



The psychology of containment: mis/representing emotional and behavioural difficulties in Australian schools

Article

Accepted Version

van Bergen, P., Graham, L. J., Sweller, N. and Dodd, H. F. (2014) The psychology of containment: mis/representing emotional and behavioural difficulties in Australian schools. *Emotional and Behavioural Difficulties*, 20 (1). pp. 64-81. ISSN 1363-2752 doi: <https://doi.org/10.1080/13632752.2014.947101> Available at <http://centaur.reading.ac.uk/40179/>

It is advisable to refer to the publisher's version if you intend to cite from the work.

To link to this article DOI: <http://dx.doi.org/10.1080/13632752.2014.947101>

Publisher: Taylor and Francis

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

This is the authors' final version of the following paper:

Van Bergen, P., Graham, L., Sweller, N., & Dodd, H. (2014). The psychology of containment: Mis/representing emotional and behavioural difficulties in Australian schools. *Emotional and Behavioural Difficulties*, 20 (1), 64-81. doi: 10.1080/13632752.2014.947101

Abstract

The number of students in special schools has increased at a rapid rate in some Australian states, due in part to increased enrolment under the categories of emotional disturbance (ED) and behaviour disorder (BD). Nonetheless, diagnostic distinctions between ED and BD are unclear. Moreover, despite international findings that students with particular backgrounds are over-represented in special schools, little is known about the backgrounds of students entering such settings in Australia. This study examined government school enrolment data from New South Wales, the most populous of the Australian states. Linear and quadratic trends were used to describe the numbers and ages of students enrolled in special schools in the ED and BD categories. Changes between 1997 and 2007 were observed. Results showed an over-representation of boys that increased across the decade and a different pattern across age for boys and girls. Consistent with international findings, these results indicate that trends in special school placements are unrelated to disability prevalence in the population. Rather, it is suggested that schools act to preserve time and resources for others by removing their more challenging students: most typically, boys.

Introduction

The use of separate special educational settings in the New South Wales (NSW) government schooling sector has increased significantly over the last decade (Dempsey, 2007; Graham & Sweller, 2011). The largest increases derive from growth in enrolments under the categories of Emotional Disturbance (ED) and Behaviour Disorder (BD) with more than one third (36.3%) of government special schools in NSW now serving this group of students (Graham, 2012a). It is currently unclear what criteria are used to define ED and BD however, with recent research indicating that there has been a change in the number and type of enrolments in each of these categories between 1997 and 2007 (Graham, Sweller & Van Bergen, 2010). While enrolments in both categories increased significantly during this 11-year period, enrolments under the category of behaviour disorder increased much more: overtaking those in the category of emotional disturbance by 2002. Changes to the age distribution of students were also evident. ED enrolments expanded and then declined at younger ages in 2007 than in 1997, whereas BD enrolments in 2007 matched *ED* enrolments in 1997.

Citing the NSW government's own assertion that increases under the BD category should be "*attributed to initiative funding rather than growth in student numbers*", Graham and colleagues argue that these shifts reflect growth in BD placement availability, resulting from the construction of "*19 new behaviour schools and 24 new tutorial centres*" between 2002 and 2005 (2010, p. 243). While the increase in BD placement availability might help to explain the increase in BD enrolments, this cannot account for ED enrolment changes over time. In other words, if the use of separate categories for emotional disturbance and behaviour disorder *do* represent

distinct diagnostic differences *and* the criteria used to distinguish between them are clear, then the increase in BD placement availability should only have affected the number of enrolments in the BD category and *not* the number and age distribution of enrolments in both BD and ED. The apparent exchange *between* ED and BD enrolments over this 11-year period prompts the question as to who may have been going into the ED category prior to the greater availability of BD places and, consequently, what criteria are informing student classification and placement decisions.

Distinguishing criteria

The NSW Department of Education and Communities (NSW DEC, formerly the DET) publishes criteria only for the umbrella category of ‘mental health problems’ (NSW DET, 2009a)¹. These criteria state:

“Students must exhibit behaviour(s) that is characteristic of mental health problems at a level of frequency, duration and intensity that seriously affects their educational functioning and emotional well-being. Students must have a current report from a specialist medical practitioner... There must also be documented evidence of ongoing individual intervention by a mental health practitioner or school counsellor. The school must also provide documentation and evaluation of strategies used to address the student’s needs within the school setting.”

¹ In addition to “mental health problems”, the New South Wales Department of Education and Communities (DEC) recognizes five other categories of disability including autism spectrum disorders and disabilities relating to intellectual, physical, hearing and/or vision impairment.

No distinction between emotional disturbance and behaviour disorder is made in the above criteria; yet significant distinctions that lay claim to the antecedents of behaviour and what counts as disability exist in practice. These distinctions are operationalised through an administrative discourse that distinguishes between 'challenging' and 'disruptive' behaviour, and manifests in the physical separation of departmental responsibilities. For example, there are 113 special schools in the NSW government school sector (Graham, 2012a), 78 of which are the responsibility of DEC's Disability Programs Directorate. The majority (64) of these special schools serve students with autism spectrum disorders and/or intellectual, physical and sensory disabilities, while a small number (14), often termed 'ED/BD special schools', are reserved for students experiencing emotional or behavioural difficulties. Each of these 78 special schools run by Disability Programs requires a confirmation of disability prior to entry (Graham, 2012a). The remaining 35 of 113 NSW government special schools are managed by DEC's Student Welfare Directorate. Eight of these are 'Education and Training Units' housed within juvenile detention centres, and 27 are special schools or tutorial/ learning centres for students "*whose behaviour can no longer be supported in their home schools*" (DET, 2009, p. 1). Special schools in the latter group are commonly referred to as 'behaviour schools' and confirmation of disability is *not* required for enrolment (Graham, 2012a).

The Department's distinction between 'ED/BD special schools' and 'behaviour schools' was investigated in interviews with DEC department officials (see Graham, 2012b), one of who explained:

“It’s an administrative arrangement. The categories of disability that we have in the system don’t include behaviour disorder, it’s not a... It’s like learning difficulties, do you know what I mean? It’s not pinned down as a... disability. So, the reasoning behind it is that any provision, special provision, that requires a confirmation of disability, sits with [Disability Programs]. Behaviour doesn’t. So at the point where the child gets a confirmation of disability and a mental health, emotional disturbance sort of diagnosis – at that point, their services would basically fall in [this] area from an administrative point of view. On the ground, it wouldn’t make much difference – people wouldn’t see the difference between where they basically sit.” (Disability Programs: #1)

These administrative distinctions are enacted at central policy and governance levels through a conceptual separation between students with ‘challenging’ behaviour as a result of their disability (ED), and students with ‘disruptive’ behaviour as a result of school disaffection (BD). The latter group – while believed to be impaired enough to require separate schooling – are not perceived to have a ‘disability’.

