Abstract

Breinholst et al explore the impact of parental behaviour and parent-child attachment on child anxiety disorders. They show that maternal variables did not predict child anxiety, while insecure attachment to the father was a significant contributor. But can we really say it's down to dad? The importance of including fathers in both research and clinical work on child anxiety disorders certainly needs to be highlighted, but family dynamics are complex and we need careful study designs which can capture some of this complexity in order to shed light on the most important targets for intervention.

Anxiety disorders are among the most common and persistent mental health difficulties experienced by children, with an estimated prevalence of around 10% (Copeland et al, 2014). They are associated with adverse outcomes for the child, including poor social and academic functioning and an increased risk of further mental health problems into adulthood. Indeed, many adults with anxiety and depressive disorders indicate that the onset of difficulties was in childhood (Kessler et al, 2007). In addition, there may be wider impacts on family functioning as well as ongoing societal costs, increasing the public health burden of these disorders. In the UK, the recent government green paper on Transforming Children and Young People's Mental Health acknowledged that children with poor mental health face unequal chances in life and that better preventive interventions are needed. This highlights the growing understanding that it is essential to target mental health early to prevent longer term problems.

Alongside this, there is an increased recognition that fathers play a pivotal role in child developmental outcomes. Over the last 50 years, fathers have been spending an increased amount of time with their children, becoming more involved in childcare from the earliest days of a child's life, and seeing their parenting role as providing social and emotional support as well as the traditional breadwinner or disciplinarian (Burgess & Davies, 2017). Fathers' involvement impacts on children's behavioural, social and cognitive outcomes, and while good quality relationships with fathers can have a positive impact on child outcomes, fathers can also contribute to poor outcomes. Research on domestic violence and paternal depression, for example, indicates associations with a range of adverse outcomes, including poor mental health (e.g. Sweeney & MacBeth, 2016). These impacts occur both directly through the quality of fathers' daily interactions with their children and also indirectly through their contribution to the wider emotional and social environment in the household, including maternal wellbeing, the quality of co-parenting, and levels of couple conflict.

Understanding the factors which drive these associations can help to develop targeted interventions to reduce mental health disorders in children. The paper by Breinholst and colleagues in this issue of

Child and Adolescent Mental Health aims to add to the literature exploring some of the factors which are posited to contribute to child anxiety disorders. Specifically, they use a clinical sample of children with diagnosed anxiety disorders (mean age 9.6 years) and employ a cross-sectional design to examine two factors which are hypothesised to predict children's self-reported anxiety: child-reported attachment security and both maternal and paternal reported parenting behaviours (with the subscales 'psychological control', 'autonomy vs overprotection', and 'acceptance vs rejection'). Using regression models, they found that maternal variables did not predict child anxiety, while insecure attachment to the father was a significant contributor. In addition, mediational analyses indicated that insecure attachment to the father fully mediated an association between paternal rejection and child anxiety.

This is an unusual finding. The majority of studies looking at associations between parental factors and child outcomes find either the strongest effects for maternal variables or similar effects for both parents. Furthermore, child anxiety is usually associated more with parental control than rejection, especially in clinical samples (e.g. McLeod et al, 2007). Therefore, there is a need for caution in interpreting this.

First, it may be useful to highlight some of the issues around including fathers in research studies.

It can be harder to engage fathers in research for reasons such as long working hours, not living with the child, or potentially not perceiving themselves (or being perceived by their partners) as being important to the research. Where fathers do take part, they are often well-educated and from high SES backgrounds, which makes it hard to generalise to other populations. Researchers who are investigating the impact of parenting on child outcomes need to ensure that the design of the study is father-inclusive and that they have sufficient resources to collect data from fathers in order to overcome these issues. In addition, it is important to be able to disaggregate data from each parent, rather that combining data and using this as a 'parenting' variable. Combining data is problematic as it doesn't allow researchers to look at the unique effects of mothers and fathers and to answer questions about similarities and differences in impacts. Breinholst et al do indeed measure both parents' behaviours and disaggregate the data to compare impacts. This therefore adds to the growing number of studies which are including paternal data and reporting fathers' unique impacts on their child. Additionally, their key practitioner messages draw attention to the importance of including fathers in assessment, formulation and treatment of anxiety disorders.

