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Problem behaviours and symptom dimensions of psychiatric disorders in adults with intellectual disabilities: An exploratory and confirmatory factor analysis

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ABSTRACT

Background: The limited evidence on the relationship between problem behaviours and symptoms of psychiatric disorders experienced by adults with intellectual disabilities leads to conflict about diagnostic criteria and confused treatment. This study examined the relationship between problem behaviours and other psychopathology, and compared the predictive validity of dimensional and categorical models experienced by adults with intellectual disabilities.
Methods: Exploratory and confirmatory factor analyses appropriate for non-continuous data were used to derive, and validate, symptom dimensions using two clinical datasets (n = 457; n = 274). Categorical diagnoses were derived using DC-LD. Severity and 5-year longitudinal outcome was measured using a battery of instruments.
Results: Five factors/dimensions were identified and confirmed. Problem behaviours were included in an emotion dysregulation-problem behaviour dimension that was distinct from the depressive, anxiety, organic and psychosis dimensions. The dimensional model had better predictive validity than categorical diagnosis.
Conclusions: International classification systems should not include problem behaviours as behavioural equivalents in diagnostic criteria for depression or other psychiatric disorders. Investigating the relevance of emotional regulation to psychopathology may provide an important pathway for development of improved interventions.

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What this paper adds: There is uncertainty whether new onset problem behaviours or a change in longstanding problem behaviours should be considered as symptoms of depression or other types of psychiatric disorders in adults with intellectual disabilities. The validity of previous studies was limited by the use of pre-defined, categorical diagnoses or unreliable statistical methods. This study used robust statistical modelling to examine problem behaviours within a dimensional model of symptoms. We found that problem behaviours were included in an emotional dysregulation dimension and not in the dimension that included symptoms that are typical of depression. The dimensional model of symptoms had greater predictive validity than categorical diagnoses of psychiatric disorders. Our findings suggest that problem behaviours are a final common pathway for emotional distress in adults with intellectual disabilities so clinicians should not use a change in problem behaviours as a diagnostic criterion for depression, or other psychiatric disorders.

1. Introduction

The presentation of psychiatric disorders in adults with intellectual disabilities can differ from that seen in the general population. Therefore, specific classification systems have been developed to diagnose psychiatric disorders experienced by adults with intellectual disabilities. Diagnostic Criteria for Psychiatric Disorders for use with Adults with Learning Disabilities (DC-LD; Royal College of Psychiatrists, 2001) is based on ICD-10 (World Health Organisation, 1993) and DSM-IV-TR (American Psychiatric Association, 2000). The Diagnostic Manual-Intellectual Disability (DM-ID; Fletcher, Loschen, Stavrakaki, & First, 2007) is developed from DSM-IV-TR (American Psychiatric Association, 2000). There is minimal evidence to inform diagnostic criteria for psychiatric disorders in adults with intellectual disabilities so both classification systems were based on the consensus opinion of experts.

Adults with intellectual disabilities experience increased rates of psychiatric disorders, with a point prevalence of 35–41% (Cooper, Smiley, Morrison, Williamson, & Allan, 2007) depending on the method of diagnosis. Generic classification systems used to diagnose psychiatric disorders, such as ICD-10 and DSM-IV-TR, rely on individuals' verbal communication skills to describe the symptoms they are experiencing. Many adults with intellectual disabilities find it difficult to communicate whether they are experiencing the symptoms of psychiatric disorders included in standard classification systems. Therefore, DC-LD (Royal College of Psychiatrists, 2001) and DM-ID (Fletcher et al., 2007) both propose that problem behaviours experienced by adults with intellectual disabilities may be equivalent to the symptoms of psychiatric disorders listed in standard diagnostic classification systems.

The term 'problem behaviour' is used here to describe any behaviour that is of a frequency, severity or chronicity to require clinical assessment and either has a negative impact on an individual's quality of life or the quality of life of other people, or presents a significant risk to the health and safety of the individual or other people (Royal College of Psychiatrists, 2001). Problem behaviours are the most common type of psychopathology experienced by adults with intellectual disabilities (Cooper et al., 2007). As well as having a negative impact on quality of life, problem behaviours are often associated with significant costs to families and services (Totsika and Hastings, 2009). The onset of problem behaviours is often in early childhood (Emerson & Einfeld, 2010), persisting into adulthood for some individuals. Adults with intellectual disabilities present to clinical services with new onset problem behaviours or a change in frequency and severity of longstanding problem behaviours (Emerson et al., 2001). If an adult with intellectual disabilities presents with symptoms of psychiatric disorder and new onset of, or a change in, problem behaviours it is not clear whether the problem behaviours should be considered equivalent to symptoms of a psychiatric disorder.

Much of the research to understand whether problem behaviours should be considered as equivalents of other symptoms of psychiatric disorders has focussed on depressive symptoms. It has been suggested that problem behaviours are behavioural equivalents of depressive symptoms in adults with intellectual disabilities and should be included in diagnostic criteria (Smiley & Cooper, 2003). However, findings have been equivocal on whether problem behaviours should (Charlot, Doucette, & Mezzacappa, 1993; Felce, Kerr, Hastings, 2009; Kishore, Nizamie, & Nizamie, 2005; Marston, Perry, & Roy, 1997; Moss et al., 2000) or should not (Holden & Gitlesen, 2003; Sturmey, Laud, Cooper, Matson, & Fodstad, 2010; Tsiouris, Mann, Patti, & Sturmey, 2003; Tsiouris, Kim, Brown, & Cohen, 2011) be considered as depressive equivalents. This creates uncertainty that is reflected in the classification systems, for example problem behaviours are included as symptoms of depression in the DC-LD (Royal College of Psychiatrists, 2001) but not in the DM-ID (Fletcher et al., 2007).

The majority of studies that have considered problem behaviours as equivalents of symptoms of psychiatric disorders have used a methodology that predefined groups of participants based on whether they met diagnostic criteria for depression that do not include problem behaviours (Charlot et al., 1993; Felce et al., 2009; Holden & Gitlesen, 2003; Kishore et al., 2005; Marston et al., 1997; Moss et al., 2000; Tsiouris et al., 2011). This methodology has limited validity (Ross & Oliver, 2002) because the comparison groups are predefined using diagnostic criteria for depression that do not include problem behaviours. Also, very few of these studies controlled for between-group differences in potential confounding variables