A narrative review of the relationship between parenting and anxiety disorders in children and adolescents

Yosi Yaffe

Department of Education, Tel-Hai Academic College, Qiryat Shemona, Israel

ABSTRACT
This theoretical study aims to identify types of parental behaviour and parent-child relationships that play a role in children’s and adolescents’ anxiety disorders. The article integrates the relevant literature on the familial climate and parental characteristics that correlate with children’s and adolescents’ anxiety disorders and describes their theoretical role in the emergence and persistence of those anxieties. The role of social learning in this context is also presented, depicting mechanisms of anxiety acquisition such as parental modelling of anxious or avoidant behaviour, as well as parental attitudes and actions. An association was found between parenting styles and practices and children’s anxiety, with the strongest effect found for different types of parental control and parental corporal punishment. Children and adolescents with anxiety disorders are more likely to be raised by non-authoritative parents (e.g. overprotective, authoritarian, and neglectful styles), who tend to employ exaggerated (e.g. preventing autonomy), harsh, or inconsistent control. The article discusses some aetiological conditions in which anxiety in children is more likely to be induced by these parental patterns, describing the interplay between parent and child characteristics in this context.

Introduction

Research suggests that anxiety disorders in children and adolescents have considerable environmental and developmental etiologic foundations (McLeod et al., 2007). Anxiety disorders refer to a range of disorders that share features of excessive fear or apprehensions and related behavioural disturbances, including separation anxiety disorder, social and specific phobias, and generalized anxiety disorder (Ayano et al., 2021). A large body of literature focuses on the marital context of children’s anxiety, specifying various aspects of parenting and parent-child relationships that play a significant role in this regard. The current article discusses some of the main parental characteristics that correlate with children’s and adolescents’ anxiety disorders, attempting to describe their theoretical role in the emergence and persistence of those anxieties. It concentrates on three related parent-child topics that are discussed in depth in the context of children’s anxiety: parenting styles and behaviours, corporal punishment, and intergenerational transmission of anxiety in the family. Apart from parent-child attachment (which will not be discussed here, simply because this topic exceeds the developmental framework of childhood and adolescence on which the current article focuses), these aspects are currently the most studied environmental factors as part of the aetiology research on children’s anxiety.

CONTACT Yosi Yaffe  yaffeyos@telhai.ac.il
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Parenting style and its underlying child-raising behaviours constitute the familial framework for children’s upbringing and establish the climate and conditions for their developmental wellbeing. An immense body of research has yielded some remarkable insights regarding the linkage between parenting and children’s anxiety (see: Bosmans et al., 2014; McLeod et al., 2007), to be discussed here, even though its nature is yet to be elucidated (i.e. the link’s magnitude, its causal direction, and so on). A specific parental disciplinary practice that has gained a great deal of empirical attention in the context of children’s psychopathology is corporal punishment. A piece of evidence reviewed below would suggest that this still common parental practice (especially in its severe form) might have adverse consequences on children’s anxiety. A major goal of this article would be to provide the contemporary main empirical findings of the body of research encompassing these parental factors in an attempt to clarify their etiologic role with respect to children’s anxiety in general, and to some anxiety disorders in particular. Based on meta-analyses of the relevant research findings (e.g. McLeod et al., 2007; Pinquart, 2017; Wood et al., 2003) an effort will be made to differentiate between some parental factors by their significance in that context. Finally, specific mechanisms of intergenerational transmission of anxiety between parent and child will be introduced, which include modelling processes, information transfer procedures, and reinforcement of anxious/avoidant behaviours. These mechanisms of anxiety transition exist between parent and offspring, will provide a theoretical framework to evaluating the well-known claim that anxiety runs in the family.

