

Editorial

Perspectives on the Incredible Years programme: psychological management of conduct disorder†

Tracey J. Bywater



Summary

Two out of three children diagnosed with conduct disorder will not outgrow it without treatment. It is costly to the individual in terms of negative life outcomes and to society in terms of increased health, social and education service use. Psychosocial interventions are effective in

psychologically managing and preventing the onset of conduct disorder.

Declaration of interest

None.

Tracey Bywater is a Reader at the Institute for Effective Education, University of York, Honorary Senior Research Fellow at Bangor University, and Chair of the Board of Trustees for the Children's Early Intervention Trust.

Conduct problems are the most common reason for referral for psychological and psychiatric treatment in childhood.¹ The prevalence rate of conduct disorder is 5–10%.¹ It can lead to negative life outcomes including criminal behaviour and psychiatric disorders,² with increased costs to the education, health, social and criminal justice services.³ The study published in this month's *Journal* by Baker-Henningham *et al* involved an evaluation of an universal school-based approach – the Incredible Years Teacher Classroom Management programme – which was developed in the US and implemented in Jamaica to help reduce conduct problems in young children.⁴

What are the risk factors for developing early-onset conduct disorder?

Conduct problems include defiant, disruptive and aggressive antisocial behaviour, and if severe and persistent, a diagnosis of 'early onset' (under 10 years) conduct disorder may be given (based on ICD-10 or DSM-IV criteria). Environmental, family, school and child risk factors contribute to the development of early-onset conduct disorder, with higher rates found in disadvantaged areas (20%),⁵ in 'looked-after' children (37%)⁶ and in boys (2:1 boy to girl ratio).⁷ Poor parenting, the main family risk factor, is characterised by poor supervision, inconsistent, neglectful or harsh discipline and a failure to set clear expectations.⁸

These clear risk factors enable targeting of preventive (early) interventions to those in need, be it individual families, schools or geographical areas, to reduce risk and enhance protective factors.

Why is it important to reduce conduct disorder?

If early behavioural difficulties remain untreated, 40% of children will develop conduct disorder.⁹ Negative juvenile and adulthood outcomes include: high-school drop-out and truancy rates, antisocial and criminal behaviour;² psychiatric disorders; drug/alcohol misuse; higher rates of hospitalisation and mortality;

unemployment; family breakdown; and intergenerational transmission of conduct problems to children.³ These individual and societal costs related to severe conduct problems are considerable. By age 28, the utilisation of health, social, education and legal services may be ten times higher for individuals with a clinical diagnosis of conduct disorder at age 10 than for those not meeting diagnostic criteria.³

Although individual and societal costs are known, few children actually receive treatment for conduct disorder in high-income countries, or, as Baker-Henningham *et al* highlight, in low- and middle-income (LAMI) countries.^{4,10} Treatment typically includes an expensive combination of therapeutic interventions targeted at both the child and family after crisis is reached. Reasons for limited reach include lack of multi-agency working and issues of identifying, targeting and engaging those in need. In LAMI countries, child mental health services are severely limited, expensive and support few children,¹¹ with less than a third of these countries having a main overseeing body for mental health programmes.¹² More cost-effective interventions to address conduct problems need to be implemented in settings guaranteed to reach the population in need at the earliest opportunity, such as educational settings in Jamaica.⁴

In the UK there have been moves to ensure that publicly funded services are delivered effectively and to specify the use of evidence-based programmes, particularly parent programmes, to manage child behaviour problems (e.g. Parenting Action Plan,¹³ Action Plan on Social Exclusion,¹⁴ guidelines from the National Institute for Health and Clinical Excellence (NICE)¹⁵). This is manifested in government initiatives such as the Pathfinder Early Intervention and Family Intervention Projects in England (<https://www.education.gov.uk/publications/eOrderingDownload/Think-Family07.pdf>), and Flying Start¹⁶ in Wales. Every Child Matters (in England; www.everychildmatters.gov.uk/publications) and Families First (in Wales; <http://wales.gov.uk/topics/childrenyoungpeople/parenting/help/familiesfirst/?lang=en>) social policy programmes recommend the blurring of boundaries between organisations and service 'tiers' to ensure families get the integrative support they need to avert families reaching crisis point.

Multi-agency work is preferable as children's complex needs rarely fit within one set of organisational boundaries. For example, a child with behavioural problems may be considered as having special educational needs by education services, considered a 'child in need' by Social Services, or having conduct disorder by a child and adolescent mental health service (CAMHS) team.

†See pp. 101–108, this issue.

