

# The Relationship between Self-Control and Cognitive Empathy among Young Adults with ASD and Other Social Challenges



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## INTRODUCTION

- Deficits in emotional self-control are common among individuals with autism spectrum disorder (ASD) (Laurent & Gorman, 2017).
- Another common characteristic among individuals with ASD is reduced levels of empathy, specifically cognitive empathy (Allison et al., 2010).
- While studies have analyzed self-control and cognitive empathy independently among adults with ASD, few have examined the relationship between these variables over the course of treatment.
- We hypothesized that young adults with higher self-control would exhibit higher levels of cognitive empathy both prior to and following treatment.

## METHODS

- $N=143$  young adults between 17-37 years of age ( $M=22.26$ ,  $SD=3.78$ ) without intellectual disabilities
- 74.1% male ( $n=106$ ); 25.9% female ( $n=37$ )
- All young adult participants exhibited clinically elevated ASD symptoms, as determined by a caregiver-reported total score  $\geq 60$  on the Social Responsiveness Scale-Second Edition (SRS-2; Constantino & Gruber, 2012).
- Participants presented for treatment at the UCLA PEERS® for Young Adults program, a 16-week caregiver-assisted evidence-based social skills intervention.

Ethnicity	Percentage (%)
Caucasian	63.6
Asian	10.5
Multiracial	10.5
Latino/Hispanic	9.1
Other	6.3

## Measures and Analyses:

- Self-control was assessed using the caregiver-reported self-control subscale of the Social Skills Improvement System (SSiS; Gresham & Elliott, 2008) and cognitive empathy was assessed using the caregiver-reported cognitive empathy subscale of the Empathy Quotient (EQ; Baron-Cohen & Wheelwright, 2004).
- Self-control and cognitive empathy were assessed at baseline (T1) and following completion of the treatment (T2).
- Pearson correlation coefficients were calculated to examine the relationship between self-control and cognitive empathy over the course of treatment.
- Paired samples t-tests were used to determine change in self-control and cognitive empathy from pre- to post-treatment.

**Higher self-control is correlated with higher levels of cognitive empathy in young adult participants both prior to and following the PEERS® for Young Adults social skills intervention.**

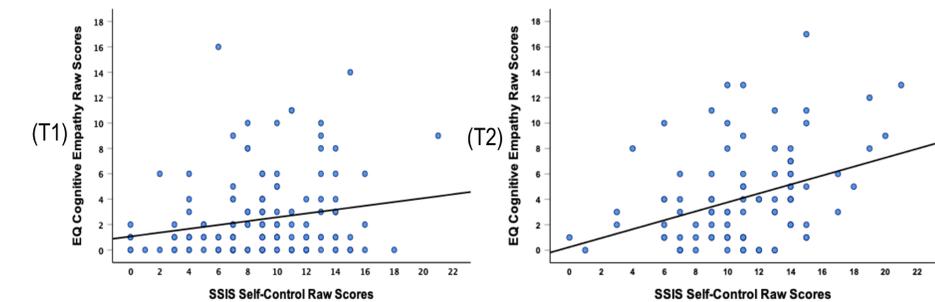
By targeting self-control in treatment, young adults with ASD and other social challenges may be able to engage in more successful socialization. This could help inform the creation of more targeted, effective treatment programs for this population.



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## RESULTS

- Pearson correlations showed a significant positive correlation between SSiS self-control and EQ cognitive empathy at T1 ( $p=.02$ ,  $r=.19$ ) and at T2 ( $p=.00$ ,  $r=.37$ ) such that young adults presenting with higher self-control also exhibited higher cognitive empathy.
- Paired samples t-test revealed significant improvements in self-control [ $(M=2.01$ ,  $SD=3.9$ ),  $t(96)=5.07$ ,  $p=.00$ ] and cognitive empathy [ $(M=2.18$ ,  $SD=3.28$ ),  $t(97)=6.59$ ,  $p=.00$ ] from T1 to T2.



## DISCUSSION

- Results support the hypothesis of a significant positive correlation between self-control and cognitive empathy at pre- and post-intervention, confirming that these two constructs demonstrate a relationship with each other.
- The present findings suggest that perhaps by targeting self-control in treatment, young adults with ASD and other social challenges may be better able to recognize emotions in others and respond appropriately, thereby increasing social reciprocity and engaging in more successful socialization.

## REFERENCES

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- Laurent, A. C., & Gorman, K. (2017). Development of emotion self-regulation among young children with autism spectrum disorders: The role of parents. *Journal of Autism and Developmental Disorders*, 48(4), 1249-1260.
- For full list of references, please scan QR code with your mobile phone camera.

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