Despite the direct and indirect relevance of broader social aspects in the familial and parental aetiology of children’s anxiety (e.g. quality of the marital relationship, socioeconomic status, family status, and culture), they will not be in the focus of the current work. Rather, it will address substantial issues concerning the parents’ and the child’s nature (e.g. parental anxiety and the child’s temperament), which may affect the mutual relationship between parenting and children’s anxiety. Finally, the complex interplay between the parent’s and the child’s reciprocal effects will be discussed in context of anxiety disorders’ causality.

**Parenting styles and dimensions in relation to children’s and adolescents’ anxiety disorders**

A robust body of work had focused on the linkage between forms of low parental acceptance and overcontrol by mothers and fathers and children’s anxiety. In general, a meta-view of its findings reveals remarkably more compelling evidence for the association between parental control expressions, rather than parental acceptance expressions, with children’s anxiety disorders (see: Ginsburg et al., 2004; McLeod et al., 2007; Wood et al., 2003). The following review will start off by presenting the findings referring to these two parental dimensions (and subdimension) in the context of children’s anxiety disorders. Later on, the relationship between overall parenting styles and offspring’s anxiety will be also discussed.

*Low parental acceptance and warmth* represents parental coldness, rejection, and unresponsiveness (Bosmans et al., 2014), and was found to explain less than 1% of the variance in children’s anxiety in general (McLeod et al., 2007). Indeed, several studies that distinguished between the unique role of the two main parental dimensions (i.e. acceptance and control), found minor support for the effect of either maternal or paternal rejection behaviours on the children’s anxiety (Mattanah, 2001; Yaffe, 2018). Yet, this theoretical link may seem more valid for specific anxious children whose dominant anxiety has social contexts. At least four studies from the recent years have shown an association between parental acceptance/rejection (including hostility) and social anxiety symptoms among children and adolescents (Spokas et al., 2009; Weymouth & Buehler, 2018; Xu et al., 2017; Yaffe, 2018), suggesting that parental rejection may play a more significant role in the development of certain types of children’s anxiety disorders. While Yaffe’s finding was limited to the highly anxious group of children within the sample, other studies demonstrated the linkage between parental (low) acceptance and social anxiety also in non-clinical and general samples of children. Theoretically, parental rejection may influence the attribution styles that the
child develops, when frequent negative feedback promotes a perception of a threatening and hostile world that diminishes his or her self-concept. This, in turn, could increase the child’s perceptions, and expectations, of negative consequences of social events in his or her life and, in certain conditions, result in severe social anxiety (Yaffe, 2018). In light of the limited and inconsistent research findings associating between parental low acceptance behaviours and social anxiety, this hypothesis requires more support in further research. In order to clarify the importance of parental acceptance/rejection-based behaviours in children’s social anxiety, seemingly this factor should be considered as part of broader aetiological perspective, which includes the child’s temperament and predisposition to anxiety (i.e. behavioural inhibition), in interplay with other parental characteristics (Ollendick & Benoit, 2012).

Parental control. The evidence supporting the association between parental control related behaviours and anxiety in children and adolescents is to a great extent more compelling. Parental over-control is typically manifested in harsh practices of discipline, overregulation of the child’s behaviour, overprotection, and psychological control (i.e. instruction on how to think and feel) (Barber, 1996; Barber et al., 2012), all of which contradict autonomy-granting to the child. Parental control was consistently linked with offspring’s anxiety disorders. Two comprehensive meta-analysis reviews that aggregated research findings from 23 and 47 studies up to 2008 (respectively to the following reviews), estimated parental control to reach the effect size of $d = .58$ (Van Der Bruggen et al., 2008), with parental autonomy-granting in particular (a subdimension of parental control) accounting for about 18% of the variance of children’s anxiety (McLeod et al., 2007). As the direction of the relationship between the child’s anxiety and parental control is yet to be clarified via further research with versatile designs (Van Der Bruggen et al., 2008), the considerable average effect size that underlies this relationship suggests that anxious children are more likely to be raised by overcontrolling and less autonomy-granting parents (Bosmans et al., 2014; Pinquart, 2017; Rose et al., 2018; Wood et al., 2003). Surprisingly, however, a more recent meta-analysis study reveals a very small effect size for the association between parental control and children’s anxiety in early childhood (Mölle et al., 2016), with no significant effect size for maternal overinvolvement and autonomy granting. This may indicate that the adverse consequences of parental control on the child’s well-being may take a toll later on in development, as a result of the cumulative influences that child–parent interactions have on the development of anxiety over time (McLeod et al., 2007). While the association between parenting and childhood anxiety is theoretically more plausible to be strongest in early childhood (McLeod et al., 2007), its effect size proved to be positively associated with the child’s age in the 2008 meta-analysis study of Van Der Bruggen (that is, the association between parental control and anxiety was larger with child’s age, which is essentially in accord with the small size effect found for pre-school children in the findings of Möller and colleagues (2016).

