

Fears in Singaporean children: Identification of and comparison of fear dimensions between Singaporean, Australian, and American children

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This study was designed to investigate the normal fears experienced by Singaporean children and to compare these fears with those reported by Australian and American children. A total of 1,234 Singaporean children aged 7 to 12 years filled in the Fear Survey Schedule for Children-Revised questionnaire. The study's findings revealed that the top common fears reported by Singaporean children relate to fears that concern 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 America, the findings from this study suggest higher fear sensitivity among Singaporean children towards ordinary day-to-day events. The implications of the study's findings for understanding fears in Singaporean children are discussed.

Keywords: *Fear; Emotion; Cultural influences; Fear intensity*

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Introduction

Fear can be defined as an aversive emotional response to real or perceived threat to one's safety, and its essential function is to motivate avoidance of and escape from danger and thus promotes survival (Epstein, 1972). For children, learned fear is particularly important as it serves as a protective barrier against potential dangers as they begin to explore and navigate their physical environment. For example, it is fear that prevents a child from venturing into deep waters, and from wandering too far away from his/her parents when in crowded areas. While learned fears can be functional by acting as self-preservation mechanisms, intense and unrelenting fears can develop into phobias, which can hamper a child's development. Excessive fears in children can lead to avoidance behaviors that limit their engagement in learning opportunities, and in extreme cases, the avoidance of

even safe and sometimes necessary life skills. Excessive fears may also hamper the development of necessary resilience, self-efficacy, and coping skills that are critical in dealing effectively with their environment, as well as preventing normal fears from escalating to pathological fears (Muris, 2007).

The investigation of children's fear

The primary driving force behind the study of fear in children is that fear is an integral aspect of their development (Gullone, 1996). The perception of fear has evolved from being regarded as an emotion of weakness to one that is accepted as a normal aspect of a child's life (Bakker, 2000). Since the shift in perspective from the 1920s (with the legendary fear experiment conducted on Little Albert by Watson and Rayner, 1920) attention has been directed at understanding how children react to as well as to gain control over their fear emotions. This is important as adaptive emotional development is of critical importance to the overall learning and healthy development of children (Saarni & Harris 1989).

A second driving force behind the study of fear in children is the need to constantly update our understanding of the fears experienced by children as they live and grow in a constantly changing environment. For example, children's fears can be influenced by societal and global events and may change as a function of changes to these events (Gullone & King 1993; Owen, 1998; Draper & James, 1985). In a recent study that investigated how the experience of fear may evolve and change as a function of global events, Burnham (2007) reported that children were expressing new fears such as those relating to terrorism and war in their immediate environment. These findings point to the need to consider prevention and intervention strategies that are directly relevant to the contemporary fears experienced by children in the 21st century.

A third driving force behind the study of fear in children was to determine the developmental norms against which pathological fears can be identified (Gullone & King, 1993; Muris & Ollendick, 2002). Cicchetti and Cohen (1995) stressed the importance of the understanding of developmental psychopathology through knowledge of and comparison between normal and atypical development. Thus, the

study of normal fears offers mental health professionals the opportunity to understand more about the antecedents of fear-related disorders such as anxiety disorders, and phobias. The experience of fear is considered to be normal in children only to the extent that the distress it causes helps them to survive and to overcome a dangerous or threatening situation. Fears that are persistent, excessive and/or irrational can become debilitating to a child's life, impacting on the child's growth negatively (Craske, 1997). Information about developmental patterns, frequency, intensity and duration of fear phenomena in children offers the classification scheme for recognition and diagnosis of pathological fears. This is critical for early prevention and intervention work.

Changing environmental influences

Factors that influence fear reaction in children can come from different environments or systems that children interact with. For example, at the *microsystems* level, a child can learn to fear failure from parents who have high expectations for success and from competitive school environments. This fear of failure can also be rooted in the *macrosystem* where culture emphasizing individual success and achievement is the norm. Fear originating from the macrosystem may not necessarily involve the child's immediate environment but may originate from a distal source. For example, a terrorist attack on the other side of the globe can trigger fear in a child, depending on how the incident is portrayed by the mass media. As the world becomes more interconnected through globalization, this ecological systems framework highlights the many new and different potential factors that can cause fears in children. As the world changes at an ever faster rate, this ecological system also highlights the potential changes in what children fear as a function of the rapid changes to their environment.

