

Editorial

This issue begins with three papers discussing, among other things, cognitive processing in Williams syndrome. Although a rare condition (1 per 20,000 births), Williams syndrome has attracted a great deal of research in recent years. This probably reflects two interesting features of the condition; that much is known about the genetic cause, and that people with Williams syndrome show an interestingly uneven profile of abilities and difficulties. It is this latter aspect that is explored in the present papers, which pursue an understanding of the nature of face, object, and word processing in Williams syndrome.

Elgar and Campbell give us an overview of face processing from the perspective of three developmental disorders; Williams syndrome, Turner syndrome, and autism. They discuss the role of configural processing in face recognition, and possible abnormalities of this local/global processing balance in these disorders. They argue that face processing may be especially vulnerable to deficits in a number of disorders, because it requires intact development of abilities in two distinct areas; visuospatial processing and socioaffective processing. Impairments in either of these may be manifest in face processing problems, and interventions may need to tackle these underlying deficits rather than the resulting face recognition impairment. This raises the interesting question of whether some secondary effects of developmental disorders can be avoided if development can be “re-routed” onto a more adaptive path.

The papers by Farran et al. and Laing et al. are both excellent examples of analysis of *how*, rather than merely *how well*, individuals with a specific syndrome process information. Farran et al. tackle the poor visuospatial processing seen in Williams syndrome, and specifically the deficits on Block Design tasks. The role of configural processing in these visuospatial puzzles is discussed, and a new version of Block Design (the “Squares task”) is employed to test some of the possible component processes. By examining the effect of design segmentation and coherence, the authors conclude that global-local processing appears normal in their participants with Williams syndrome. Mental imagery, and specifically mental rotation, however, appears to be impaired. The authors offer some interesting speculations about the role of verbal encoding strategies, pointing out that, in English at least, it is hard to use a verbal route to aid processing of certain visuospatial information, such as right-left orientation of obliques. It would be interesting to see whether teaching children with Williams syndrome novel verbal labels for some such visual discriminations might aid their processing, in the lab or classroom.

Laing et al. explore another area of relative impairment in Williams syndrome: reading ability. They find evidence of weak relations between phonological skills and reading ability in this group relative to controls, and suggest that children with Williams syndrome may fail to map orthography to semantics. In a task mimicking learning new written words, they find that imageability has a reduced effect in Williams syndrome—perhaps reflecting weaker semantic links, or the impaired use of

mental imagery as found in the preceding paper. The authors make the important point that these qualitative differences in processing urge a note of caution in interpreting performance in terms of mental age or age equivalent: to say that a young person with Williams syndrome has a reading age of 6 should not lead us to think that he or she reads like an ordinary 6-year-old.

It would be interesting to see how the group with Williams syndrome would compare with the other developmental disorders discussed by Elgar and Campbell, namely autism and Turner syndrome, in these visuospatial and reading abilities. Clear cognitive markers that discriminate developmental disorders are likely to be of use in genetic (e.g. broader phenotype) studies, as well as in refining diagnosis and directing intervention. In this issue, Conti-Ramsden et al. report on a study of psychological markers for specific language impairment. Their results suggest that measures tapping short-term memory—specifically sentence repetition (and to a lesser extent nonword repetition)—are the best markers for identifying specific language impairment at age 11 years. Unlike the linguistic tense tasks they used, the repetition tasks were able to identify even those children who no longer showed gross language impairments, but had been identified as having specific language impairment at 7 years. The specificity of these markers among other developmental disorders, however, remains open to test.

Hartman et al. also discuss issues of diagnostic specificity. They question the classic dichotomy between diagnostic approaches: top-down “clinical” taxonomies, versus bottom-up “psychometric” dimensions. They use a psychometric technique (factor analysis) to explore the clinical taxonomy in DSM-IV. The resultant factor structure supports the syndrome status of attention deficit hyperactivity disorder, conduct disorder, oppositional defiant disorder, generalised anxiety, and depression. Imperfections in the model fit, however, lead the authors to suggest areas of future improvement, for example in the measurement precision of DSM-IV questionnaires.

Among all the other interesting papers in this issue, three perhaps deserve mention as reporting findings that may cause us to question our assumptions, with potentially important implications for policy. Barber et al. question whether conventional family foster care is the most suitable placement for adolescents with behavioural problems. Based on measures of placement stability and psychological adjustment, they suggest there is an urgent need for alternative care options for these young people. Hughes et al. explore relations between stillbirth of a previous child and the subsequent infant’s attachment status. They argue for a causal path from mother’s experience of stillbirth, to her own “unresolved” mourning status, to the subsequent infant’s disorganised attachment. The positive message from this work is that it is the mother’s experience and perception of the stillbirth, rather than the event itself, that has knock-on effects on the next child—opening the doors to intervention. More surprising and disturbing is the finding that mothers’ experience of seeing the stillborn

child—as is the recommended policy in many hospitals—appeared to contribute to disorganised attachment in the next child. Hughes et al. rightly emphasise that seeing the stillborn infant is not a randomised event but one chosen by parents, and so this exposure may reflect other personality characteristics at work. In addition, other causal factors (including genetics) connecting maternal coping after stillbirth and offspring's attachment cannot be ruled out.

Jaffee et al. also bring psychological study to bear on an important policy assumption; that keeping fathers in families is always for the good of the children. Using data from the Dunedin longitudinal study in New Zealand, they examined which factors predict early fatherhood and absent fatherhood. They find a common set of

factors, including own experience of stressful rearing and history of conduct problems, that predict which men will father children young, and which men are likely to leave their children. Interestingly, their conclusion is that young fatherhood itself may not be harmful for the offspring, but that the factors that predispose to young and absent fathering are likely to increase the burden on mothers and children. Encouraging fathers to stay with the family, then, is not the answer—rather, addressing the root problems of conduct disorders in young men and improving educational and occupational prospects would best enhance the chances for the next generation.

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