Chorpita and Barlow (1998) theorized that early experiences with a diminished control in childhood may foster a psychological vulnerability to anxiety, which at some point becomes a relatively stable and diathetic cognitive tendency to interpret subsequent events as out of one’s control. Hence, a lack of parental autonomy granting (i.e. an expression of overcontrolling) hinders the child’s opportunities to develop adequate independent experiences, resulting in a deficient sense of control and in increased helplessness (Wood et al., 2003).

This conception may particularly describe a possible path for the emergence of a specific childhood anxiety type known as separation anxiety disorder. Wood et al. (2003) further suggested that the insecure child (in terms of sense of control) who develops a growing pattern of dependence on the parents, might exhibit detachment difficulties from them which, in turn, resulted in a consistent refusal of family separation due to the anxiety involved. So far only a few studies have provided empirical support for this hypothetical trajectory between overcontrolling parental behaviours and separation anxiety disorders (e.g. Orgilès et al., 2018; Yaffe, 2018), in both clinical and non-clinical populations, however more research findings are required to further ground this theory.
Additional studies presented a similar link for parental control with social anxiety in children of diverse ages (e.g. Bynion et al., 2017; Wei & Kendall, 2014; Xu et al., 2017; Yaffe, 2018). These works’ findings are in line with evidence from a US national representative sample of adolescents (Eun et al., 2018), whose findings particularly magnified the link between parental control and both social and separation anxiety disorders among adolescents. This accumulated evidence may reinforce the above proposed theory regarding the path between parental control and specific anxiety disorders, but also implies that children’s impaired sense of control and autonomy as derived from restrictive parental control can be related to various social anxiety types (i.e. separation and social) rather than exclusively to one type.

Overall parenting style is considered a characteristic of parents that is stable over time and constitutes the environmental and emotional context for child-rearing and socialization (Darling & Steinberg, 1993). By composing the parental dimensions of control and warmth (demandingness and responsiveness, respectively), Baumrind initially conceptualized three main overall types of parenting styles, which later were expanded into four types (Baumrind, 2005; Maccoby & Martin, 1983). These four prototypes of parental configurations include the authoritative style (highly demanding and responsive, exerting consistent behavioural control, granting autonomy, using reasoning, and providing warmth), the authoritarian style (highly demanding and low in responsiveness, exerting strict control, avoiding negotiating, tending to use punishment, and maintaining an emotional distance), and the permissive style (low in demandingness and high in acceptance, practicing lax control, avoiding punishing, and maintaining an emotional closeness) (Baumrind, 2005; Yaffe, 2020). The fourth form later identified is neither demanding or responsive, usually characterized as a neglectful or uninvolved parenting style (Baumrind, 2005; Maccoby & Martin, 1983).

