Spiders, bullies, monsters or terrorists

What scares Australian children?

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In recent times, Australian children have been exposed to a range of frightening images of war and terrorism in the media. To determine the possible impact of such distal events, fears were measured in a sample of 220 children aged 6 to 12 years using the Fear Survey Schedule for Children (FSSC-R) as well as a free option method. On the FSSC-R, the type and intensity of children's fears were similar to previous studies conducted over the past two decades, with being hit by a car, bombs and being unable to breathe producing the most fear. By contrast, spontaneous responses indicated that children's greatest fears were of animals, the dark and being lost. Surprisingly few children mentioned war and terrorism without prompting. The findings suggest that concerns about Australian children becoming more fearful as a result of media coverage of war and terrorism are not supported.

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Childhood fears are so common that they are considered to be a normal part of development. Indeed, certain levels of fearfulness are adaptive since they serve to protect children from danger and promote survival (Gullone 2000). Fears of strangers, for instance, reduce the likelihood of abduction, while fears of falling keep children away from cliff edges. Excessive or unrealistic fears, on the other hand, have been linked to anxiety and depression (Last, Francis & Strauss 1989; Muris, Merckelbach & Ollendick 2002) as well as phobic disorders (Beidel & Turner 1988; Ollendick, Yule & Ollier 1991; Weems, Silverman & Saavedra 1999).

Over the past 30 years, research has described normative fears in children and the developmental changes that typically occur in the pattern of their fears. Findings have been relatively consistent across time and different cultural groups. Younger children tend to be most fearful of animals, monsters and the dark, while older ones have more realistic fears of dangerous situations and social evaluation (Gullone & King 1993; Muris, Merckelbach & Collaris 1997; Slee & Cross 1989). Girls generally report a greater number of fears than do boys (King et al. 1989; Ollendick, Matson & Helsel 1985; Spence & Kennedy 1989; Spence & McCathie 1993) and children's fears generally decrease in intensity and frequency by late adolescence (Campbell & Rapee 1994; King et al. 1989; Spence & McCathie 1993).

Several studies have investigated the indirect effects on children of traumatic events such as wars and natural disasters. Being closer to the location of a tragedy increases fearfulness (Ronen 2002; Shaw 2003), and fear tends to subside more than two years following exposure (Joshi & O'Donnell 2003; Schuster et al. 2001).

In recent times, children have been exposed to a range of frightening incidents in the media and on the internet. In particular, the horrifying events in New York on September 11, 2001, and subsequent terrorist attacks have brought disturbing scenes into most homes. Not surprisingly, American children who were studied after the 2001 terrorist attacks reported an increased number of real-world fears of war and violence (Burnham 2006; Royer & Schmitt 2002) and symptoms of post-traumatic stress (Schuster et al. 2001). Whether the more distal effects of terrorism have produced similar changes in the fears of Australian children is unknown.

Most studies of children's fears have employed a self-report methodology, with the Fear Survey Schedule for Children (FSSC-R; Ollendick 1983) being a popular choice. The FSSC-R presents a list of fears and asks children to indicate the amount of fear they have for each, a method that has been criticised because it prompts children to think about events that they might not usually worry much about due to the unlikelihood of their occurrence (Campbell, Rapee & Spence 2001; McCathie & Spence 1991). An alternative methodology is the free option approach in which children spontaneously record their fears, either verbally (Henker, Whalen & O'Neil 1995; Lahikainen et al. 2003) or through drawings and photographs (Royer & Schmitt 2002) without any cues or suggestions from the researchers.

Although both methods have advantages, they tend to produce different results. For instance, Muris, Merckelbach and Collaris (1997) found that fears of danger and death were most common with the FSSC-R, while the free option method showed that children spontaneously expressed most fear of animals. They concluded that a combination of the two approaches might provide the best picture of children's fears.

The aim of the current study was to investigate whether Australian children have become more fearful and whether they now express more fears related to war and terrorism. A second aim was to compare two methods for obtaining information from children about their fears: the FSSC-R and the free option method.

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METHOD

PARTICIPANTS

The participants were 220 children (108 boys and 112 girls) aged between 6 and 12 years (M = 8.72 years, SD = 1.99). Of the children, 102 were aged 6-8 years and 118 were 9-12 years. In order to obtain a sample that was as representative as possible of Australian children and one that could be compared with previous studies of children's fears, there were no specific exclusion criteria. Most of the children lived in the south-east corner of Queensland. Education levels of their parents ranged from Grade 10 or less up to postgraduate qualifications. When contrasted with the Australian population, the sample was somewhat skewed towards higher levels of education.

MEASURES

The questionnaire contained two parts. The first part consisted of demographic information and two open-ended questions (*Tell me some of the things you are scared or worried about* and *Tell me something you're really, really scared of*).

