RESEARCH-TO-PRACTICE SUMMARY

How an Educational Television Program Depicts Literacy and How its Messages Affect Young Children's Literacy Attitudes

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The current study involved a content analysis and field experiment investigating messages about literacy within a children's educational television program. The content analysis showed that the program's episodes contained many positive, explicit statements about reading and, to a lesser extent, writing and other literacy activities. Select episodes were then used in the experiment, which included preschool- and kindergarten-aged children either viewing or not viewing the episodes. Participants' attitudes about literacy were measured before and after the viewing period. A measure of children's feelings about the program and its characters was also administered to the viewing group. Results from the experiment were not statistically significant, but indicated several trends. When considering children's media consumption, findings suggest that this program offers many positive literacy messages to young viewers. Perhaps, with greater exposure, the literacy messages may have influence children's feelings about literacy, and potentially more so for young boys.

Keywords: television; early literacy; literacy attitudes

Television is a very common daily activity for young children (Rideout & Hamel, 2006). Yet, educators, families and others have long worried about how television affects development and learning. Researchers have taken up the call to better understand whether and how television

influences young children. They have found a complex relationship: under certain circumstances, television can have a positive effect, a negative effect, or no effect at all. This has been found for various developmental areas, including in language and literacy.

Maintaining moderate amounts of children's television viewing is one strategy for reducing or deterring potential negative effects, but adults must also consider the content that children view in that time. This includes whether the program is educational (i.e., has educational goals or a guiding curriculum) or non-educational (e.g., entertainment). With regard to literacy development, educational programming can improve certain early literacy skills. The same has not been found for non-educational programs (e.g., Anderson, et al., 2001; Ennemoser & Schneider, 2007). Thus, educators, families, and others must weigh the content and messages conveyed in television programs as they relate to literacy learning.

Literacy skills are an essential component of literacy development and success in literacy. A number of studies have been conducted to look at television's impact on literacy skills (for a review, see Moses, 2008; Uchikoshi, 2009). Children's beliefs and feelings about reading and writing also factor into overall development (Baker & Wigfield, 1999), and less is known about television's effect on literacy attitudes. One previous study looked at the 10 most watched programs by 2- to 5-year olds, and found that those particular programs contained few messages about literacy (Moses & Duke, 2008). Moses and Duke studied 44 hours of programming, and identified only 1 hour, 11 minutes and 11 seconds containing any interactions with print. When found, the messages about reading, writing, or listening to print being read were often neutral about literacy (77% of the messages found), but other messages ranged from very positive (about 20%) to very negative (about 3%) about literacy. One example of a positive message came from an episode of *Barney and Friends*, which included positive lyrics about reading and books. Characters sang lyrics including, "Books are fun / Books are great / Let's sit down and read a book today . . . Is it book time yet? / Oh I just can't wait to read a book." In contrast, an example of a negative message, from *The Fairly Odd Parents*, involved a child character mishandling books for fun (e.g., tossing books, shredding pages in books, etc.). Finally, there were occasions in which characters could have interacted with print and shared positive aspects of literacy, but they did not. For example, during episodes of *Dora the Explorer*, Dora used a map. However, the map did not contain print or other symbols typically found in maps, which people use to locate and navigate to places.

Because the study analyzed the television content rather than children's understanding of it, a follow-up study was conducted (Moses, 2011). Preschool-aged children viewed very brief clips that contained positive or negative literacy messages, and they answered questions about the characters' feelings as well as their own feelings about literacy. Although they distinguished between characters' positive and negative feelings, children's own literacy attitudes did not change after viewing the clips. One limitation was that the clips lasted no more than a few minutes. Therefore, it is unclear whether a full episode or series of episodes that contain literacy messages would impact children differently.

SUMMARY OF RESEARCH METHODS AND MAJOR FINDINGS

The current investigation continues this line of research with two studies. The first study involved a content analysis of two seasons of the children's program *Super WHY!*. *Super WHY!* airs on the Public Broadcast Service (PBS), and it was created and has been shown to promote

key early literacy skills in viewers between the ages of 3 and 6 years (http://www.pbs.org/parents/superwhy/program/index.html; Linebarger, McMenamin, & Wainwright, 2009). Episode scripts were examined for any statement made by a character that indicated his/her feelings or beliefs about literacy. This included reading or writing print as well as signing or talking about letters, words, or sounds that related to print.

