Title: Cognitive behavior therapy to treat anxiety among children with autism spectrum disorders: a systematic review
Authors: Kester K. R.; Lucyszyn J. M.
Abstract: Background: Children with an autism spectrum disorder (ASD) are at risk for developing co-morbid mental health disorders, with anxiety being the most common. Anxiety symptoms significantly interfere with a child's ability to participate in school and community settings. Over the past 17 years, there has been an increase in empirical evidence of Cognitive Behavioral Therapy (CBT) as a treatment for anxiety in children with ASD. The purpose of this systematic review was to evaluate this body of research to determine whether CBT could be classified as an empirically supported treatment (EST) for this population. A secondary purpose was to identify the extent to which schools have been involved in this line of research. Method: A systematic review of group comparison and single case research was conducted. Each study was evaluated using quality indicators recommended by the Council for Exceptional Children (CEC), including an evaluation of study effects. Information regarding school involvement was also extracted. Results: A total of 30 studies were included in the analysis. Results indicated that modified CBT interventions for children with ASD met CEC criteria for an EST. Among the studies evaluated, only two (6%) involved a school setting in which educators participated in the intervention. Conclusion: The results of this review offer empirically support for modified CBT for children with autism as an EST. Findings also indicate that little research has included the school context when implementing CBT treatments for children with autism and anxiety. Implications for dissemination and future research are presented.
Publication date: 2018
Address: Joseph M. Lucyszyn, Department of Educational and Counseling Psychology and Special Education, Faculty of Education, University of British Columbia, 2125 Main Mall, Vancouver, BC, V6T1Z4, Canada; email: joe.lucyszyn@ubc.ca
Keywords: Cognitive behavioural therapy; Anxiety; Children; Autism spectrum disorders; Systematic review; Support; Treatment; Evidence based practice
CID: 47547

Title: Emotion regulation in autism: reappraisal and suppression interactions
Authors: Cai R. Y. et al
Source: Autism, 2018, May 23 [Epub ahead of print]
Abstract: Emotion regulation has been proposed to be a transdiagnostic factor in the development and maintenance of psychopathology in the general population, yet the nature of the relationships between emotion regulation strategy use and psychological well-being has not been comprehensively explored in individuals with autism spectrum disorder (ASD). The aim of this study was to assess how the individual differences in self-reported emotion regulation strategy use relate to levels of both positive and negative psychological well-being. In total, 56 individuals with ASD aged 14–24 years (Mage = 18.15; SDage = 2.30) completed Emotion Regulation Questionnaire, Diagnostic and Statistical Manual of Mental Disorders-5 Generalized Anxiety Disorder Dimensional Scale, Patient Health Questionnaire-9, Warwick-Edinburgh Mental Well-being Scale and Autism-Spectrum Quotient – Short. Individuals were grouped into four clusters based on their Emotion Regulation Questionnaire subscale scores. Individuals in the high suppression and low reappraisal group expressed higher depressive symptoms and lower positive well-being when compared with the low suppression and high reappraisal group. Interestingly, individuals who self-reported using both high suppression and reappraisal expressed relatively high positive well-being and low depression symptoms. We suggest that the maladaptive effect of habitual suppression usage may be buffered by the habitual use of reappraisal, and this interaction between adaptive and maladaptive emotion regulation strategy use has clinical implications.
Publication date: 2018
Address: Amanda L Richdale, Olga Tennison Autism Research Centre, School of Psychological Science, La Trobe University, Melbourne, VIC 3086, Australia; email: a.richdale@latrobe.edu.au
Download from: If you are an NAS employee you can read this journal online from your NAS computer.
Keywords: Emotion regulation; Autism spectrum disorders; Interaction; Anxiety; Depression
CID: 47544

Title: The myth of the naughty child
Source: Connect (Nasen), 2018, Issue 9, pp. 22-23
Abstract: Mental ill health in children can manifest as behavioural and conduct problems as well as emotional issues such as depression and anxiety. Judging behaviours negatively with simplistic labels like 'naughty' only creates the potential for a ticking time bomb of adult mental health problems which will continue to impact upon the lives of one in four of all adults.
Publication date: 2018
Title: The association between emotional and behavioral problems in children with autism spectrum disorder and psychological distress in their parents: a systematic review and meta-analysis

