

Preschoolers' Vocabulary Learning from Screen Media

INVESTIGATING THE IMPACT OF ADULT-LED INTERACTION



Cailyn Ebler; Faculty Mentors: Rebecca Jarzynski, M.S., CCC-SLP, Deborah Elledge, Ph.D., CCC-SLP | Communication Sciences and Disorders

INTRODUCTION

This research examined the way preschoolers learn new vocabulary from television. It was designed to answer the following research question: Do children exposed to screen media in the form of Sesame Street's *Word on the Street* videos (WOTS) learn and retain new vocabulary words better with or without additional adult-led interaction?

BACKGROUND

- Optimal language learning in children happens through interaction, especially when naturalistic and direct teaching methods are combined (Warren & Yoder, 1994).
- Studies have demonstrated that young children can learn new words from media if it is co-viewed with an adult (Richert, Robb, Fender, & Wartella, 2010).
- An analysis of Sesame Street's *Word on the Street* videos led to the conclusion that these videos utilized well-designed, research-based instructional strategies for teaching new words such as: repeated word exposures, examples, and nonexamples.
- The same research suggested that Sesame Street's *Word on the Street* video segments might lead to better vocabulary learning if more active involvement and interaction with an adult was included (Larson & Rahn, 2015).

REFERENCES

Larson, A. L., & Rahn, N. L. (2015). Vocabulary instruction on Sesame Street: A content analysis of the word on the street initiative. *Language Speech and Hearing Services in Schools*, 46(3), 207. doi:10.1044/2015_1shss-14-0079

Richert, R. A., Robb, M. B., Fender, J. G., & Wartella, E. (2010). Word learning from baby videos. *Archives of Pediatrics & Adolescent Medicine*, 164(5), . doi:10.1001/archpediatrics.2010.24

Warren, S. F., & Yoder, P. J. (1994). Communication and Language Intervention: Why a Constructivist Approach is Insufficient. *The Journal of Special Education*, 28(3), 248-258. doi:10.1177/002246699402800302

[WOTS Cover Art – Sesame Street/Sesame Workshop]. Retrieved from www.YouTube.com

METHODS

PARTICIPANTS

This study consisted of five participants who were 4 years old at the onset of the study and had typical vocabulary development. Vocabulary development was measured by parent report and by performance during standardized testing using the *Expressive Vocabulary Test (EVT)*, which measures vocabulary that a child understands and uses.



Example from *Word on the Street* Videos

INSTRUCTION

Each participant was taught 8 target words through the *WOTS* videos, under two conditions.

Video Condition: *WOTS* videos containing the target vocabulary words were co-viewed by the participant with the clinician, but there was no teacher interaction.

Interactive Condition: *WOTS* videos containing the target vocabulary words were co-viewed, and the child then participated in an activity related to the target word with the teacher.

The same 8 target words were taught to each child, but the teaching conditions for the target words varied across participants, with 4 words taught under each condition to each participant. Word frequency in the interactive condition was controlled to match the word frequency in the video only condition to ensure all participants had equal word exposure by having participants in the video only condition watch the videos twice. The clinician then controlled the number of target words used during the activity portion of the interactive condition to match the number in the video.

RESULTS

INDIVIDUAL VOCABULARY GROWTH

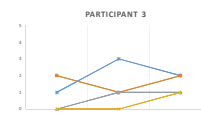
All participants experienced overall vocabulary growth, and the number of known vocabulary words under both conditions either increased or remained the same for all participants.



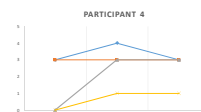
- Participants 1, 3, and 4 total vocabulary growth was greater under the interactive condition.



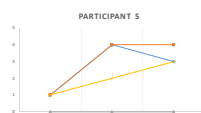
- Participant 2 had equivalent total vocabulary growth under both conditions.



- Participant 5 had more total vocabulary growth under the video only condition.

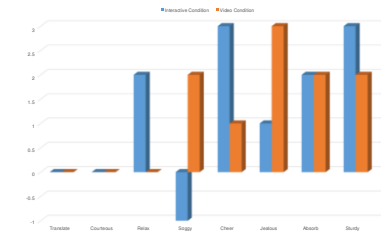


When expressive and receptive vocabulary words were looked at separately, there was not a clear connection to the condition under which the words were taught.



Video Expressive
Video Receptive
Interactive Expressive
Interactive Receptive

TOTAL VOCABULARY GROWTH BY WORD



Vocabulary learning varied substantially across individual words, and did not appear to be strongly related to the condition under which the word was learned.

CONCLUSIONS

Preschoolers can learn new vocabulary words from well-designed educational programming such as *Sesame Street*, both with and without adult interaction, when the words are appropriate for their age. The benefits of adult-interaction during high quality screen media viewing are unclear.

LIMITATIONS AND FUTURE DIRECTIONS

This study had a small sample size, limiting generalization. An odd number of participants led to an uneven distribution of words in both conditions across all participants (+/- 1 word per condition) which may have influenced the results. Future research could utilize nonsense words to limit variability in prior knowledge and task complexity across words, investigate the influence of target word selection on vocabulary learning from screen media, include a larger sample size, and/or investigate the impact of adult interaction on word learning from lower quality screen media.