

# Descriptive Study: Functional Impairment Related to ADHD Symptoms in a Sample of Children with Autistic Spectrum Disorders

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## INTRODUCTION

During the last ten years there has been an increased prevalence of both attention deficit hyperactivity disorder (ADHD) and autistic spectrum disorders (ASD). Although these two disorders are defined by impairment in different areas, research shows that between 30 and 50% of individuals with ASD manifest ADHD symptoms and two-thirds of Individuals with ADHD show features of ASD [1]. Both disorders are considered a neurodevelopment disorder, they both often include difficulties in attention, communication with peers, impulsive behaviors, and a degree of restlessness or hyperactivity. Both are more common in boys than in girls and both disorders have a genetic predisposition. Recent studies suggest that these two syndromes share common neurobiological substrates, as similarities in neuropsychological profiles have been found in individuals with both disorders [2,3].

Most important is the fact that both disorders, even when presented alone cause significant behavioral, academic, emotional, social and adaptive problems at home, school and in other important life areas. The Weiss Functional Impairment Rating Scales for parents (WFIRS-P) was designed for parents of patients with ADHD. It is a specific instrument to measure the degree of impairment present in different areas [4]. The WFIRS-P specifically quantifies how the individual's behavior or emotional problems impact on various clinically-relevant domains of functioning: Family, Life Skills, Self-Concept, Social Activities, Learning & School and Risky Activities.

## OBJECTIVE

The objective of this study was to make a descriptive analysis of the functional impairment measured with the WFIRS-P in a sample of 50 ASD subjects, to evaluate whether functional impairment typically associated with ADHD was also present in ASD subjects.

## METHODS

**Subjects:** Fifty patients with an ASD diagnosis attended at CSMIJ (Center of child mental health) of Hospital Parc Taulí Sabadell. Specifically, the data was collected from parents attending a specialized group addressed to parents with children who have an ASD diagnosis.

**Scales:** WFIRS-P

## RESULTS

Fifty subjects with an ASD diagnosis were analysed. An 88% of the subjects were Male (Fig. 1) and the mean age was 7.96 years. Results show a higher percentage of children with no impairment in all the measured domains (Fig. 2). Despite this, we do observe that higher difficulties are present in Life skills and Social activities, this is congruent with the disorder's characteristics.

Fig. 1

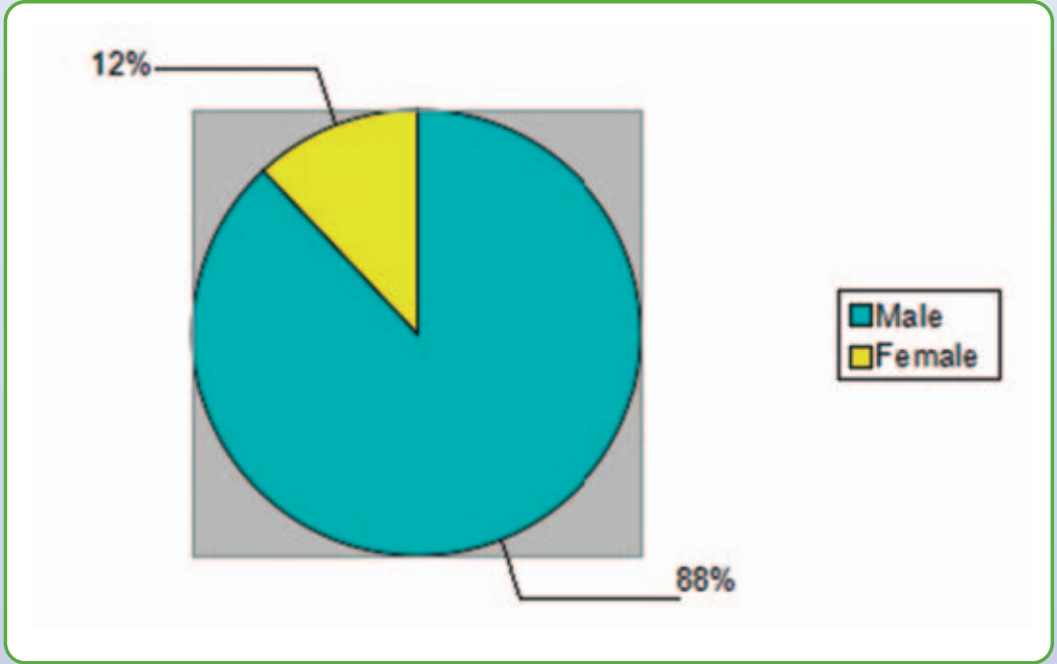
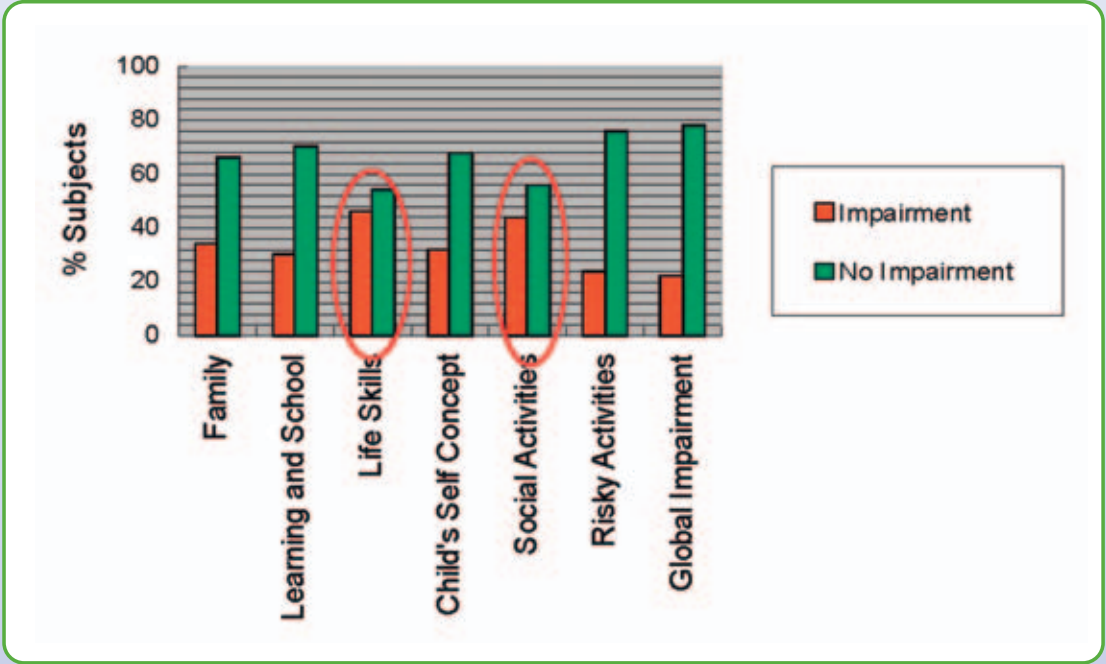


Fig. 2. Functional impairment associated with adhd symptoms in children with ASD



## CONCLUSIONS

ADHD is defined by impaired functioning in the areas of attention, hyperactivity, and impulsivity, while ASD is defined by altered social communication and restrictive-repetitive behaviors, interests or activities. Regardless the difference between them, these two disorders often share difficulties in attention, communication with peers, social inadequacy, pragmatic language, hyperactivity and impulsivity. These wide range of difficulties cause functional impairment in several areas. Herein we can see that children with an ASD, present impairment (measured with a scale originally created for patients with ADHD) in several areas, especially in Life Skills and Social Activities. Meaning this that both ASD and ADHD can cause similar functional impairment in specific life areas.

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