Culture influences

The interaction between culture and fear is complex as cultural variables can take many forms and can range across ecological environmental factors such as religious beliefs, child-rearing methods, myths, taboos, and economic development (Fonsesca, Yule & Erol, 1994). Nevertheless, overall findings from several cross-

cultural studies showed that the common fears of children do not differ greatly across cultures. For example, Ollendick and his colleagues (1996) examined the 10 most common fears among children from Australia, China, Nigeria and the U.S., and found that American and Chinese children shared 7 fears in common; both groups of children shared 8 common fears with Australian children; and all three groups shared 6 common fears with Nigerian children.

While past studies indicate that the common fears of children do not differ greatly across cultures, the intensity and the prevalence of fears however, have been found to vary across cultures. For example, Nigerian and Chinese children were found to express more social evaluative and safety related fears than their peers in the U.S. and Australia (Ollendick et al., 1996). Ollendick and his colleagues attributed this finding to cultural differences in the way the Chinese and the Nigerian cultures place more emphasis on obedience, self-control, emotional restraint and compliance to social rules than American and Australian cultures do. Referring specifically to the Chinese, they suggested that the restrictive and highly protective Chinese child-rearing and education practices, both of which emphasize academic achievements within a culture that places high value on the opinion of others, contributed to the children's elevated socio-evaluative and safety fears.

The Singaporean context

Singapore is a country well known for its strong economy, social stability and governing efficiency. Apart from its strategic geographical location, the achievement and reputation of the country has been built on its only natural resource: the people of Singapore. Singapore depends on its human capital to continue to exert its international competitiveness and extend its presence in the world. Children, being the future of the country, are naturally valued and protected as the country's greatest asset and a large part of the country's development focus (Ministry of Health Singapore, 2007). Yet, statistics presented by the Ministry reported that 12.5% of Singaporean children (age 6 to 12) have emotional/ behavioral problems such as anxiety, depression and social withdrawal, and that one in five of the children referred to the Singapore Institute of Mental Health Reach Scheme concerns anxiety, phobias and moods issues (Poon, 2012).

Other than understanding how to educate and to nurture the current and future talents of Singapore, an understanding of what could prevent them from functioning at their optimal level is just as important. The study of fears and their potential as barriers to the healthy development of Singaporean children is one possible avenue of helping these children to perform at their best. For example, in an education system that focuses on exams and results, the normal fear of exams and failure can be a strong motivator for the child to expand more effort in his/her studies. However, excessive fear could also be counterproductive as fear of failure would lead to the setting of low achievement goals and the overall lowering of one's confidence and effort to succeed (Elliot & Church, 1997; Dweck & Leggett, 1988).

In line with the Government of Singapore's current commitment to building a mentally and emotionally resilient society (Ministry of Health Singapore, 2007), the present study has been designed to (1) investigate the top common fears experienced by Singaporean children, (2) examine how these top fears may vary by gender and age, (3) explore the unique dimensions underlying these fears, and (4) compare these dimensions with those identified for American and Australian children. It is hoped that the findings from the present study will contribute to the education, prevention and early detection of mental and emotional issues related to fears in Singaporean children. It is also hoped that the study's findings may contribute to a better understanding of the cross-cultural differences/similarities in the kinds of fears experienced by children in Singapore, and those experienced by children residing in the West (U.S. and Australia). As Matsumoto (2001) pointed out, uncovering cross cultural similarities and differences is important for refining our theoretical understanding of human behavior, and has practical value in the development of culturally sensitive practices.

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

median age of 9 years. The majority of the children participants reported that they were born in Singapore (98.8%; $n=1,219$).

