FACTOR STRUCTURE OF THE FEAR SURVEY SCHEDULE FOR CHILDREN-REVISED (FSSC-R): IDENTIFICATION OF AND COMPARISON OF FEAR DIMENSIONS BETWEEN SINGAPOREAN, AUSTRALIAN, AND AMERICAN CHILDREN

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Abstract: This present study employed the Fear Survey Schedule for Children-Revised questionnaire to investigate the common normal fears experienced by Singaporean children, as well as to compare these fears with those identified for Australian and American children. This quantitative research employed frequency analysis to identify the top ten common fears reported, and factor analysis to identify fear dimensions that best represent the participants' fear responses. A total of 1,234 Singaporean children aged 7 to 12 years participated in this study. The study's findings revealed that the top common fears reported by Singaporean children relate to fears concerning death and danger. Factor analysis yielded a 10 factor structure that relates primarily to the fears of danger and death, and fears related to negative social consequences. Compared to children in Australia and the U.S., the findings from this study suggest higher fear sensitivity among Singaporean children towards ordinary day-to-day events. Findings from this study reinforce the need to consider the unique cultural and environment factors that can influence fears in children other than typical developmental fears that children experience.

Keywords: Normal Fear, Common Fears, Children, Fear Survey Schedule for Children-Revised (FSSC-R)

Introduction

The academic study of normal fear in children dates back more than a hundred years. According to G. Stanley Hall (1897), first president of the American Psychological Association and a pioneer in childhood development study, all children have fears and that pedagogic work is needed in order to understand fear so as to help children learn to cope with it. Since then, many studies have been conducted with the aim to understand and to measure normal fears (e.g., Jersild & Holmes, 1933; Ollendick, Matson, & Helsel, 1985; King et al., 1989; Adler, 1994; Gullone, 2000; Ollendick, King & Muris, 2002; Bokhorst, Westernberg, Oosterlan & Heyne, 2008; Burnham & Lomax, 2009).

With the understanding that the emotion of fear is an integral aspect of child development (Gullone, 1996), on-going interest has been driven and sustained by the need to constantly update our understanding of the fears experienced by children as they live and grow in a constantly changing environment (Gullone & King 1993; Owen, 1998; Draper & James, 1985). Researchers of fears in children have also been motivated by the need to determine developmental norms against which pathological fears can be identified (Gullone & King, 1993; Gullone, 2000; Muris & Ollendick, 2002). This is of particular interest to mental health professionals who are looking for developmental patterns, frequency, intensity and duration of fear phenomena in children, in order to inform the development of a classification scheme for the recognition and diagnosis of pathological fears which is critical for early prevention and intervention work. Studies of fears in children have also been centered on trying to understand how children's fears may differ (or may be similar) as a function of the developmental and cultural values specific to their up-bringing in their country of residence. This particular interest has resulted in the cross-cultural investigation of the normal fears experienced by children in Australia (Gullone, King & Ollendick, 2001), Belgium (Muris, Merckelbach, Ollendick, King & Boogie, 2002), China (Dong,Yang & Ollendick, 1994), Greece (Mellon, Koliadis & Paraskevopoulos, 2004), Israel (Elebedour, Shulman & Kedem, 1997), Netherlands (Oosterlaan, Prins, Hartman & Sergeant, 1995), Nepal (Mahat & Scoleveno, 2003), South Africa (Burkhart, 2002; Burkhart, Loxton & Muris ,2003), Turkey (Erol & Sahin, 1995), and the UK (Ollendick & Yule, 1990). However, few such studies have been conducted in Singapore. A literature search revealed only two studies that investigated the topic of fear among Singaporean children. One study, conducted by Chellappah, Vignehsa, Milgrom and Lo (1990) investigated dental fear among Singaporean children, and the other, an unpublished thesis surveyed the fears of 800 Singaporean children aged 8 to 13 years (Ng, 1998).

