Evaluation of SkillTalk for Autistic Young Adults

Study Protocol

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Objective

The primary objective of this randomized controlled trial (RCT) was to evaluate the effectiveness of the SkillFlix for Autistic Young Adults resource in improving communication skills. The study aimed to determine whether SkillFlix, a video-based intervention, enhances social skill acquisition in autistic young adults compared to a control condition using a text-based informational website.

Study Design and Methods

The study followed a two-group, pre-post evaluation design, with participants randomized into either the SkillFlix intervention group or the control group. Stratified randomization was employed based on diagnostic status and employment/education status to ensure balanced allocation. The study included three evaluation time points: pre-test, one-month post-test, and three-month post-test.

Recruitment Strategy

Participants were recruited via multiple channels, including targeted social media campaigns on Instagram, Facebook, and LinkedIn, as well as partnerships with autism service providers and professional networks. To enhance outreach, paid "boosted" posts were used on Instagram, which effectively increased engagement but also attracted fraudulent applications. To mitigate this, staff implemented a thorough screening process, including IP address verification, VoIP phone number checks, remote screening calls, and enrollment interviews to confirm eligibility and consent understanding.

We recruited young adults, aged 18-28, with ASD. They were required to have access to the internet and a device (a smart phone, tablet, or computer) to participate in study activities on. They were also required to meet minimum requirements for participation, common to studies that require high levels of communication with ASD participants. This included reciprocal communication skills and receptive language skills.

The study successfully enrolled 115 participants, surpassing the enrollment goal. Attrition resulted in 100 participants completing all study activities.

Study Instrument Development

The evaluation process incorporated multiple instruments and protocols, including:

- Online surveys at pre-test, one-month post-test, and three-month post-test administered via Alchemer.

- Standardized roleplay protocols assessing three communication skills: addressing a conflict, giving feedback, and coming to a compromise. Each skill was tested using

three different scripted scenarios designed with extensive branching logic to allow for diverse participant responses. These roleplays were coded using a validated rubric for skill evaluation, with each skill divided into 6-8 steps and scored on a 0-10 scale based on behavioral criteria.

- A tracking system to monitor participant engagement with the SkillFlix resource or the control website.

Study Implementation and Data Collection

Upon enrollment, participants scheduled their initial roleplay via Microsoft Bookings, selecting from five trained facilitators. Roleplays were conducted via Microsoft Teams and included an introductory explanation, a practice scenario, and three scripted scenarios based on real-life communication challenges. Roleplay sessions lasted 10-15 minutes.

Following the first roleplay, participants completed an online survey before randomization into the treatment or control group. The treatment group received immediate access to SkillFlix, while the control group accessed a website with written content unrelated to the evaluated skills. Participants engaged with their assigned resource for 30 days before completing a second roleplay and survey, followed by a final roleplay and survey after an additional 90-day resource access period. A total of 322 standardized roleplays were conducted.

Roleplay Coding and Data Analysis

Recorded roleplays were coded for skill demonstration by a trained coding team. The rubric was developed and refined by the principal investigator (PI), project director (PD), and evaluation lead to ensure consistent scoring. Coders underwent training sessions, achieved an 80% inter-rater reliability rate, and independently coded the roleplays.