

The Fears of Youth in the 1990s: Contemporary Normative Data

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ABSTRACT. This article reports the findings of a normative fear investigation involving a sample of 918 Australian children and adolescents, ranging in age from 7–18 years. The Fear Survey Schedule for Children and Adolescents–II (FSSC-II) was administered to determine self-reported prevalence, intensity, and content of fear. Consistent with past research, girls generally reported significantly higher levels of fearfulness than boys. Age differences also were found; younger children reported a higher intensity and a greater number of fears than older children and adolescents. Qualitative differences in normative fear were found, with younger children reporting more animal fears and older children reporting more fears relating to social evaluation or psychic stress. Significantly, although the specific content of children's and adolescents' normative fears in the 1990s (as compared with the 1960s) has changed (now including fear of AIDS and of nuclear war), the fears found to be most prevalent continue to relate to death and danger. These findings are discussed within the context of the prepotency and preparedness concepts of fear.

FEAR, DEFINED AS A NORMAL REACTION to a real or imagined threat, is seen as an integral part of development. Research in the area has focused on determining what children fear and how their fears develop, and on establishing the relationship between children's fears and demographic variables, such as age, sex, location, and socioeconomic status (Graziano, DeGiovanni, & Garcia, 1979; King, Hamilton, & Ollendick, 1988; Morris & Kratochwill, 1983).

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In relation to developmental differences in normative fear, the most comprehensive explanation combines cognitive–developmental conditioning, as well as prepotency and preparedness factors. Thus, fear in infancy may serve to enhance the attachment between the infant and his or her primary caregiver. Programmed behaviors, including fear, are considered to be of primary importance in infancy when the organism, in its relatively helpless state, is heavily dependent on others for survival (Campbell, 1986). The fears expressed in infancy (e.g., loud noises, loss of support) have been argued to be prepotent, that is, they are biologically preprogrammed and occur in the absence of learning (Marks, 1987).

In contrast, many of the fears that emerge in the first year of life require cognitive maturation, including the capacity to remember and to distinguish the novel from the familiar. During this time, stranger and separation anxiety emerge. Development into the school years coincides with the emergence of fears relating to supernatural phenomena, failure and criticism, and bodily injury. Thus, whereas in infancy children generally become fearful of stimuli in their immediate environment such as loud noises or loss of support, with increasing age, the infant's fears change and now include anticipatory events or stimuli (Campbell, 1986).

The preparedness concept (Seligman, 1971) directly relates to the distribution of fears. Given their prevalence in the environment, the fears of certain stimuli or situations are far too common to be explained as having occurred through conditioning, whereas other fears are far too rare (Rachman & Seligman, 1976). For example, fear of snakes is frequently reported by people who have had no contact with the animal (Agras, Sylvester, & Oliveau, 1969). In contrast to this seemingly popular fear of snakes is the seemingly rare fear of, for example, electric power points. Normative fear investigations with children and adolescents have yielded similar findings. For example, Ollendick and colleagues (King, Ollier, Iacuone, Schuster, Bays, Gullone, & Ollendick, 1989; Ollendick, 1983) have found fears relating to death and danger among the most commonly reported. Included are fears such as earthquakes, not being able to breathe, and falling from high places.

Seligman (1971) argued that certain stimuli are biologically significant. Evolution has predisposed organisms to easily acquire associations that facilitate survival of the species. The organism is, therefore, prepared to learn to fear biologically significant stimuli. Another consistent finding of normative fear investigations is that relating to sex differences. Overwhelmingly, girls report or are reported to express more fears than boys (e.g., Angelino, Dollins, & Mech, 1956; Bamber, 1974; Croake, 1969; Croake & Knox, 1973; Cummings, 1944, 1946; Hall, 1897; Lapouse & Monk, 1959; Ollendick, 1983; Scherer & Nakamura, 1968; Spiegler & Liebert, 1970). These sex differences do not necessarily indicate that girls have a greater fear reactivity. Rather, such differences may be a reflection of sex-role expectations within

which fearful behavior in response to certain stimuli is much more acceptable for girls than boys. Further, girls may be more likely to report their fears than boys. The latter behavior also is consistent with the female stereotype (Graziano et al., 1979).

