

The Use of Video Instruction to Increase Daily Life Skills in Learners with Autism Spectrum Disorder

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Purpose of This Literature Review

A significant number of literature reviews have discussed the broader topic of daily skills. In an effort to explore the areas of self-help, this current paper will discuss the growing body of literature on the use of video modeling to teach self-help skills. Self-help skills are skills that are essential for the learner to be able to take care of themselves or to live as independently as possible. These include and are not limited to, cooking and preparing food, doing laundry, getting dressed, and practicing proper hygiene (Ayres, et al., 2011).

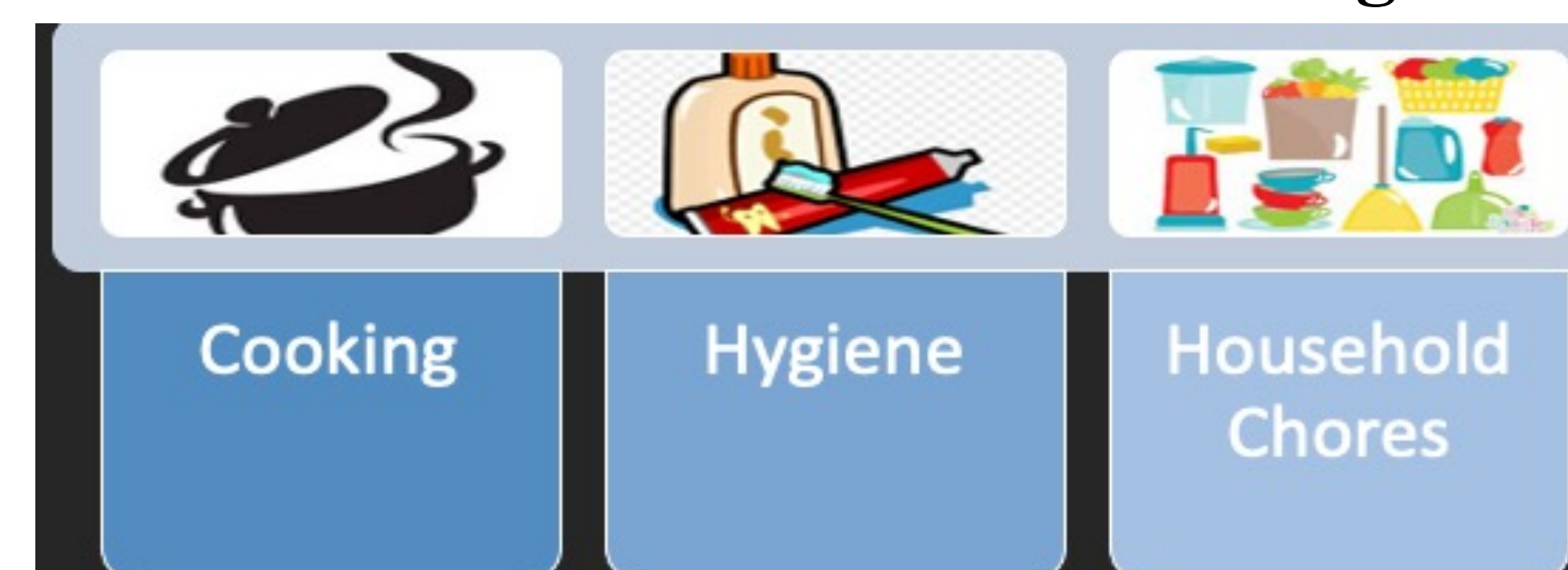
This current paper discusses the body of literature on video instruction to increase daily life skills in learners with ASD; in particular, this paper will address the use of video instruction on self-help skills in areas such as cooking, hygiene, and household chores, as well as future directions for this area of research

Literature Review

Video instruction is a well-established, evidence-based intervention used to teach new target skills and personal responsibility skills that utilizes technology to deliver modeling interventions (Charlop-Christy, Le, & Freeman, 2000; Wilczynski et al., 2009; Wong et al., 2015). Video instruction is the umbrella term that can consist of video modeling and/or video prompting. Video modeling entails watching a full video in one sitting whereas video prompting entails watching short segments of video for each step of a complex skill. In both types of video instruction, observers are watching a skill being demonstrated.