Results revealed that the episodes contained many positive statements about literacy, with a total of 2,727 statements found across the 43 episodes. Such a multitude of positive messages differs from previous studies of children's programming. *Super WHY!* characters most often made direct, positive statements about reading. This included characters talking about reading as being powerful and characters encouraging the viewers to read. For example, characters encouraged viewers by saying statements like "Let's read the title of this book". Characters also identified the usefulness of reading through statements such as "When we have a question we look in a book", and they conveyed the necessity of reading with statements like "a super big problem needs us, the Super Readers!".

Less often, *Super WHY!* characters made statements about writing (e.g., characters encouraged viewers to write, they talked about writing as useful) or other literacy activities (e.g., characters encouraged viewers to sing about letters or letter sounds). For instance, viewers were encouraged to "Spell with me" as well as to think about consider "What letter makes the sound sss?". They also heard excitement about writing, with statements such as "I love to spell!".

Importantly, no negative messages about literacy were found. Therefore, viewers of *Super WHY!* would receive a consistent perspective about literacy (i.e., only positive statements literacy).

Following the first study, an experiment was conducted with 149 preschoolers and kindergarteners. Participants were randomly assigned to one of the following conditions: 1) an experimental group who viewed 20 *Super WHY!* episodes that contained the highest number of literacy messages or 2) a control group who did not view any of the episodes. Before and after the viewing period, all of the participants were assessed for their reading attitudes using two different instruments: a researcher-developed Reading Attitudes Measure (RAM) and a modified version of the Elementary Reading Attitudes Survey (ERAS; McKenna & Kear, 1990; McKenna, Kear, & Ellsworth, 1995). Children in the viewing group also answered questions about their liking of the program and individual characters, and they identified a favorite character and provided an explanation for their choice.

Results showed that viewers did not significantly differ from non-viewers in their literacy attitudes after watching the 20 episodes. However, a number of trends emerged. First, viewers had, on average, slightly higher reading attitudes scores than non-viewers after watching the episodes, and there were more noteworthy differences between male viewers and non-viewers than between female viewers and non-viewers. In addition, nearly all of the viewing participants reported liking the program, regardless of age or gender. However, viewers tended to pick a same-gendered character as their favorite (i.e., female viewers chose Princess Presto or Wonder Red, whereas male viewers chose Super Why or Alpha Pig). The character Super Why was associated with reading and other aspects of literacy more often than other characters.

IMPLICATIONS FOR PRACTICE

The current investigation demonstrated that, in contrast to past studies, one program (*Super WHY!)* presents many direct and positive statements about literacy activities. These messages occur in high numbers during each episode. Educators are faced with many options of educational television programming for children. Being selective is important and requires adults to preview programming ahead of time. This research suggests that educators who are seeking positive messages about literacy should consider integrating *Super WHY!* into their educational television selections for children in their care.

In addition, although the experiment did not find a significant difference between viewers' literacy attitudes and non-viewers' attitudes, it did no harm. Indeed, trends in the data suggest that, particularly for boys, viewers like and connect to *Super WHY!* characters. The strength and appeal of media characters for children can contribute both to their learning of educational messages (Lauricella, Gola, & Calvert, 2010) and their liking of products including healthy foods (De Droog, Valkenburg, and Buijzen, 2011). In the case of *Super WHY!*, the "product" being sold is literacy skills, and previous research has shown that viewing of *Super WHY!* leads to a significant increase in the early literacy skills targeted in the program (Linebarger, McMenamin, & Wainwright, 2009). As evidenced by the content analysis in this study, another "product" being sold is feelings about reading, writing, and other aspects of literacy. Because the characters in the program portray literacy as powerful, useful, and enjoyable, viewers can develop these associations with characters and learn about their excitement for literacy. However, in the case of attitude change, it may take more than just viewing the program to see a big difference in attitude.

In addition to be selective, watching with children (e.g., Reiser, Tessmer, & Phelps, 1984) and extending the content into the classroom have been found to enhance children's learning (e.g., Penuel, et al. 2012; Piotrowski, Jennings, & Linebarger, 2012). Reinforcement and repetition of the literacy messages in *Super WHY!* may be necessary to change attitudes in the classrooms and homes of child viewers. In addition to be selective, watching with children (e.g., Reiser, Tessmer, & Phelps, 1984) and extending the content into the classroom have been found to enhance children's learning (e.g., Penuel, et al. 2012; Piotrowski, Jennings, & Linebarger, 2012). Educators can model for children how to think and feel about reading, writing, and other aspects of literacy using *Super WHY!* statements. For example, they can convey: a) that literacy skills help people answer questions or solve problems that they have (e.g., "When we have a question we look in a book"), b) that literacy serves many purposes (e.g., "Going on adventures, that's what books are for"), and c) encouragement to participate in literacy-related activities (e.g., "Spell with me", "Read with me").