Fear occurring as part of general development has been differentiated from clinical fear or phobia on the basis of several criteria, including whether or not the expressed fear is age or stage specific and whether or not it persists over an extended period of time (Miller, Barrett, & Hampe, 1974). Thus, research in the area also is considered to have significant clinical importance, particularly in relation to establishing norms of fearfulness against which excessive or "phobic" fears can be identified (Graziano et al., 1979; King et al., 1988).

Over 100 investigations have been conducted in the area of children's and adolescents' normative fears or worries/concerns, beginning in the late 1800s (Hall, 1897) and continuing at a rapidly increasing rate, particularly in the 1980s (e.g., Draper & James, 1985; Ollendick, 1983; Silverman & Nelles, 1988; Staley & O'Donnell, 1984). Although normative-fear investigations overwhelmingly have been conducted in the United States, several have been conducted in other countries, providing valuable cross-national data (e.g., Bamber, 1974; 1977; Klingman & Wiesner, 1982; 1983; Sidana, 1975; Sidana & Sinha, 1973). In particular, during the late 1980s and early 1990s, a wealth of research in Australia has emerged, the majority of which has been conducted by King and his colleagues (e.g., King & Gullone, 1990; King, Gullone, & Ollendick, 1990; King, Gullone, & Stafford, 1989; King, Mulhall, & Gullone, 1989; King, Ollier, et al., 1989). Given their identical methodology, particularly with regard to the data-gathering instrument (i.e., the Revised Fear Survey Schedule for Children: FSSC-R; Ollendick, 1983), they have enabled valid and reliable comparison of normative fear between Australia and the United States.

In a direct comparison of American and Australian data, Ollendick, King, and Frary (1989) reported a considerable degree of similarity between the factor structures yielded by American and Australian samples. It also was reported that the two samples yielded an identical fear prevalence, with an average of 14 self-reported fears. Consistent with past research, females and younger (7–10 year olds) children reported more fear than males and older children (11–13 and 14–16 year olds), respectively. This was the case on all factors of the FSSC-R (see Ollendick, 1983, for a detailed description of the five fear factors) except for the Medical Fears factor.

In a subsequent investigation, Ollendick, Yule, and Ollier (1991) compared self-reports of fear for British and American samples, reporting almost identical total fear scores (i.e., fear intensity) for the two populations of children. Again, girls were found to report significantly more fear than boys;

however, no age differences were found. The authors maintain that the latter finding was a result of the limited age range (i.e., 8–10 years).

A substantial contribution has been made to the normative-fear literature by researchers using the FSSC-R. Of particular importance are the comparisons across countries. Several other researchers have conducted investigations in countries such as Israel, Northern Ireland, and India; however, the methodology and instruments used have differed, thereby limiting valid comparison. In fact, this is the biggest criticism of the entire normative-fear literature focusing on children and adolescents—methodologies range from open-ended interviews with parents to self-reports on psychometrically evaluated fear schedules by the children and adolescents themselves.

In our 1992 study, although acknowledging the contributions made to the normative-fear literature by researchers using the FSSC-R, we noted that the item content of the FSSC-R has remained unchanged since the original scale was developed in the 1960s (Scherer & Nakamura, 1968). Consequently, they have reported a substantial revision of the instrument.

The Fear Survey Schedule for Children and Adolescents-II (FSSC-II) provides an updated list of stimulus items that potentially elicit fear, including such items as “nuclear war” and “AIDS.” It has been developed and evaluated on a sample of children and adolescents ranging in age from 7–18 years and, therefore, enables the reliable and valid assessment of fearfulness over this range of the course of development (e.g., see Gullone & King, 1992 for details).

In the present article, we report the findings of a normative-fear investigation in which the FSSC-II was used with a large representative sample of Australian children and adolescents. The prevalence, intensity, and content of fear are reported, as are age and gender differences.

