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Status and Potential of Community-Engaged Research to Investigate Physical Activity Interventions for Children with Autism Spectrum Disorder in Chinese-American Communities

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Multi-level Determinants of PA for Children with ASD

**Perspective** |
---|
**Barriers** |
---|
**Findings** |
---|
**Individuals** |
Learning
- Physical activity (PA) skills were difficult to learn.

**Individuals** |
Communication
- Fewer adolescents with ASD believed that PA was a way to make friends, and they had problems in communicating with others.

**Individuals** |
Beliefs
- Fewer adolescents believed that PA would be good for their health.

**Individuals** |
Screen Time
- Screen time and PA – both in number of hours and type of PA – were inversely correlated. But children with ASD showed better responses to verbal directives delivered through video.

**Individuals** |
Behavioral problems
- Behavioral problems could be obstacles for children with ASD to be engaged with the other.

**Individuals** |
Motor skills
- Motor difficulties affected the ability to perform PA.

**Families** |
Supervision
- More supervision was needed when the children engaged in PA.

**Families** |
Age
- The older the children, the less they were to be engaged in PA.

**Families** |
Skills to promote inclusion
- Parents lacked skills for helping their children to make friends.

**Families** |
Fear of being injured
- Parents feared that their child might be hurt during PA, and that their children might hurt others.

**Families** |
Peers
- Children with ASD had difficulty talking with typically developing peers, who in many cases did not want to play with them.

**Families** |
Time
- Children wanted their children to learn to do homework, which took more time to complete as compared with typically developing children. Accordingly, children with ASD had less time for PA.

**Families** |
Transportation
- Children with ASD had short-term challenges with transitions, which prevented them from moving indoors to outdoors and back, and from going to new places.

**Communities** |
Opportunities
- Opportunities for children with ASD to enroll in PA were lacking and too costly.

**Communities** |
Staff
- Lack of available programs and inexperienced personnel influenced the extent to which the needs of children with ASD were met.

**Communities** |
Equipment
- Too few or inappropriate pieces of equipment were available for children with ASD to perform PA.

**Chinese-American Cultural Variables: Do they Influence Participation in PA in Children with ASD and their Families?**

- Chinese culture is quite different from American culture. Immigrant Chinese-Americans have had to adapt to the American culture. Although some studies were identified that suggested Chinese-American cultural variables may influence participation in PA in typically developing children, no research was found on children with ASD.

- Acculturation can influence a person's beliefs, attitudes, and behaviors. In addition, changes in immigrants' health status are more apt to be associated with higher levels of acculturantion in the second and third generations.

- Some studies also found that low-acculturation levels in families adversely affected their access to health and educational resources, and community-based approaches may be particularly useful for research with children with ASD and their families from culturally diverse communities.

- Scant research has been conducted on PA in ASD, but it is almost non-existent among Chinese-American children/families, for whom familial and cultural perspectives on ASD, modes of exercise and health, and other factors may diverge from the typical American norm.

**Conclusion**

Deteriorants at multiple levels influence the extent to which children with ASD engage in PA and exercise. At the same time, culture may be an important factor that influences engagement in PA. More research is needed in this area. Applying the social-ecological model and community-based programs of research might help us to better understand and conduct health challenges among Chinese-American children with ASD and their families.

**References**

See next slide.
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References