As part of inspecting the association between parenting and children’s anxiety, fewer research studies have also examined the effects of overall parenting styles rather than (or alongside with) their constituent dimensions and behaviours. Those studies usually found the authoritative and the authoritarian parenting styles to be inversely related to children’s and adolescents’ anxieties, with the former style associated with lower levels of anxiety and the latter style associated with higher levels of anxiety in offspring (Erozkan, 2012; Manoochehri & Mofidi, 2014; Panetta et al., 2014; Pinquart, 2017; Timpano et al., 2015; Wolfradt et al., 2003; Wei & Kendall, 2014; Yaffe, 2018; Yazdani & Daryei, 2016). Of these studies, some also demonstrated the differential parental effect of the authoritative and non-authoritative parents on the rates of various types of anxiety and anxiety sensitivity in children and adolescents (Erozkan, 2012; Panetta et al., 2014; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016). Given that most of those studies use self-report indexes of parenting styles employed in correlational and cross-sectional research designs, it can be concluded that anxious children and adolescents are more likely to experience their parents’ dominant parenting style as non-authoritative (i.e. authoritarian, permissive, or uninvolved) rather than authoritative. There is evidence to suggest that culture may moderate the relationship between parenting styles and offspring’s emotional and behavioural outcomes (e.g. to reduce the adverse effects of authoritarian parenting style and practices on the child’s emotional well-being) (Davidov & Khoury-Kassabri, 2013; Dwairy, 2004; Lansford et al., 2014). Yet authoritative parenting is seemingly the cross-culturally preferred style in diverse developmental contexts of children’s internalizing and externalizing behaviours problems, including anxiety (Pinquart, 2017; Pinquart & Kauser, 2018).

The review of the literature on the aetiology of children’s anxiety disorders indicates an association between parenting and children’s anxiety, with the strongest effect found for parental control (Bosmans et al., 2014; McLeod et al., 2007). Accordingly, children and adolescents with anxiety disorders are more likely to be raised by non-authoritative parents (e.g. authoritarian and neglectful styles), who tend to employ exaggerated (e.g. preventing autonomy), harsh, or inconsistent control. Authoritative parenting, on the other hand, is cross-culturally associated with lower developmental psychopathology, which has also been shown to constitute a protecting factor against children’s anxiety. Despite these significant and considerably consistent findings linking between parenting and children’s anxiety, their general average effect size remains relatively modest, explaining about
4% of the variance in childhood anxiety (after accounting for the effect sizes of all parental constructs) (McLeod et al., 2007). Moderators tests indicated that the effect sizes generally vary by sample and method characteristics, with stronger effects obtained for clinical samples, observation studies (rather than using questionnaires), studies with higher quality measurement of parenting practices (McLeod et al., 2007), and studies on school-age children (Möller et al., 2016; Van Der Bruggen et al.’s, 2008). Also, parental types of behaviour differ in their potential association with children’s anxiety (e.g. autonomy granting, and warmth; overprotection and rejection), with some behaviours seeming to be considerably more important than others. These moderators, which in fact constitute the conditions in which parenting is more aetiological relevant to children’s anxiety, should adjust the focus of further prospective empirical and practical (that is, intervention and treatment) efforts in this area.

Moreover, Bosmans et al. (2014) note that the effect sizes of the relationship between parenting and anxiety might be diminished when parenting influences are considered in isolation, namely, without accounting for other substantial factors in which the parental effects on children’s anxiety are likely to be larger when interacting with them. This notion may include both parents’ and children’s characteristics, such as parental anxiety, specific parental practices, and most important – the child’s temperament. Accordingly, anxious parents are more likely to employ fearful and overprotecting behaviours (e.g. modelling or reinforcing anxious behaviours; preventing autonomy-based experiences). Further, some parents would be more likely to employ overcontrolling behaviours, while exerting harshly punitive practices. Both cases might increase the risk of leading to a child’s elevated anxiety and, in certain conditions (especially in the case of children temperamentally predisposed to anxiety), even a specific anxiety disorder (see: Murray et al., 2008; Orgilés et al., 2018; Van Der Bruggen et al., 2008). In what follows, these subjects will be discussed in various contexts, starting with the specific parental practice known as corporal (or physical) punishment, whose links with children’s psychopathology were widely studied. Subsequently, a few mechanisms of parent-child transmission of anxiety will be described, while arguing that their underlying procedures (e.g. parental practices of modelling or reinforcing anxiety) are affected by some of the parents’ and child’s characteristics mentioned above (that is, parental anxiety and child’s temperament).