Authors: Yorke I. et al
Source: Journal of Autism and Developmental Disorders, 2018, May 18 [Epub ahead of print]
Abstract: This review (Prospero Registration Number: CRD42017057915) aimed to systematically identify and summarize existing research on the relationship between additional emotional and behavioural problems (EBP) in children with autism, and parenting stress (PS) and mental health problems (MHP) in their parents. Sixty-seven studies met criteria for inclusion in the review, 61 of which were included in the meta-analysis. Pooled correlation coefficients were in the low to moderate range ($r^2 = -0.21, 95\% CI = -0.21 to 0.43$). Some evidence for moderation by measurement characteristics was found. Narrative review of concurrent adjusted associations showed some evidence for shared relationships with other factors, most notably ASD severity and parent perception of own parenting. Longitudinal studies showed mixed evidence for bidirectional predictive relationships between child EBP and parent psychological distress variables. This review (Prospero Registration Number: CRD42017057915) aimed to systematically identify and summarise existing research on the relationship between additional emotional and behavioural problems (EBP) in children with autism, and parenting stress (PS) and mental health problems (MHP) in their parents. Sixty-seven studies met criteria for inclusion in the review, 61 of which were included in the meta-analysis. Pooled correlation coefficients were in the low to moderate range ($r^2 = -0.21, 95\% CI = -0.21 to 0.43$). Some evidence for moderation by measurement characteristics was found. Narrative review of concurrent adjusted associations showed some evidence for shared relationships with other factors, most notably ASD severity and parent perception of own parenting. Longitudinal studies showed mixed evidence for bidirectional predictive relationships between child EBP and parent psychological distress variables.

Publication date: 2018
Address: Isabel Yorke, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London; email: isabel.yorke@kcl.ac.uk
Keywords: Emotional and behavioural disorders; Children; Autism spectrum disorders; Psychological aspects; Distress; Parents; Systematic review; Meta-analysis; Psychopathology; Mental health; Parental stress; Stress
CID: 47534

Title: Interoceptive accuracy in youth with tic disorders: exploring links with premonitory urge, anxiety and quality of life

Authors: Pile V. et al
Source: Journal of Autism and Developmental Disorders, 2018, May 18 [Epub ahead of print]
Abstract: Aberrant interoceptive accuracy could contribute to the co-occurrence of anxiety and premonitory urge in chronic tic disorders (CTD). If it can be manipulated through intervention, it would offer a transdiagnostic treatment target for tics and anxiety. Interoceptive accuracy was first assessed consistent with previous protocols and then reassessed following an instruction attempting to experimentally enhance awareness. The CTD group demonstrated lower interoceptive accuracy than controls but, importantly, this group difference was no longer significant following instruction. In the CTD group, better interoceptive accuracy was associated with higher anxiety and lower quality of life, but not with premonitory urge. Aberrant interoceptive accuracy may represent an underlying trait in CTD that can be manipulated, and relates to anxiety and quality of life.

Publication date: 2018
Address: Sally Robinson, Tic and Neurodevelopmental Movements Service (TANDeM), Children’s Neurosciences Centre, Evelina London Children’s Hospital, Guys and St Thomas’ NHS Foundation Trust, St Thomas’ Hospital, London; email: sally.robinson@gstt.nhs.uk
Keywords: Young people; Tics; Anxiety; Quality of life; Tourette syndrome; Perception; Awareness
CID: 47532

Title: Managing anxiety around unexpected changes

Authors: Howell S.
Abstract: Sometimes the structure of your day can be disrupted, plans may change or public transport is late. Sudden or unexpected changes can cause high levels of panic and stress in autistic people. Having some strategies to cope can help manage the anxiety around these changes and this article discusses some of these.

