

Measuring the participation of children and adolescents in everyday activities: Results from this study

Rebecca Taylor (PhD Candidate)¹, Professor Tim Olds (Principal Supervisor)², Dr Alison Lane (Associate Supervisor)³ and Dr Kobie Boshoff (Associate Supervisor)⁴

¹ Health and Use of Time Group, School of Health Sciences, University of South Australia

² Health and Use of Time Group and Sansom Institute for Health Research, University of South Australia

³ School of Allied Medical Professions, College of Medicine, The Ohio State University

⁴ School of Health Sciences, University of South Australia

In 2009 recruitment of children with Asperger syndrome to the research study, 'Measuring the participation of children and adolescents in everyday activities' occurred through Autism SA. This study compared how typically developing children and children with Asperger syndrome aged 10-15 years participate in everyday activities. A summary of this study and its results have been included below.

Why was this study needed?

Optimal participation in activities by children is important as participation is thought to contribute to child development and health and well-being (Law 2002). Children with Asperger syndrome may be at particular risk of lower levels of participation due to difficulties in social interactions and repetitive and stereotypical behaviours (American Psychiatric Association 1994). Awareness of how the participation of children with Asperger syndrome differs to that of typically developing children will identify areas where health professionals can target support and interventions to maximize participation and health outcomes.

How was the data collected?

Forty-five typically developing children and 30 children with Asperger syndrome aged 10-15 years were involved in the study. Each child was interviewed by the researcher on two separate occasions within a two week period. At each interview children completed the Multimedia Activity Recall for Children and Adolescents – Participation Edition (MARCA-PE), a survey to measure the participation of children and adolescents in activities. The MARCA-PE asked children to recall the activities they had completed over the previous two days, how much they enjoyed the activities and how difficult they found them.

What were the results?

When compared with typically developing children, children with Asperger syndrome,

- are involved in fewer activities per day,
- report higher levels of enjoyment for school related activities (includes reading and writing),
- report no differences in the level of difficulty experienced when completing activities,
- have lower physical activity levels,
- spend less time involved in team sports,
- spend an additional 61 minutes per day in screen time activities (includes watching TV and playing computer games).

This research study provides evidence that there are differences between the participation of typically developing children and children with Asperger syndrome. It is important to note however that although children with Asperger syndrome have lower physical activity levels than typically developing children, they still on the whole meet the minimum recommendations for minutes spent in moderate to vigorous physical activity per day (60 minutes per day is recommended).

Both typically developing children and children with Asperger syndrome in this study exceeded the recommended maximum time spent in screen time activities (2 hours per day). Typically developing children exceeded the recommendations by 125 minutes and children with Asperger syndrome by 186 minutes. High levels of screen time are a concern given that it has been reported that children who meet the physical activity and screen time recommendations are less likely to be overweight (Laurson 2008). The screen time levels of both typically developing children and children with Asperger syndrome should therefore be monitored to ensure that screen time activities are not detracting from time spent in physical activities. Maintaining adequate levels of physical activity is important as associations have been reported between physical activity and blood pressure, psychological health, cardio respiratory fitness, obesity and skeletal health (Troost 2005).

References

- American Psychiatric Association 1994, "Diagnostic and statistical manual of mental disorder", 4th edn., American Psychiatric Association, Washington, United States.
- Laurson, K.R., Esenmann, J.C., Welk, G.J., Wickel, E.E., Gentile, D.A. & Walsh, D.A. 2008, "Combined influence of physical activity and screen time recommendations on childhood overweight", *The Journal of Pediatrics*, vol. 153, no. 2, pp. 209-214.
- Law, M. 2002, "Participation in the occupations of everyday life", *American Journal of Occupational Therapy*, vol. 56, no. 6, pp. 640-649.
- Troost, S.G. 2005, "Discussion paper for the development of recommendations for children's and youth's participation in health promoting physical activity", Australian Department of Health and Ageing, Canberra, Australia.