

Research Update on Challenging Behaviour – Summer 2008

The following is a necessarily subjective selection of recent reading in the field of challenging behaviour. It includes two major multi site studies, one evaluating the effect of psychotropic medication on challenging behaviour (4) and another evaluating the impact of person centred planning (9). Other themes in this selection include positive behaviour support in the family (3, 7), hyperarousal arousal associated with autism (1), a setting event assessment tool from Ted Carr (2), new data on the persistence of challenging behaviour (6), life story analysis with people with self injurious behaviour (5) and Irish data on long term outcomes of behavioural intervention for people with severe challenging behaviour (8).

This is the first in a regular selection from the challenging behaviours literature. If anything interesting comes your way, please let me know at bmcclean@indigo.ie.

1. Cardiovascular Arousal in Individuals With Autism

Matthew S. Goodwin; June Groden; Wayne F. Velicer ; Lewis P. Lipsitt ; M. Grace Baron; Stefan G. Hofmann ; Gerald Groden

Focus on Autism and Other Developmental Disabilities, Vol. 21, No. 2, 100-123 (2006)

Despite the hypothesized link between arousal and behaviour in persons with autism, there is a lack of idiographic research that directly assesses arousal responses to novel stimuli or social situations in this population. The current study used heart rate as a measure of sympathetic activity to compare arousal responses to the presentation of potentially stressful situations in five persons with autism and five age- and sex-matched typically developing individuals. Findings revealed that the group with autism showed significant responses to stressors only 22% of the time compared to the typically developing group, which showed significant responses 60% of the time. Interpretation of these results and methodological considerations for future research on arousal in persons with autism are discussed.

2. A contextual assessment inventory for problem behaviour: initial development.

Michelle McAtee; Edward G. Carr; Christine Schulte.

Journal of Positive Behaviour Interventions Vol 6 No 3, 2004

Problem behaviour is a primary barrier to successful community inclusion for people with developmental disabilities and therefore a major priority for intervention efforts. Recently, researchers and clinicians have begun to focus on the systematic assessment of a broad range of contextual variables that purportedly affect problem behaviour. In the study presented in this article, the authors began developing a comprehensive, user-friendly inventory to aid primarily in the initial assessment of contextual variables and secondarily in identification of factors relevant to enhancing the reliability of contextual assessment. Forty community residence staff completed the Contextual Assessment Inventory for 20 adults with developmental disabilities. Results indicated that the CAI was efficient, comprehensive, and comprehensible. A high proportion of its items had significant test-retest reliability, but only a modest proportion had significant interrater reliability. Pragmatic reasons for lower interrater reliability are explored, and research issues pertaining to establishing the validity of contextual inventories, enhancing their reliability, and extending their use to planning interventions are discussed.

3. Recapturing Desired Family Routines: A Parent–Professional Behavioural Collaboration

Pamelazita Buschbacher, Lise Fox, and Shelley Clarke

Research & Practice for Persons with Severe Disabilities 2004, Vol. 29, No. 1, 25–39

Children with complex disabilities such as autism spectrum disorders and Landau Kleffner syndrome often lack means to participate in everyday family routines. Serious problem behaviours may result from their challenges in responding to and initiating communicative interactions. These behaviours can change routine family activities such that the child and other family members (parents, siblings) are dissatisfied with these routines. The purpose of this study was to examine the use of functional assessment and positive behaviour support carried out in equal partnership with family members to reduce a child's challenging behaviour and increase his or her engagement in

three family-chosen home activities. A multiple-baseline design across routines was used to determine the effectiveness of intervention in reducing challenging behaviour and increasing engagement in the routines. Additionally, the study explored outcomes for positive and negative parent–child interactions within the three – targeted routines. Following parent implementation of positive behaviour support, results indicated (1) reductions in challenging behaviour, (2) increases in the child’s engagement, (3) increases in positive parent–child interactions, (4) decreases in negative parent–child interactions, and (5) increased number of days that the child slept through the night. Social validation by parent observers provided additional support for the effect of the intervention on the child’s behaviour and child–parent interaction.

