

Tetnowski & Cecil: The Use of Virtual Reality Simulations to Promote Carry-Over in Older Children and Adolescents Who Stutter

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Abstract:

The focus of this proposal is to develop and test the use of virtual reality (VR) technology that can promote carry-over of therapeutic gains to settings that are commonly encountered by older children and adolescents that stutter. One of the limitations of current therapeutic models for stuttering is the lack of carryover to real-life settings. Commonly used methods like role-playing have distinct limitations. The use of VR can mimic real-life settings that present difficulty for older children and adolescents that stutter. This method can help in the transition of therapeutic gains from clinical settings to real world settings. The research team will develop and explore the use of VR environments as tools to overcome barriers for older children and adolescents that stutter. In other words, we would like to *support* individuals who stutter as they enter *community* settings. Although VR has been used in some previous studies with people who stutter (e.g., Brundage & Graap, 2004), the studies were completed in laboratory settings, with expensive equipment, and only with adults. This proposal would make use of relatively low-cost VR devices that could be taken home for continued practice. In addition, this proposal would target older children and adolescents that stutter. Therefore, the specific aims of this study are: (1) to determine how stuttering therapy is provided for older children and adolescents that stutter, (2) to determine situations/settings that are at various levels of difficulty for older children and adolescents that stutter. This will lead to (3) the development of VR simulations (that have been ranked in difficulty by older children and adolescents that stutter) to improve communication and limit anxiety when entering these real-life settings. Finally, the research team will *educate and advocate* for older children and adolescents that stutter by (4) assessing the impact of such an approach and compare it to traditional stuttering therapy for older children and adolescents that stutter. The results of this proposal can have a significant impact by improving the ways that older children and adolescents who stutter carryover their skills into real-life settings.