High-income countries are now shifting focus to promote early intervention, in an attempt to prevent rather than cure conduct disorder. The reasons are threefold; first, from a psychological viewpoint it is easier to change behaviour while children are younger and more malleable before negative behaviours become embedded; two, from a financial viewpoint it is sensible to apply an ‘invest to save’ approach, i.e. to invest in cost-effective prevention programmes rather than pay the expensive costs of ‘cure’ (treatment) or ‘late’ interventions (e.g. prison) and the increased service use associated with conduct disorder; and three, from a prevention science viewpoint we now know ‘what works’. However, despite knowing what works, evidence-based programmes still struggle to be successfully scaled up without top-down government support.

How can we reduce or prevent early-onset conduct disorder?

There is considerable evidence from randomised controlled trials and systematic reviews that targeted complex interventions such as psychosocial parenting (e.g. Furlong *et al*¹⁷) and universal school-based (e.g. Durlak *et al*¹⁸) programmes can reduce or prevent conduct problems and increase child social emotional competence. However, even though 90% of the world population of children and young people live in LAMI countries, only 10% of trials of psychosocial interventions to prevent child mental health problems such as conduct disorder have been conducted in these countries.¹²

Despite diagnosis as a child mental health disorder, the proximal antecedents for conduct disorder are mainly psychological, and therefore psychosocial interventions can effectively reduce/treat conduct disorder. Evidence-based parent programmes are grounded in models of parent × child interaction, drawing on Patterson’s theory of coercive family process¹⁹ and Bandura’s social learning theory.²⁰ Social learning techniques rely strongly on principles of operant conditioning, that is, that behaviour that is rewarded (reinforced) will increase in frequency and be repeated, whereas that which is not will decrease. Accordingly, the key components of parent (and teacher) programmes involve learning to change the antecedents that are eliciting, and the consequences that are maintaining, negative child behaviour. The techniques and collaborative approaches are designed to increase positive behaviours such as adult × child and child × child interactions and relationships.

Programmes with these theoretical underpinnings effectively reduce conduct problems and are increasingly being delivered through multi-agency work between education, social and health services. One such programme is the US Incredible Years series (see www.incredibleyears.com).

The series comprises three linked programmes for children, parents and teachers. The basic Incredible Years group format is one of two parent programmes (the other being Triple P: Positive Parenting Programme) recommended by NICE¹⁵ to reduce/prevent conduct disorder. The Incredible Years programmes incorporate identified effective components to reduce conduct problems,¹⁵ including a collaborative model of parental engagement, behaviour modelling and practice, with the emphasis on building positive parent–child relationships through play (making full use of rewards and praise). In addition, they have the necessary tools for achieving fidelity and effective replication of results.

The Dinosaur child programmes are delivered in school to whole classes, or to small groups, to improve social emotional competence – a protective factor against conduct disorder development.

The parent programme’s structured curriculum is delivered to small groups of parents/carers (of children aged 0–12 years) by two facilitators (from various service backgrounds) over 4–18 weeks (2 h/week). Pragmatic, multi-agency, randomised controlled trials in Irish and Welsh community settings with parents of ‘at risk’ young children demonstrated significant short-term^{21,22} and long-term²² reductions in child problem behaviour and also in parental depression (which is highly correlated with child conduct problems, suggesting potential benefits if child and adult mental health services link up in programme delivery). Other key findings included the impact of positive role models; reflective statements and praise towards parents by facilitators increased the use for these behaviours by parents with their children,²³ and this positive parenting behaviour led to improved child behaviour.^{23,24} Moderator analyses showed that boys, younger children and children with mothers with severe depression, showed greater improvement in conduct problems post-intervention. Risk factors such as teen or single parenthood, or very low income, showed no predictive effects, implying intervention was at least as successful at helping the most disadvantaged families compared with the more advantaged.²⁴ The Incredible Years parent programme was also found to be cost-effective.¹⁷

The Incredible Years Teacher Classroom Management programme reflects the parent programme format and applies the same effective principles and strategies. Teachers attend groups for 1 day per month for 5–6 months. Recent randomised controlled trial results in Ireland demonstrate more positive teacher and child behaviours, and fewer negative behaviours,²⁵ reflecting the findings of Baker-Henningham *et al*.⁴

Baker-Henningham *et al*’s study highlights the benefits of offering a universal Teacher Classroom Management programme, with excellent results for those with higher levels of problem behaviour. However, although universal services reduce potential stigma, others favour a more targeted approach which may be more cost-effective by ensuring resources are reaching those most in need and with ‘more room’ to change.²⁶