The study of fears and their potential as barriers to the healthy development of children in Singapore is critical, as due to the lack of natural resources, the country highly dependent on its human capital. The importance of this fact is reflected in the words of the current Prime Minister Lee Hsien Loong, who said that "nurturing human talent is a matter of survival for the country." (Prime Minister's Office, Singapore, 2009). Integral to the understanding of how to nurture the future talents of Singaporean children is an understanding of what could prevent them from functioning at their optimal level. It has been reported that 12.5% of Singaporean children (age 6 to 12) have emotional/behavioral problems such as anxiety, depression and social withdrawal (Ministry of Health Singapore, 2007). One in five children referred to the Singapore Institute of Mental Health Reach Scheme manifests psychological problems relating to anxiety, phobias and moods issues (Poon, 2012). As the Ministry of Health in Singapore (2007) pointed out, this number is

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of concern as the population ages, family size decreases, and economic pressure grows.

The study of normal fears in children has employed different assessment methods including direct observation, teacher/parent's reports, self-report interviews, self-report fear lists, self-report schedules (Gullone, 1999), and projective techniques (Martalas, 1999). In a review of assessment methods used, Gullone (1999) concluded that self-report schedules, specifically the Fear Survey Schedule (FSS), was the most commonly used tool among fear researchers. In its revised form, the *Fear Survey Schedule for Children-Revised* (FSSC-R) has been shown to be a well-established evidence-based assessment tool by the Assessment Committee in Pediatric Psychology (Holmbeck et al., 2008). It measures the subjective feeling of fear in terms of its fear content, number/levels of fears, and patterns/dimensions of fears. Exploratory factor analysis has often identified a five-factor structure as the best conceptual fit to the items in the FSSC-R (Ollendick, 1983; Ollendick et al., 1991; Dong et al., 1994). These five factors were labeled as 'Fear of Failure and Criticism', 'Fear of the Unknown', 'Fear of Injury and Small Animals' 'Fear of Danger and Death', and 'Medical Fears.' However, other researchers working in different countries reported different factor solutions. For example, Mellon et al., (2004), using the Greek version of the FSSC with Hellenic children aged 7 to12 years, reported a seven-factor structure relating to fear of 'Danger and Death', 'The Unknown', 'Failures and Criticism', 'Injury and Small Animals', 'Medical Fears', 'Travel and Agoraphobic' and 'School Performance.' Neal, Lilly and Zakis (1993), working with African children, reported a three-factor structure that included 'Fear of Danger', 'Fear of the Unknown' and 'Medical Fears'.

Considering the dearth of data about the common fears experienced by Singaporean children, and the potential utility of such data in providing insights for the development of intervention strategies to support mental and emotional resiliency of these children, the present study has been designed to investigate common fears in Singaporean children, and to examine how these fears may vary by gender and age. Also, given the possibility that the pattern of fears experienced by children may vary as a function of their unique cultural background, the present study also compared the pattern of fears experienced by Singaporean children with those reported for American and Australian children.

Method

Participants

The sample consisted of 1,234 children, of whom 588 (47.6%) were males and 646 (52.4%) were females. Their ages ranged from 7 to 12 years, with a mean age within the interval of 9 to 10 years. Of the sample, 52.4% (*n*=647) reported that they were Chinese, 24.8% (*n*=306) reported that they were Malays, 22.4% (*n*=277) reported that they were Indians, and 0.3% (*n*=4) reported that they were of other ethnicity. The majority of the respondents reported that they were born in Singapore (98.8%; *n*=1,219).

Materials

The study employed a survey questionnaire consisting of two sections.

Section 1 consisted of three items written to tap the participants' demographic characteristics of gender, age, and ethnicity.

Section 2 consisted of the 80-item Fear Survey Schedule for Children-Revised (FSSC-R) (Ollendick, 1983). The FSSC-R is a self-report measure of fear and fearfulness in children aged 7 to 16 years. The FSSC-R asks children to indicate on a 3-point scale (1=none/not scared, 2=some/a little scared, 3=a lot/very scared) how much they fear a specific stimulus Considering cultural and contextual differences, a number of items on the FSSC-R were modified to make them more relevant to the present Singaporean children participants. For example, words such as "grades", "truck", "bears and wolves", "elevators", and "train" were replaced with more culturally meaningful words such as "marks/results", "lorry", "wild monkeys", "lifts", and "MRT" respectfully.