Material

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. For the present study, a number of items on the FSSC-R were modified to make them more culturally-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.

The FSSC-R generates a fear score ranging from 80 to 240, with higher scores indicating higher 'fear intensity.' Based on the number of fear items that is endorsed "a lot", the FSSC-R also generates a fear frequency index ranging from 0-80. This frequency index reflects the 'fear content' of the most commonly endorsed fears by the children participants.

Procedure

The study's questionnaire was administered by the second researcher at a children's development center in Singapore where the researcher worked. Participants were sampled from among children who had signed up for a '*Meet-your-Monsters Talk/Workshop*' held at the children's center. Only those children whose parents had provided informed consent to participating in the research took part in the study. The children participants were assured of their anonymity and confidentiality. Following the testing protocol of Gullone and King (1992), the directions to filling in the questionnaire were read aloud to the children.

Results

What kinds of fears are common among Singaporean children and how may these common fears vary as a function of their gender and age?

In order to answer these research questions, the ten most common fears were first identified. This was achieved by determining the proportion of the sample endorsing the highest level of fear – ‘a lot/very scared.’ Table 1 presents these ten common fears rated for the entire sample.

Table 1

Fear Items	Total Sample
Terrorists	64.1
Bombing attacks	60.3
Hit by vehicle	57.7
Not able to breathe	57.3
Death/dead people	53.3
Falling	53.2
Fire – getting burned	52
Germs/serious illness	41.8
Sent to principal	40.4
Ghosts/spooky things	40.3

Ten most common fears of Singaporean children (in %)

It can be seen from Table 1 that, for the entire sample of children, their most common fears 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. Thus, it appears that for these children, the most common fears are those that are associated with injury or death.

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

Table 2

Fear Items	Gender				Age					
	Boys		Girls		7-8		9-10		11-12	
	<i>M</i>	<i>SD</i>								
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

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 in the fear intensity 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 fear 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. These findings clearly suggest that the girls in the present study were more fearful of things in general than the boys.

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 effect are associated with 'terrorists' and 'being hit by a vehicle.' Thus, the children participants, regardless of their ages, expressed similar amount of fear for '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 that: (1) in comparison to their older counterparts, the youngest group of children (7 to 8 years old) expressed higher fear intensity for bombing attacks, death/dead people, falling from high places, being burned, germs/serious illness, being sent to the principal, and ghost and spooky things, and (2) children 9 to 10 years old expressed higher fear intensity for falling from high places, germs/serious illness, and being sent to the principal than the oldest group of children (11 to 12 years old).

Can the children's fears be grouped into unique dimensions?

In order to answer this question, 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%).

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. Table 3 presents this factor together with its respective fear items and factor loadings.

Table 3

Fear of Injury, Pain and Death	Factor loadings
Having to go to the hospital.	0.66
Getting a cut or injury.	0.63
Sharp objects, e.g., knife, scissors, blades.	0.62
Going to the dentist.	0.60
The sight of blood.	0.59
Getting an injection from the nurse or doctor.	0.56
Death or dead people.	0.54
Getting lost in a strange place.	0.53
Ghosts or spooky things.	0.48
Deep water or the sea.	0.42
Wild monkeys.	0.40

Fear factor - Fear of Injury, Pain and Death - together with its fear items' factor loadings

Are there differences in the fears experienced by Singaporean, American, and Australian children?

The study conducted in the U.S. by Ollendick (1983) was based on children between 8 and 11 years of age from two geographically diverse regions of the country. Subsequent studies extended its use to 7–16 year old youths (Ollendick, King, & Frary, 1989). The study conducted in Australia by Gilmore and Campbell (2007) was based on 220 children between 6 and 12 years of age from the south-east corner of the state of Queensland. The sampling technique employed by both these studies was 'convenience sampling' in which there were no specific exclusion criteria.

Factor analysis of the FSSC-R yielded a five-factor solution in both the U.S. and Australian studies. However, similar to the present study, the first factor extracted in both studies captured the most amount of explained variance and 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.

