

## BRIEF REPORT: The Relationship Between Social Acceptance, Problem Behaviours, and Social Skills as Perceived by Youth with Autism Spectrum Disorders

### Abstract

*The current study examined the relationships among social acceptance and perceived social skills, internalizing and externalizing behaviours, and friendships in youth with autism spectrum disorders. Forty participants aged 6 to 14 years self-reported on all of the above-mentioned variables except friendships. Social acceptance was found to be positively correlated with social skills and number of friends in school, and negatively correlated with internalizing behaviours. This study highlights the possible pathways to positive feelings of social acceptance in youth with autism spectrum disorders.*

Persons with autism spectrum disorders (ASD) have impairments in social interaction and pragmatic communication (American Psychiatric Association, 2000), and also struggle with comorbid disorders, including mood and anxiety disorders (Green, Gilchrist, Burton, & Cox, 2000). Although causes of these comorbidities are unclear, it can be postulated that self-awareness of the social deficits associated with ASD play a role in psychological adjustment (Vickerstaff, Heriot, Wong, Lopes, & Dossetor, 2007).

General self-concept is a term that is often used interchangeably with self-esteem and self-worth (Sherrill, 1993). In typically developing adolescents, poor self-concept has been linked to peer rejection (McDougall, Hymel, Vaillancourt, & Mercer, 2001). This relationship may also exist for youth with ASD, who suffer from increased self-blame and low self-esteem (Attwood, 2003), and are at increased risk for peer shunning and being bullied (Little, 2001).

To date, only two studies have examined the relationship between feelings of social acceptance and social skills in youth with ASD. Capps, Sigman, and Yirmiya (1995) examined the relationship among social skills and social acceptance in a sample of youth with autism; they found social acceptance was negatively correlated with IQ, and parent rated social skills were negatively correlated with their child's ratings of social acceptance. Vickerstaff et al. (2007) incorporated youth ratings of social skills and found them to be positively correlated with social acceptance. Higher age and IQ predicted lower self-perceived social acceptance, which in turn predicted higher levels of depression.

#### Authors

Michelle A. Viecili,<sup>1</sup>  
Jonathan A. Weiss,<sup>1</sup>  
Yona Lunsky,<sup>2</sup>  
Stephen Shupak<sup>2</sup>

<sup>1</sup> Department of  
Psychology,  
York University,  
Toronto ON

<sup>2</sup> Centre for Addiction  
and Mental Health,  
Toronto ON

#### Correspondence

mviecili@yorku.ca

#### Keywords

social acceptance,  
self-concept,  
autism spectrum disorders,  
social skills,  
externalizing behaviour,  
anxiety

Table 1. Participant Characteristics (N = 40)

| Characteristic   | N                    |
|--|----------------------|
| Child Age  | 10.36<br>(SD = 2.07) |
| Child Gender   |                      |
| Male   | 33                   |
| Female   | 7                    |
| Parent-reported Diagnosis  |                      |
| Asperger Syndrome  | 31                   |
| Autism   | 3                    |
| Pervasive Developmental Disorder—Not Otherwise Specified (PDD-NOS) | 0                    |
| Both Autism and Asperger syndrome                                  | 3                    |
| Ethnicity  |                      |
| European-Canadian  | 31                   |
| Middle-eastern-Canadian  | 1                    |
| African/West-Indian-Canadian                                       | 2                    |
| Asian-Canadian   | 3                    |
| South-Asian-Canadian   | 1                    |
| South/Latin American-Canadian                                      | 2                    |
| Parental Marital Status  |                      |
| Married  | 31                   |
| Single   | 2                    |
| Separated  | 4                    |
| Divorced   | 0                    |
| Total Family Income  |                      |
| \$25,000 or less   | 2                    |
| \$41,000–\$60,000  | 1                    |
| \$61,000–\$80,000  | 5                    |
| \$81,000–\$99,000  | 7                    |
| \$100,000 or more  | 24                   |

The current study sought to build on this previous research by examining the relationships among self-reported social skills, social acceptance, internalizing and externalizing behaviours, and number of friends in youth with ASD. It was hypothesized that increased social skills and friendships would lead to a more positive self-concept, and that higher rates of internalizing behaviours would be correlated with lower ratings of social acceptance.