Super WHY! also showcases literacy materials and activities that educators can integrate into the classroom. When *Super WHY!* characters work to solve a problem, they always consult a book, which contains a fairytale or other narrative text applicable to their situation. Therefore, another recommendation is for educators to use books to help children answer questions and solve problems in the classroom. In addition, books can be integrated around children's viewing. Although narratives should not be the only genre used during read aloud, educators can read aloud the storybook in that episode (e.g., *The Three Pigs, The Three Billy Goats Gruff, and Peter Rabbit*). Reading aloud not only offers repeated exposure to the text, but it also provides educators with the opportunity to hone in on vocabulary words, discuss story elements (i.e., character, setting, sequence of events), develop concepts of print (where to begin reading on a

page, how to turn a page, etc.), and focus on other essential early literacy skills. Ultimately, educators and families must carefully consider the content and messages conveyed during children's television viewing, and find ways to use television to benefit children's learning.

REFERENCES

Anderson, D. R., Huston, A. C., Schmitt, K., Linebarger, D. L., & Wright, J. C. (2001). Early childhood television viewing and adolescent behavior: The recontact study. *Monographs of the Society for Research in Child Development, 66* (1, Serial No. 264).

Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly, 34,* 452-77.

De Droog, S. M., Valkenburg, P. M., & Buijzen, M. (2011). Using brand characters to promote young children's liking of and purchase requests for fruit. *Journal of Health Communication, 16*, 79-89.

Ennemoser, M., & Schneider, W. (2007). Relations of television viewing and reading: Findings from a 4-year longitudinal study. *Journal of Educational Psychology, 99*(2), 349-368.

Lauricella, A. R., Gola, A. A. H., and Calvert, S. L. (2011). Toddlers' Learning From Socially Meaningful Video Characters, *Media Psychology, 14*, 216–232. doi: 10.1080/15213269.2011.573465

Linebarger, D.L., McMenamin, K. & Wainwright, D.K. (2009). *Summative Evaluation of Super Why!: Outcomes, Dose and Appeal.* Retrieved from http://pbskids.org/read/files/SuperWHY_Research_View.pdf

McKenna, M., C., & Kear, R. A. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher, 54*, 10-23.

McKenna, M. C., Kear, R. A., & Ellsworth, R. A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly, 30*, 934-956.

Moses, A. M. (2011). "Books are fun, Books are great": The impact of television messages about literacy on young children's literacy attitudes. *Journal of Children and Media, 5(2),* 164-180.

Moses, A. M. (2008). Impacts of television viewing on young children's literacy development in the USA: A review of the literature. *Journal of Early Childhood Literacy, 8*(1), 67–102.

Moses, A. M., & Duke, N. K. (2008). Portrayals of print literacy in children's television programming. *Journal of Literacy Research, 40*(3), 251–289.

Penuel, W. R., Bates, L., Gallagher, L. P., Pasnik, S., Llorente, C., Townsend, E., Hupert, N., Dominguez, X., & VanderBorght, M. (2012). Supplementing literacy instruction with a media-rich intervention: Results of a randomized controlled trial. *Early Childhood Research Quarterly, 27*(1), 115-127.

Piotrowski, J. T., Jennings, N. A., & Linebarger, D. L. (2012). Extending the lessons of educational television with young American children. *Journal of Children and Media,7*(2), 216-234. doi:10.1080/17482798.2012.693053

Reiser, R. A., Tessmer, M. A., & Phelps, P. C. (1984). Adult-child interaction in children's learning from *Sesame Street. Educational Communication and Technology Journal, 32*(4), 217–23.

Rideout, V. J., & Hamel, E. (2006). *The media family: Electronic media in the lives of infants, toddlers, preschoolers and their parents*. Menlo Park, CA: Henry J. Kaiser Family Foundation.

Uchikoshi, Y. (2009). Effects of television on language and literacy development. In A. Bus & S. Neuman (Eds.), *Multimedia and literacy development: Improving achievement for young learners* (pp. 182-195). New York: Routledge.