The second section consisted of the FSSC-R (Ollendick, 1983). A revision of Scherer and Nakamura's (1968) Fear Survey Schedule for Children, the FSSC-R consists of 80 stimulus items to which children respond on a three-point scale indicating how much fear (none, some or a lot) they have of particular things. The scale has sound psychometric properties (Muris, Merckelbach & Ollendick 2002). Use of the FSSC-R enabled direct comparisons with several previous studies of children's fears. The original 1983 version of the instrument was used in this research (as sent to the authors by Ollendick in 2004 with one item (73) changed from 'Russia' to 'terrorists'). Several other items were re-worded to reflect standard Australian language and other nuances. For example, item 21 was changed from 'getting a shot' to 'getting an injection'.

PROCEDURE

As part of the fieldwork requirements of a developmental psychology subject, questionnaires were administered by undergraduate students enrolled in a teacher training degree at a large Australian university. Following a strict protocol of directions, each student administered the questionnaire to two children from different families who were known to them. University ethical clearance was obtained to use questionnaires for research purposes in cases where the child, the child's parents and the student researcher gave consent. Data collection took place several years after September 11, 2001, during a time that was unmarked by significant local or international events that might have affected children's responses.

RESULTS

SPONTANEOUS RESPONSES

Responses to the initial questions (*Tell me some of the things you are scared or worried about* and *Tell me something you're really, really scared of*) were coded using 10 categories that were developed from the data. Approximately half of the sample mentioned more than one fear in response to Question 1 and all of these were coded. Only one fear was coded for Question 2. In a few instances where children provided more than one answer to this question, only the first was used. Most children provided a response for Question 1, but for the second question over

Table 1: Number of times a fear in each category was mentioned in response to the question *Tell me some of the things you are scared or worried about*

	Category	No. of times mentioned
1	Dark/lost	86
2	Animals	81
3	Injury/death – self	39
4	Bullying	36
5	Monsters	26
6	Performance	22
7	Intruders	19
8	Injury/death – others	17
9	World events	14
10	Natural disasters	10

Table 2: Numbers of children in the two age groups who gave responses in each category for the question *Tell me something you're really, really scared of*

	Category	6-8 years n = 102	9-12 years n = 118
1	Dark/lost	20	18
2	Animals	21	17
3	Injury/death – self	8	18
4	Bullying	1	7
5	Monsters	18	5
6	Performance	1	4
7	Intruders	5	6
8	Injury/death – others	6	7
9	World events	1	2
10	Natural disasters	2	6
	Nothing	15	17
	No response	4	11

20% either did not answer or reported that they were not 'really, really scared' of anything.

Responses to the first question are shown in Table 1. The most frequently mentioned fear was associated with the dark, being alone or getting lost. Fears in this category (titled dark/lost) reflected a common theme of being alone and vulnerable to a non-specific threat. Within the sample of 220, such fears were mentioned by 86 children. Almost as frequently reported were fears of animals such as snakes, spiders or dogs. Fears of death or injury (e.g. being hit by a car) and bullying were the third and fourth categories.

Table 3: Ten most common fears, with percentages of the sample endorsing each fear at the highest level

Item	Total	Gender	
		Boys	Girls
Being hit by a car	61.2	57.7	64.7
Bombing	57.5	54.5	60.5
Being unable to breathe	56.2	52.7	59.5
Burglars	53.7	50.5	56.9
Fire	52.0	47.7	56.0
Terrorists	49.8	47.3	52.2
Getting lost	48.2	44.6	51.7
Death	47.4	42.9	51.7
School principal	41.9	35.7	47.8
Guns	41.0	35.1	46.6

When children were asked about one thing they were 'really, really scared of', the most common responses were in the animals and dark/lost categories. There were no significant gender differences, although a higher proportion of boys (29%) reported fears of dark/lost and intruders than did girls (17%), and more girls reported being afraid of animals and injury to self and others (38% compared with 29% of boys). Comparisons of children aged 6-8 years with those aged 9-12 (see Table 2) showed that younger children were significantly more fearful of monsters than were older children, χ^2 (1) = 10.509, $p < .001$.

Fear Survey Schedule for Children – Revised

On the FSSC-R, a total fears score was derived by summing scores across all fear items. The mean score was 136.37 (standard deviation = 24.86). Analysis of variance for age and gender yielded a main effect only for gender ($F = 5.72$ $p < .05$) with girls reporting significantly more fears (mean = 140.61, standard deviation = 23.72) than boys (mean = 131.98, standard deviation = 25.33). The scale had high internal consistency with a Cronbach's alpha co-efficient of .95 on the 80 items.

