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Do you think I should be scared? The effect of peer discussion on children's fears

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ABSTRACT

This study investigated whether close friends affect each other's fear responses (fear beliefs and avoidance) when they discuss fear-related issues together. Children (N = 242) aged 7–10 years were first presented with ambiguous and threatening information about two novel animals respectively, after which their fear responses towards each animal were assessed (T1). Next, dyads of close friends had a discussion about their feelings regarding the animals, and their fear responses were measured again (T2). Results showed that children influenced each other's cognitions following the discussion; from T1 to T2 their fear responses became more similar and close friends' fear responses at T1 significantly predicted children's fear responses at T2. Gender pair type predicted change in children's fear responses over time. Children in boy-boy pairs showed a significant increase in fear responses following the discussion; their fear level became more in line with that of other gender pairs at T2, while those in girl-girl pairs showed a significant decrease in their fear beliefs, at least when threatening information was given. Differences in anxiety level between close friends did not affect change in fear responses over time. Altogether, the results indicate that children may affect each other's fears.

1. Introduction

Fears are highly prevalent in childhood, and are usually mild and benign (Gullone, 2000). According to Lang's (1968, 1985) tripartite model, fear is characterized by verbal-cognitive responses (e.g. subjective feelings of apprehension), behavioural changes (e.g. avoidance), and physiological arousal (e.g. sweating, trembling, heart palpitations). Normative fears include fear of ghosts and the supernatural in early childhood (Bauer, 1976), fear of animals in middle childhood, and fear of self-injury as well as socio-evaluative apprehension in late childhood and adolescence (Muris & Field, 2010). Although these fears usually diminish over time, a substantial minority of children go on to develop significant fears that interfere with their daily functioning. Specific phobias are the most common form of childhood anxiety disorders (Costello, Egger, Copeland, Erkanli, & Angold, 2011). If left untreated, phobias can continue into adulthood; retrospective interviews with phobic adults indicate that certain fears, such as animal phobias, first developed when the individuals were as young as 7 years old (Öst, 1987).

In exploring the origins of fears and phobias, research in behavioural genetics suggests that up to half of the variance in childhood fears can be explained by a child's genetic inheritance, depending on the type of fear (Eley & Gregory, 2004). This leaves a substantial role for environmental factors, such as discrete learning experiences. Rachman (1977) posited that the transmission of verbal threat information is one of the pathways through which children learn fears and phobias. In keeping with this hypothesis, a substantial body of research has demonstrated that children generally become less fearful of stimuli when presented with positive information about the stimulus and more fearful when presented with threatening information (Muris & Field, 2010). For instance, Field, Argyris, and Knowles (2001) presented either threatening or positive information about a novel monster doll to children aged 7–9 years, and measured their fear beliefs about the doll before and after being given the information. Results showed that children's fear beliefs towards the monster doll increased following threatening information and decreased following

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positive information. More recent research suggests that ambiguous information also heightens children's fears, although the observed effect is weaker relative to threatening information (Dalrymple-Alford & Salmon, 2013; Field & Field, 2013; Muris et al., 2009).

Overall, there is considerable evidence showing that children's fears are affected by the information they are given from others. Children may receive this information from a variety of sources, including parents and peers (Muris & Field, 2010). Research examining the intergenerational transmission of anxiety has provided some indication that parents may inadvertently transmit anxiety-related cognitions to their children (Drake & Ginsburg, 2012; Hadwin, Garner, & Perez-Olivas, 2006). There is evidence that children share similar patterns of interpretation bias (a tendency to interpret ambiguity negatively) with their parents (Bögels, van Dongen, & Muris, 2003; Creswell & O'Connor, 2006; Creswell, Schniering, & Rapee, 2005; Creswell, Shildrick, & Field, 2011), although other studies have failed to find this association (Creswell, O'Connor, & Brewin, 2006; Gifford, Reynolds, Bell, & Wilson, 2008). Verbal information transfer is one of the plausible pathways through which this intergenerational transmission of anxious cognitions occurs (Field & Lester, 2010; Hadwin et al., 2006; Muris & Field, 2010; Ooi, Dodd, & Walsh, 2015). For example, Ooi et al. (2015) found an association between the amount of threat parents included in stories for their children and the way their children completed their own stories.