“Well, the shorter term nature of what the BD category was – it was seen to be – the child’s learning was being disrupted by their own behaviour ... If you wanted to be considered for an ED placement, though, you would need to have met the disability criteria for that placement consideration. You don’t need to meet that for consideration in behaviour ... they don’t have to wait to be seen by someone who would be able to make a report to the Department about their emotional needs such as a paediatrician or

a clinical psych or a psychiatrist, adolescent psychiatrist. But you would need that for consideration for the ED setting.” (Student Welfare: #1)

According to behaviour school principals and department officials, behaviour schools were set up in the late 1990s following a state government election that was fought and won on the promise to be ‘tough on crime’. The administrative distinction between challenging and disruptive behaviour, the structural division of responsibilities between DEC directorates, and the relaxing of entry requirements to a new group of special ‘behaviour’ schools, emerged in 1998:

“[Disability Programs] retained the [14] original schools, which had a mixture of behaviour – students who were carrying a classification of emotional disturbance and those schools that were set up for conduct disorder – and they came in the mid-nineties... All the newer ones and a number of tutorial centres, and the suspension centres – we [Student Welfare Directorate] maintain overview. There was a big view on conduct disorder... The view [resulting in the NSW behaviour school model and relaxing of entry requirements] was originally to be a shorter-term support without the need to go through long diagnostic processes to see whether they need placement.” (Student Welfare: #1)

Although initially seeking to justify DEC’s conceptual distinction between and response to students with disruptive behaviour versus challenging behaviour arising from a disability, this department official acknowledged that there was a paradox in response because the two diagnostic categories that are recognised under the

Department's BD classification (Oppositional Defiance Disorder and Conduct Disorder) are indeed defined in the DSM, whereas emotional disturbance is not. When it came to determining who was placed where and what support they received, he returned to specific clauses within DEC's 'mental health problems' criteria:

“So really, it's making sure that the student has in fact an actual mental health problem, and that sort of – it was really invasive of all their life, so that's why those words are around the “level of frequency, duration and intensity” that seriously affects their educational functioning. But, because of that, you wouldn't expect that it was just at school. It would be in all aspects. If it was just at school, it would mean something different. So you're looking at something fairly pervasive in that sense, and it has to be – we even become explicit – it must be evident in the home, the school, and the community. Trying to say that this has to be something about the student's functioning, not functioning just in a particular environment.”
(Student Welfare: #1)

According to behaviour school principals, the above distinction is meaningless. Each agreed that disruptive behaviour from a student who had an otherwise perfect life could well mean 'something different', but none felt that this was a description befitting any of their students. A common view was that the Department's distinction between disruptive and challenging behaviour was a political one that did not hold up in practice. For example, one behaviour school principal noted that students enrolled in her school may hold one or more diagnoses that not only straddle the Department's administrative distinctions between emotional disturbance and

behaviour disorder but also work to highlight how the diagnosis of 'mental health problems' is sometimes used as a 'means to an end'; that is, an accepted departure from the rigour of clinical diagnostic procedures and criteria.

"Yeah that's right, they don't require [a diagnosis] and if they have one, we don't exclude them on that basis. So we've got kids here with autism, Asperger's, Tourette's, ODD, OCD, ADHD, bipolar, depression, PTSD... Oh yeah, pretty much everything. Most of the kids that we've got have been ADHD and ODD diagnoses and, you know... I mean they end up with multiple ones but often that's to find a placement, to get them in the right funding box and find a placement. Anyway, at the end of the day, it [the diagnosis] doesn't really help all that much [laughs]." (SSP: #1)

Challenging the administrative distinction between behaviour resulting from a disability and disruptive behaviour arising from school disaffection, another behaviour school principal explained that many of his students arrived without official assessments or diagnoses because they were 'the worst of the worst' and impossible to engage in the diagnostic process. In his view, one reason for the administrative distinction was funding. He explained that the association between ED and disability meant higher per student funding allocations and access to additional programs; however, costs were being maintained 'behind closed doors' by DEC's restriction of placement increases to 'lower-cost' behaviour schools. As behaviour schools do not require a confirmation of disability for entry, students enrolling in a behaviour school will not receive an ED classification – even if they may warrant one.

This principal then nominated a number of ED/BD schools that he knew well and maintained that there was ‘not a crack of daylight’ between his students and theirs. Later in the interview, he conceded that perhaps one difference was the ‘level of criminality’ in his school, which he put down to its location in an impoverished community with 98% of his students living in public housing. While maintaining that his students also fit departmental criteria for ‘mental health problems’, he was sceptical of diagnosis and health professionals, noting tendencies for certain local paediatricians to over-diagnose and over-medicate; in his view, adding to the problem rather than solving it:

“I’ve got one paediatrician who tells some of my boys ‘You’re either going to be a millionaire or a serial killer. Get out of my office. I don’t want to see you again. You’re never going to be any good. You’re just a criminal.’ I really question those kinds of people. [laughs] You know, what ARE these people doing?” (SSP: #2)

Distinguishing between ED and BD: national and international concerns

Concerns about the distinction between ED and BD in NSW are consistent with international concerns about the way in which ED and BD are defined, classified, and distinguished. For example, Toffalo and Pederson (2005) suggest that the classification criteria of the 2004 Individuals with Disabilities Act used widely in the United States lacks specificity; with particular controversy regarding an exclusion clause used by some US states for students who are “socially maladjusted”, and with overlap between the categories of ED, BD, SED (serious emotional disturbance) and learning difficulties (also see Stinnett, Bull, Koonce & Aldridge, 1999; Yeh, Forness,

Ho & McCabe, 2004). Similarly, Lee and Jonson-Reid (2009, p. 723) argue that: “*One of the dilemmas when studying the ED population is understanding what this label actually means... This [special education definition] is not the same definition of ED used in mental health that is based upon the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria*”. Thus, despite the relationship to mental health implied by the label ‘emotional disturbance’, only half of the US students with an ED classification have also been diagnosed with a DSM-defined disorder (Centre for Effective Collaboration and Practice, 2002; see DSM-IV-TR; American Psychiatric Association, 2000).