Method

Subjects

As part of a larger study, we administered the FSSC-II to a total of 941 children and adolescents; however, several questionnaires were not included in the final analyses because they were not completed adequately. This resulted in a final sample of 918 children and adolescents (459 boys and 459 girls). Subjects ranged in age from 7–18 years: 340 were between 7–10 years (192 boys and 148 girls); 314 were between 11–14 years (146 boys and 168 girls); and 264 were between 15–18 years (121 boys and 143 girls). The subjects were drawn from regular primary and secondary schools in urban, suburban, and rural areas of Victoria, Australia. In total, three primary and five secondary schools were involved in the investigation, two of which were parochial and six public. As determined by the 1986 Australian Bureau of Statistics

Census (Australian Bureau of Statistics, 1988), a sample representative of the Victorian population with regard to several variables was selected for inclusion. These variables included socioeconomic status (i.e., annual income of household), birthplace, language spoken at home, and geographic location (i.e., Ministry of Education Regions). Thus, the sample constituted a representative cross-section of children and adolescents attending regular primary and secondary schools in Victoria.

Apparatus

As we reported in an earlier study (1992), the FSSC-II is a 75-item fear survey schedule. Respondents rate their level of fear for each of the stimulus items on a 3-point scale (i.e., 1 = *not scared*, 2 = *scared*, 3 = *very scared*; cf. Ryall & Dietiker, 1979). The FSSC-II has been reported to have high internal consistency with a corrected item-total correlation coefficient of .96. One-week test-retest also was reported to be good with a correlation between the two completions of .90. Validity of the FSSC-II was assessed by correlating overall fear estimates with psychometrically related and distinct indices. Specifically, convergent validity was reported to be sound, with moderate correlations of .42 and .39 for the FSSC-II with the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) and the Trait Scale of the State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1970). Also as expected, divergent validity analyses were reported to yield nonsignificant correlations for the FSSC-II with the Goodenough-Harris Drawing Test of Intellectual Maturity (Goodenough & Harris, 1963) and the State Scale of the STAIC. Further, a principal components factor analysis with varimax rotation yielded a five-factor fear structure: Factor 1 = "Fear of Death and Danger," Factor 2 = "Fear of the Unknown," Factor 3 = "Fear of Failure and Criticism," Factor 4 = "Animal Fears," and Factor 5 = "Psychic Stress-Medical Fears."

Procedure

We administered the FSSC-II to the respondents on a group basis in their regular classrooms at school. Data were collected by the first author and the class teacher. The children and adolescents were directed to read each item and to place a tick in the box in front of the words that most adequately described their level of fear. Any questions that arose were clarified by the researchers. As with other fear research (e.g., King, Gullone, & Stafford, 1989; King et al., 1990), we provided more assistance to certain respondents than to others. This was particularly the case for the 7- and 8-year-old children, for whom the items and instructions were read aloud by the researcher; the older children and the adolescents completed the fear schedule indepen-

dently after having had the directions read aloud to them. Such variation in procedures has not appeared to influence the outcomes (cf. King et al., 1989; King et al., 1990). We emphasized to the subjects that there were no right or wrong answers and that in responding to each item they should not be concerned with other students' responses.

Results

As has been reported for fear investigations using the FSSC-R, the results were analyzed on the basis of several fear measures. Thus, Total/Intensity Fear score (the sum of all item ratings), Frequency/Prevalence Fear score (the sum of all items endorsed with the highest level of fear), factor scores (both Intensity and Prevalence fear indices), and the 10 most frequently endorsed fears (with the highest level of fear) are reported for each age and sex group. The data were analyzed using the Statistical Package for the Social Sciences, 3rd. ed. (SPSS-X, 1988).

Overall- and Factor-Fear Intensity Scores

The self-reports yielded an overall sample fear-intensity score of 132.14. To examine fear-intensity score differences between the age and sex groups, we carried out a 3×2 (Age Group \times Sex) analysis of variance (ANOVA) that manifested significant age and sex effects. Fear intensity was found to decrease as age increased, with the 7–10-year-olds obtaining a significantly higher mean fear-intensity score than the 11–14 and 15–18-year-olds. The oldest age group scored significantly lower than either of the two younger groups. Girls obtained a higher mean fear-intensity score than boys did (see Table 1).

