

## Teachers' Attitudes Toward Learning Disabilities in Three Countries

Attitudes of fifth-grade teachers toward working with students with learning disabilities were examined through a survey of 577 teachers in three countries (Italy, Spain, and United States). Teachers across all three countries reported having a thorough understanding of working with students with learning disabilities; national legislation sufficiently supports these students. Labeling students with learning disabilities will not be detrimental to perceptions of the student, and teachers rely on learning specialists to help implement interventions. However, support for inclusion had an inverse relationship with age among teachers in Spain and the United States but had widespread support in Italy. Attitudes toward using compensatory supports were also more favorable among teachers in Italy than teachers in Spain and the United States. The authors suggest these results may be due to differences in legislation between the countries. Furthermore, teachers in the United States were more likely to identify biology over instruction and emotional components as contributing factors to learning disabilities than teachers in Spain and Italy. This result might suggest different ideologies between the countries that may differentially affect how teachers engage with students and, in turn, student achievement.

Cornoldi, C., Capodieci, A., Colomer Diago, C., Miranda, A., & Shepherd, K. (2018). Attitudes of primary school teachers in three western countries toward learning disabilities. *Journal of Learning Disabilities*, 51(1), 4–54. doi:[10.1177/0022219416678408](https://doi.org/10.1177/0022219416678408)

## Long-Term Exercise Program for Children With Autism

The effects of a 48-week coordination and strength program on metabolic health and quality of life were examined for 90 children (aged 6–12 years; male = 82 and female = 8) with autism spectrum disorder in Brazil. Children were randomly assigned to the specialized physical activity program ( $n = 67$ ) or the control group ( $n = 23$ ). The program consisted of two 40-min sessions a week administered to three participants and their parents/legal guardians at a time. No difference in body mass index, waist circumference, glucose, and triglycerides was seen between groups or across the intervention. The intervention group saw an increase in high-density lipoprotein and decrease in low-density lipoprotein and total cholesterol, a decrease in autistic traits (particularity, stereotypical behavior patterns and verbal and nonverbal communication skills), and an increase in parental reporting of quality of life (psychosocial health and physical health) across the intervention compared with the control group. The results of this study indicate the ability to engage children and their caregivers in long-term physical activity programs and

the potential for this engagement to improve both physical and subjective assessments of the health of children with autism spectrum disorder.

Toscano, C., Carvalho, H., & Ferreira, J. (2018). Exercise effects for children with autism spectrum disorder: Metabolic health, autistic traits, and quality of life. *Perceptual Motor Skills, 125*(1), 126–146. doi:[10.1177/0031512517743823](https://doi.org/10.1177/0031512517743823)

## Cardiometabolic Risk and Exercise in Spinal Cord Injury

Individuals with spinal cord injury are at an increased risk for cardiovascular disease and Type 2 diabetes, due in part to low levels of physical activity. This study was a randomized controlled trial examining the effects of a moderate-intensity, upper body, home-based exercise program on cardiometabolic risk, adipose tissue metabolism, and cardiorespiratory fitness. Participants included 21 inactive adults with paraplegia. The exercise group completed 45 min of moderate-intensity arm-crank ergometry exercise on 4 days per week, whereas the control group maintained current lifestyle. Following 6 weeks of intervention, the exercise group had significantly decreased serum fasting insulin and homeostatic model assessment version 2 measuring insulin resistance (HOMA2-IR;  $p \leq .044$ ) and significantly increased  $VO_{2peak}$  ( $p \leq .001$ ) compared with the control group. However, no differences were observed in adipose tissue metabolism or peripheral insulin sensitivity ( $p > .05$ ). The study included both men and women (29%), whereas most spinal cord injury and exercise research has focused on men. The authors conclude that the moderate-intensity arm-crank exercise intervention was effective in improving functional capacity and hepatic insulin sensitivity in adults with paraplegia. Additional research is needed to understand the mechanisms behind this improvement.

Nightingale, T.E., Walhin, J.P., Thompson, D., & Bilzon, J.L. (2017). Impact of exercise on cardiometabolic component risks in spinal cord-injured humans. *Medicine & Science in Sports & Exercise, 49*(12), 2469–2477. doi:[10.1249/MSS.0000000000001390](https://doi.org/10.1249/MSS.0000000000001390)

## Reflections of Adults With Visual Impairments on Physical Education

There is a need to understand the perspectives of students with disabilities in physical education (PE) to improve practices. Previous research has focused on perspectives of parents, teachers, or peers, rather than individuals with disabilities. This study examined retrospective reflections of adults with visual impairments on their experiences in integrated PE as students. Interpretive phenomenological analysis was used to identify themes in semistructured interviews from 16 adults (aged 21–48 years; 10 women and 6 men) with visual impairments. Three themes were identified from the analysis: (a) feelings of frustration and inadequacy from being excluded, (b) debilitating feelings from physical educators' negative attitudes or being treated differently, and (c) feelings about peer interactions related to