In the UK, where the terms EBD (emotional and behavioural difficulties) and SEBD (social, emotional and behavioural difficulties) are used, a similar lack of clarity emerges. Jones (2003, p.153-153) notes the “*lack of a coherent conceptual framework encompassing all types of cases falling under the EBD label... when one ponders the definition of EBD, it transpires as nebulous and ad hoc*”. She goes on to argue that EBD is typically viewed by educational authorities as being mutually distinct from serious mental illness, yet, paradoxically, may include “*abnormal emotional stresses*”. Thomas and Loxley (2007, p.63) in turn argue that “*in the use of the term ‘EBD/ESBD’, there is an indolent espousal of a term which too conveniently packages together difficult, troublesome children*”

There are of course important criticisms of the way in which some childhood psychiatric disorders are diagnosed and interpreted. First, it is important that behaviour reflecting challenges to school adjustment, school disengagement, or other age-appropriate displays (e.g. fidgeting, poor emotion regulation, distractibility)

does not become pathologised. Second, there is a need to more strongly critique the way in which diagnosis and medicalisation is used within society to define the individual. With regards to depression, for example, Rose (2007, p.702) argues that *“Such a medicalisation of sadness can only occur within a political economy of subjectification, a public habitat of images of the good life for identification, a plurality of pedagogies of everyday existence, which display... the ways of conducting oneself”*. Third, there are suggestions that diagnoses are not always accurate: that is, that false negatives and false positives are possible (Kirk, 2004). When special education categories refer loosely to ‘mental health problems’, the same challenges arise.

Disproportionate representation in special education

Compounding concerns about the criteria used to define ED and BD are findings from international research, particularly from the United States, showing disproportionate over-representation of boys in more judgmental or “soft” diagnostic categories including ED and BD (Hosp & Reschly, 2001; Oswald, Best, Coutinho & Nagle, 2003; Wehmeyer & Schwartz, 2001). Disproportionate representation is not limited to gender: in the US, Hispanic and African American children are also disproportionately represented in special education settings (Hosp & Reschly, 2004; Oswald, Coutinho, Best, & Singh, 1999; Skiba, Poloni-Staudinger, Gallini, Simmons, & Feggins-Azziz, 2006) and in Australia, Indigenous children are disproportionately represented (Graham, 2012a; Sweller, Graham & Van Bergen, 2012). The implication from these findings is that unclear, ambiguous, or holistic criteria create opportunities for schools to make placement decisions subjectively, on the basis of demographic and personal factors.

While acknowledging the difficulties in diagnosing emotional and behavioural difficulties in children, and the potential for inappropriate assumptions to be made about the cause of the difficulty, we suggest that gender differences in the recognised prevalence of psychiatric “internalising” and “externalising” disorders can nonetheless be used as guide to test for disproportionality in gender representation². Where the *ratio* of boys to girls enrolled in special schools under the categories of ED and BD exceeds the *ratio* of boys to girls with psychiatric diagnoses, two explanations are possible. First, given the important conceptual distinction between psychiatric diagnosis and educational provision, it may be that boys are more in need of educational support than girls. However, there is no convincing reason to suggest that this is the case. Second, socio-political factors may drive increased enrolments of boys.

Gender differences in psychiatric diagnosis consistently emerge. For example, boys are diagnosed with externalising or behaviour disorders such as Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD) in greater numbers; and girls are diagnosed with internalising disorders such as depressive and anxiety disorders in greater numbers (American Psychiatric Association, 2000; Roberts, Attkisson & Rosenblatt, 1998). In a large epidemiological study of 1420 children in the US, for example, Costello, Mustillo,

² According to the American Psychiatric Association (2000), externalising disorders are defined as those in which difficulties are expressed externally, through disruptive or challenging displays of behaviour. They include Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD). Internalising disorders are defined as those in which difficulties are expressed internally, through disruptive or maladaptive cognition. They include depression, anxiety, and Bipolar Disorder.

Erkanli, Keeler and Angold (2003) found that at any given time 4.5% of girls and 9.0% of boys aged 9-13 years could be classified as having a behavioural disorder according to DSM-IV criteria. Approximately 2.8% of girls and 2.0% of boys met criteria for an internalising disorder. Cross-cultural studies using random sampling across populations show the same pattern of gender differences in Australia, China, Israel, Turkey, Jamaica, and the Netherlands (Verhulst et al., 2003) and in Germany, Greece, Puerto Rico, Sweden, and Thailand (Crijnen, Achenbach & Verhulst, 1997), with approximately 14% of surveyed Australian children and adolescents reporting symptoms associated with mental health problems (Sawyer et al., 2000).

It is also said that many disorders manifest differently in boys and girls with, for example, more girls who are diagnosed with ADHD exhibiting predominantly inattentive (IA subtype) symptoms, and more boys who are diagnosed with ADHD exhibiting predominantly hyper-active impulsive (HI subtype) or combined (C subtype) symptoms (Weiss, Worling & Wasdell, 2003).

It is important to note that the greater reported numbers of children and adolescents showing externalising rather than internalising disorders should not be taken at face value. Externalising behaviour is more noticeable to parents and teachers than internalising behaviour: particularly in childhood, when internalising symptoms include lethargy and complaints of physical illness (American Psychiatric Association, 2000). However, this should not affect the relative number of boys and girls diagnosed with each complaint: rather, it simply makes it more likely that the externalising behaviour of both boys and girls will be noticed whereas their internalising difficulties will not.

On the basis of these prevalence rates for both internalising and externalising mental health disorders, in Australia and elsewhere, one might expect to see a ratio of between 1:1 and 2:1 boys to girls meeting criteria for a psychiatric diagnosis. There are of course important differences between DSM-defined psychiatric diagnoses, which reflect a medical model of identifying symptoms against standard diagnostic criteria, and school disability support classifications, which reflect school support needs (with or without mental health diagnosis). This distinction should impact upon the *raw number* of students enrolled in special schooling: yet it should not differentially affect the *ratio* of boys to girls. That is, if special school placement decisions were to be made purely on the basis of student functioning and educational need, we would expect a similar ratio of between 1:1 and 2:1 boys to girls enrolled in special schools for ED and BD. Critically, however, international research shows that enrolments in restrictive settings for ED or BD regularly exceed even the upper expected ratio of 2:1 boys to girls (Oswald, Best, Coutinho & Nagle, 2003) suggesting that placement decisions are affected by factors other than prevalence.

Aims of the current study

Our previous research investigating enrolments in NSW government special schools shows a similar pattern to these international trends: in the 2007 school year, for example, there were 5.5 boys for every one girl enrolled under the ED support category and 5.7 boys for every one girl enrolled under the BD category (Graham et al., 2010). The aim of this study was to determine whether or not patterns of enrolment – that is, trends in either age or gender – have changed over time. Significant changes between the 1997 and 2007 enrolment patterns, in either age or

gender, would further support the argument that these enrolments reflect subjectivity in placement decision-making and not community prevalence.