Table 4.

<u>Fear of danger and death</u>		<u>Fear of injury, pain and death</u>			
U.S. (Ollendick, 1983)		Australia (Gilmore & Campbell, 2007)		Singapore (present study)	
<u>Items</u>	<u>Loadings</u>	<u>Items</u>	<u>Loadings</u>	<u>Items</u>	<u>Loadings</u>
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		

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

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 group 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 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. These fears can be attributed to specific environmental factors, cultural influences, and parenting practices unique to Singapore.

Discussion

The present study was designed to examine normal fears among Singaporean children. The study's findings indicated that, among these children, their most common fears concern threats of physical danger and threats to their personal safety. These findings are interesting in that although these children live in a country noted for its socio-political-economic stability, they still rated their most common fears as those that concern threats to their personal safety. In a recent survey of quality of living and safety among various countries, Singapore was ranked 8th in personal safety in the world (Mercer, 2011). Yet, the finding of the most common fears being related to threats to one's personal safety, even in an environment of relative stability and safety, suggests the presence of an evolutionary preservation trait in humans marked by the emotion of fear, an emotion that drives people to seek out safe havens as well to avoid danger in order to survive (Ohman, 2000). This suggestion is consistent with the definition of fear as a subjective emotion, and that feelings of fears may not always be grounded in the objective reality of the environment (Marks, 1969).

While the drive to survive may be driven by an evolutionary preservation imperative, the study's findings nevertheless begs the question of how and why Singaporean children have come to acquire high levels of fear associated with safety and danger in a relatively safe environment like Singapore? The answer appears to lie with the specificity of the common fears expressed by the children, and their

relationship with the circumstances and environment unique to their country. For example, their expressed fears of terrorism and bombing attacks may be attributed to the counter-terrorism measures that Singaporean children are constantly exposed to in their country. It is not uncommon to see the Public Transport Security Command unit patrolling the Singapore transportation network ever since the London bombings in 2005. In addition, there are on-going broadcasts on trains to inform passengers to report suspicious looking packages or people. Apart from what they experience in their environment, children in Singapore, like other children in the modern world, are constantly exposed to the mass media. The increasing political tensions worldwide, and the extensive media coverage about terrorism and wars, with their explicit images of danger, destruction, and death, have been found to influence the development of fears in children (Scheaefer, Watkins & Burnham, 2003). This suggestion is consistent with past research which has shown that threat information presented on television and movies create fear reactions among children (Cantor, 1998).

For the Singaporean children in the present study, findings from the factor analysis of the FSSC-R yielded a 10-factor structure that appears to reflect a major distinct fear dimension. This fear dimension reflects concern over danger and safety (i.e. fear of injury, pain and death) and appears to fit the major common theme 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, a similar dimension found in past studies include fear of injury, death and danger.

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. While findings from factor analysis indicated that the most important fear factor for these three groups of children are similar (Singaporean children: *Fear of injury, pain and death*; American children: *Fear of danger and death*; Australian children: *Fear of danger and death*), the items that represent these factors are nevertheless different. For American and Australian children, their *fear of danger and death* is reflected in fears such as 'not being able to breathe', 'terrorism', 'earthquake', 'bomb attacks',

and 'fire and being burned.' These are fears that appear to reflect general threats to their personal safety. In contrast, for Singaporean children, their primary fears appear to be more personal and relate to their fear of pain and injury to oneself, such as the fear of 'having to go to hospital', 'seeing a dentist', 'being given an injection', and 'being cut and suffering some injury.'

It is also interesting to note that in comparing the specific fears of Singaporean children with those of American and Australian children, 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. The outcome of such an over-protective style of parenting is children who are less resilient to the trials and tribulations they encounter in their everyday lives.

Every study has its limitations and this one is no exception. First, it must be noted that the study's children participants were sampled from different parts of Singapore. Therefore, environmental factors that are specific to different areas/neighborhoods (e.g., socio-economic status, religion, ethnicity) were not controlled for and could have biased the study's findings. As such, caution should be taken when generalizing the study's findings to the entire population of children in Singapore.