We carried out five additional ANOVAs to examine factor fear-intensity scores by age group and sex. The ANOVAs yielded interesting findings (see Table 1). Significant Age \times Sex interactions were found for the Fear of Death and Danger factor and the Psychic Stress–Medical Fears factor. For the Death and Danger factor, the interaction resulted from a much greater decline of fearfulness with age for boys than for girls, albeit a significant decrease for both. For the Psychic Stress–Medical Fears factor, there was a fear increase with age for girls up to 18 years old but a stabilization after 11–15 years for boys. As with the overall scale score, girls scored significantly higher than boys on all five factors.

Overall and Factor Fear Prevalence Scores

The fear-prevalence score for the overall sample was found to be 16.22. As with the fear-intensity score, in order to examine differences in fear preva-

TABLE 1
ANOVA Results, Means, and Standard Deviations Showing Age-Group and Sex Effects on Intensity Fear Scores for the Total FSSC-II and the Five Factors.

Variable	Sex				Age group						Two-way interactions
	Male		Female		(1) 7-10 years		(2) 11-14 years		(3) 15-18 years		
	M	SD	M	SD	M	SD	M	SD	M	SD	
Overall scale	121.36	21.84	142.72	23.66	139.10	24.54	131.16	24.23	124.74	24.75	
	$F(1, 822) = 227.75^{***}$				$F(2, 822) = 43.18^{***}$ (All pairs)						
Factor 1 (death and danger)	50.69	11.04	58.51	9.70	58.29	9.80	54.29	10.44	50.52	11.86	Sex × Age Group $F(2, 829) = 5.46^{**}$
	$F(1, 829) = 166.89^{***}$				$F(2, 829) = 58.37^{***}$ (All pairs)						
Factor 2 (the unknown)	27.68	6.35	33.46	7.64	33.68	7.86	29.82	7.05	27.64	6.40	
	$F(1, 829) = 200.72^{***}$				$F(2, 829) = 76.83^{***}$ (All pairs)						
Factor 3 (failure and criticism)	19.03	4.51	21.28	4.87	20.33	4.52	20.75	5.29	19.27	4.52	
	$F(1, 829) = 56.67^{***}$				$F(2, 829) = 6.57^{**}$ (Pairs: 1 & 3, 2 & 3)						
Factor 4 (animals)	11.14	2.38	13.88	3.34	13.02	3.29	12.16	2.94	12.27	3.32	
	$F(1, 829) = 215.44^{***}$				$F(2, 829) = 15.23^{***}$ (Pairs: 1 & 2, 1 & 3)						
Factor 5 (psychic stress-medical fears)	12.79	2.63	15.43	3.24	13.60	2.97	14.22	3.14	14.65	3.55	Sex × Age Group $F(2, 822) = 3.66^*$
	$F(1, 822) = 173.58^{***}$				$F(2, 822) = 4.70^{**}$ (Pair: 1 & 3)						

Note. Scheffe's tests for multiple comparisons on the overall scale score and the five factors showed significant differences between age-group pairs, as indicated () ($p < .05$).

* $p < .05$, ** $p < .01$, *** $p < .001$.

lence between the age and sex groups, we conducted a 3×2 (Age Group \times Sex) ANOVA. We found significant Age and Sex effects. The average number of self-reported fears decreased as age increased, with the 7–10-year-olds reporting a significantly higher number of fears than the 11–14 and 15–18-year-olds. The oldest age group reported significantly fewer fears than either of the two younger groups. Girls reported a significantly higher number of fears than boys did (see Table 2).

Five, 3×2 (Age Group \times Sex) ANOVAs carried out for each of the five factors yielded only one significant interaction, that between age group and sex on the Death and Danger factor. This resulted from a general decrease in fear prevalence with age for boys, but a decrease only from the first to the second age groups with an increase for the third age group for girls. Significant main effects for age and sex were found on all five factors (see Table 2). Not surprisingly, girls reported a significantly greater number of fears than boys did on all factors. The main effects for age also were consistent with those on the overall scale for all factors, with the exceptions of Factors 3 and 5. For these factors, the results were consistent with the fear-intensity factor score findings. Thus, for the Failure and Criticism factor, the oldest age group scored significantly lower than either of the other two groups, and for the Psychic Stress–Medical Fears factor, the number of self-reported fears increased with age.