Method

The study drew on annual government school enrolment data published by the New South Wales Department of Education and Communities (NSW DEC). New South Wales (NSW) is the oldest and most populous state in Australia, comprising almost one third of the national population.³ In 2010 there were over 1.1 million school students in NSW and two thirds of these attended government schools. In total, over 749,000 students enrolled in over 2230 government schools across 10 administrative regions (NSW DEC, 2011). Students complete seven years of primary (elementary) schooling, and up to six years of secondary schooling. Children can enrol in Kindergarten from 4 years and 9 months and, until recent changes to the school leaving age were enacted in 2010, could choose to leave school any time from age 15 (NSW DET, 2009b). At the commencement of the study the most recent enrolment data available was from 2007 with statistical archives extending to 1997; thus, enrolment data from both 1997 and 2007 was chosen for analysis.

First, the number of students enrolled in special schools under the categories of emotional disturbance (ED) or behavioural disorder (BD) was calculated by age and by gender. As the exact number of students enrolled in government schooling varied between both age group and year of inquiry (1997 or 2007), and in order to better

³ The government school sector in New South Wales is also the most transparent of any Australian state, in that the number, gender and age of students in mainstream classes, special schools and support classes are made available. While special school enrolment numbers are made available for each disability classification, the number of students with disability classifications within mainstream classes is not.

compare with population prevalence rates, percentages rather than raw values were used. All special school enrolments for ED and BD are thus presented as a percentage of the total student population. Note that special 'behaviour schools' run by Student Welfare are only available to students from Year 5, when they are typically 9 to 11 years old. Prior to Year 5, students are referred to combined ED/BD special schools run by Disability Programs and enrolling children from either Kindergarten to Year 4 or Kindergarten to Year 12.

Second, a series of curve estimation analyses were used to estimate linear and quadratic trends in the percentage of students enrolled in special schools at each age: first for ED, and then for BD. Trends are reported separately by gender. A significant linear trend indicates that the proportion of special school enrolments for the disability support category in question (ED or BD) either increases or decreases consistently with age; whereas a significant quadratic trend indicates a change in the rate at which the proportion of enrolments increases or decreases with age (for example, a proportion that increases sharply across younger ages but then levels off across older ages, or a proportion that initially increases but then decreases).

To the extent that special school enrolment patterns for ED and BD follow international prevalence patterns, quadratic trends would be expected in both 1997 and 2007. In the US, increased rates of both internalising and externalising disorders are seen in both boys and girls until mid adolescence (American Psychiatric Association, 2000), where, for example, only 4.4% of 11 year olds but 10% of 15 year olds meet criteria for a behavioural disorder according to DSM-IV criteria (Costello et al., 2003). Gender differences in BD should also lessen with age. In the case of

ADHD, for example, hyperactive-impulsive symptoms, which are exhibited primarily by boys, decline significantly with increasing age whereas inattentive symptoms exhibited primarily by girls do not: suggesting either problems that are more persistent and more impairing over time for girls, or problems that are not equally identifiable for boys and girls (Hart, 1995, Willoughby, 2003). To the extent that enrolment trends across age differ from these patterns of prevalence, the important functional differences between psychiatric diagnoses and school-based support and placement decisions are implicated. To the extent that enrolment trends *also* differ between 1997 and 2007, however, subjectivity in the school placement decision-making processes is implicated.

Results

Emotional Disturbance

For special school enrolments under the disability category of Emotional Disturbance (ED), significant linear and quadratic trends in age were observed. This was the case for both boys and girls, and in both 1997 and 2007. While trends did not differ by the year of inquiry, the nature of these trends was different for girls than for boys. For boys, the combined linear trends, $R^2s > .31$, $F(1, 11)s > 4.94$, $ps < .05$, and quadratic trends, $R^2s > .66$, $F(2, 10)s > 9.50$, $ps < .005$, indicate a long and gradual rise and then a sharp fall in enrolments for ED across ages, beginning at age 5 and peaking at age 14 (see Figure 1). For girls, in contrast, the combined linear trends, $R^2s > .72$, $F(1, 11)s > 28.63$, $ps < .001$, and quadratic trends, $R^2s > .72$, $F(2, 10)s > 13.11$, $ps < .002$, were more consistent with the expected clinical profile and indicate an increased *rate* of the rise in enrolments with age. There was no clear peak or fall in enrolments, but instead a pattern of very low but gradually increasing enrolments

between ages 5 and 12, followed by an acceleration of enrolments between the ages of 12 and 17 (see Figure 1).

Behaviour Disorder

For special school enrolments under the disability category of behaviour disorder (BD), age trends were less clear and changed with both gender and year of inquiry. For boys, there was a significant linear trend in 1997, $R^2 = .37$, $F(1, 11) = 6.39$, $p = .03$, yet no significant quadratic trend, $p = .07$, indicating a relatively consistent rise in enrolments with age beginning at age 9. In 2007, however, the trend was quadratic, $R^2 = .45$, $F(2, 10) = 4.07$, $p = .04$, and not linear, $p = .07$, indicating a sharp rise and then fall in enrolments between 9 and 16 years. Enrolments under the BD category peak at 13 years; one year earlier than for ED. In addition to these changes in the *pattern* of enrolments, the *number* of special school enrolments for BD - as a percentage of total government school enrolments - were much larger in 2007 than in 1997 (see Figure 1). This increase does not represent an increase in the identification and reporting of youth mental health difficulties across the decade: while enrolments for BD have increased dramatically, Eckersley (2008) reports that there is no clear and conclusive evidence that the incidence of diagnosed mental illness in young people has increased over the same period. Instead, changes appear to relate to the way in which schools manage disruptive behaviour (Graham, et al., 2010).

For girls there was a significant linear trend in 1997, $R^2 = .33$, $F(1, 11) = 5.47$, $p = .04$, showing a consistent pattern of negligible enrolments. Both the linear trend, $R^2 = .56$, $F(1, 11) = 14.01$, $p = .003$, and the quadratic trend, $R^2 = .57$, $F(2, 10) = 6.60$, p

= .02, were significant in 2007, indicating a long period of negligible enrolments (as in 1997), coupled with a rise and fall of enrolments between the ages of 11 and 16. The peak is at 15 years, although it is worth noting the very low overall percentages of enrolments when compared with the boys (see Figure 1).