Second, it is important to note that the findings in this study are limited by the self-reporting format of the FSSC-R. Inherent in such measures of experimental inquiry are issues related to response biases such as social desirability (Holtgraves, 2004). As such, future studies on this topic should consider addressing the issue of fear from a multi-perspective approach, such as getting the perspective of fears in children from parents' and teachers' reports, rather than relying exclusively on the self-report measure of the FSSC-R.

Third, the FSSC-R is limited in that it does not include contemporary fear items that are relevant to children in Singapore. Some of these fears include meeting a bully, being molested in the lift, tsunami, seeing a flasher, being kidnapped, and global warming. These additional fears point to the limitation of the FSSC-R's content validity and suggest that the fear items included in the scale need to be revised periodically for it to remain a relevant measure of children's fears.

Notwithstanding the above limitations, the present study's findings carry a number of important implications for the understanding of fears in children. First, the similarities and differences obtained from past as well as from the present study reinforce the trends and fear patterns typical of children everywhere. Findings that are distinct to children in Singapore reflect cultural characteristics that are unique to Singapore and point to the need for further research to identify fear-inducing events that are relevant and specific to different cultural contexts. This understanding is critical in informing the parameters necessary for generalizing fears in children, and where contextual understanding is warranted.

Second, apart from identifying the most common fears of Singaporean children, this study also revealed that living in a safe and secure Singapore does not necessarily mean that children feel safe or have less fears and concerns over what they perceive as threatening. Indeed, the findings from the present study point to how living in a safe environment may, overtime, create a sense of over-protectiveness (possibly reinforced through over-protective parents) that causes children to fear things that are ordinary and mundane. These findings have important implications for the country's mission of building emotional resilience among its children, a vision espoused by no less than the country's Ministry of Health (2007). It is clear from this study that the ordinary fears of the children must be taken into account if the vision of a mentally resilient society is to become a reality in Singapore.

The present study represents a small beginning in the investigation of what events are perceived as fearful by Singaporean children, as well as an attempt to understand the antecedents of these fear events. It is not difficult to see how this topic of study will continue to be relevant as long as the environment that children live in continues to shift and change. Research in this area will continue to be

important as long as people are concerned about helping children understand their fears and to manage their anxieties that result from their fears. 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.

References

- Bakker, N. (2000). The meaning of fear, emotional standards for children in the Netherlands, 1850–1950: was there a western transformation? *Journal of Social History*, 34(2), 369–392.
- Barretts Values Centre (2012). *How we view Singapore society and workplace as these are today and what we want them to be*. Retrieved on September 15,2013 from http://lkyspp.nus.edu.sg/ips/wp-content/uploads/sites/2/2013/06/aAdvantage-RT_MediaRelease_230812.pdf
- Burnham, J. J. (2007). Children's fears: A pre-9/11 and post-9/11 comparison using the FSSC-AM. *Journal of Counseling and Development*, 85, 461-466.
- Cantor, J. (1998). *Mommy, I'm Scared! How TV and Movies Frighten Children and What We Can Do To Protect Them*. San Diego, CA: Harcourt Brace.
- Cicchetti, D., & Cohen, D. J. (1995). *Preface. Developmental psychopathology: Vol. 1. Theories and methods*. (Eds.). Canada: Wiley.
- Craske, M. G. (1997). Panic and anxiety in children and adolescent. *Bulletin of the Menninger Clinic*, 61, 14-36.
- Draper, T. W., & James, R. S. (1985). Preschool fears: Longitudinal sequence and cohort changes. *Child Study Journal*, 15, 147–156.

