

**Title:** Self-Determination among Young Adults with Autism Spectrum Disorder: Differential Treatment Effects by Gender

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**Introduction:** Individuals with developmental disabilities (DD) are known to exercise less self-determination, which is the right to set goals, make life decisions, and self-advocate to the extent one is able. Self-determination has been linked to successful academic and transition outcomes (e.g., Konrad, Fowler, Walker, Test, & Wood, 2007) and a higher quality of life (e.g., Nota, Ferrari, Soresi, & Wehmeyer, 2007). Thus, it is critical to further establish interventions that effectively improve self-determination and to understand which self-determination interventions work with whom. Given the different clinical phenotypes of autism spectrum disorder (ASD; Van Wijngaarden-Cremers et al., 2014) based on gender, it is important to examine whether self-determination skills differ by gender and whether interventions aiming to improve self-determination have differential impacts for those who are male, female, and non-binary. Our research questions were: 1) Are there differences in self-reported self-determination between self-identifying males, females, and non-binary young adults with autism spectrum disorder? 2) Does gender impact change in self-determination over time while receiving “Working Together,” a goal-focused, psychoeducation intervention for young adults with ASD and their parents?

**Method:** As a part of a larger study involving the implementation of “Working Together,” an intervention involving concurrent multi-family parent psychoeducation and young adult social skills and goal-setting group, 48 young adult participants with autism spectrum disorder without intellectual disability (33 male, 12 female, 3 non-binary) completed the American Institutes for Research Self-Determination Scale (AIR-S; Wolman et al., 1994) at three time points: baseline, 3-month follow-up (immediately following completion of 8 weekly intervention sessions), and 6-month follow-up (immediately after receiving 3 monthly booster intervention sessions). The AIR-S measures a person’s capacities and opportunities for self-determination. For the purpose of this study, the *Capacity* and *Opportunity at Home* subscales of the self-report version were used. The *Capacity* subscale includes 12 items (6 on “actions” or ability related to self-determination, and 6 on “beliefs” or perceptions about performing self-determined actions). The *Opportunity at Home* subscale includes 6 items measuring the perception of opportunities at home to perform self-determined actions (e.g., “People at home let me set goals”). Scores are rated on a Likert scale from 1 (Never) to 5 (Always). The AIR-S has been extensively used and has demonstrated adequate test-retest reliability, strong internal consistency, and validity (Mithaug, Agran, Martin, & Wehmeyer, 2002). Cronbach’s alphas in the current sample ranged from .86-.91. To answer question 1, paired samples t-tests were performed to compare means of *Capacity* for self-determination and *Opportunity* for self-determination at baseline. To answer question 2, two Time by Gender repeated measures ANOVAs (one with *Capacity* and one with *Opportunity* as the dependent variable) were conducted to investigate differences in the change in *Capacity* and *Opportunity* for self-determination over the three study time points by gender.

**Results:** Overall, individuals with ASD in the current sample reported higher *Capacity* for self-determination than *Opportunity* for self-determination at home at baseline ( $M = 19.9$  vs.  $22.1$ ,  $t = -3.0$ ,  $p = .005$ ). Mean *Capacity* for self-determination at Baseline, 3-month follow-up, and 6-month follow-up was as follows: 42.2, 42.9, and 42.3 respectively for males; 42.0, 48.2, and 49.2 for females; and 28.7, 38.0, and 36.3 for non-binary individuals. Mean *Opportunity* for self-determination at home was as follows: 22.6, 23.5, and 23.1 respectively for males; 22.4, 22.8, and 26.0 for females; and 16.0, 21.3, and 15.7 for non-binary individuals. There were no differences in *Capacity* or *Opportunity* for self-determination at baseline by gender. In the *Capacity* for self-determination model, there was a significant main effect of time ( $F = 10.19$ ,  $p < .001$ ) as well as a significant time x gender interaction effect ( $F = 3.51$ ,  $p = .014$ ). In the *Opportunity* for self-determination at home model, there were no significant main effects of time ( $F = 2.23$ ,  $p = .121$ ) or time x gender interaction effects ( $F = 2.39$ ,  $p = .067$ ).

**Discussion:** Overall, our findings suggest significant increases in *Capacity* for self-determination for individuals who received the “Working Together” intervention, with stronger increases for females and non-binary individuals. This is an important consideration when designing interventions specific to self-determination for individuals with ASD. Although the current study was conducted with a small sample (especially for the non-binary group) and did not measure long-term outcomes, the findings advance knowledge surrounding the effectiveness of self-determination intervention by gender. Females received particularly strong self-determination Capacity benefit from this intervention. It is possible that females who elected to participate in this study were readier to engage in the intervention or more perceptive of changes in their own *Capacity* for self-determination. Yet, given similar rates of self-determination across gender groups at baseline, findings point to the notion that females may be more responsive than other genders to this type of intervention targeting self-determination skills. Our findings also point to the need for more intervention studies to include larger samples of non-binary individuals to better understand their unique experiences.

### References:

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