ANXIETY AND AGGRESSION IN ADOLESCENTS WITH AUTISM

Anxiety and Aggression in Adolescents with Autism Spectrum Disorders Attending Mainstream Schools

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Statement of Originality

1. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository**, subject to the provisions of the Copyright Act 1968. **Unless an Embargo has been approved for a determined period.

2. The work in this thesis was carried out under the supervision of Dr Ami Eidels, Lecturer, University of Newcastle school of Psychology, and Mr Christopher Gregory, Senior Specialist Psychologist, Department of Family and Community Services.

3. I hereby certify that a section of the work embodied in this thesis includes a co-authored scholarly work of which I am a joint author. My supervisor's signature appears below attesting to my contribution to the joint scholarly work.

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Dr Ami Eidels

Abstract

Scope: There is a known strong association between autism spectrum disorders (ASDs) and anxiety. There is also a perceived but less well researched link between high-functioning autism (HFA) or Asperger's disorder and aggressive behaviour. HFA and Asperger's disorder are autism spectrum disorders where there is no comorbid intellectual disability. Adolescents with autism spectrum disorders have been identified as being at increased risk of early exit from schooling due to behavioural problems.

Purpose: The purpose of this research was to investigate the link between anxiety and aggression in adolescents with autism using self-report measures of anxiety and anger and teacher ratings of behaviour. Anger is a primary emotion that is expressed behaviourally as aggression or violence. There are two kinds of anger: reactive anger, which is the immediate response to feelings of fear, frustration or being threatened; and instrumental anger, which is more likely to be goal-directed and malicious. It was hypothesised that aggression in adolescents with autism is characterised by high scores on measures of reactive anger but not instrumental anger, and is related to high scores on measures of anxiety. This would have implications for school policies and procedures for the management and prevention of incidents of aggression by children with autism.

Methodology: This research is a correlational study comparing levels of anger, anxiety and aggression in adolescents with autism and in a control group of their typically developing peers matched for age and gender. The research was conducted in 12 high schools in the Hunter Central Coast region of New South Wales, with 105 students participating. Measures used were:

- *Revised Children's Manifest Anxiety Scale: Second Edition (RCMAS-2)*
- *Adolescent Anger Rating Scale (AARS)*
- *Student Behavior Survey (teacher report)*

Results: We found significant differences between the students with autism and their typically developing peers on each of the measures of anxiety and anger as well as on teacher-reported behaviour problems. Students with autism are more likely to be suspended from school than their peers. Regression analyses showed that social anxiety is a significant predictor of aggression for students with ASDs, but not for control students. At low levels of social anxiety, levels of physical aggression for ASD students and control group students were equally low. As social anxiety increased, physical aggression also increased for the ASD group but there was no change for the control group. While there was no significant difference in self-reported anger control between the ASD group and the control group, the relationship between anger control and physical aggression was different for the two groups. Differing levels of anger control did not affect physical aggression for the control group. For the ASD group, a high level of self-reported anger control skills was associated with low levels of physical aggression. At low and average levels of anger control, physical aggression was high.

Conclusions and Implications: Students with autism who attend mainstream high school report higher levels of anxiety and reactive anger than their peers, and are at higher risk of being suspended from school for aggressive behaviour. Students with better developed anger control engage in less physical aggression. This has implications for the screening of anxiety in school students, and particularly of those with autism spectrum disorders, the provision of specific interventions for managing anxiety and the development of anger management skills, and for appropriateness of suspension as a mandatory response to incidents of physical aggression in schools.

Keywords: autism, anxiety, anger, aggression, adolescents

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