A limitation of offering psychosocial programmes in just one context, such as the school, could be that positive behaviours learned in that setting may not generalise to other contexts. A multimodal approach may be required by adding a child and/or parent programme for additional behaviour change/maintenance. This approach has been shown to have a cumulative effect on positive behaviour change.²⁷

Conclusions

The focus of many psychiatric and psychological services, such as CAMHS in the UK, is treatment rather than prevention. However, it is more cost-effective for the individual, and for society, to implement preventive, evidence-based interventions as early as possible to mitigate exposure to cumulative risks for the development of mental health problems such as conduct disorder.²⁸ Furthermore, it is important to deliver high-quality programmes to maintain effectiveness.²⁹ In LAMI countries, where there is a lack of child mental health services, the earliest chance of programme implementation may not be until children enter nursery or school.⁴

The Incredible Years parent programme appears to be transportable across different ethnic groups³⁰ and different countries,¹⁷ and the universal teacher programme is similarly demonstrating its transportability across countries with different cultures and economic standing.^{4,31}

A universal school approach could be supplemented by more targeted interventions to enhance generalisability of behaviour

change across home–school contexts, an approach supported by NICE.³²

With the blurring of organisational boundaries there is a growing shared responsibility for the ‘psychological management’ of conduct disorder, suggesting that evidence-based behaviour management training should be considered as an inclusion in initial training for professionals who are in regular contact with families and children, including foster carers and nursery workers.

In summary, the collective evidence suggests that the effective prevention of conduct disorder relies on a combination of key ingredients, including:

- (a) an integrated, multi-agency, multimodal approach
- (b) the scaling up of evidence-based universal and targeted ‘early’ interventions
- (c) careful attention paid to identification of ‘at risk’ populations
- (d) ongoing training and fidelity to preserve the mechanisms of change.

Attention to these combined ingredients would help to reduce the considerable individual, family, societal and service costs that are incurred by untreated conduct problems and conduct disorder.

Tracey J. Bywater, PhD, CPsychol, Institute for Effective Education, Berrick Saul Building, University of York, York YO10 5DD, UK. Email: tracey.bywater@york.ac.uk

