**SCIENCE, TECHNOLOGY, ENGINEERING, MATH, AND SOCIAL SKILLS PROGRAM FOR YOUTH WITH AUTISM SPECTRUM DISORDERS: LESSONS LEARNED FROM A PILOT INVESTIGATION**

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**Objectives:** Despite low overall rates of post-secondary enrollment, youth with Autism Spectrum Disorders (ASD) are more likely than their typically-developing peers to enroll in science, technology, engineering, and math (STEM) fields. With an increasing need for STEM informed individuals in the workforce, students with ASD who pursue STEM majors are in a position to become significant contributors to our increasingly technological society. STEM is a field that catalyzes social interaction due to its collaborative and problem-solving nature; however, those with ASD present difficulties with communication skills and are often overlooked when creating STEM education programs. To increase the likelihood of students with ASD pursuing STEM majors at the postsecondary level, support programs must partner early with students to develop appropriate educational and social skill foundations. The goal of the current pilot study was to determine the feasibility and refine the implementation of an afterschool STEM and social skills program for youth with ASD. Further, we collected information on effects of the program on the STEM aptitude, affinity, and perceptions as well as complex social skill development for youth with ASD.

**Method:** We recruited 5 participants between the ages of 9-13 years old with ASD (M = 4; F = 1). Participants and their families participated in a pre-assessment meeting where they completed surveys of STEM affinity, perception and aptitude, the Vineland Adaptive Behavior Scales-Third Edition, Social Responsiveness Scale, Second Edition. Participants met once a week for a 2-hour STEM afterschool program for 10 consecutive weeks. Baseline proficiency of social skills were observed and documented, followed by video-modelling social skill interventions embedded into the STEM program. We used a direct observation of social skills to monitor the effects of video-modelling of social skills. After completion of the 10-week program, participants completed post-assessment surveys of social validity and STEM affinity, aptitude, and perceptions, and social responsiveness.

**Results:** Small changes in in STEM affinity and perceptions, as well as social responsiveness were reported the youth and their families. The program was positively evaluated by participants. Behavioral observation indicated inconsistent changes in social skills performance as a result of the video modeling. We will present the program model as well as lessons learned on the barriers and facilitators to implementing the program relevant for researchers and practitioners in the field.

**Discussion/Conclusions:** The proposed research is an initial step towards creation of inclusive programming that encourages STEM engagement and social skills with hopes of increasing the likelihood that youth with ASD will enter a STEM related field in post-secondary. refine the implementation of the programming for future studies and for dissemination to practitioners.

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