Emotional Intelligence & Resiliency in Asperger’s Disorder

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Presentation Overview

• Overview & Significance of the Research
• Brief Review of Asperger’s Disorder & Research Constructs
• Research Protocol & Methodological Considerations
• Selected Research Findings: Emotional Intelligence & Resiliency
• Limitations and Implications
• Research in Progress
• Selected Publications & Presentations
Research Project Overview

- Investigation of social & emotional abilities in individuals with Asperger’s (AS)
  - to identify factors that promote resiliency and successful transitions
- Examine:
  - 1) psychological basis of social, emotional, and executive abilities in young adults with AS
  - 2) psychological protective and vulnerability factors associated with social, interpersonal, and personal adjustment (i.e., resiliency) in young adults with AS
Research Significance

- Limited research on social & emotional abilities that promote resiliency & successful life outcomes in individuals with AS
- No known previous research on EI and AS
- Young adults who experience challenges in social & emotional contexts also experience difficulties with successful life transitions
- Understanding predictors of, and buffers to, social & emotional challenges, & their relationship to developmental & adult outcomes is critically important
BRIEF REVIEW OF ASPERGER’S DISORDER & RESEARCH CONSTRUCTS
Asperger’s (AS) Disorder

- Autism Spectrum Disorder
- Significant and sustained impairment in social interactions
- Pragmatic and nonverbal communication difficulties
- Restricted, repetitive, and stereotyped patterns of behaviour, interests, and activities
  - Within the context of typical development
    - language
    - cognition
Resiliency

• Resilience: the process of how individuals cope successfully in the face of significant adversity or risk (Masten, 2001).

• Enhanced by protective factors: (Garmezy, 1985)
  – Individual attributes
  – Family qualities
  – Community resources
Executive Functions (EFs)

• Executive functioning
  - ability to adapt one’s behaviour based on changing environmental contingencies
  - includes cognitive functions involved in planning & guiding behavior to achieve a goal in an efficient manner

• Coordination of cognitive processes including (but not limited to):
  - planning
  - cognitive and behavioural flexibility
  - inhibition
  - working memory

(Roberts, Robbins, & Weiskrantz, 1998; Stuss & Knight, 2002)
Theory of Mind (ToM)

• ‘Mindreading’ or ‘Mentalizing’
  (Baron-Cohen, 1995)

• The ability to recognize that others have thoughts, feelings, beliefs, and perceptions different from our own
  (Astington, Harris, & Olson, 1988; Happe & Frith, 1996).
Emotional Intelligence (EI)

2 Distinct Definitions/Models

- **Ability: MSCEIT** (Mayer, Salovey, & Caruso, 1990)
  a) accurately perceive emotions in oneself and others;
  b) use emotions to facilitate thinking;
  c) understand emotional meanings;
  d) manage emotions.
  - Performance tasks

- **Trait: BarOn EQ-i:S** (Bar-On, 1997)
  Broad, yet interdependent, domains of:
  a) intrapersonal skills,
  b) interpersonal skills,
  c) adaptability,
  d) stress management,
  e) general mood
  - Self-report
RESEARCH PROTOCOL & METHODOLOGICAL CONSIDERATIONS
Methodology

• 35 young adults (aged 16 to 21 years) with AS from schools and clinics in MB and AB
• 35 typically developing participants (data collection will be complete mid-November)
• Parents, teachers
• Informed consent secured
• Screening with parent measures
• Participants attended on site labs and completed in one or two sessions
Measures

• Inclusion
  – Background Questionnaire
  – Krug Asperger Disorder Index
  – Wechsler Abbreviated Scale of Intelligence

• Emotional Intelligence
  – MSCEIT
  – Bar-On EQ-i:S

• Resiliency & Satisfaction with Life
  – Resiliency Scale for Adolescents
  – Satisfaction with Life Scale

• Autism Spectrum
  – Gilliam Autism Rating Scale, 2nd Ed
  – Krug Asperger Disorder Index
Measures

• Executive Function
  – Selected subtests from Delis Kaplan Executive Function System
  – Wisconsin Card Sorting Task
  – Cambridge Neuropsychological Test Automated Battery
  – Iowa Gambling Task

• Theory of Mind
  – Reading the Mind in the Eyes Test-Revised (Baron-Cohen, et al., 1997)

• Social and Adaptive skills
  – Behaviour Assessment System for Children (2nd Ed.)
SELECTED RESEARCH FINDINGS
Emotional Intelligence & Asperger’s (AS) Disorder

Emotional intelligence, theory of mind & executive functions as predictors of social outcomes
Key Findings

- AS group had lower scores (than norms) on the trait test, but not the ability test
- ‘Understanding Emotions’ (Ability)
  - one SD above norm group
  - evidence of strength
- EQ (trait) correlated strongly with self reports of social stress and poor interpersonal relationships
- EQ (trait) correlated moderately with adaptive skill ratings by parents
Key Findings

- Trait and Ability EI predicted 55% of the variance for interpersonal skills
- Theory of mind and trait EI together significantly predicted 33% of variance for social stress
- Adding EFs did not improve predictions for social outcomes
Emotional Intelligence & Resiliency in AS

Brief Review of Findings: Publication in the Canadian Journal of School Psychology
Resiliency: Key Findings

Relative to the standardization sample, individuals with AS demonstrated:

Significantly low scores in the following areas:
- empathy, social responsibility, and interpersonal relationships, as well as optimism and happiness

Slightly below average scores in the competencies, skills and facilitators underlying:
- self-regard, emotional self-awareness, assertiveness, independence, and self-actualization; stress tolerance and impulse control; and flexibility and problem solving
Resiliency: Key Findings

- Individuals with AS appear to experience difficulties with emotional resiliency (i.e., tend to be overly sensitive and show less capacity to recover from emotionally-laden situations)

- Parents rated our participants as highly resistant to change, developmentally immature in daily living skills, and unable to use internal and external support systems to alleviate stress and overcome adversity

- Total EQ, Stress Management, and Intrapersonal skills correlated significantly with self- and parent-report scales tapping emotional reactivity and self-control, as well as self-reported interpersonal relationships
Limitations & Implications
Limitations

- Small sample size
- No random selection
- Self-report
- Self and parent referred
- Co-morbidities included
- Different clinicians involved in the diagnostic process
Emerging research suggests that trait-based emotional intelligence can be significantly enhanced within a matter of a few weeks, as a result of training.

- offers hope for altering the risk trajectory.

(BarOn, 2003; Hansen, 2005)
Broader Research Implications

- Understanding social & emotional strengths and areas of need has implications for:
  - Individualization of assessment and intervention

- Identification of predictive factors for resiliency promotion has the potential to:
  - Build and strengthen protective factors within youth with ASD to improve outcomes
  - Inform support services for youth with ASD, their families, & their communities
  - Guide government policy & subsequent funding initiatives
Research in Progress
Research in Progress

• Danielle Brady: Executive Specificity in Young Adults with AS: A Neuropsychological Perspective

• Adam McCrimmon: Verbal and Nonverbal Correlates of Young Adults with AS

• Data collection complete in November, 2009
References & Selected Publications & Presentations
References


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