Procedure

The study's questionnaire was administered by the researcher at a children's development centre in Singapore where the researcher worked. Participants were sampled among children who had signed up for a '*Meet - your - Monsters Talk / Workshop*' held at the children's centre. Only children whose parents had provided informed consent to participate took part in the survey. Participants were assured of their anonymity and confidentiality. Following the testing protocol of Gullone and King (1992), the directions to filling in the questionnaire was read aloud to the children participants. Considering the cognitive demands place on children in reading the items on the questionnaire, each item on the questionnaire was read out by the researcher to the children. This also helped to managed the pace and time that each administration took.

Results

Common Fears

The ten most common fears were identified by determining the proportion of the sample endorsing the highest level of fear – 'a lot/very scared.' Table 1 presents these ten common fears for the entire sample, and tabulated separately by gender and age.

(See Table 1 on the next page)

It can be seen for the entire sample of children that the fears that generated the highest frequencies in fear-intensity are those that relate to unpredictable /unprovoked attacks (terrorists, bomb attacks) as well as

accidents (hit by a vehicle, not being able to breathe, falling from high places, getting burned) that result in personal injury or death. For boys, their ranking of the 10 most common fears are highly similar to the overall sample, with 8 out of the 10 fears ranked in the same order. For girls, their ranking of the 10 most common fears are somewhat different from that of the boys and from the entire sample. Nevertheless, their 6 top ranked fears also relate to unpredictable/unprovoked attacks (terrorists, bomb attacks) as well as to accidents (hit by a vehicle, not being able to breathe, falling from high places, getting burned). Thus, although their order of ranking may be different, what they fear most are similar to those of their male counterparts as well as of the total sample; that is, their greatest fears also relate to situations that may cause personal injury or death.

In terms of age differences, for younger children (age 7-8 years), their ranking clearly reflects their fear of unpredictable/unprovoked attacks (terrorists, bomb attacks), accidents and death (hit by a vehicle, not being able to breathe, falling from high places, getting burned, death/dead people), and unworldly things like ghosts and spooky things. For older children aged 9 to 10 years, their ranking of their greatest fears is similar to that of their younger counterparts with a focus once again on unpredictable/unprovoked attacks (terrorists, bomb attacks), accidents and death (hit by a vehicle, not being able to breathe, falling from high places, getting burned, death/dead people). However, their fear of unworldly things like ghosts and spooky things had clearly diminished. For the oldest group of children aged 11 to 12 years, their top rated fears also focused on unpredictable/unprovoked attacks (terrorists, bomb attacks) and accidents (hit by a vehicle, not being able to breathe, falling from high places, getting burned), with the least fear being associated with ghosts and spooky things. Together, these findings show a very high consistency in the children's fear of unpredictable /unprovoked attacks (terrorists, bomb attacks) across all three age groups.

Age and Gender Differences in fear Intensity

Table 2 presents the means and standard deviations for the identified ten common fears as a function of the Singaporean children's gender and age.

In order to investigate gender and age differences for the ten identified common fears, GLM multivariate analysis of variance (MANOVA) was conducted on the means of these variables.

Gender. The MANOVA results showed that there was an overall gender effect for the ten variables combined, F (10, 1223) = 40.01, $p < .001$. Follow-up tests of between-subjects effects showed that gender has a significant effect for all 10 fear variables ($p < .001$). Examination of the marginal means showed that girls reported significantly higher level of fear for each of the 10 fear variables than their male counterparts.

Table 1: Ten Most Common Fears by Gender and Age (In %)

Fear Items	Total sample	Gender		Ages		
		Boys	Girls	7-8	9-10	11-12
Terrorists	64.1	53.6	73.7	68.2	62.9	61.6
Bombing attacks	60.3	47.3	72.1	65.9	54.9	60.4
Hit by vehicle	57.7	45.9	68.4	53.8	60.7	58.3
Not able to breathe	57.3	44.0	69.3	59.5	60.0	52.8
Death/dead people	53.3	43.2	62.5	77.9	44.4	39.6
Falling	53.2	42.0	63.3	68.5	51.2	41.2
Fire – getting burned	52.0	38.9	63.9	68.7	48.3	40.5
Germs/serious illness	41.8	25.0	57.1	49.5	43.4	33.3
Sent to principal	40.4	31.3	48.8	50.3	38.3	33.6
Ghosts/spooky things	40.3	25.9	53.4	61.8	36.7	24.3