## Methods

### Participants

This study is based on data collected from the initial assessments of youth participating in a social skills group at the Centre for Addiction and Mental Health, in Toronto, Ontario. Forty youth aged 6–14 years (33 boys, 7 girls) participated (see Table 1 for participant characteristics).

### Measures

**Social Skills Improvement System Rating Scales (SSIS; Gresham & Elliott, 2008).** The SSIS is a measure of social skills and problem behaviours. Scales of interest in this study included *Social Skills* (46 items), *Externalizing Behaviours* (12 items), and *Internalizing Behaviours* (7 items). The Internalizing subscale examines behaviours suggestive of sadness, anxiety, loneliness and low self-esteem.

**Self-Perceptions Profile for Children (SPPC; Harter, 1985).** The SPPC is a self-report measure of self-concept. The *Social Acceptance* subscale (6 items; e.g., “Having a lot of friends”) of the SPPC was included in this study. Higher scores reflect more positive self-perceptions of social acceptance.

**Parent questionnaire.** Parents reported on the *number of friends* their child had both within school and outside of school.

### Procedure

Informed consent was provided by all parents, and assent by all youth. Youth were individually interviewed, and parents independently provided written responses about number of friendships.

## Results

### Description of social acceptance, social skills and friendships

Parents reported their child had an average of 2 friends in school ( $SD = 2$ ), and 2 friends outside of school ( $SD = 2$ ).

Pearson product-moment correlations were conducted (see Table 2). Youth perceived social acceptance was positively correlated with their perceived social skills and with the number of in-school friends as reported by parents; it was also negatively correlated with their self-reported internalizing behaviours. Social acceptance was not significantly correlated with the number of friends outside of school or externalizing behaviours.

A standard multiple regression was performed to examine whether social skills and internal-

izing symptoms were predictors of perceived social acceptance. Analysis revealed that the overall model was significant,  $F(2, 35) = 7.06$ ,  $p < .01$ , accounting for 29% of the variance. As shown in Table 3, social skills and internalizing scores were both significant independent predictors of perceived social acceptance, accounting for 16.6% and 9% of the variance, respectively.

## Discussion

Youth with more friends in school, and who reported having more social skills felt more socially accepted. The relationship between social skills and social acceptance is likely bidirectional, with youth who are more socially accepted having more opportunities to improve their social skills, which in turn builds on their social competence and results in greater peer acceptance. Increasing peer networks, through social and physical activity groups may lead to a greater sense of group belonging, and promote healthy self-concepts in youth with developmental disabilities (Weiss, Diamond, Demark, & Lovald, 2003).

Internalizing behaviours, including symptoms of anxiety, depression, and low self-esteem were negatively correlated with perceived social acceptance. Youth who rate themselves highly on this scale feel less accepted by their peers and more poorly about themselves overall. This follows the cognitive triad of depression proposed by Beck (1974) with youth having negative thoughts related to the self, the world, and the future. Youth who internalize attribute negative elements of their social environment to themselves, and would also perceive themselves as being less accepted socially.

## Limitations

This analysis was limited in the number of predictors that could be examined in relation to social acceptance due to the low sample size. There were also methodological issues in the assessment of self-reported self-concept in youth with ASD, as it is unclear how accurate their self-perceptions are (Begeer, Koot, Rieffe, Terwogt, & Stegge, 2008). Although it is possible that youth who reported above-average social competence had the greatest misconceptions about their

Table 2. Pearson Product-Moment Correlations Between Youth Self-Concept, SSIS Domains, and Friendships

|                       | Social Acceptance (n) |
|-----------------------|-----------------------|
| Age                   | -.20 (36)             |
| In school friends     | .34* (36)             |
| Out of school friends | -.00 (36)             |
| Social Skills         | .44** (38)            |
| Internalizing         | -.38* (39)            |
| Externalizing         | -.09 (38)             |