Video modeling is an evidence-based intervention used to teach learners a variety of different skills. Typically, a learner will watch a short video of an individual performing a sequence of steps for a desired behavior. The learner is then expected to perform the same sequence of steps for the behavior depicted in the video (LeGrice & Blampied, 1994). The three types of video instruction that seem to be commonly used are: video modeling that uses other individuals as the model, video self-modeling, and video modeling that uses the first-person point of view (Hong et al., 2016)

Utilization of Video Modeling



Cooking

A combination of video prompting and video modeling is effective to teach adolescents with developmental disabilities more complex cooking tasks (Kanfush & Jaffe, 2018).

Hygiene

There were mixed results across the different types of hygiene tasks. Some evidence suggested the effectiveness of video modeling while other studies suggested minimal improvements (Charlop-Christy et al., 2000; Raynor, 2010; Popple et al., 2016).

Household Chores

Results suggested that the use of video prompting plus error correction increased the overall percentage of acquired steps (Rehfeldt et al., 2003; Goodsen et al., 2007; Gardner & Wolfe, 2015).

Generalization & Maintenance

An important consideration that needs to be addressed is the generalization and maintenance of the skills that were taught through video instruction. Being able to apply the learned skills across a variety of untrained settings and being able to maintain them over time are important because individuals with ASD often have difficulty doing this (Phillips & Vollmer, 2012). Teaching individuals to generalize these skills is necessary for instruction to be meaningful and have lasting change (Kanfush & Jaffe, 2019). Out of the 14 studies reviewed in this paper, only four measured generalization or maintenance and found that learners were able to demonstrate generalization (Campbell et al., 2015; Charlop-Christy et al., 2000; Drydale et al., 2015; Gardner & Wolfe, 2015; Goodson et al., 2007; Inoue et al., 1994; Kanfush & Jaffe, 2019; Ket et al., 2007; McLay et al., 2015; Mechling & Gustafson, 2008, 2009; Popple et al., 2016; Raynor, 2010; Rehfeldt et al., 2003).

Future Research & Other Considerations

Because much of the current research have used devices that are not easily portable (e.g., laptops and video players), there are other considerations for researchers. There has been a growing literature on the uses of mobile technology in combination with video instruction (Shepley, 2017). In another study, Berezna, Ayres, Mechling, and Alexander (2012) evaluated the use of video self-prompting and mobile technology. The purpose of this study was to see whether or not students with ASD can utilize an iPhone as a video prompting tool to learn living tasks like using a washing machine, making noodles, and using a copy machine to determine if participants could complete these tasks independently with the aid of video prompting. Results indicate that using video prompting with an iPhone did have an impact on teaching daily living skills to adolescents with ASD and the withdrawal of the iPhone showed a decreased performance in two out of three tasks. This research suggests that iPhones are an effective self-prompting tool for adolescents with ASD in learning daily living skills (Berezna et al., 2012). Another critical need is to evaluate the effectiveness of video modeling for adults with autism because much of the research has been for school-aged children.

Conclusion

There is still a growing literature on the use of video modeling and its effectiveness as a teaching tool (Matson et al., 2012; McCoy et al., 2007; Neely et al., 2007). This comprehensive literature review provides scientific support for video modeling as an effective evidence-based practice for learners with ASD to acquire self-help skills in the areas of hygiene, chores, and cooking. Our findings also seem to suggest that self-help skills that were acquired through video instruction do not generalize well over into other settings for the learners, a common problem that is found in individuals with ASD (Neely et al., 2016). Furthermore, our findings also suggest that as technology continues to develop and advance, different modalities of technology are being evaluated in the use of video instruction such as iPhones and tablets. Improving ways for individuals with ASD to generalize these types of self-help skills through technology will allow for meaningful change and greater independence (Farley et al., 2009, Shepley, 2017).