Age and Sex Differences in Fear Content

To determine which FSSC-II items best discriminated between boys and girls, and between the youngest (7–10-year-olds) and oldest (15–18-year-olds) groups, we carried out discriminant function analyses. The discriminant function analysis for the sex variable, Wilks's lambda (75) = 0.60, $p < 0.001$, correctly classified 79.71% of the cases. The top 10 discriminating items for boys and girls, from highest to lowest, were (1) rats, (2) fire, (3) spiders, (4) snakes, tied on (5) were bushfires and being in a fight, (6) having an operation, tied on (7) were murderers and mice, (8) creepy houses, (9) being alone, and tied on (10) were having bad dreams and being alone at night. On each item, girls obtained significantly higher mean scores than boys.

The discriminant function analysis for the age variable, Wilks's lambda (75) = 0.35, $p < 0.001$, correctly classified 91.33% of the cases. The top 10 discriminating items for 7–10 and 15–18-year-olds, from highest to lowest, were (1) strangers, (2) being kidnapped, tied on (3) were getting lost in a strange place and having to talk in front of my class, tied on (4) were drunk people and getting lost in a crowd, (5) our country being invaded, (6) earthquakes, (7) being sent to the principal, (8) cyclones, tied on (9) were tigers and strange-looking people, and (10) taking dangerous drugs. On all items, the 7–10-year-olds scored significantly higher than the 15–18-year-olds, with

TABLE 2
ANOVA Results, Means, and Standard Deviations Showing Age-Group and Sex Effects on Prevalence Fear Scores for the Total FSSC-II and the Five Factors.

Variable	Sex		Age group						Two-way interactions		
	Male		Female		(1) 7-10 years		(2) 11-14 years			(3) 15-18 years	
	M	SD	M	SD	M	SD	M	SD		M	SD
Overall scale	12.28	9.50	20.24	11.82	19.76	11.70	15.52	11.05	12.70	10.26	
	$F(1, 822) = 153.38^{***}$				$F(2, 822) = 43.71^{***}$ (^All pairs)						
Factor 1 (death and danger)	8.82	6.18	13.17	6.61	13.30	6.31	10.57	6.61	8.57	6.54	Sex × Age Group $F(2, 909) = 3.21^*$
	$F(1, 909) = 140.82^{***}$				$F(2, 909) = 57.46^{***}$ (^All pairs)						
Factor 2 (the unknown)	1.39	2.20	3.04	3.37	3.29	3.49	1.87	2.63	1.26	2.02	
	$F(1, 909) = 104.38^{***}$				$F(2, 909) = 55.78^{***}$ (^All pairs)						
Factor 3 (failure and criticism)	1.11	1.65	1.59	1.93	1.45	1.71	1.57	2.03	0.97	1.58	
	$F(1, 909) = 18.18^{***}$				$F(2, 909) = 9.56^{***}$ (^Pairs: 1 & 3, 2 & 3)						
Factor 4 (animals)	0.37	0.78	1.13	1.44	0.91	1.28	0.59	1.05	0.73	1.31	
	$F(1, 909) = 106.81^{***}$				$F(2, 909) = 10.12^{***}$ (^ Pairs: 1 & 2)						
Factor 5 (psychic stress-medical fears)	0.58	0.95	1.31	1.51	0.79	1.16	0.93	1.33	1.16	1.45	
	$F(1, 822) = 67.11^{***}$				$F(2, 822) = 3.65^*$ (^Pair: 1 & 3)						

Note. Scheffe's tests for multiple comparisons on the overall scale score and the five factors showed significant differences between age-group pairs, as indicated (°) ($p < .05$).

* $p < .05$, ** $p < .01$, *** $p < .001$.

the exception of “having to talk in front of my class,” for which the 15–18-year-olds reported a significantly higher level of fear.

Most Common Fears

We identified the 10 most common fears by determining the percentage endorsement of the highest level of fear (i.e., very scared) for each of the FSSC-II items. We found that those stimulus items most likely to be endorsed as fear arousing (i.e., the most common fears) all loaded onto the Death-and-Danger factor. From highest to lowest and with the percentage endorsement in parentheses, the 10 most common fears were AIDS (74.3), someone in my family dying (64.8), myself dying (64.0), not being able to breathe (63.4), being threatened with a gun (61.0), taking dangerous drugs (60.0), being kidnapped (58.7), nuclear war (53.5), being hit by a car or truck (52.4), and sharks (51.5).