4. Risperidone, haloperidol, and placebo in the treatment of aggressive challenging behaviour in patients with intellectual disability: a randomised controlled trial

Peter Tyrer, Patricia C Oliver-Africano, Zed Ahmed, Nick Bouras, Sherva Cooray, Shoumitro Deb, Declan Murphy, Monica Hare, Michael Meade, Ben Reece, Kofi Kramo, Sabyasachi Bhaumik, David Harley.

Lancet 2008; 371: 57–63

Background Aggressive challenging behaviour is frequently reported in adults with intellectual disability and it is often treated with antipsychotic drugs. However, no adequate evidence base for this practice exists. We compared flexible doses of haloperidol (a typical, first-generation antipsychotic drug), risperidone (an atypical, second-generation antipsychotic), and placebo, in the treatment of this behaviour.

Method 86 non-psychotic patients presenting with aggressive challenging behaviour from ten centres in England and Wales, and one in Queensland, Australia, were randomly assigned to haloperidol (n=28), risperidone (n=29), or placebo (n=29). Clinical assessments of aggression, aberrant behaviour, quality of life, adverse drug effects, and carer uplift (positive feelings about the care of the disabled person) and burden, together with total costs, were recorded at 4, 12, and 26 weeks. The primary outcome was change in aggression after 4 weeks’ treatment, which was recorded with the modified overt aggression scale (MOAS). Analysis was by intention to treat.

Findings 80 patients had adherence of 80% or more to prescribed drug. Aggression decreased substantially with all three treatments by 4 weeks, with the placebo group showing the greatest change (median decrease in MOAS score after 4 weeks=9 [95% CI 5–14] for placebo, 79% from baseline; 7 [4–14] for risperidone, 58% from baseline; 6.5 [5–14] for haloperidol, 65% from baseline; p=0.06). Furthermore, although no important differences between the treatments were recorded, including adverse effects, patients given placebo showed no evidence at any time points of worse response than did patients assigned to either of the antipsychotic drugs.

Interpretation Antipsychotic drugs should no longer be regarded as an acceptable routine treatment for aggressive challenging behaviour in people with intellectual disability.

5. Learning disability against itself: the self-injury/self harm conundrum

Lovell, A., 2007

British Journal of Learning Disabilities, 36, p 109-121

The article begins with a critical look at the existing literature explaining self-injury by people with significant learning disabilities and self-harm by those with mental health difficulties. It suggests that the different conceptualizations are perhaps less distinct than might initially appear, and that behavioural similarities between those with and those without learning disabilities might be greater than previously believed. The notion of ‘career’ is presented as a means of explaining the process by which people with learning disabilities engage in self-injury and subsequently integrate it into their lives. Data are subsequently presented from a number of life histories of people with learning disabilities to illustrate the development of self-injury over the life course. The findings of the research indicate that the development and consolidation of self-injury over time conforms to the expectations of a career and provides reason to question the contemporary separate categorization of the behaviour of people with

significant learning disabilities. The evidence suggests that the relationship between self-injury and learning disability is best explicable in terms of its intelligibility, rational behaviour in the context of the individual's life.

6. Persistence of challenging behaviours in adults with intellectual disability over a period of 11 years

V. Totsika, S. Toogood, R. P. Hastings & S. Lewis

Journal of Intellectual Disability Research Volume 52 (5) 446–457 May 2008

Background Challenging behaviours in people with an intellectual disability (ID) often develop early and tend to persist throughout life. This study presents data on the chronicity of challenging behaviours in adults with ID over a period of 11 years, and explores the characteristics of people with persistent serious behaviour problems.

Method Support staff provided data on 58 adults living in a long-term residential facility using an interview survey schedule assessing challenging behaviours in 1992 and 2003.

Results Participants presenting with serious physical attacks, self-injury and frequent stereotypy were the most likely to persist in these behaviours over time. These behaviours were characterised by high persistence percentages and associations over time. However, the earlier presence of serious challenging behaviours did not significantly affect the likelihood of serious challenging behaviours in 2003. Individuals with persisting behaviour problems differed from those who did not present serious behaviour problems on the basis of their younger age, increased mobility, and decreased sociability and daily living skills in 1992.