Summary

Taken together, the ED and BD enrolment data show that boys are entering special schools earlier than are girls, with significant increases from age 5 for ED and age 9 for BD. Girls, in contrast, had very low ED enrolments before age 12 and very low BD enrolments before age 11. Indeed, there were negligible ED enrolments of girls at any age in 1997. Second, it is of note that whilst boys had significantly higher enrolments than girls in both ED and BD categories, in both 1997 and 2007, a greater gender discrepancy was seen in 2007. This gender discrepancy was greatest at 13 years, when boys' 2007 enrolments were at a peak (see Figure 1). Thirdly, it is of interest that the pattern of BD enrolments at each age changed across the decade from 1997 to 2007. For both boys and girls, enrolments were low and linear across ages in 1997, and much higher, with a sharp peak, in 2007. Finally, it can be seen that, with the exception of 1997 enrolments for BD, boys show a sharp drop in enrolments across the board between the ages 13 and 16.

Discussion

By statistically analyzing trends in New South Wales' government special school enrolment data, this study aimed to determine the relationship between age, gender, and special school enrolments for ED and BD in both 1997 and 2007. Two key findings emerged.

First, significantly more boys than girls were enrolled in special schools for ED and BD. This finding is consistent with international trends showing an over-representation of boys in special education, particularly in more subjective categories of diagnosis (Hosp & Reschly, 2001; Oswald et al., 2003; Wehmeyer & Schwartz, 2001), and with our own previous findings of over-representation (Graham et al., 2010). In addition, we show here that boys were not simply over-represented; their pattern of enrolment across age was also different. For boys, there were significant quadratic trends in both ED and BD, signifying a large drop in enrolments between the ages of 13 and 16. Importantly, this drop occurs prior to age 15, when students may legally leave school (from 2010 the minimum school leaving age increased to 17), and does not reflect the typical clinical profile across age (American Psychiatric Association, 2000). Even accounting for the important functional differences between clinical diagnosis and school placement decisions, it is unclear why special school enrolments for BD peak at 13, a full two years earlier than might be expected according to prevalence data. While individual students cannot be tracked across schools, we note elsewhere that decreases in boys' special school enrolments in mid adolescence are matched with increases in enrolments in Juvenile Justice special schools: thus representing a potential graduation to the judicial system (Graham et al., 2010). Enrolments of girls with ED, albeit much smaller in number, were more reflective of the typical clinical profile across age in that they continued to rise through adolescence (American Psychiatric Association, 2000). The number of girls enrolled under the BD category was however negligible in both earlier and later years of schooling.

Second, notable differences were found between the enrolment profiles of ED and BD across the decade from 1997 to 2007. In particular, a much larger surge in enrolments occurs for BD than for ED. This indicates a pattern of enrolment that is not consistent with prevalence rates of psychiatric disorder, which have not increased in the same way. Both key findings are discussed below.

The over-representation of boys in ED and BD categories: Contributing factors

Our first major finding showed that boys were over-represented in ED and BD categories. A gender discrepancy in favour of boys might be expected in the BD enrolment category, where genetic, behavioural, and other indices suggest a higher prevalence rate of externalising behaviours in boys. However, this cannot explain our finding of the same gender discrepancy in ED where internalising disorders such as depression, anxiety, and other mood disorders, which are more common in girls, should also be prominent. It is therefore critical to understand exactly what conditions are being diagnosed within the ED category, and why, as shown in Figure 1, boys are enrolled in much greater numbers than girls. Moreover, it is notable that boys in the analysis are even more highly over-represented in the special school support categories of BD and ED than is reflected in the international literature (see Oswald et al., 2003; Coutinho & Oswald, 2005). This is true across a range of ages. Such variation appears not to reflect the prevalence of disability in the population (OECD, 1999).

There are several reasons why gender differences in the process of ED and BD identification, categorisation, and special school enrolment might exceed gender differences in prevalence. First, boys and girls may differ in the way that they express

emotional or behavioural difficulties, with boys more likely to engage in behaviours that are considered troublesome by teachers (Weymeyer & Schwartz, 2001). Consistent with this possibility, some researchers suggest that boys are simply louder and their difficulties more likely to be noticed in a busy school setting (e.g. Donovan & Cross, 2002). Special school enrolment may then be used to provide more intensive individualised support (e.g. Kauffman, Lloyd, Baker, Riedel, 1995); however, evidence drawn from empirical research in schools indicates that disability classification may also be used as a way to remove difficult students from the mainstream classroom: thus preserving limited teaching time and resources for the remainder of the class. The Australian Primary Principals Association (2008) refer to the significant funding pressures felt when resources are directed towards children with special needs whom they feel would be better educated elsewhere, whereas principals interviewed by Graham and Spandagou (2011) suggest a forced choice between support for challenging students and for others in the class:

“Then you have the next layer down, if you want to think of it in those terms – it’s not a great way to think of it, but that’s what it is. The more negative layer down: your special needs kids ... you’ve got your kids with funding, which is a big tick in the box, that’s not so bad but if those special needs kids have got no funding at all, already you’re pushing yourself within your school’s capacity to look after your remedial tail ... and then you’ve got your gifted and talented up the top, that you’re supposed to be doing something for ... so, who do you keep happy?

(Graham & Spandagou, 2011, p. 229)

Existing gender biases may also lead decision-makers to believe that special schooling is a more appropriate option for boys than for girls, or that boys are more deserving: either due to a belief that boys' difficulties are more severe or likely to result in more challenging classroom behaviour than are girls', or a belief that boys will benefit more in a separate setting. Interviews with behaviour school principals, however, suggest that disproportionality in placement may be an artefact of yet another administrative distinction (Graham, 2012b). While there were a very small number of girls in the participating behaviour schools, each principal stated that regional placement panels avoid placing girls in behaviour schools. One principal, who stated that he refused to enrol girls in his school, said that it was not a good idea to "*mix sad girls with bad boys*" (SSP #2). When pressed as to what he meant by this, he explained that 'maladjusted' girls tend to act promiscuously and the last thing his boys needed was distraction, or worse, fatherhood. In response to this same question, another behaviour school principal commented that there are "*just as many bad girls as bad boys out there*" (SSP #4) but, as boys were bigger and stronger than girls, they represented a greater threat to teachers and other students and were less welcome in referring schools. Similarly, when asked why there weren't many girls in behaviour schools, a third principal referred to the feminisation of the teaching workforce and a fear of 'real' boys. His comment is representative of the perspectives expressed by the majority of participating behaviour school principals and is worthy of repeating in full:

"I think that's where a lot of the problems come from. If you've got a teacher who comes from a middle class background, does really well at school, has an ambition since she was five years old to become a

teacher – these kids that come into the school who maybe haven't had anything to eat, saw a row, hadn't had much sleep for whatever reason – and they expect the kid to sit down and be quiet. Then when they're not quiet they go and they scream at them or they send them out of the room or whatever.