Publication date: 2018
Keywords: Anxiety; Stress; Coping
Availability: Available from the NAS Information Centre
Title: Characterising the relationship between theory of mind and anxiety in children with Autism Spectrum Disorder and typically developing children
Authors: Lei J.; Ventola P.
Abstract: Background: Social communication impairments associated with Autism Spectrum Disorder (ASD) is a multi-faceted phenomenon that encapsulates a broad range of skills with Theory of Mind (ToM) as a key component. Early Theory of Mind (ToM) skills, such as joint attention, typically develop during infancy and provide a foundation for the co-emergence of affect regulation via social referencing. Children with Autism Spectrum Disorder (ASD) demonstrate delays and impairments in the development of ToM, and up to 40% of children with ASD also experience co-occurring symptoms of anxiety and poor affect regulation. Method: Using parent report, this cross-sectional study aimed to characterise the relationship between ToM competency and anxiety, and explore how specific ToM deficits may confer vulnerability to anxiety in children (4–8 years old) with ASD. Results: Early ToM skills, such as joint attention and social referencing, mediated the relationship between broader social communication impairments and anxiety symptom severity in children with ASD. Conclusions: Increasing competency of early ToM skills might provide additional therapeutic benefits for clinical interventions targeting anxiety in children with ASD.
Publication date: 2018
Address: Pamela Ventola, Child Study Center, Yale University, New Haven, CT 06519, USA; email: pamela.ventola@yale.edu
Keywords: Theory of mind; Anxiety; Children; Autism spectrum disorders; Joint attention
Availability: Available from the NAS Information Centre
CID: 47525
Classification Journal Collection

Title: Acceptability and caregiver-reported outcomes for young children with autism spectrum disorder whose parents attended a preventative population-based intervention for anxiety: a pilot study
Authors: Bischof N. L. et al
Source: Autism Research, 2018, May 15 [Epub ahead of print]
Abstract: This pilot study explored acceptability to parents and outcomes for children of a preventive intervention for anxiety problems in pre-schoolers with autism spectrum disorder (ASD) who were an identified sub-group within a population-based randomised trial of the Cool Little Kids parenting group programme. The population trial included 545 temperamentally inhibited pre-schoolers recruited across eight economically diverse areas of Melbourne, Australia. Within this sample, 26 parents reported that their child had received an ASD diagnosis. Trial measures included baseline inhibited temperament and developmental problems, post-intervention feedback on the programme, and caregiver-reported child mental health outcomes (anxiety diagnoses and internalising symptoms) at 1- and 2-year follow-up. Sample retention for the children with ASD over 2 years was strong (92%). At follow-up, fewer intervention than control children with ASD had anxiety disorders after 1 year (% (n): 25 (3) vs. 77 (10), P = .028) and separation anxiety symptoms after 2 years (M (SD): 4.22 (2.68) vs. 9.38 (5.91), P = .017). Similar effects favouring the intervention group were apparent across other child emotional outcome measures but without statistical significance in this small sample. Parents of the children with ASD reported that Cool Little Kids was "quite useful" in relation to their child's anxiety but also gave feedback that they would appreciate some tailoring of programme content to the context of ASD. These pilot findings suggest Cool Little Kids may be helpful for reducing comorbid anxiety in pre-schoolers with ASD. Further research is warranted to develop an ASD-specific adaptation which can be trialled with a larger sample of children with confirmed ASD diagnosis.
Publication date: 2018
Address: Jordana K. Bayer, School of Psychology and Public Health, La Trobe University, Melbourne, VIC, Australia; email: j.bayer@latrobe.edu.au
Download from: If you are an NAS employee you can read this journal online from your NAS computer. Click here for the username and password.
Keywords: Acceptability; Reports; Outcome; Young people; Children; Autism spectrum disorders; Parents; Population-based study; Intervention; Anxiety; child; Autism; Internalizing; Prevention; Early intervention
CID: 47520

Title: A preliminary evaluation of metacognitive beliefs in high functioning children with autism spectrum disorder
Authors: Campbell B. et al
Source: Advances in Autism, 2018, Vol. 4(2), pp. 73–84
Abstract: Purpose: Metacognitive beliefs and processes have been found to perpetuate anxiety and depression in youth and adults. However, the presence of metacognitive beliefs in children with autism spectrum disorder is somewhat unclear and has received limited research attention to date. The purpose of this paper is to explore
metacognitive beliefs in children with autism and associations with anxiety and depression. Design/methodology/approach: In total, 23 high functioning participants (17 male and 6 female) between the ages of 8 and 12 (M=10.38) diagnosed on the autism spectrum completed the study. Participants completed the Revised Children’s Scale of Anxiety and Depression and the Metacognitions Questionnaire for Children. Findings: Correlation analyses revealed that positive and negative metacognitive beliefs were found, as hypothesised, to be prevalent in this sample. Originality/value: Despite methodological limitations, this is one of the first research evaluations to provide evidence for metacognitive beliefs in high functioning children with autism and comorbid anxiety or low mood.

