

# Overcoming Exercise Barriers for Adults with Autism Spectrum Disorder

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## Key Points:

- **One of the key barriers to exercise in adults with autism is difficulty in social situations**
- **Family interventions are important for encouraging individuals with autism to exercise.**

Autism spectrum disorder (ASD) is a lifelong neurodevelopmental disorder accompanied by challenging behaviors, impulsivities, hyperactivity, and intellectual disability. Beyond that, data shows that individuals in these populations exercise less than individuals without ASD.<sup>1</sup> Furthermore, as individuals with ASD age, participation in physical activity (PA) decreases because adulthood fosters different barriers such as a decrease in support for participating in exercise.<sup>1</sup>

Generally, individuals with ASD prefer things like walking, running, or swinging, as opposed to team sports. Much of the time people with autism are socially outcasted, which can affect participation in physical activity and sports.<sup>1</sup> Social support, specifically from family members, has been found to be an asset to encouraging these individuals to participate in PA and individuals with autism that live in a supporting environment are more likely to participate in PA.<sup>2</sup>

Barriers and Facilitators	Responses	<i>n</i> <sup>a</sup>
Interpersonal barriers	47 (19%)	37
Parents do not have time or energy	26 (10%)	23
Lack of peer exercise partner	21 (8%)	20
Interpersonal facilitators	51 (23%)	35
Friends/peers are supportive or physically active	22 (10%)	18
Parents are supportive or physically active	16 (7%)	15
Siblings are supportive or physically active	12 (5%)	7
Dogs are physically active	1 (<1%)	1
Physical barriers	27 (11%)	21
Inclement outdoor conditions	19 (8%)	15
Lack of equipment/resources	8 (3%)	8
Physical facilitators	56 (25%)	48
Appropriate resources at/around house	34 (15%)	29
Good outdoor conditions	22 (10%)	21

*Note.* Numbers in parentheses represent the percentage of total responses.

<sup>a</sup> Number of questionnaire participants providing responses (*N* = 103).

**Figure 1:** A list of interpersonal and physical barriers and facilitators to exercise in adults with ASD.<sup>5</sup>

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Employing the self-determination theory has potential to increase motivation and PA level for individuals with ASD. According to this theory, every individual has three basic psychological needs: autonomy, competence, and relatedness. When these needs are met, self-determined motivation toward a behavior is increased making people more likely to engage in that behavior. With little information on what motivates people with ASD, applying this theory allows for a better understanding. Those with ASD often find socializing with their peers difficult, which affects their relatedness, and many prefer strict routine, which could be closely linked to autonomy. Utilizing these facts through the guise of the self-determination theory can help us learn how to better motivate individuals with ASD.<sup>3</sup>

Exercise is extremely beneficial for individuals with ASD, as research shows positive effects on cognitive performance including on executive functions such as working memory, self-restraint, emotional control, focus, planning, organizing, and stress tolerance. Though these effects are individual, varied, and selective.<sup>4</sup> Additionally, participation in PA can help foster social relationships, and increase overall physical health. Adults with ASD face added obstacles to exercise, but as shown below there are simple and useful facilitators to help mitigate them. Even with the presence of these barriers, promoting exercise for this population is important, with social support being a key component in diminishing this disconnect.

## References

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