Conclusions Estimates of persistence for challenging behaviours are affected by the statistics chosen to represent stability. The apparent persistence of serious challenging behaviours highlights the need to identify the factors related to maintenance of these behaviours over time. The participant characteristics and adaptive behaviours identified in the present study were not consistently related to the persistence of challenging behaviours. Therefore, other factors, including environmental characteristics, are likely to be related to challenging behaviour persistence.

7. Family Implementation of Positive Behaviour Support for a Child With Autism: Longitudinal, Single-Case, Experimental, and Descriptive Replication and Extension

Joseph M. Lucyshyn, Richard W. Albin, Robert H. Horner, Jane C. Mann, James A. Mann, Gina Wadsworth

Journal of Positive Behaviour Interventions Volume 9, Number 3, Summer 2007, pages 131–150

Abstract: This study examined the efficacy, social validity, and durability of a positive behaviour support (PBS) approach with the family of a girl with autism and severe problem behaviour. The study was conducted across a 10-year period beginning when the child was 5 years old. A multiple baseline across family routines design evaluated the functional relationship between parent implementation of a PBS plan and longitudinal improvements in child behaviour and successful participation in routines. Daily indicator behaviour data allowed us to assess generalized improvements in child behaviour. An inventory of monthly community activities allowed us to assess changes in child quality of life. In addition, social validity and contextual fit were assessed. Results document that the intervention was associated with a 75% reduction in problem behaviour, and that the effects were maintained across a 6-month to 7-year follow-up period. Associated outcomes included generalized improvements in child behaviour and enhanced community activity patterns. Parents also rated the social validity and contextual fit of the approach highly. Results verify the efficacy and social validity of the approach and offer preliminary descriptive evidence of its durability. Contributions to the literature, implications, and future directions are discussed.

8. An evaluation of positive behavioural support for people with very severe challenging behaviours in community-based settings.

Brian McClean, Ian M Grey, Margaret McCracken

Journal of Intellectual Disabilities 2007 Sep ;11 (3):281-301

This study employs a multiple baseline across individual design to describe positive behaviour support for five people in community settings. The individuals represent all people with intellectual disability residing in one county with long-standing challenging behaviour resulting in serious physical injury. Five types of outcome are

presented: rates of behaviour, rates of medication, psychiatric symptomatology, quality of life and revenue costs. The systems of support required to maintain outcomes and develop real lifestyles include behaviour support planning, mental health review, on-call intensive support and emergency respite care. Behaviours reduced to near-zero levels following implementation of positive behaviour support and improvements were sustained over 24 months. The use of psychotropic medications reduced by 66 percent over the same period. Quality of Life Questionnaire scores improved significantly for three of the five participants. The results are discussed in the context of a framework for supporting people with severe challenging behaviours in the community.

9. Longitudinal analysis of the impact and cost of person-centered planning for people with intellectual disabilities in England

Robertson, J., Emerson, E., Hatton, C., Elliott, J., McIntosh, B., Swift, P., Krinjen-Kemp, E., Towers, C., and Romeo, R., and Knapp, M. Sanderson, H., Routledge, M., Oakes, P. and Joyce, T.

American Journal On Mental Retardation, 2006 111 (6). pp. 400-416.

Person-centered planning is central to United Kingdom policies regarding the support of people with intellectual disabilities. However, little evidence exists on the impact or cost of introducing person-centered planning. We examined the efficacy, effectiveness, and costs of introducing person-centered planning for 93 people with intellectual disabilities over 2 years across four localities in England. A person-centered plan was successfully developed for 65 people. Little change was apparent prior to introducing person-centered planning. After its introduction, modest positive changes were found in the areas of social networks; contact with family; contact with friends; community-based activities; scheduled day activities; and choice. The direct training and support cost of introducing person-centered planning was \$1,202 per participant; indirect costs were negligible.