tomopoulos, S. (2010). Do verbal interactions with infants during electronic media exposure mitigate adverse impacts on their language development as toddlers? *Infant & Child Development*, 19(6), 577-593. http://dx.doi.org/10.1002/icd.711
- Mendelsohn, A., Berkule, S., Tomopoulos, S., Tamis-LeMonda, C., Huberman, H., Alvir, J., & Dreyer, B. (2008). Infant television and video exposure associated with limited parent-child verbal interactions in low socioeconomic status households. *Archives of Pediatric and Adolescent Medicine*, *162*(5), 411-417. http://dx.doi.org/10.1001/archpedi.162.5.411
- Rideout, V., Roberts, D., & Foehr, U. (2010). *Generation M2: Media in the lives of 8-18-year-olds*. Menlo Park, CA: Kaiser Family Foundation.
- Roseberry, S., Hirsh-Pasek, K., & Golinkoff, R. (2009). Live action: Can young children learn verb from video? *Child Development*, 80(5), 1360-1375. http://dx.doi.org/10.1111/j.1467-8624.2009.01338.x
- Tomopoulos, S., Valdez, P. T., Dreyer, B. P., Fierman, A. H., Berkule, S. B., & Kuhn, M. (2007). Is exposure to media intended for preschool children associated with less parent-child shared reading aloud and teaching activities? *Ambulatory Pediatrics*, 7, 18-24. http://dx.doi.org/10.1016/j.ambp.2006.10.005
- Vittrup, B. (2009). What U.S. parents don't know about their children's television use: Discrepancies between parents' and children's reports. *Journal of Children and Media*, 3(1), 51-67. http://dx.doi.org/10.1080/17482790802576972
- Zimmerman, F. J., Christakis, D. A., & Meltzoff, A. N. (2007a). Associations between media viewing and language development in children under age 2 years. *Journal of Pediatrics*, *151*, 364-368. http://dx.doi.org/10.1016/j.jpeds.2007.04.071
- Zimmerman, F. J., Christakis, D. A., & Meltzoff, A. N. (2007b). Television and DVD/video viewing in children younger than 2 years. *Archives of Pediatrics and Adolescent Medicine*, *161*, 473-479. http://dx.doi.org/10.1001/archpedi.161.5.473
- Zimmerman, F. J., Gilkerson, J., Richards, J. A., Christakis, D. A., Dongxin, X., Gray, S., & Yapanel, U. (2009). Teaching by listening: The importance of adult-child conversations to language development. *Pediatrics*, 124(1), 342-349. http://dx.doi.org/10.1542/peds.2008-2267

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).