The 10 most frequently endorsed items also were examined separately for boys, girls, and each age group. We found that most fears were common across all groups, with a few exceptions. For example, endorsement of “sharks” as one of the 10 most common items was unique to 15–18-year-old subjects. Endorsement of “dingoes” was unique to 11–14-year-old subjects, whereas “falling from high places” and “earthquakes” were unique to the youngest age group (i.e., 7–10-year-olds). Overall, self-reports by the youngest subjects yielded the highest percentage endorsements, ranging from 77 (myself dying) to 63 (earthquakes) for the 10 most common fears, whereas endorsements for the oldest respondents ranged from 65 (AIDS) to 40 (murderers). Further, the relative ordering of the most common fears differed slightly depending on the age group and sex.

Discussion

Age and Sex Differences in Intensity and Prevalence of Fear

Consistent with the work of King, Ollier, et al., (1989), the overall Intensity and Prevalence Fear scores differed significantly on the basis of age, with younger children scoring significantly higher than older children and adolescents. Further, a general decline of fearfulness with an increase in age has been reported in the fear literature (e.g., Davidson, White, Smith, & Poppen, 1989; Ollendick et al., 1989; Slee & Cross, 1989; Spence & Kennedy, 1989; Spiegler & Liebert, 1970; Staley & O'Donnell, 1984). The majority of studies failing to find significant age trends have examined fear across a limited age range of subjects (e.g., Croake & Knox, 1973; Ollendick, 1983; Ollendick, Matson, & Helsel, 1985; Ollendick et al., 1991; Scherer & Nakamura, 1968). Also consistent with many previous fear investigations is the finding

that girls generally have reported more fear than boys (e.g., Bamber, 1974; Croake, 1967; 1969; Hall, 1897; King, Ollier, et al., 1989; Lapouse & Monk, 1959; Ollendick, Matson, & Hessel, 1985; Ollendick et al., 1991; Pratt, 1945; Scherer & Nakamura, 1968) with few exceptions (e.g., Derevensky, 1974; Miller, Barrett, Hampe, & Noble, 1971; Nalven, 1970).

Age Differences in Fear Content

Both prevalence of and intensity of fear related to the unknown and to death and danger were found to decrease with increasing age, whereas psychic stress and medical fears were found to increase (increase due to girls' self-reports). Children aged 11–14 years reported the highest levels of fear relating to failure and criticism. The results on the intensity-of-fear index revealed a decrease in animal-related fears at 11–14 years and a stabilization thereafter.

The fears that best discriminated between 7–10 and 15–18-year-olds (i.e., between childhood and adolescence) clearly demonstrate that younger children are more likely to fear objects or situations over which they may believe they have little control or are vulnerable; for example, "being kidnapped," "getting lost in a strange place," "getting lost in a crowd," and "taking dangerous drugs." During adolescence, an age when the future and academic achievement become more significant, fears of evaluation and criticism become most evident, hence fear of "having to talk in front of my class."

The present results are consistent with past studies that also have reported a decrease in animal-related fears with an increase in age (e.g., Angelino & Shedd, 1953; Angelino et al., 1956; Derevensky, 1974; King, Ollier, et al., 1989; Lapouse & Monk, 1959) and an increase in fears relating to failure and criticism in middle childhood (e.g., Angelino, Dollins, & Mech, 1956; Angelino & Shedd, 1953; Granell de Aldaz, Vivas, Gelfand, & Feldman, 1984; King, Ollier, et al., 1989; Lapouse & Monk, 1959; Ollendick et al., 1989). Of particular interest is the lack of stability of fears relating to death and danger across age. The age-related increase in fears relating to psychic stress and medical procedures also is intriguing. Within preparedness theory, one can argue that during late adolescence, the decrease in fear of death and danger is related to the need for the individual to leave the security of the family and to fend for oneself. Nevertheless, examination of the items loading onto the factors may assist further in elucidating these findings.