Boys are the worst because boys are always going to be... my boys here are a lot like when we were kids. They're still climbing trees, catching lizards, running around out on the streets until eight o'clock at night, building skateboards. They're also doing some dodgy things like breaking into places maybe and breaking windows or whatever. But they're certainly not going to sit in the classroom.

And, now we've got a culture where everything is so sanitised. Boys aren't allowed to climb trees anymore, because if you climb a tree at school you get a four day suspension or a two day suspension. Or if you run around or if you throw rocks or if you make a slingshot, now it's a weapon. I know there are issues with all of that, but I think we've just gone occupational health and safety mad. Boys aren't allowed to be boys. They're so protected and teachers are so paranoid.” (SSP: #3)

If any of the above explanations are true, girls classified with ED may simply be more likely than boys to remain in the mainstream setting. In the absence of disability support enrolment data across the full continuum of provision, such an explanation is of course speculative. Nonetheless, whatever the ratio of boys to girls classified with

ED in the mainstream setting, the greater numbers of boys than girls classified with ED in special schools is sufficient to indicate a gender discrepancy in placement, suggesting that a psychology of containment may be affecting referral and placement decisions. While it is beyond the scope of this study to infer motive or reason on the part of teachers, school counsellors, and other decision makers, it is nonetheless clear that specific and systematic classification criteria and placement procedures for ED and BD would enable the decision-making process to be more closely scrutinised.

Changes to the ED and BD patterns of enrolment: Contributing factors

Our second major finding showed changes in the pattern of ED and BD enrolments from 1997 to 2007, with a large increase in enrolments for BD in 2007. This shift appears to mirror the increasing availability in New South Wales of placements in newly built “behaviour schools”; suggesting that special school enrolments for BD may have been higher in 1997 had places in these specialist schools been available (see Graham et al., 2010). As discussed earlier, however, increased availability of BD places should not have affected the number and age distribution of enrolments under the ED category. The apparent exchange between ED and BD suggests that students who may have been enrolled under the ED category in 1997 were, in the 10 years following, re-directed to behaviour schools where there were both more places and fewer entry hurdles.

One question posed by Graham et al. (2010) as to the shift in age distribution was whether young children were being enrolled in “ED/BD” special schools, which are open to children from Kindergarten, and later moving to behaviour schools, which

open in Year 5 (around age 10). Although clinical literature shows little evidence of 'heterotypic continuity' from internalising to externalising behaviour disorders to support the possibility that young children begin experiencing emotional difficulties and then later progress to oppositional defiance or conduct disorder (Costello et al., 2003), behaviour school principals confirmed that they had 'inherited' many students from "ED/BD" special schools serving students in early primary and that some students move back and forth throughout their schooling lives (Graham, 2012b).

"We would have maybe - it's a considered guess, but I would say 10 to 15 students [15%] who have been elsewhere...in other special school settings. For the ones that have come here from other special schools, this tends to be the end of the road... There's nowhere else for them to go. In other words, they've exhausted the other options..." (SSP: #4)

Changes to assessment practices across the decade may also be implicated in the significant increases in BD across the decade from 1997 to 2007. An ever-increasing focus on high-stakes assessment – evidenced by the introduction of the Basic Skills Test for years 3, 5 and 7 in NSW in 1996 (Bruniges, 2001), culminating in the implementation of compulsory national literacy and numeracy (NAPLAN) testing in 2008 (Australian Curriculum and Reporting Authority, 2012), with public reporting and comparison of school performance on the Australian government's My School (www.myschool.edu.au) website in the same year – means that perverse incentives are now in place for Australian schools to 'cream' their student cohorts. It is important to note that while NSW has one of the lowest NAPLAN exemption rates of all the Australian states and territories, participation of students in special schools is rare

and the results of those who do participate are seldom reported. Limited data available from the Australian government's My School website do however indicate that students enrolled in special schools for emotional or behavioural difficulties perform significantly below the state average in both literacy and numeracy.

In 2010, 50% of Year 7 students in a behaviour school in the Western Sydney suburb of Riverstone scored in Band 4 or below for Reading versus 7% of Year 7 students attending Riverstone High School⁴. Similarly, 33% of Year 7 students in the behaviour school scored in a Band 4 or below for numeracy versus 13% of Year 7 students at Riverstone High. To put these results into perspective, 95% of Year 7 students *nationally* scored in Bands 5 or above for reading and 96% scored in Bands 5 or above in numeracy. Put another way, 44% of Australian children in Year 3 performed in Bands 5 and above for reading, while 33% of Year 3 children performed in Bands 5 and above for numeracy. Evidently emotional and behavioural difficulties are not the only issues facing the children and young people enrolled in NSW government behaviour schools and questions have been raised as to their effectiveness (Granite & Graham, 2012).

Importantly, the increasing rate of enrolment for BD in New South Wales' special schools does not appear to reflect a genuine shift in the incidence or identification of different types of mental health disorders in the population. Some researchers do note increases in the number of children and youth diagnosed with particular chronic health conditions and disabilities in the US across the past thirty years (Perrin, Bloom

⁴ Note that performance levels are available at a school-level only: thus, no distinction is able to be made between students with a behaviour disorder categorisation and those with an emotional disturbance categorisation.

& Gortmaker, 2007) with, for example, an unprecedented 9% of children diagnosed with ADHD in 2007 (Froehlich, Lanphear, Epstein, Barbaresi, Katusic & Kahn, 2007). However, the environmental factors to which changes in ADHD prevalence are attributed, including greater survival rates of premature infants, greater television exposure, and changing patterns of family time and engagement (Perrin et al., 2007), cannot account for the size of the surge in BD enrolments shown in our data (for example, a 595% increase at age 13). Nor can they account for the speed at which this surge, across just one decade, has occurred.

If special school enrolments for BD have instead increased across the past decade due to better identification processes or techniques, then we would also expect commensurate increases in enrolments for ED. Indeed, more diagnoses of internalising disorders are now made clinically. For example, Costello, Erkanli and Angold (2006) note that while there does not appear to be any increase in the prevalence of depression in children and youths over the past decade, more cases now are identified by clinical practitioners and receiving treatment. Critically, however, our data show no change to the rate of special school enrolments for ED. This suggests that socio-political needs (such as the need to appear as though a hard line is being taken on disruptive behaviour), the administrative distinctions between Student Welfare and Disability Programs, funding constraints leading to greater availability of BD places as opposed to the more expensive ED places, a lack of clear discrimination between ED and BD criteria, lower scrutiny of and standards for entry to behaviour schools, and a strong increase in high-stakes assessment practices may be driving the increase in BD, but not ED, special school enrolments. These driving forces do not address student need, and moreover, do nothing to

acknowledge the potential for environmental and contextual factors to contribute to student difficulties (Kirk, 2004).