**Publication date:** 2018  
**Address:** Lee Kannis-Dymand, Sunshine Coast Mind & Neuroscience – Thompson Institute, School of Social Sciences, FABL, University of the Sunshine Coast, Queensland, Australia; email: Lkannis@dus.edu.au  
**Download from:** If you are an NAS employee you can read this journal online from your NAS computer.  
**Keywords:** Evaluation; Beliefs; High functioning autism; Children; Autism spectrum disorders; Anxiety; Depression  
**Availability:** Available from the NAS Information Centre  
**CID:** 47507  
**Classification** Journal Collection

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**Title:** A phenomenological approach to diagnosing psychosis in autism spectrum disorder and intellectual disability: a case series  
**Authors:** Rai R. et al  
**Source:** Advances in Autism, 2018, Vol. 4(2), pp. 39-48  
**Abstract:** Purpose: The diagnosis of psychosis in individuals with autism spectrum disorder (ASD) poses a unique clinical challenge. The presence of intellectual disability (ID) further complicates the diagnostic picture. Reliable and timely diagnosis of psychosis in such individuals minimises the duration of untreated psychotic symptoms and the subsequent impact on the quality of life of the patients concerned. The paper aims to discuss this issue. Design/methodology/approach: The authors present four patients with psychosis, ASD and ID, who have received care within forensic mental health and ID settings. These examples demonstrate the interaction between these conditions, as well as issues pertaining to diagnosis and management. Findings: In all four patients, sustained use of antipsychotic medication was objectively associated with an improvement in psychotic symptoms and quality of life. In instances where autistic phenomena were accentuated upon development of psychosis, such features returned to the baseline levels evident prior to the onset of psychosis. Practical implications: The discussion and related case examples could improve the understanding of the possibility of psychosis in individuals with ASD and ID, and increase awareness of this diagnostic possibility among healthcare professionals. Originality/value: This is the first published case series illustrating the challenges of diagnosing psychosis in individuals with ASD and ID.

**Publication date:** 2018  
**Address:** Verity Chester, Department of Psychiatry, Partnerships in Care Learning Disability Services, St Johns House, Norfolk and Norwich Medical School, University of East Anglia, Norwich; email: veritychester@priorygroup.com  
**Download from:** If you are an NAS employee you can read this journal online from your NAS computer.  
**Keywords:** Phenomenology; Approaches; Diagnosis; Psychosis; Autism spectrum disorders; Intellectual disability; Case studies; Mental health; Learning disability; Schizophrenia; autism spectrum conditions; Comorbidity  
**Availability:** Available from the NAS Information Centre  
**CID:** 47503  
**Classification** Journal Collection

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**Title:** Predictors of quality of life for autistic adults  
**Authors:** Mason D. et al  
**Source:** Autism Research, 2018, May 07 [Epub ahead of print]  
**Abstract:** Research with adults on the autism spectrum is as yet limited in scope and quality. The present study describes quality of life (QoL) of a large sample of autistic adults in the UK and investigates characteristics that may be predictive of QoL. A total of 370 autistic adults from the Adult Autism Spectrum Cohort-UK (ASC-UK) completed the WHOQoL-BREF, and the Social Responsiveness Scale (SRS, autism symptom severity), along with the ASC-UK registration questionnaire giving information on mental health and their life situation. QoL for autistic adults was lower than for the general population for each WHOQoL domain. Younger participants reported higher QoL than older participants in psychological and environment domains. Males reported higher physical QoL than females, and females reported higher social QoL than males. Significant positive predictors of QoL were: being employed (physical QoL), receiving support (social and environment QoL), and being in a relationship (social QoL). Having a mental health condition and higher SRS total score were negative predictors of QoL across all four domains. Autistic adults require access to effective mental health interventions, and informal and formal support for their social difficulties, to improve their quality of life.