The ten most common fears were determined by the proportion of the sample endorsing the highest level of fear ('a lot'). Table 3 shows the ten fears rated with the greatest intensity. The order of fears was remarkably consistent for boys and girls, with being hit by a car, bombs and being unable to breathe heading the list.

DISCUSSION

Children's fears, as measured by the FSSC-R, appear to have remained very stable over the past 25 years. The total fears score of 136 compares with those in previous studies

conducted over the past two decades in the USA (e.g. 135 in Ollendick 1983; 133 in Ollendick et al. 1996) and Australia (e.g. 135 in McCathie & Spence 1991; 132 in Gullone & King 1993; 134 in Ollendick et al. 1996), suggesting that children today do not have a greater number of fears, despite the current world situation and media coverage of war and terrorism. Consistent with previous research, girls report higher levels of fear than do boys.

There is also a high level of consistency across time for the type of fears commonly reported by children on the FSSC-R. Seven of the top ten fears (being hit by a car, bombing attacks, fire, being unable to breathe, burglars, getting lost and death) are shared by children in the USA (Ollendick 1983) and the Netherlands (Muris, Merckelbach & Collaris 1997). A direct comparison with McCathie and Spence's (1991) Australian study is more difficult because of item changes; even so, the children in that study rated most of their top ten fears in common with the current sample.

Interestingly though, the two methods of measuring children's fears produce a somewhat different picture. One of the intriguing findings is that children spontaneously mention fear of animals (e.g. spiders, snakes and dogs) so frequently. By contrast, on the FSSC-R animals do not rate in the top 10. Fears of animals are very common among children (Elbedour, Shulman & Kedem 1997; Lahikaine et al. 2003; Muris, Merckelbach & Collaris 1997) and for a large proportion of the children this was the fear that immediately came to mind. Interestingly, a 2004 survey of British adults found that they reported being more scared of spiders than terrorist attacks or death (Ananova 2004).

In the present study, which was conducted after the events of September 11, 2001, it is particularly notable that war and terrorism were rarely mentioned spontaneously. Indeed, this was the lowest rated category on Question 2, with such fears being mentioned by only three of the 220 children. This may be due to Australia's lack of geographic proximity to terrorist incidents, as well as the fact that the study was conducted more than three years post-September 11. Children display more acute fear reactions when they are closer to the site of a terror incident (Ronen 2002; Shaw 2003) and immediately after a traumatic event (Joshi & O'Donnell 2003; Schuster et al. 2001). The current findings are consistent with Muris, Merckelbach and Collaris (1997) who found that fears of danger and death were most common on the FSSC-R, while fears of animals were reported frequently using the free option method.

It seems, therefore, that children spontaneously report being most afraid of things they have experienced directly: the dark or being lost, and animals such as spiders. Although FSSC-R fears of bombs, not being able to breathe, fire and terrorists are rated as producing the most fear, these are seldom mentioned without prompting. Clearly such events would be frightening if they were to occur but, being relatively unlikely, perhaps they are not something that children worry very much about (Campbell, Rapee & Spence 2001; McCathie & Spence 1991). Rather, children's fears are about the concrete events they have already experienced or are most likely to experience – a spider crawling towards them, being lost in the shopping centre, breaking an arm in a fall from a bike. Older children are more concerned about such injuries, possibly because they have experienced more of them. By contrast, the fantasy world of younger children creates fears of make-believe creatures such as monsters and ghosts which most older children have outgrown. Such fears in early childhood are well documented (Bauer 1976; Lenz 1985).

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It is possible, of course, that children *do* worry about frightening events such as violence, war and terrorism, but that they do not mention them spontaneously when questioned. Perhaps such fears are difficult for children to admit or express. Certainly they are very much more complex and abstract than are spiders and injuries to the self. They require mature cognitive skills such as perspective-taking, prospective visualisation, and an understanding of complex cause/effect relationships or personal motives, skills that are not well-developed in 6 to 12-year-old children. However, Henker, Whalen and O'Neil (1995) found that American children were able to express serious concerns about safety and societal problems to unfamiliar adult researchers, and that younger children spontaneously reported more fears related to world disasters than did adolescents.

It is also possible that children today are not excessively fearful of war and violence because their parents have monitored their exposure to media coverage and provided effective emotional support, thus limiting the impact of global events. On the other hand, instead of becoming more fearful as a result of television viewing, children may actually be becoming desensitised through repeated exposure to media images of violence.

Nevertheless, the results of this study suggest that the fears of today's Australian children are very similar to those held by children in the past, despite recent world events and global threats. Although concerns about children becoming more fearful as a result of vivid media reports of war and terrorism are clearly not supported by the findings, group

data undoubtedly mask the fact that some children have extreme reactions to traumatic distal events. Thus, families and practitioners should always be aware of the potential indirect impact on children's mental health and offer appropriate support when necessary. ■

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