Implications and conclusion

Taken together, our two key findings show an over-representation of boys in ED as well as BD, across age groups, and an unexplained change in the profile of NSW government special school enrolments across the past decade. These findings are not consistent with the clinical and epidemiological literature. Thus, it is of critical importance that the procedures and criteria upon which these disability support category classifications are based be scrutinized. There is of course no question that cases of genuine psychiatric difficulty exist, or that contextual and ecological factors contributing to student difficulty, such as parental mental health, must be accounted for (Reddy & Richardson, 2006; Yeh et al., 2004). Indeed, evidence suggests that a large portion of children with genuine emotional difficulties currently go unidentified and untreated (Reddy & Richardson, 2006). Whilst disability support criteria remain ambiguous and school placement decisions continue to lack systematic rigour, however, children who do not adequately meet clinical definitions of behavioural or emotional difficulty may be identified for removal from the mainstream setting, whereas children who genuinely require additional psychological support may be overlooked entirely.

Exacerbating the need for unambiguous diagnostic criteria and school placement procedures is evidence that special school outcomes for students classified as emotionally or behaviourally disordered may not be positive (Bradley, Doolittle & Bartolotta, 2008). While advocates for the use of separate settings argue for the

importance of appropriate and timely treatment (Kauffman et al., 1995), critics maintain that they are increasingly becoming “holding areas for students that regular schools are either unable to or unprepared to work with” (Dempsey, 2007, p. 76), noting that there have been few evaluations of these settings or the outcomes for students that attend. Research that has been conducted, both in Australia and internationally, shows that students currently placed in special schools have an elevated risk of ‘graduation’ to juvenile detention when compared to students integrated in the mainstream (Bouhours, 2006; de Plevitz, 2006; Graham et al., 2010; Christle, Jolivette & Nelson, 2005). By understanding what a child is being classified with, and by pursuing more transparent classification procedures, we will be in a stronger position to ensure that school placements are genuinely in the best interests of the child.

Acknowledgments

This research was supported under the Australian Research Council's *Discovery Projects* funding scheme (DP1093020). The views expressed herein are those of the authors and are not necessarily those of the Australian Research Council. Ethics approval was obtained from the Macquarie University Ethics Committee (Final Approval No. 5201000237) and the NSW Department of Education and Communities (SERAP No. 2010026).

References

- Australian Curriculum, Assessment and Reporting Authority (2012). NAPLAN. Retrieved 26 October, 2012 from <http://www.naplan.edu.au/>.
- Australian Primary Principals Association (2008). Too few resources to help 'Million Dollar Kids' and 'Millenium Kids'. Retrieved 26 October, 2012 from <http://www.appa.asn.au/images/news/mediareleasegoodwill20080825.pdf>
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (Revised 4th ed.)*. Washington, DC: Author.
- Bouhours, T. (2006). *The Journey of the Excluded: Schooling and Crime in the Exclusive Society*. Unpublished dissertation presented for the award of Doctor of Philosophy, Griffith University, Brisbane.
- Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: the experiences and outcomes of students with emotional disturbance. *Journal of Behavioural Education, 17*, 4-23.
- Bruniges, M. (2001). The relationship between assessment and curriculum in improving teaching and learning. Paper presented at the Australasian Curriculum Assessment and Certification Authorities Conference, July 26. Sydney: The Grace Hotel.
- Center for Effective Collaboration and Practice (2002). CECP 20th Annual Report: Students with emotional disturbance: Eligibility and characteristics. *Center for Effective Collaboration and Practice*. Retrieved 19 July 2010 from <http://cecp.air.org/resources/20th/eligchar.asp>.
- Christle, C. A., Jolivette, K., & Nelson, C. M., (2005). Breaking the school to prison pipeline: identifying school risk and protective factors for school delinquency. *Exceptionality, 13*, 69-88.
- Costello, E. J., Erkanli, A., & Angold, A. (2006). Is there an epidemic of child or adolescent depression? *Journal of Child Psychology and Psychiatry, 47*, 1263-1271.

- Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry, 60*, 837-844.
- Coutinho, M. J., & Oswald, D. P. (2005). State variation in gender disproportionality in special education: findings and recommendations. *Remedial and Special Education, 26*, 7-15.
- Crijnen, A. A, Achenbach, T. M., & Verhulst, F. C. (1997). Comparisons of problems reported by parents of children in 12 cultures: Total problems, externalizing, and internalizing. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 1269-1277.
- Dempsey, I. (2007). Trends in the placement of students in segregated settings in NSW Government Schools. *Australasian Journal of Special Education, 31*, 73-78.
- de Plevitz, L. (2006). Special schooling for indigenous students: a new form of racial discrimination? *The Australian Journal of Indigenous Education, 35*, 44-52.
- Donovan, M. S., & Cross, C. T. (Eds.). (2002). *Minority students in special education. Committee on Minority Representation in Special Education*. Washington, DC: National Academy Press.
- Eckersley, R. (2008). Never better – or getting worse? The health and wellbeing of young Australians. *Australia 21*. Retrieved 10 June 2012 from http://www.australia21.org.au/oldsite/pdf/A21_youth_health_wellbeing.pdf.
- Froehlich, T.E., Lanphear, B. P., Epstein, J. N., Barbaresi, W. J., Katusic, S. K., & Kahn, R. S. (2007). Prevalence, recognition, and treatment of attention-deficit/hyperactivity disorder in a national sample of US children. *Archives of Pediatrics & Adolescent Medicine, 161*, 857–864. doi: 10.1001/archpedi.161.9.857
- Graham, L. J. (2012a). Disproportionate over-representation of Indigenous students in New South Wales government special schools. *Cambridge Journal of Education, 41*, 163-176.
- Graham, L.J. (2012b). A critical analysis of the increase in diagnosis of special educational needs in New South Wales government schools. Australian Research Council Discovery Project: DP1093020, 2010-2012.