**Corporal punishment and children’s anxiety**

Corporal punishment by definition includes any kind of physical punitive measures in response to a child’s inappropriate behaviour and may take the form of beatings, such as a spanking the buttocks, slapping, pinching, hair pulling, or ear twisting (Gershoff, 2002; Xing & Wang, 2013). Its disciplinary usage by parents was widely studied in many developmental contexts and outcomes, with somewhat less attention given to children’s anxiety. Theoretically, corporal punishment may decrease children’s sense of control of their environment and, more specifically, their sense of control of their body’s reaction to fear, thus amplifying their anxiety sensitivity (Graham & Weems, 2015).

A few studies tested the specific link between parental use of corporal punishment and anxiety in offspring at various ages, all of them showing association between the two phenomena (Gershoff et al., 2010; Graham & Weems, 2015; Lansford et al., 2014; Xing & Wang, 2013; Yaffe & Burg, 2014). As a rule, parental corporal punishment was consistently found to be positively correlated with children’s and adolescents’ anxiety, while parenting styles (authoritativeness), parental behaviours (positive supportive parenting; supplying warmth), and cultural characteristics (normativeness of corporal punishment in more authoritarian groups) moderate this association but do not eliminate it. The connection between these two variables across studies from multiply nationalities suggests that corporal punishment might contain a substantial negative impact on children’s anxiety state, though its consequences on children’s emotional well-being are not exclusively related to anxiety (Gershoff et al., 2010).
While the direction of causality between corporal punishment and children’s anxiety is empirically supported by solely a few studies (as discussed below), the reverse causal course is theoretically less plausible in the context of children’s anxiety (i.e. children’s anxiety causes parental corporal punishment). For example, two longitudinal studies exhibited evidence of a causal link between corporal punishment and anxiety in boys and girls from different countries. In Xing and Wang (2013) study conducted in China, mild to severe corporal punishment predicted an elevated anxiety level six month later among girls, while among boys the same effect was observed for severe corporal punishment. In both genders, the reverse correlation was not significant, which heightens the evidence of a causal effect of corporal punishment. Lansford et al. (2014) illustrated the effects of corporal punishment on children’s anxiety in a significantly larger sample of participants (N = 1196). A major advantage of this study’s findings was that they derived from a much more internationally diverse sample, encompassing eight countries from different culturally affiliations, which is more representative of the world’s population than is the case in the majority of psychological research. In this study, corporal punishment predicted subsequent growth in children of both genders’ anxiety (according to both mothers’ and children’s reports) over time. These trends are also reflected in Pinquart’s (2017) meta-analysis, whose findings indicate increase in internalizing problems overtime among children who were exposed to harsh control (also physical punishment) by their parents. Those results have important implications for clinicians’ and other practitioners’ work across countries. They should advise parents against using corporal punishment even in the context of warm parent–child relationships (Lansford et al., 2014). While these findings provide us with evidence of the harmful potential of parental corporal punishment in relation to children’s anxiety, many more in-depth studies are needed to further establish the causal relationship between the two phenomena.

**Parental (intergenerational) transmission of anxiety**

Research findings suggest that anxiety tends to run intergenerationally in the family, as its co-occurrence prevalence in families with anxious member is immeasurably higher than its prevalence in general families (Creswell et al., 2011; Fisak & Grills-Taquechel, 2007). Thus, parents with anxiety disorders were found to be seven times more likely than non-anxious parents to have anxious offspring children (i.e. children who meet the criteria for an anxiety disorder diagnosis) (Turner et al., 1987). The latter also report more anxiety-related problems, such as school difficulties, worries about family members and themselves, and somatic complaints. Conversely, research indicates that more than 80% of parents of children with anxiety disorders exhibit clinical anxiety symptoms themselves (Last et al., 1987).