Table 2: Means and Standard Deviations for the Identified Ten Common Fears as A Function of the Singaporean Children's Gender and Age

Fear Items	Gender				Age					
	Boys		Girls		7-8		9-10		11-12	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Terrorists	2.41	.70	2.68	.57	2.58	.67	2.55	.64	2.53	.65
Bombing attacks	2.36	.67	2.69	.51	2.61	.58	2.49	.61	2.52	.65
Hit by vehicle	2.36	.65	2.64	.56	2.51	.55	2.55	.61	2.47	.68
Not able to breathe	2.33	.67	2.67	.52	2.55	.59	2.54	.61	2.44	.65
Death/dead people	2.24	.75	2.53	.66	2.72	.57	2.26	.75	2.23	.71
Falling	2.28	.69	2.55	.64	2.64	.57	2.41	.67	2.24	.72
Fire-Getting Burned	2.22	.72	2.56	.63	2.65	.55	2.31	.75	2.26	.69
Germs/serious illness	1.98	.72	2.53	.58	2.42	.63	2.27	.73	2.13	.72
Sent to principal	2.13	.69	2.37	.68	2.40	.66	2.27	.65	2.12	.74
Ghosts/spooky things	1.98	.73	2.45	.65	2.56	.60	2.14	.76	1.99	.69

Age. The MANOVA results showed that there was an overall age effect for the ten variables combined, F (20, 2446) = 15.04, p > .001. Follow-up tests of between-subjects effects showed that age has a significant effect for 8 of the 10 fear variables (p < .001). The two fear variables that showed no age difference are associated with 'terrorists' and 'being hit by a vehicle.' For the other fear variables, examination of the marginal means together with the Scheffé *post hoc* comparisons shows the following significant age differences:

- Children 7 to 8 years old are more fearful of bombing attacks (*M*=2.61) than children 9 to 10 years old (*M*=2.49);
- Children 7 to 8 years old are more fearful of death/dead people (*M*=2.72) than children 9 to 10 years old (M=2.26) and children 11 to 12 years old (*M*=2.23);
- Children 7 to 8 years old are more fearful of falling from high places (*M*=2.64) than children 9 to 10 years old (*M*=2.41) and children 11 to 12 years old (*M*=2.24); Children 9 to 10 years old are more fearful of falling from high places (*M*=2.41) than children 11 to 12 years old (*M*=2.24);
- Children 7 to 8 years old are more fearful of fire – being burned (*M*=2.65) than children 9 to 10 years old (*M*=2.31) and children 11 to 12 years old (*M*=2.26);
- Children 7 to 8 years old are more fearful of germs/serious illness (*M*=2.42) than children 9 to 10 years old (*M*=2.27) and children 11 to 12 years old (*M*=2.13); Children 9 to 10 years old are more fearful of germs/serious illness (*M*=2.27) than children 11 to 12 years old (M=2.13);
- Children 7 to 8 years old are more fearful of being sent to the principal (*M*=2.40) than children 9 to 10 years old (*M*=2.27) and children 11 to 12 years old (*M*=2.12); Children 9 to 10 years old are more fearful of being sent to the principal (*M*=2.27) than children 11 to 12 years old (*M*=2.12);
- Children 7 to 8 years old are more fearful of ghosts and spooky things (*M*=2.56) than children 9 to 10 years old (*M*=2.14) and children 11 to 12 years old (*M*=1.99); Children 9 to 10 years old are more fearful of ghosts and spooky things (*M*=2.14) than children 11 to 12 years old (*M*=1.99).

