Results of a Training and Screening Pilot Study in Identifying Autism Spectrum Disorders in Females Under 18

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Introduction

➢ Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social communication and interaction across multiple factors as well as restrictive, repetitive behavioral patterns (1).

➢ ASD effects one in 68 children in the United States with nearly five times as many males diagnosed as females (2; 3).

➢ Approximately 70% of females with ASD have at least one comorbid psychiatric disorder (6).

Female ratios
• Mild ASD (without intellectual disability): 10:1
• Severe ASD (with intellectual disabilities): 2:1

➢ **Project FINDS** (Females in Need of Diagnostic Screening) was funded to raise awareness among mental health care professionals to become more knowledgeable about the symptoms and screening procedures for identifying females at risk for being diagnosed with ASD.
  o The 1 hour training that mental health professionals received was aimed at increasing knowledge about ASD and common comorbid disorders in females.
  o Mental health professionals also received training on how to administer the screening tool selected for this study, the SRS-2.
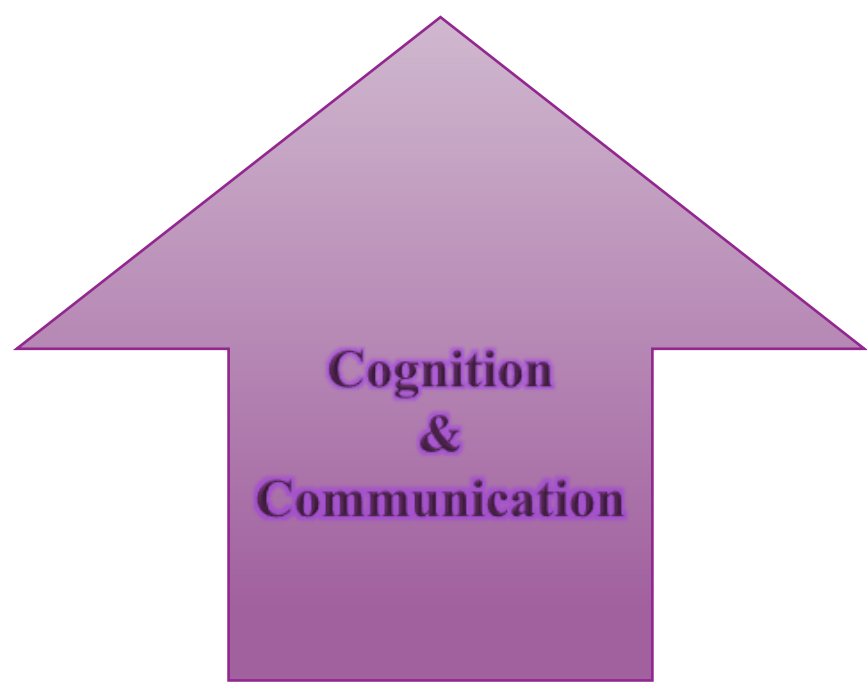
Objectives

1) Determine the effectiveness of the 1 hour training on mental health professionals' knowledge about the female characteristics of ASD, common comorbid conditions and screening procedures.

2) Identify the number of females receiving mental health services who screened at risk for ASD to see how many might be eligible for further testing.