Both genetic and environmental factors are thought to explain the intergenerational connection between parents’ and children’s anxiety in the family. However, while genetics seems to play a general explanatory role in this connection (that is, inherited vulnerability, temperamental style of behavioural inhibition), environmental processes within the family may offer more specific explanations for the intergenerational transmission of anxiety. Such familial mechanisms are in general learning experiences, exposure to negative information, and modelling (Askew & Field, 2008; Fisak & Grills-Taquechel, 2007; Murray et al., 2009; Podina et al., 2013). Recent research findings intriguingly suggest that in this specific aetiological trajectory of children’s anxiety (i.e. intergenerational transmission), environmental variables matter to a great extent more than genetic ones (Eley et al., 2015). In this study, two groups of monozygotic and dizygotic, same-sex pairs of twins were utilized for testing the presence of genetic and environmental transmission of anxiety from one generation to the subsequent. The study’s analyses provided support for a direct, environmental transmission of anxiety from parents to their adolescent offspring through the above-mentioned familial mechanisms, which is above and beyond any genetic confounding of this association. While no significant evidence was found for genetic transmission, parental anxiety was showed to be transmitted through a direct environmental pathway from the parent’s behaviour to the offspring.
Following Rachman’s (1977) theory on the indirect pathways for anxiety acquisition, Fisak and Grills-Taquechel (2007) proposed a framework to describe the transition of anxiety disorders between parent and child through three basic learning mechanisms: modelling, information transfer, and reinforcement of anxious/avoidant behaviours. Led by Rachman’s notions of vicarious learning (fears acquired by observing others) and transmission of threatening information, they proposed that anxious parents may transfer their own anxieties through *modelling* and instructional learning (information transfer). An eclectic line of research studies reviewed by the authors led them to conclude that modelling of anxious behaviours by parents (e.g. parents express their own anxiety or anxious thoughts in front of their child, presenting as visibly anxious, and modelling avoidance behaviours) can be associated with the development of several types of anxiety in children (Fisak & Grills-Taquechel, 2007). The authors also proposed that certain modelling behaviours may be related to the formation of specific anxiety types among children. This assertion can draw support from a few research findings demonstrating not only an intergenerational continuation of anxiety in the family, but also a resemblance in its symptoms (or type) between parents and children (e.g. Bögels et al., 2001; Murray et al., 2008; Peleg et al., 2006; Podina et al., 2013).

Other studies have illustrated the potential impact *threatening verbal information* may have in the development of children’s sense of fear (namely, information transfer; Muris & Field, 2010). Those studies show that a wide range of children report greater fear of previously novel stimuli if simply described in a negative manner, such as disgusting or scary (Adams et al., 2014). Although the influence of parents was not directly examined in this main body of work, Fisak and Grills-Taquechel (2007) speculated that the parental influence when transferring threatening information would be even stronger, due to their crucial role as a source of information and interpretation for their children. They explain that anxious parents in particular may communicate messages to their children regarding safety and wellbeing matters in an excessive manner that magnifies the potential risk and increases its negative effect (e.g. by using extreme and frequent massages). Recently a few studies have provided support for this specific explanatory path of intergenerational transmission of anxiety, suggesting that this transference between parent and child may be explained (or mediated) by a mechanism of a shared, negatively biased (i.e. fearful) information processing shaped by the parent (Eley et al., 2015; Podina et al., 2013).