Factor Structure of the FSSC-R

The children participants' responses to the 80-item FSSC-R were subjected to a principal components analysis, followed by varimax rotation. Inspection of the results revealed that 17 factors had Eigen-values greater than 1.00. However, examination of the items that loaded on these 17 factors indicated that only 10 factors were interpretable, as well as containing the fewest number of cross-correlated items. In conjunction with results obtained from the scree-plot, these findings suggested a 10 factor solution. These 10 factors accounted for a total of 42.68% of the variance, with the first factor accounting for 20.17% and the other 9 factors accounting for the rest (22.51%). From the obtained factor matrix, a total of 52 items were retained using the criteria of selecting items with factor structure coefficients greater than or equal to 0.33 and no significant cross-correlations. The use of the 0.33 value as a criterion for selecting items is based on the logic that squaring the correlation coefficient (0.33^2) yields approximately 10% of the variance explained. Examination of the items that correlated with these 10 factors indicated that Factor 1 consisted of 11 items that reflected *Fear of Injury, Pain and Death* (e.g., having to go to the hospital; getting a cut or injury). Factor 2 consisted of 7 items that reflected *Fear of the Dark and Unknown* (e.g., going to bed in the dark; being alone). Factor 3 comprised 9 items that reflected *Fear of Unexpected Dangerous Events* (e.g., terrorists; being hit by a vehicle). Factor 4 comprised of 7 items that reflected *Fear of Failure and Criticism* (e.g., failing a test; being criticized by others. Factor 5 comprised 5 items that reflected *Fear of Insects and Small Animals* (e.g., worms or snails; rats or mice). Factor 6 comprised 3 items that reflected *Fear of Conflicts and Punishments* (e.g., getting punished by my father; when my parents argue/quarrel). Factor 7 comprised 3 items that reflected *Fear of Heights* (e.g., flying in an airplane; high places like on mountains or on high buildings). Factor 8 comprised 2 items that reflected *Fear of Engaging with Unfamiliar People* (e.g., meeting someone for the first time; talking on the telephone). Factor 9 comprised 3 items that reflected *Fear of Public Performance* (e.g., presenting something in front of the class; being asked by the teacher to answer a question). Factor 10 comprised 2 items that reflected *Fear of Riding in Vehicles* (e.g., riding in a car or a bus; riding on the MRT). Table 3 presents the 10 factors together with their respective fear items and factor loadings.

Of the 10 factors extracted, it is clear that Factor 1 - *Fear of Injury, Pain and Death* – is the fear factor that best characterize the fears of Singaporean children in the present study. In terms of the factor structure of the FSSC-R, this factor captured almost half (20.17%) of the total scale's explained variance (42.68%). Thus, for Singaporean children, it seems that their greatest fears are associated with things that can hurt or injure them, leading to pain and even death.

Fears among Singaporean, Australian, and American children

Based on factor analytic studies of the FSSC-R conducted in the U.S. by Ollendick (1983) and in Australia by Campbell and Gilmore (2006), a five-factor solution was found in both studies. Similar to the present study, the first factor extracted in both studies appeared to best represent the most common fears of American and Australian children. This factor was labelled '*fear of danger and death*' in both studies. Table 4 presents this factor obtained from both the U.S. and Australian studies and the factor of '*fear of injury, pain and death*' obtained from the present study. For comparison purposes, the factor loadings for these three factors have also been included.

(See Table 3 and 4 on the next page)

Table 3: Factor Structure of the FSSC-R Together With the Fear Items' Factor Loadings

	Factor loadings
Fear of Injury, Pain and Death	
• Having to go to the hospital.	.66
• Getting a cut or injury.	.63
• Sharp objects, e.g., knife, scissors, blades.	.62
• Going to the dentist.	.60
• The sight of blood.	.59
• Getting an injection from the nurse or doctor.	.56
• Death or dead people.	.54
• Getting lost in a strange place.	.53
• Ghosts or spooky things.	.48
• Deep water or the sea.	.42
• Wild monkeys.	.40
Fear of the Dark and Unknown	
• Going to bed in the dark.	.73
• Dark rooms or cupboards.	.67
• Dark places.	.64
• Horror/scary movies.	.57
• Being alone.	.56
• Nightmares.	.50
• Closed spaces, e.g., storeroom.	.47
Fear of Unexpected Dangerous Events	
• Terrorists.	.59
• Falling from high places.	.57
• Being hit by a vehicle, e.g., car, bus, lorry.	.54
• Not being able to breathe.	.53
• Earthquakes.	.53
• Getting a shock from electricity.	.49
• Guns.	.45
• Getting a bee sting.	.42
• A burglar breaking into our house.	.42
Fear of Failure and Criticism	
• Getting poor marks/results.	.76
• Failing a test.	.74
• Taking a test.	.58
• My parents criticizing me.	.52
• Getting my school report book.	.50
• Making mistakes.	.45
• Being criticized by others.	.42
Fear of Insects and Small Animals	
• Worms or snails.	.72
• Rats or mice.	.66
• Spiders.	.61
• Lizards.	.57
• Ants and beetles.	.50
Fear of Conflicts and Punishments	
• Getting punished by my father.	.71
• When my parents argue/quarrel.	.57
• Being made to stay back after school by teacher.	.42
Fear of Heights	
• Flying in an airplane.	.55
• Riding on a roller coaster.	.52
• High places like on mountains or on high buildings.	.40