**Publication date:** 2018  
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**Download from:** https://onlinelibrary.wiley.com/doi/full/10.1002/aur.1965
Title: Neurodevelopmental disorders in prison inmates: comorbidity and combined associations with psychiatric symptoms and behavioural disturbance
Authors: Young S, et al
Abstract: The identification and management of inmates with neurodevelopmental disorders (ND) has been insufficiently addressed in the literature. We estimated the proportion of cases with Attention deficit/hyperactivity disorder (ADHD), Autism spectrum disorder (ASD) and Intellectual disability (ID) in prison, their comorbidity, and associations with disruptive behaviours and with psychiatric symptoms. Further, we examined the role of coexisting ND on psychiatric symptoms and attitudes toward violence. All 390 male inmates underwent an assessment that included the Diagnostic Interview for AD/HD in Adults 2.0, the Autism Quotient, the Learning Disability Screening Questionnaire, the Brief Symptom Inventory (BSI), and measures of disruptive behaviours and attitudes towards violence. The percentage of cases with ADHD, ASD and ID were 25%, 9% and 9%. Inmates with ADHD and those with ID had significantly higher levels of disruptive behaviours. The combined ADHD/ASD group had significantly higher scores on global severity symptoms than either ADHD or ASD only. Meanwhile, the combined ADHD/ID group had significantly higher scores of behavioural disturbance than the ADHD-only group. Our findings show the extent of ND in prison, their inter-relations and associations with further mental health problems. Vulnerabilities conferred by ND within the criminal justice system should be addressed via interventions and preventative strategies.
Publication date: 2018
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Keywords: Neurodevelopmental disorders; Prison; Comorbidity; Psychiatric disorders; Symptoms; Behaviour; Attention deficit hyperactivity disorder; Autism; Intellectual disability
CID: 47484
Classification Journal Collection

Title: Older adults with autism spectrum disorders in Sweden: a register study of diagnoses, psychiatric care utilization and psychotropic education of 601 individuals
Authors: Nylander L, et al
Source: Journal of Autism and Developmental Disorders, 2018, Apr 16 [Epub ahead of print]
Abstract: In a Swedish sample of persons eligible for disability services and aged 55 years or older in 2012, persons (n = 601) with autism spectrum disorder diagnoses registered in specialist care were identified. Register data concerning diagnoses of other psychiatric disorders, psychiatric care, and psychiatric medication were reviewed. More than 60% had been in contact with psychiatric care. The majority had no intellectual disability (ID) diagnosis recorded during the study period. Apart from ID, affective disorders, anxiety and psychotic disorders were most commonly registered; alcohol/substance abuse disorders were uncommon. Psychotropic drug prescriptions were very common, especially in the ID group. Professionals need awareness of this vulnerable group; studies concerning their life circumstances and service requirements should be conducted.
Publication date: 2018
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Keywords: Older persons; Adults; Autism spectrum disorders; Sweden; Diagnosis; Care; Psychotropic drugs; Medication; Psychiatry
CID: 47444

Title: Treatment utilization by adults with autism and co-occurring anxiety or depression
Authors: Maddox B. B, et al
Abstract: Background: While a growing body of research suggests that talk therapies can reduce anxiety and depression in adults with autism spectrum disorder (ASD), we know little about what community treatment for these disorders looks like for them. The present study investigated whether treatment utilization differs between adults with and without ASD who have anxiety or depression. Method: Using Pennsylvania Medicaid claims data, adults aged 18–65 years diagnosed with ASD and depression or anxiety (n = 268) were matched 1:4 to adults with depression or anxiety disorder without ASD (n = 1072). Chi-square tests and generalised linear models were used to estimate differences in diagnoses and psychiatric treatment between groups. Results: While the proportion of people prescribed benzodiazepine and antidepressants did not differ between groups, the ASD group had more days per month prescribed for all medications. Adults with ASD also were more likely to be prescribed multiple medications concurrently and to use case management. Adults without ASD were more likely to receive talk therapy for anxiety/depression. Among those receiving talk therapy, adults with ASD averaged more individual visits per month. Conclusions: Findings suggest that therapists may need more session time for adults with ASD, although it is
unclear if this time is dedicated to anxiety or depression treatment. The greater use of psychotropic medications among adults with ASD may suggest unresponsiveness to the talk therapy they receive or greater clinical complexity.

Publication date: 2018
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Keywords: Treatment; Adults; Autism spectrum disorders; Anxiety; Depression; Therapy
Availability: Available from the NAS Information Centre
CID: 47440
Classification: Journal Collection