- Dweck, C. S., & Leggett, E.L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256–273.
- Elliot, E. A., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 72, 18-232.
- Epstein, S. (1972). The nature of anxiety with emphasis upon its relationship to expectancy. pp. 292-338 in C. D. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (Vol. 2,). New York: Academic Press.
- Fonseca, A.C., Yule, W., & Erol, N. (1994). Cross-cultural studies of children's fears. pp 67-86 in Ollendick T.H., King N.J. & Yule W. (Eds.), *International hand book of phobia and anxiety disorders in children and adolescents*. New York: Plenum Press.
- Gilmore, L., & Campbell, M. (2007). Spiders, bullies, monsters or terrorists: What scares Australian children? *Children Australia*, 32(3), 29-33.
- Gullone, E. (1999). The assessment of normal fear in children and adolescents. *Clinical Child and Family Psychology. Review*, 2, 91–106.
- Gullone, E. (1996). Developmental psychopathology and normal fear. *Behaviour Change*, 13, 143-155.
- Gullone, E., & King, N. J. (1993). The fears of youth in the 1990's: Contemporary normative data. *The Journal of Genetic Psychology*, 154, 137-153.
- Gullone, E., King, N. J. (1992). Psychometric evaluation of a revised fear survey schedule for children and adolescents. *Journal of Child Psychology and Psychiatry*, 33, 987–998.

- Holtgraves, T. M. (2004). Social desirability and self-reports: Testing models of socially desirable responding. *Personality and Social Psychology Bulletin*, 30, 161-172.
- Marks, I. (1969). The development of normal fear: A review. *Journal of child Psychology and Psychiatry*, 28(5), 667-697.
- Matsumoto, D. (2001). Cross-cultural psychology in the 21st century. In J. S. Halonen & S. F. Davis (Eds.). *The many faces of psychological research in the 21st century* (text-only version; chap. 5). Retrieved November 12, 2010 from <http://teachpsych.org/resources/e-books/faces/text/ch05.htm>
- Mercer (2011). *Quality of Living Rankings Report*. Retrieved November 12, 2012 from <http://www.mercer.com.au/articles/quality-of-living-survey-report-2011>
- Ministry of Health Singapore (2007). *Strategic roadmap to build up a mentally resilient society*. Retrieved on November 23, 2010, from <http://www.moh.gov.sg/mohcorp/pressreleases.aspx?id=17120>
- Muris, P. (2007). *Normal and abnormal fear and anxiety in children and adolescents*. Oxford: Elsevier.
- Muris, P., & Ollendick, T. H. (2002). The assessment of contemporary fears in adolescents using a modified version of the fear survey schedule for children-revised. *Journal of Anxiety Disorders*, 16, 567-584.
- Ohman, A. (2000). Fear and anxiety: evolutionary, cognitive, and clinical perspectives. pp. 573–593 in M. Lewis and J.M. Haviland-Jones (eds.), *Handbook of emotions*. New York, London: The Guilford Press.
- Ollendick, T. H., Yang, B., King, N. J., Dong, Q., & Akande, A. (1996). Fears in

American, Australian, Chinese and African children and adolescents: A cross - cultural study. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 37(2), 213-220.

Ollendick, T. H., King, N. J., & Frary, R. B. (1989). Fears in children and adolescents: Reliability and generalizability across gender, age, and nationality. *Behaviour Research and Therapy*, 27, 19–26.

Ollendick, T. H. (1983). Reliability and validity of the revised fear survey schedule for children (FSSC-R). *Behaviour Research and Therapy*, 21, 685-692.

Owen, P. (1998). Fears of Hispanic and Anglo children: Real-world fears in the 1990s. *Hispanic Journal of Behavioral Sciences*, 20(4), 483–491.

Poon, C. H. (2012, November 28). More children get early help with mental health issues. The Straits Times. Retrieved December 12, 2012 from <http://yourhealth.asiaone.com>

Saarni, C., & Harris, P. L. (1989). *Children's understanding of emotion*. (Eds.) New York: Cambridge University Press.

Schaefer, B. A., Watkins M. W., & Burnham, J. J. (2003). Empirical fear profiles among American youth. *Behavior Research and Therapy*, 41, 1093-1103.

Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. *Journal of Experimental Psychology*, 3, 114.