Table 3: Factor Structure of the FSSC-R Together With the Fear Items' Factor Loadings

	Factor loadings
Fear of Engaging with Unfamiliar People	
• Meeting someone for the first time.	.56
• Talking on the telephone.	.41
Fear of Public Performance	
• Talking/Presenting something in front of the class.	.70
• Having to sing or act in a play or a sketch.	.64
• Being asked by the teacher to answer a question.	.41
Fear of Riding in Vehicles	
• Riding in a car or a bus.	.76
• Riding on the MRT.	.64

Table 4: The Fear Factor of 'Danger and Death' Obtained From the U.S. Study (Ollendick, 1983) and the Australian Study (Campbell & Gilmore, 2006), and the Fear Factor of 'Fear of Injury, Pain and Death' Obtained from the Present Singaporean Study Together with Their Factor Loadings

Fear of danger and death				**Fear of injury, pain and death**	
U.S. (Ollendick, 1983)		Australia (Campbell & Gilmore, 2006)		Singapore (present study)	
Items	Loadings	Items	Loadings	Items	Loadings
Breathe	0.70	Earthquakes	0.71	Hospital	0.66
Hit by car	0.68	Terrorists	0.70	Cut or injury	0.63
Principal	0.65	Breathe	0.70	Sharp objects	0.62
Earthquake	0.64	Fire-burned	0.70	Dentist	0.60
Falling	0.58	Hit by car	0.70	Blood	0.59
Germs	0.57	Getting shock	0.65	Injection	0.56
Stay school	0.56	Bomb attacks	0.64	Death	0.54
Getting shock	0.53	Germs	0.64	Getting lost	0.53
Fire-burned	0.51	A burglar	0.63	Ghosts	0.48
Bomb attacks	0.50	Guns	0.63	Deep water	0.42
Go school	0.47	Falling	0.60	Wild monkeys	0.40
Getting lost	0.45	Strangers	0.53		
Death	0.43	Principal	0.52		
Russia	0.42	Be in a fight	0.49		
		Bee sting	0.46		
		Sharp objects	0.44		
		Father punish	0.43		
		Bears/wolves	0.42		
		Car sick	0.38		
		Death	0.37		
		Sick at school	0.37		
		Deep water	0.36		
		Rough games	0.35		
		High places	0.34		
		Strange dogs	0.33		
		Cemeteries	0.31		

Comparison of the fear items between the present study's Singaporean children and the children from the U.S. and Australia shows that the Singaporean children differed markedly from the two Western groups of children in what they fear. Of the 11 items that loaded on the first fear factor of '*Fear of injury, pain and death*', only 4 items were found to be common with the fears of U.S. and Australian children. More specifically, the only item that is common to both the U.S. and Australian children is 'fear of death or dead people.' Thus, for all three groups of U.S., Australian, and Singaporean children, the fear of death or of dead people is a common fear. The present Singaporean children shared the common fear of 'getting lost' with their U.S. counterparts, but not with the Australian children. The two fears that the Singaporean children have in common with the Australian children are 'fear of sharp objects' and 'fear of deep water or the sea.' The other 7 fears that loaded on

the '*Fear of injury, pain and death*' factor appeared to be unique to the present Singaporean children.