Further indication that parents can affect children's anxiety-related cognitions comes from early research demonstrating that parents enhance their children's interpretation bias and/or avoidant responses following family discussions (Barrett, Rapee, Dadds, & Ryan, 1996; Chorpita & Albano, 1996; Dadds, Barrett, Rapee, & Ryan, 1996). For instance, Barrett et al. (1996) and Dadds et al. (1996) found that clinically anxious children became more avoidant following family discussion of ambiguous scenarios, with their parents exhibiting a tendency to agree with their avoidant plans. In contrast, non-anxious children became more prosocial following the discussion, with their parents exhibiting a tendency to listen to and agree with their prosocial plans.

It is plausible that the transmission of fears, as well as ideas about how to behave in fear-provoking situations, might also occur in other close relationships. As children transition from early to middle childhood, peers become increasingly influential as a supplementary source of information about the environment alongside parents (Schunk & Hanson, 1985; Schunk, 1987). Therefore, it is possible that children in close friendships might affect each other's fears. Thus far, however, there has been relatively little research in this area. To our knowledge, only Muris and Rijkee (2011) have explored whether children's fears are influenced by their interactions with other children of the same age, although the children were deliberately paired with a non-close peer for the purpose of their study. To examine this, half the children (aged 9–12 years) were first exposed to positive information about a novel animal, after which their fear beliefs towards the animal were measured. Subsequently, the children were exposed to ambiguous information about another novel animal, followed by a discussion about fear-related issues with a same-gender peer before their fear beliefs towards the animal were measured. The same procedure was adopted for the other half of the children in the study, but they were first exposed to ambiguous information in the individual (non-discussion) condition, followed by the presentation of positive information in the peer-discussion condition. Results showed that when presented with positive information, all children who had a peer discussion were less fearful towards the animal, compared to those in the individual condition. When presented with ambiguous information, boys who had a discussion with a peer had lower fear beliefs than those who did not have the discussion (individual condition). However, there was no significant difference between the fear beliefs of girls in either the discussion or non-discussion conditions. As a whole, these findings indicate that discussing ambiguous information with a non-close peer might lead to an attenuation of fear beliefs for boys. Muris and Rijkee posited that this could be influenced by children's gender-role orientation, with boys downplaying their level of fearfulness when discussing their fears with other boys they are not close to, while the expression of fear may be more accepted among girls.

To extend current understanding about how peers might affect each other's fears during childhood, there are a number of areas to be explored. First, as close friends tend to interact more regularly with each other than non-close peers, children in close friendships may play an influential role in affecting and/or maintaining each other's fears. To understand the origins of children's fears and to potentially reduce these fears, it is more ecologically valid to examine the interaction between close friends than non-close peers. Second, it is not clear how close friends affect each other's fear beliefs when they are given threatening information (note that Muris and Rijkee gave only ambiguous and positive information) and enter a discussion situation with relatively high fear beliefs. This is important as it reflects many real-life scenarios when children may be feeling fearful, such as exams. It is possible that the same attenuating effect will be found in the context of threatening information but also possible that children may enhance each other's fears in this context.

A further consideration is the potential effect of individual differences in the transmission of fears within close friendships. It is plausible that the anxiety level of the two individuals involved in the discussion may determine the effect of the discussion on their fear beliefs; when children discuss ambiguous information with a less anxious friend, they may adjust their beliefs and become less fearful. Similarly, when children discuss ambiguous information with a more anxious friend, they may adjust their beliefs and become more fearful. This has yet to be explored in relation to anxiety but research examining aggression found that adolescents who communicated with online peers (e-confederates) who endorsed hostile intent to others reported increased hostile attributions themselves following the interaction, while those exposed to the benign intent condition reported reduced hostility (Freeman, Hadwin, & Halligan, 2011).

The present research aimed to significantly extend the existing literature regarding peer discussion of fear by exploring how close friends affect each other's fear responses when they discuss fear-related issues together. Besides children's fear beliefs, the present study also explored whether their avoidance behaviours were affected by the discussion. Research of this nature has the potential to inform our understanding of the development and/or maintenance of childhood anxiety as well as practical applications. For example, it is important for school-based interventions aimed at the prevention and/or treatment of anxiety such as the *FRIENDS for Life* program (Barrett, 2005) and group-based therapy to understand what the likely outcome of peer discussion of fears might be and therefore whether it is likely to be useful or detrimental as a therapeutic tool. Furthermore, if research shows that peers can affect each other's fear beliefs and avoidance behaviours, it may be possible to include peers in a targeted intervention to change cognitions using an approach similar to cognitive bias modification (cf. Lau, Pettit, & Creswell, 2013).

In the present study, children were first presented with ambiguous and threatening information about novel animals, after which their fear beliefs and behavioural avoidance (together referred to as fear responses) for each animal were measured (T1). Subsequently, pairs of close friends discussed their fear beliefs and