- Granite, E., & Graham, L. J. (2012). Remove, rehabilitate, return? The use and effectiveness of behaviour schools in New South Wales, Australia. *International Journal on School Disaffection*, 9, 39-50.
- Graham, L. J., & Spandagou, I. (2011). From vision to reality: Views of primary school principals on inclusive education in New South Wales, Australia. *Disability & Society*, 26, 223-237.
- Graham, L. J., & Sweller, N. (2011). The inclusion lottery: who's in and who's out? Tracking inclusion and exclusion in New South Wales government schools. *International Journal of Inclusive Education*, 15, 941-953.
- Graham, L., Sweller, N. & Van Bergen, P. (2010). Detaining the Usual Suspects: charting the use of segregated settings in New South Wales government schools, Australia. *Contemporary Issues in Early Childhood*, 11, 234-248.
- Hansen, J. (2010). Classroom disorder on the rise. *The Australian*, p. 13. Retrieved 16 January 2010 from <http://www.theaustralian.com.au/national-affairs/commentary/disorder-in-the-classroom-on-the-rise/story-e6frgd0x-1225925201873>
- Hart, E. L. (1995). Developmental change in attention-deficit hyperactivity disorder in boys: a four-year longitudinal study. *Journal of Abnormal Child Psychology*, 23, 729-749.
- Hosp, J. L., & Reschly, D. J. (2001). Predictors of restrictiveness of placement for African-American and Caucasian students. *Exceptional Children*, 68, 225-238.
- Hosp, J. L., & Reschly, D. J. (2004). Disproportionate representation of minority students in special education: Academic, demographic, and economic predictors. *Exceptional Children*, 70, 185-199.
- Individuals with Disabilities Education Act (2004). US Department of Education. Retrieved 26 October, 2012, from <http://idea.ed.gov/>.
- Jones, R. (2003). The construction of emotional and behavioural difficulties. *Educational Psychology in Practice*, 19, 147-157.

- Kauffman, J. M., Lloyd, J. W., Baker, J., Riedel, T. M., (1995). Inclusion of all students with emotional or behavioural disorders? Let's think again. *Phi Delta Kappan*, 7, 542-546.
- Kirk, S. (2004). Are DSM diagnoses accurate? *Brief Treatment and Crisis Intervention*, 4, 255-270.
- Lee, M., & Jonson-Reid, M. (2009). Needs and outcomes for low income youth in special education: Variations by emotional disturbance diagnosis and child welfare contact. *Children and Youth Services Review*, 31, 722-731.
- NSW DEC (2011). New South Wales Public School Enrolment Data. Retrieved 1 January 2012 from: <https://www.det.nsw.edu.au/media/downloads/about-us/statistics-and-research/key-statistics-and-reports/public-school-enrolments.pdf>.
- NSW DET (2009a). Specialist Schools Supporting Behaviour: Available places by year - Reports and Statistics. New South Wales Department of Education and Training. Retrieved February 15, 2010 from: https://www.det.nsw.edu.au/media/downloads/reports_stats/yr2008/sssb.pdf
- NSW DET (2009b). 2009 Annual Report. New South Wales Department of Education and Training. Retrieved 29 September 2010 from: <https://www.det.nsw.edu.au/about-us/how-we-operate/annual-reports/yr2009>
- OECD. (1999). *Inclusive Education at Work: Students with Disabilities in Mainstream Schools*. Paris: OECD.
- Oswald, D. P., Best, A. M., Coutinho, M. J., & Nagle, A. L. (2003). Trends in the special education identification rates of boys and Girls: A call for research and change. *Exceptionality*, 11, 223-237.
- Oswald, D. P., Coutinho, M. J., Best, A. M., & Singh, N. N. (1999). Ethnic representation in special education: The influence of school-related economic and demographic variables. *The Journal of Special Education*, 32, 194-206.
- Perrin, J. M., Bloom, S. R., & Gortmaker, S. L. (2007). The increase of childhood chronic conditions in the United States. *JAMA*, 297, 2755-2759.

- Reddy, L. A., & Richardson, L. (2006). School-based prevention and intervention programs for children with emotional disturbance. *Education and Treatment of Children, 29*, 379-404.
- Roberts, R. E., Attkisson, C. C., & Rosenblatt, A. (1998). Prevalence of psychopathology in children and adolescents. *American Journal of Psychiatry, 155*, 715-725.
- Rose, N. (2007). Beyond medicalisation. *The Lancet, 369*, 700-701.
- Sawyer, M. G., Arney, F. M., Baghurst, P. A., et al. (2000). Children and adolescent component of the National Survey of Mental Health and Wellbeing. Canberra, ACT: Commonwealth of Australia.
- Sweller, N., Graham, L. J., & Van Bergen, P. (2012). The minority report: Disproportionate representation in Australia's largest education system. *Exceptional Child, 79*, 107-125.
- Skellern, C., Schluter, P., & McDowell, M. (2005). From complexity to category: responding to diagnostic uncertainties of autism spectrum disorders. *Journal of Paediatric Child Health, 41*, 407-412.
- Skiba, R., Poloni-Staudinger, L., Gallini, S., Simmons, A. B., & Feggins-Azziz, R. (2006). Disparate Access: The disproportionality of African American students with disabilities across educational environments. *Exceptional Children, 72*, 411-424.
- Stinnett, T. A., Bull, K. S., Koonce, D. A., & Aldridge, J. G. (1999). Effects of diagnostic label, race, gender, educational placement, and definitional information on prognostic outlook for children with behaviour problems. *Psychology in the Schools, 36*, 51-59.
- Thomas, G., & Loxley, A. *Deconstructing Special Education and Constructing Inclusion (2nd Ed.)*. Maidenhead: Open University Press.
- Toffalo, D. A., & Pederson, J. A. (2005). The effect of a psychiatric diagnosis on school psychologists' special education eligibility decisions regarding emotional disturbance. *Journal of Emotional and Behavioural Disorders, 13*, 53-60.

- Verhulst, F. C., Achenbach, T. M., van der Ende, J., Nese, E., Lambert, M. C., Leung, P. W., ... Zubric, S. R. (2003). Comparisons of problems reported by youths from seven countries. *American Journal of Psychiatry*, *160*, 1479-1486.
- Wehmeyer, M., & Schwartz, M. (2001). Research on gender bias in special education services. In H. Rousso & M. L. Wehmeyer (Eds.), *Double Jeopardy: Addressing Gender Equity in Special Education* (pp. 271-288). New York: State University of New York Press.
- Weiss, M., Worling, D., & Wasdell, M. (2003). A chart review study of the Inattentive and Combined types of ADHD. *Journal of Attention Disorders*, *7*, 1-9.
- Willoughby, M. T., (2003). Developmental course of ADHD symptomatology during the transition from childhood to adolescence: a review with recommendations. *Journal of Child Psychology and Psychiatry*, *44*, 88-106.
- Yeh, M., Forness, S., Ho, J., & McCabe, K. (2004). Parent etiological explanations and disproportionate representation in special education services for youths with emotional disturbance. *Behavioural Disorders*, *29*, 348-358.