Discussion

The purpose of this study was to investigate common fears in Singaporean children, and to compare the fear dimensions between Singaporean, Australian, and American children. Consistent with the findings obtained from previous studies (e.g. Ollendick, 1983; King et al., 1989; McCathie & Spence, 1993; Ollendick et al., 1996; Muris et al., 1997a; Gilmore & Campbell, 2007) the most common fears among Singaporean children concern death and danger. However, the fear of ghosts and spooky things seems unique to Singaporean children. This fear of the supernatural has not been reported among the top ten common fears in past studies (Ollendick & King, 1994; King et al., 1989; Muris et al., 1997b; Mellon et al., 2004; Campbell & Gilmore, 2006) and this could be due to factors specific to Singaporean culture, such as practices of holding funeral wakes in the family home, and observing the annual month-long Ghost Festival that reinforces the belief that dead relatives will return to visit the living.

Findings related to gender and age differences which show that girls are generally more fearful than boys, and younger children are typically more fearful than older children are also in line with previous studies (e.g. Burnham, 1995, 2005; Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Gullone & King, 1997; Ng, 1998; Campbell & Gilmore, 2006). Gender role expectations could have accounted for the obtained gender differences. Specifically, in an Asian society like Singapore that is largely patriarchal, it will not bode well for boys to appear fearful. Age differences is not unexpected as older children, being more mature, have the ability to process information about fearful events in a more logical and rational way. The finding of no age differences for the fears of 'terrorists' and 'being hit by a vehicle' appears to reflect a common understanding among both younger and older children of the potential danger these two events may have on them regardless of their developmental maturity. Younger and older children in Singapore are alike in that they are constantly reminded of the threat of terrorism, possibly through television and other forms of mass media exposure, as well as being exposed to counter-terrorism measures on a daily basis. Similarly, the danger of being hit by a vehicle is a threat both younger and older children face every day in living in an urban environment with its high volume traffic and inevitable accidents.

Findings from the factor analysis of the Fear Survey Schedule for Children-Revised (FSSC-R) suggest that the notion of fear among children is culturally bound and point to (1) the need to understand how children from different countries may interpret the notion of fear differently as a function of their cultural upbringing, and (2) the need to identify the factor structure of the FSSC-R scale before its use can be justified in different countries. However, whilst the fear dimensions identified in this study can be attributed to factors unique to Singapore's culture and environment, the identified fear factors appear to also fit the common themes that Gullone (1999) found in other factor structures that had been reported in past fear studies. Gullone reported that regardless of the conceptual and statistical classification methods, similar dimensions found in past studies and this current study include fear of social rejection, death and danger, animals, medical treatment, psychic stress, and of the unknown.

The cultural imperative that dictates what events are perceived by children as fearful is clearly demonstrated when the factors that best represent the top fears of Singaporean children are compared with those of American and Australian children. In comparison with American and Australian children, it is clear that Singaporean children exhibit higher fear sensitivities towards more commonplace or everyday ordinary events. Their tendency to fear ordinary events may be attributed to the Singaporean culture of Kiasu (literal translation: *scared to lose out*) and Kiasi (literal translation: *scared to die*) (Barretts Values Centre, 2012). Being afraid to die and to lose out may serve as the impetus for parents to practice an over-protective parenting style that maximizes their children's safety while at the same time, minimizing risks to the point where their children feel fearful and vulnerable toward ordinary, mundane day-to-day events. It should also be noted that the only fear item that was found to be common between Singaporean, American, and Australian children is their fear of death or dead people. This is not surprising as the fear of death is universal, and the idea of death and the fear of it have been described to "haunt human (animals) like nothing else" (Becker, 1973, p. ix).

This study represents a necessary and important first step in understanding the normal fears of Singaporean children. It is clear from this study that the ordinary fears of the children must be taken into account if the vision of a mentally and emotionally resilient society is to become a reality in Singapore. Understanding the ordinary fears of children is also critical in informing the parameters necessary for generalizing fears in children, and where contextual understanding is warranted. The similarities and differences obtained from past as well as from the present study reinforce the trends and fear patterns specific to different cultural contexts. While living in a flatter world means that children around the world may share more common fears, features unique to a specific culture and environment are still important in informing fears in children. This study and future ones are critical for meeting the rising demand for prevention and treatment of pathological fears and anxieties in this new world of accelerated change and unpredictability.

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