\* $p < .05$  \*\* $p < .01$

Table 3. Social Skills and Internalizing as Predictors of Perceived Social Acceptance

| Predictor                | b (SE)      | t-score |
|--------------------------|-------------|---------|
| Constant                 | 9.91 (2.48) | 3.99    |
| Social skills            | 0.07 (.02)  | 2.89**  |
| Internalizing behaviours | -0.18 (.08) | -2.13*  |

$R^2 = .29$ ;  $N = 37$ ; \* $p < .05$  \*\* $p < .01$

peer relationships and social status within their school, or respond with a social desirability bias, this alone would not explain the logical correlation between youth self-perceptions and parent reported number of friends.

## Future Study

Rates of anxiety and mood problems are significantly higher in youth with ASD (Meyer, Mundy, Van Hecke, & Durocher, 2006) compared to peers without ASD. A greater understanding of the social perceptions and self-concept of these youth and the relationship to maladaptive behaviours would be beneficial to informing cognitive and behavioural intervention methods in this population.

## References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed., text rev.). Washington, DC: Author.
- Attwood, T. (2003). Cognitive Behaviour Therapy (CBT). In L. Holliday Willey (Ed.), *Asperger syndrome in adolescence: living with the ups and downs and things in between* (pp. 38–68). London: Jessica Kingsley.
- Beck, A. T. (1974). The development of depression: A cognitive model. In R.J. Friedman & M.M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 3–28). Washington, DC: V.H. Winston.
- Begerer, S., Koot, H. M., Rieffe, C., Meerum Terwogt, M., & Stegge, H. (2008). Emotional competence in children with autism: Diagnostic criteria and empirical evidence. *Developmental Review, 28*(3), 342–369.
- Capps, L., Sigman, M., & Yirmiya, N. (1995). Self-competence and emotional understanding in high-functioning children with autism. *Development and Psychopathology, 7*(1), 137–149.
- Green, J., Gilchrist, A., Burton, D., & Cox, A. (2000). Social and psychiatric functioning in adolescents with Asperger syndrome compared with conduct disorder. *Journal of Autism and Developmental Disorders, 30*(4), 279–293.
- Gresham, F. M., & Elliott, S. N. (2008). *Social Skills Improvement System-Rating Scales*. Bloomington, MN: Pearson Assessments.
- Harter, S. (1985). *Manual for Self-Perception Profile for Children*. Denver, CO: University of Denver.
- Little, L. (2001). Peer victimization of children with asperger spectrum disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(9), 995–996.
- McDougall, P., Hymel, S., Vaillancourt, T., & Mercer, L. (2001). The consequences of childhood peer rejection. In: M. R. Leary (Ed.), *Interpersonal rejection* (pp. 213–247). New York, NY, US: Oxford University Press.
- Meyer, J. A., Mundy, P. C., Van Hecke, A. V., & Durocher, J. S. (2006). Social attribution processes and comorbid psychiatric symptoms in children with Asperger syndrome. *Autism, 10*(4), 383.
- Sherrill, C. (1993). Women with disabilities. In G. L. Cohen (Ed.), *Women in sport: Issues and controversies* (pp. 238–248). Thousand Oaks, CA: Sage Publications, Inc.
- Vickerstaff, S., Heriot, S., Wong, M., Lopes, A., & Dossetor, D. (2007). Intellectual ability, self-perceived social competence, and depressive symptomatology in children with high-functioning autistic spectrum disorders. *Journal of Autism and Developmental Disorders, 37*(9), 1647–1664.
- Weiss, J., Diamond, T., Demark, J., & Lovald, B. (2003). Involvement in Special Olympics and its relations to self-concept and actual competency in participants with developmental disabilities. *Research in Developmental Disabilities, 24*, 281–305.