Despite this, the authors' title 'It's down to dad' isn't a helpful interpretation of the results. This is not a message that is either reflective of the literature in general or useful in thinking about

developing preventive interventions. Family dynamics are complex and both parents influence their child's wellbeing in multiple ways, through their 1:1 interactions, the quality of their co-parenting, and also through their effect on the wellbeing of the other parent.

If we assume that child anxiety is partially caused by environmental factors including the home environment, it might be useful to include other measures of this, in particular, the marital relationship/couple conflict. The quality of the parental relationship could influence child perceptions of their parents' trustworthiness or ability to act as a protector. Co-parenting is also an important element of family functioning and a focus on this is increasingly being incorporated into early interventions for families. The extent to which mothers and fathers support or undermine each other's parenting is likely to affect child beliefs about their parents as well as their level of anxiety. A measure of parental involvement may also be helpful - knowing who the main caregiver is and to what extent each parent is involved in the child's life is important in understanding the impact of parental behaviour.

These factors are all likely to influence family members' reports of their behaviour and relationships, but are not measured in the study. Therefore, the title's suggestion that the finding in this study means that fathers are the main contributors to child anxiety is rather misleading when so few variables are explored.

Furthermore, the authors rightly point out some of the methodological issues in the study which may have led to spurious findings. These are worth highlighting.

As well as being a rather small, homogenous sample, the cross-sectional design means it is not possible to look at the direction of effects. It is likely that child behaviour is impacting on parents and could potentially be leading to some aspects of rejecting parental behaviour. Similarly, child anxiety is likely to impact on child perceptions of their attachment to their parents. With this design it is not possible to investigate factors that may have led to the development of anxiety; this is crucial to preventive efforts. Longitudinal designs are necessary to explore the way that early parenting behaviours impact on the development of attachment and the subsequent development of anxiety disorders, and are preferable for mediational models which make assumptions about the order in which key variables occur (Selig & Preacher, 2009). Cross-lagged designs may be able to explore the extent to which child anxiety also impacts on parents' behaviour, potentially creating cycles of unhelpful parent-child interactions that family therapies can intervene in. With larger samples, structural equation modelling can be used to test relationships in these designs and start to unravel some of the complex dynamics at play.

The use of a self-report questionnaire for parental behaviour is also problematic. Social desirability is an issue here and, although the authors note this in their discussion and suggest the possible use of partner report of parental behaviour to overcome this, Bogels et al (2004) found rather low correlations between different informants' ratings of mothers' and fathers' behaviour. The complex nature of family dynamics means that all reports are likely to have distortions and biases depending on the quality of relationships, the insight of the individual, current mental health disorders etc. Therefore, objective measures are the best way to overcome this. Indeed, research suggests that effect sizes are higher when observational measures of parenting are used to look at associations with child anxiety (McLeod et al, 2007). Videotaped parent-child interactions can be coded by researchers who are blind to the status of the family and who have reached reliability on the scale being used. A variety of approaches can be used, from unstructured free play to more specific tasks which incorporate stressors. Novel methods are also now being developed to code triadic family interactions, which can capture aspects of the co-parenting relationship (e.g. Dallos, 2014).

These limitations do indeed, as the authors point out, highlight the need for further studies, and also highlight the necessity for careful design and interpretation when exploring such complex relationships.

Conclusions

Given the growing understanding of the importance of fathers to child developmental outcomes, it is essential that researchers investigating the risk factors for specific outcomes design father-inclusive studies. This includes allowing sufficient resources for data collection, making an effort to recruit and retain representative samples of fathers, and ensuring disaggregation of maternal and paternal data for analysis to enable interpretation of differential parental influences.

Where fathers are included, researchers need to hold in mind the complexity of family dynamics. It is useful to try and capture different aspects of this complexity both through including a range of variables of family functioning, but also through ensuring the use of high quality measures. This means measures with good psychometric properties, but also, where possible, observational measures which reduce the likelihood of bias.

The more studies we have which include a wide range of maternal, paternal and family variables, the better understanding we will have of the factors contributing to child anxiety disorders. This will aid the development of targeted interventions which can reduce the burden of child mental health problems and give children a better start in life.

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