First received 31 Jan 2012, final revision 17 May 2012, accepted 14 Jun 2012

References

- 1 Moffitt T, Scott S. Conduct disorders in childhood and adolescence. In *Rutter's Child and Adolescent Psychiatry* (5th edn) (eds M Rutter, D Bishop, D Pine, S Scott, J Stevenson, E Taylor, et al): 543–64. Blackwell Publishing, 2008.
- 2 Fergusson DM, Horwood LJ, Ridder EM. Show me the child at seven: the consequences of conduct problems in childhood for psychosocial functioning in adulthood. *J Child Psychol Psychiatry* 2005; **46**: 837–49.
- 3 Scott S, Knapp M, Henderson J, Maughan B. Financial cost of social exclusion: Follow up study of antisocial children into adulthood. *BMJ* 2001; **323**: 191–4.
- 4 Baker-Henningham H, Scott S, Jones K, Walker S. Reducing child conduct problems and promoting social skills in a middle-income country: cluster-randomised controlled trial. *Br J Psychiatry* 2012; **201**: 101–8.
- 5 Attridge-Stirling J, Davis H, Day C, Sclare I. Someone to talk to who'll listen: addressing the psychosocial needs of children and families. *J Community Appl Soc Psychol* 2000; **11**: 179–91.
- 6 Tapsfield R, Collier F. *The Cost of Foster Care: Investing in Our Children's Future*. British Association for Adoption and Fostering (BAAF) and The Fostering Network, 2005.
- 7 Green H, McGinnity A, Meltzer H, Ford T, Goodman R. *Mental Health of Children and Young People in Great Britain, 2004*. Palgrave Macmillan, 2005.
- 8 Hoeve M, Dubas JS, Eichelsheim VI, van der Laan PH, Smeenk W, Gerris JRM. The relationship between parenting and delinquency: a meta-analysis. *J Abnorm Child Psychol* 2009; **37**: 749–75.
- 9 Coid J. Formulating strategies for the primary prevention of adult antisocial behaviour: ‘high risk’ or ‘population’ strategies? In *Early Prevention of Adult Antisocial Behaviour* (eds DP Farrington, JW Coid): 32–78. Cambridge University Press, 2003.
- 10 Belfer ML. Child and adolescent mental disorders: the magnitude of the problem across the globe. *J Child Psychol Psychiatry* 2008; **49**: 226–36.
- 11 Patel V, Aroya R, Chatterjee S, Chisholm D, Cohen A, De Silva M, et al. Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet* 2007; **370**: 991–1005.
- 12 Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, et al. Child and adolescent mental health worldwide: evidence for action. *Lancet* 2011; **378**: 1515–25.
- 13 Welsh Government. *Parenting Action Plan: Supporting mothers, fathers and carers with raising children in Wales*. Welsh Government, 2005.
- 14 Cabinet Office Social Exclusion Task Force. *Reaching Out: An Action Plan on Social Exclusion* HM Government, 2006.
- 15 National Institute for Health and Clinical Excellence, Social Care Institute for Excellence. *Parent-Training/Education Programmes in the Management of Children with Conduct Disorders* (Technology Appraisal TA102). NICE, 2006.
- 16 Welsh National Assembly. *Children and Young People: Rights to Action*. Welsh Assembly Government, 2004.
- 17 Furlong M, McGilloway S, Bywater T, Hutchings J, Donnelly M, Smith SM, et al. Behavioural/cognitive-behavioural group-based parenting interventions for children age 3–12 with early onset conduct problems. *Cochrane Database Syst Rev* 2012; **2**: CD008225.
- 18 Durlak JA, Weissberg RP, Dymnicki DA, Taylor RD, Schellinger KB. The impact of enhancing students’ social and emotional learning: A meta-analysis of school-based universal interventions. *Child Dev* 2011; **82**: 405–32.
- 19 Patterson GR, Forgatch MS. Predicting future clinical adjustment from treatment outcome and process variables. *Psychol Assess* 1995; **7**: 275–85.
- 20 Bandura A. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice-Hall, 1986.
- 21 McGilloway S, Ni Mhaille G, Bywater T, Furlong M, Leckey Y, Kelly P, et al. A parenting intervention for childhood behavioral problems: a randomised controlled trial in disadvantaged community-based settings. *J Consult Clin Psychol* 2012; **80**: 116–27.
- 22 Bywater T, Hutchings J, Daley D, Whitaker C, Yeo ST, Jones K, et al. Long-term effectiveness of a parenting intervention for children at risk of developing conduct disorder. *Br J Psychiatry* 2009; **195**: 318–24.
- 23 Eames C, Daley D, Hutchings J, Whitaker CJ, Hughes C, Jones K, et al. The impact of group leaders’ behaviour on parents acquisition of key parenting skills during parent training. *Behav Res Ther* 2012; **48**: 1221–6.
- 24 Gardner F, Hutchings J, Bywater T, Whitaker C. Who benefits and how does it work? Moderators and mediators of outcome in an effectiveness trial of a parenting intervention. *J Clin Child Adolesc Psychol* 2010; **39**: 1–13.
- 25 McGilloway S, Hyland L, NiMhaille G, Lodge A, O’Neill D, Kelly P, et al. *Positive Classrooms, Positive Children. A Randomised Controlled Trial to Investigate the Effectiveness of the Incredible Years Teacher Classroom Management Programme in an Irish Context (Short-term Outcomes)*. National University of Ireland, Maynooth, 2012.
- 26 Scott S, O’Conner T, Futh A. *What Makes Parenting Programmes Work in Disadvantaged Areas? The PALS Trial*. Joseph Rowntree Foundation, 2006.
- 27 Webster-Stratton C, Reid MJ. An integrated approach to prevention and management of aggressive behavior problems in preschool and elementary grade students – schools and parents collaboration. In *Interventions for Students With or At Risk for Emotional and Behavioral Disorders* (eds FM Gresham, TE Shaughnessy): 261–72. Allyn & Bacon, 2002.
- 28 Walker S, Wachs TD, Grantham-McGregor S, Black MM, Nelson CA, Huffman SL, et al. Inequality in early childhood: risk and protective factors for early child development. *Lancet* 2011; **378**: 1325–38.
- 29 Engle PL, Fernald LCH, Alderman H, Behrman J, O’Gara C, Yousafzai A, et al. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *Lancet* 2011; **378**: 1339–53.
- 30 Reid MJ, Webster-Stratton C, Beauchaine TP. Parent training in head start: a comparison of program response among African American, Asian American, Caucasian, and Hispanic mothers. *Prev Sci* 2001; **2**: 209–27.
- 31 Baker-Henningham H. Transporting evidence-based interventions across cultures: using focus groups with teachers and parents of preschool children to inform the implementation of the Incredible Years Teacher Training Programme in Jamaica. *Child Care Health Dev* 2001; **37**: 649–61.
- 32 National Institute for Health and Clinical Excellence. *Social and Emotional Wellbeing in Primary Education* (Public Health Guidance PH12). NICE, 2008.