**Title**: Unlocking Potential: Vocational Soft Skills Training for Autistic Transition-Age-Youth

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**Introduction**: Employment is often a crucial step toward independence and can have wide-ranging benefits from financial freedom to improved mental health (Almalky, 2020). However, individuals with developmental and intellectual disabilities face a variety of barriers to entering the workforce. Autistic individuals are underemployed, not only compared to non-disabled individuals but also peers with other types of disabilities, including intellectual and learning disabilities (Solomon, 2020). Research shows job postings are increasingly emphasizing employees’ soft skills, such as problem-solving, communication, and flexible thinking, particularly as tasks requiring hard skills frequently become automated as technology improves (Poláková et al., 2023). Thus, targeting these skills in vocational programs and interventions is an opportunity to enact meaningful change in autistic individuals’ employment outcomes. With the prevalence of autism on the rise (U.S. Centers for Disease Control and Prevention, 2023), the need for tailored interventions designed specifically for, and with input from, autistic adults will likely increase as the growing number of autistic children reach adulthood and seek integrated, competitive employment. One such program is the Transition-Age-Youth Supported Employment, Comprehensive Cognitive Enhancement, and Social Skills (TAY Success) program. This intervention was adapted from the original, evidence-based Success curriculum (Baker-Ericzén et al., 2018) and is designed for transition-age-youth receiving pre-employment transition services through high schools or vocational programs. The aim of the current study is to investigate the direct impact of the TAY Success program on executive function, social cognition and communication, and related work behaviors.

**Method**: The TAY Success program is designed to enhance autistic transition-age-youth’s soft skills and aims to promote integrated, competitive employment. The curriculum is split into two main sections: (1) executive function and (2) social cognition and communication. The executive function portion focuses on strategies for skills such as attention, cognitive flexibility, and problem-solving, while the social cognition section covers skills like contextual awareness, perspective-taking, and self-advocacy. This program was designed in collaboration with the autism community and [centers on] a neurodiversity-affirming framework. Strategies are taught to increase awareness of cultural norms rather than enforce masking, and the curriculum includes flexible, individualized content. TAY Success was delivered at a vocational training program within community services. Participants included 21 autistic individuals, some with co-occurring intellectual disabilities, ranging in age from 18-27 (M=21) years old. The majority of participants were White (85.71%) males (85.71%) and lived at home with parents or guardians (95.24%). Most participants’ highest educational attainment was a high school diploma (52.38%). TAY Success was delivered in two, 90-minute group sessions per week, across 27 weeks. Self-report measures were collected pre- and post-intervention to understand the direct impact of the TAY Success curriculum on executive function, social communication, and related work behaviors. These measures included two study-derived assessments of participants’ use of the cognitive and social strategies taught in the intervention and two standardized measures, the Behavior Rating Inventory of Executive Function - Adult version (BRIEF-A) and the Social Responsiveness Scale - Second Version (SRS-2). Additionally, the Work Behavior Inventory (WBI) and Work Motivation Scale (WMS) were used to measure whether the predicted gains in cognitive and social skills also improved participants’ related work interest and performance.

**Results**: Analysis consisted of paired-samples t-tests with pre- and post-intervention measures. Mean scores improved across many items and subscales, indicating participants made gains in TAY Success curriculum strategies, executive function and social communication skills, and related work behaviors. Although mean scores indicated some gains in executive function, results did not reach statistical significance on the BRIEF-A (p=.334, Cohen’s d=.292). Some items on the cognitive measure did show statistically significant improvements (p=.044 to 1.000, Cohen’s d=.000 to .468). Participants made particular gains in social communication. Mean item scores improved on the social strategies measures, with some items (e.g., compress emotions, cope with emotions, detect and duplicate, adjust behaviors, and self-advocacy) significantly improving (p=<.001 to .025, Cohen’s d=.621 to 1.098). The SRS-2 also showed improvements in a number of subscales (e.g., social cognition, social communication, social motivation, and restrictive and repetitive behaviors; p=.002 to .038, Cohen’s d=.514 to .855). Mean scores on the WBI improved across time points, with one item (learning new tasks quickly) showing significant improvement (p=.005, Cohen’s d=.849). Positive items on the WMS did not improve from pre to post, and while negative items did improve, none reached statistical significance.

**Discussion:** Findings from the current study provide preliminary evidence for the direct cognitive and social skill improvements from the TAY Success curriculum. Participants in the curriculum made meaningful improvements in cognitive and social skills, and these improvements also impacted related work behaviors. This study was limited by a small sample size, but results indicate that further investigation of the TAY Success program used within community vocational services as a means for improving autistic transition-age-youths’ vocational soft skills and subsequent employment outcomes are warranted.

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