High School SUCCESS: Vocational Soft Skills Program for Transition-Age ASD Youth

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STUDY PROTOCOL WITH SAP

RESEARCH AIMS:

By utilizing research-community partnership methods, we have worked in collaboration with the community through our partnership of researchers, providers, educators and consumers (**A**ctive **C**ollaborative **H**ub for **I**ndividuals with ASD to **E**nhance **V**ocation and **E**ducation- ACHIEVE) to develop a cognitive training intervention for adults that adapted evidenced -based interventions for schizophrenia and traumatic brain injury. The original SUCCESS program was designed for adults within supported employment community programs. This proposal capitalizes on this existing work, using the already established and highly productive ACHIEVE group and current resources, to adapt the SUCCESS curriculum for HS/transition programs.

AIM: With our ACHIEVE partners , develop the High School Supported, Comprehensive Cognitive Enhancement and Social Skills (SUCCESS) program to fit the needs of transition-age youth with ASD within the community educational system.

a. Standardize the High School SUCCESS program by developing a facilitator manual, student workbook and corresponding support person materials.

b. Develop a training protocol that can be individualized and implemented within the HS educational system to provide initial training and ongoing coaching for educators to reach and sustain intervention fidelity.

AIM: Conduct a pilot study to examine the feasibility, acceptability, and implementation procedures (recruitment, randomization, retention & training strategies) of TAY SUCCESS and to obtain estimates of effects to support a future large-scale effectiveness trial.

a. Examine intervention feasibility, acceptability, satisfaction, and sustainability.

b. Examine preliminary individual outcomes (executive functioning and social cognitive skill development).

Research Design

Through a randomized clinical trial (RCT) thirty-two eligible TAY with ASD involved in High School (HS) diploma track (n=2) or Transition Program (TP) (n=2) participated and received TAY SUCCESS (intervention group, INT) (n=16) or usual care programming (UC) only (n=16). Due to possible meaningful differences across these programs it was necessary to pilot test in both program types. Randomization took place at the school site level. A total of 4 school sites participated: 2 HS diploma (1 randomized to UC and 1 to INT) and 2 Transition (1 randomized to UC and 1 to INT) with 8 students enrolled in each group totaling 32 students (and parents).

Staff and eligible students at each school site were recruited to participate. Both groups received all other typical supports offered at the school by school staff. The INT group received the TAY SUCCESS curriculum weekly, following the manualized program. Sessions were delivered sequentially but individualized to allow for review and repeating any content as needed for comprehension.

Participants

Parent/caregivers were consented as participants and provided permission for students < 18 years or for those adults with a conservatorship in place. Child student assent (<18 yrs) and adult student consent (≥18 yrs) was obtained. Student enrollment will continue until 5 students per site participate. Inclusion/exclusion Criteria: Students were English speaking (15-22 years) with ASD diagnoses that have at least 1 year remaining in the school program. (A standardized ASD diagnostic assessment conducted at baseline (ADOS-2) confirmed ASD). Students were intellectually able with assessed and reported cognitive ability (≥ 75 IQ score in more than one subtest assessed by WASI) and ability to read. Student/parents were compensated $100 per family.

Statistical Analyses Plan

To examine the intervention effect for each measure between the intervention group and the control group and to control for variations at initial performances of two groups, we conducted the analysis of covariance (ANCOVA) by controlling for baseline scores. For the ANCOVA, the data met assumptions of homogeneity of regression and equality of error variances. Because this study assessed the potential value of the intervention with a small community sample, the Type I error rate was not adjusted for the number of comparisons and was kept at $p < .05$ level for each comparison. Effect size for the ANCOVA was assessed by partial $\eta 2$ in which medium (>.06) and large (>.14) effects were considered clinically meaningful. Furthermore, in each condition group, within-group effect sizes (Cohen's d) were calculated for all scores using the paired-sample t-test.