Finally, Fisak and Grills-Taquechel (2007) note a third mechanism of intergenerational transmission of anxiety which, according to Rapee’s (2002) hypothesis, involves parental reinforcement of anxious or avoidant behaviours and thereby supports and advocates anxious patterns in the offspring. For example, parents may permit (or even encourage) their children’s absence from social activities where they feel stress or discomfort (e.g. social meetings with friends, school trips, and in extreme cases of social anxiety, even attending school). In this regard, observational studies show that parents (especially anxious ones) may employ more controlling and protecting interactions with their anxious children, expressed by discouragement of coping and brave behaviours and reinforcement of anxious behaviours (e.g. avoidance or escape) (Barrett et al., 2005; Bilsky et al., 2018; Murray et al., 2009). These dysfunctional reinforcement patterns could be related subsequently to the children’s various anxiety problems (Askew & Field, 2008; Fisak & Grills-Taquechel, 2007; Murray et al., 2009, 2008; Watt et al., 1998).

Interestingly, the transmission process of parental anxiety to an offspring was observed already in very early developmental stages. Murray et al. (2008) demonstrated some of the above-mentioned mechanisms of intergenerational transference of anxiety in socially anxious mothers and their infants by using an experimental research design with longitudinal elements. In this study, infants of mothers with social phobia were observed to become progressively more avoidant of social interactions with an unfamiliar adult between 10 and 14 months, particularly if they were behaviourally inhibited. The infants’ inclination of social avoidance overtime was associated with the social anxiety of their mothers who, compared to the mothers from the control group, modelled more anxious behaviour throughout the experimental situation and were less encouraging of social interaction with the unfamiliar adult. Consistent findings were obtained in a later study with a similar research
design (Aktar et al., 2013), where 12-month-old infants participated in a study separately with their fathers and mothers who had diverse anxiety disorders. The link found in this study between expressed parental anxiety and inhibited infants’ avoidance behaviour accords with that reported in the study discussed previously, both illustrating the mechanism explaining early intergenerational transmission of anxiety in the family.

Conclusions and further considerations: child’s nature, parental anxiety, and parent-child bi-directional effect

The above review describes several generic pathways of the association between parenting and offspring’s anxiety, while particularly focusing on the parental role in the relationship between the two variables. However, most research studies reviewed here (apart from a specific few) do not necessarily reflect any causal effect, but their findings rather suggest the parental influence on the child’s anxiety as a possible explanation. Even though this is the favoured and prominent theory regarding the connection between parenting styles and children’s anxiety, the reverse direction is not only theoretically plausible but also supported by several particular works (e.g. Bilsky et al., 2018; Eley et al., 2010; Moore et al., 2004). A child’s natural behavioural tendencies (i.e. behavioural inhibition of anxiety sensitivity), as well as a child’s anxiety disorder, can equally evoke and elevate parental protective and controlling behaviours (including all their possible associated expressions described above, such as reinforcement of avoiding behaviours, punitiveness, failure to grant autonomy, etc.). In fact, the reciprocal impacts of parental behaviours and child’s anxiety could be boosted by both the parent’s and the child’s nature. Specifically, the various parental effects on the child’s anxiety tend to be stronger for children with a temperamentally disposition to anxiety (that is, behaviourally inhibited children) (e.g. Aktar et al., 2013; Murray et al., 2008). Moreover, those parental styles and behaviours that are associated with children’s anxiety are more likely to be carried out by anxious parents. Conversely, anxious children (or behaviourally inhibited children for that matter) would presumably be more provoking of parental dysfunctional child-raising behaviours (e.g. overprotection), especially in the context of anxious parenting (that is, when the parents are anxious themselves) (see: Murray et al., 2009). Thus, referring to anxiety as a problem that ‘runs in the family’ in terms of environmental transmission refers not only to a unilateral-directional effect, but rather to a bi-directional singular effect (i.e. a vicious circle).

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Notes on contributor

Yosi Yaffe (Ph.D.) holds a position of senior lecturer at Tel-Hai Academic College. He specializes in family assessment and is interested in parent-child relations in diverse contexts of children’s and adolescents’ emotional and educational wellbeing.

ORCID

Yosi Yaffe http://orcid.org/0000-0002-3342-8842

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