Research & Results

➢ A within subjects t-test was used to determine whether or not mental health professionals gained knowledge in ASD characteristics in females. Results showed that there was a significant ($p < .001$) improvement between the pre-test scores and post-test scores.
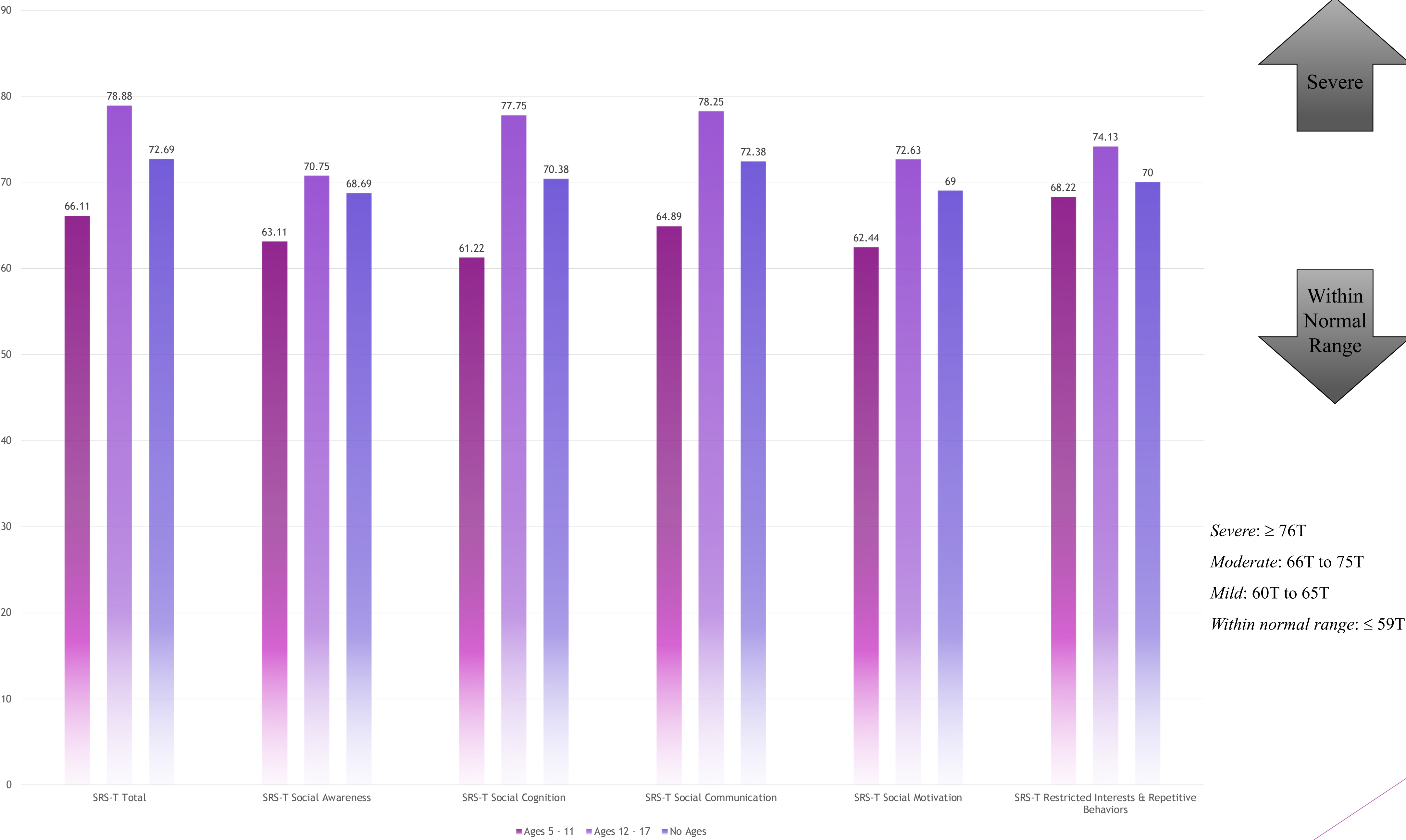
Training

➢ A distribution of screening results was also used to reveal the age ranges in which females display more severe levels of ASD characteristics. Results showed that ASD characteristics are more visible in adolescent females, starting at the age of 12, and specifically in social cognition and social communication.

Cognition & Communication

➢ Descriptive statistics showed that a significant number (76%) of females were at risk for ASD and that some of the subscales were less noticeable in the females.

Figure 1. Age Ranges of FINDS Screening Results

AGE RANGES & FINDS SCREENING RESULTS

	Ages 5 - 11	Ages 12 - 17	No Ages
SRS-T Total	66.11	78.88	72.69
SRS-T Social Awareness	63.11	70.75	68.69
SRS-T Social Cognition	61.22	77.75	70.38
SRS-T Social Communication	64.89	78.25	72.38
SRS-T Social Motivation	62.44	72.63	69
SRS-T Restricted Interests & Repetitive Behaviors	68.22	74.13	70

Severe

Within Normal Range

Severe: ≥ 76T
Moderate: 66T to 75T
Mild: 60T to 65T
Within normal range: ≤ 59T

Conclusion & Future Implications

➢ Training mental health care providers in identifying ASD characteristics at an earlier age together with properly administering screening tools will assist in detecting ASD in children, which in turn, will assist in diagnosing and creating early interventions for this population (4).

➢ With up to nearly 15 percent of children referred to receive psychiatric treatment and nearly 25 percent of mental health care providers' caseloads being compromised of children with ASD, it is crucial for providers to have the competence and specific training to deal with this population (6).

➢ Utilizing the small sample of females with ASD would help further explore what is necessary for mental healthcare providers to know about this population (5).

➢ Overall, females displayed more severe ASD characteristics in all five subscales beginning during the onset of adolescence (12-17 years old), especially in social cognition and social communication.

➢ There is a growing demand for more cost-effective methods for screening, assessing and treating children with ASD (7). Brief screening tools, such as the SRS-2, can be utilized towards such efforts as was done in this pilot study.

➢ The published research on interventions with adolescent females (12-17 years old) in mental health treatment is scarce and any studies including them (6) involve small samples. Targeting local mental health agencies already providing counseling and therapy services to the community may help increase samples.

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