Several items loading onto the Fear of Death and Danger factor also were among the best discriminating items between children and adolescents, such as: "being kidnapped," "earthquakes," "our country being invaded," "cyclones," and "tigers." The probability of encountering such events is relatively remote. For example, meeting with a tiger is extremely unlikely outside of the local zoo, and natural disasters such as cyclones and earthquakes, although having occurred in Australia, do not occur frequently. Interestingly,

such realistic evaluations of threat are less characteristic of younger children (7–10 year olds) than in older children and adolescents (11–18-year-olds).

Items loading onto the Psychic Stress–Medical Fears factor include items that relate to social evaluation, for example: “having to talk in front of my class,” “going to a new school,” “losing my friends,” “having no friends,” and “meeting someone for the first time.” As previously noted, such fears have been reported as most characteristic of the middle childhood and early adolescent years.

Sex Differences in Fear Content

For the five factors of the FSSC-II, girls reported a greater number and higher intensity of fear than boys did. This is not surprising given previous research findings. In their examination of sex differences on the five factors of the FSSC-R, Ollendick, Matson, and Helsel (1985) and King, Ollier, and colleagues (1989) reported similar findings. Thus, the present data further reinforce the importance of gender in determining normative fear level and content.

The items that most strongly discriminated between boys and girls, including, “rats,” “spiders,” “snakes,” “mice,” “creepy houses,” “being alone,” and “having bad dreams,” strongly support the proposal that sex differences in self-reported fears are largely the result of gender stereotypes and social learning, as opposed to innate sex differences. Considering these items, it is particularly difficult to imagine a boy, in the presence of his peers, reporting a fear of “mice” or “spiders” or, for that matter, “having bad dreams.”

Most Common Fears

Given the inclusion of new items into the fear schedule, few of the items reported as the 10 most common fears by Ollendick et al., (1985) and King, Ollier, et al. (1989) were found when examining normative fear with the FSSC-II. In fact, only two of the top-10 items were common to research using the FSSC-R and the present investigation using the FSSC-II, namely, “not being able to breathe” and “being hit by a car or truck.” Nevertheless, consistent with past research, the 10 most common fears are clearly death-and-danger related (e.g., AIDS, not being able to breathe, nuclear war, someone in my family dying, and myself dying), and all load onto the Fear of Death and Danger factor. These findings demonstrate that, although the specific content of children’s and adolescents’ fears may change in response to changing environmental and social conditions, the predominant fear is that which relates to death or danger. As has been maintained (Seligman, 1971), this is not surprising from a survival viewpoint.

Conclusions

The present investigation examined the fears of children and adolescents using a revised fear survey schedule. Demonstration of the validity of the FSSC-II has been reinforced by the findings, which are consistent with the major body of normative fear literature, particularly with regard to age and sex differences. Further, it has been demonstrated that the FSSC-II is a valuable tool for researching the changes in intensity, prevalence, and content of fear through development from early childhood to late adolescence. The major contribution of the present investigation is the provision of updated norms of fearfulness. Of most significance is the finding that, although the specific content of children's and adolescents' normative fears in the 1990s, as compared with the 1960s, has changed to now include fear of AIDS and of nuclear war, the fears found most prevalent continue to relate to death and danger. In contrast to other investigations that have assessed the fear of nuclear war and AIDS, this study has demonstrated their contribution to overall fearfulness and their relative importance when compared with other stimuli constituting the FSSC-II. Further, unlike past research, the AIDS item, as with the other "new" items, forms part of an instrument that has been soundly validated.

Normative fear investigations in countries other than Australia are required in order to examine factorial invariance of the instrument across nationality (cf., Ollendick, et al., 1989). Replication of the present investigation not only will serve to further validate the instrument but also will determine whether changes in the content of normative fear occurring in Australia also have occurred internationally.

Future research also is required to determine the degree of social desirability responding on the FSSC-II. Although it is a commonly accepted proposal that males do not necessarily respond honestly on fear schedules (e.g., Pierce & Kirkpatrick, 1992), the degree of such bias remains undetermined. Nevertheless, nonsignificant correlations between the RCMAS lie scale and the FSSC-II (for the total sample and for each age and gender group) demonstrate that, at the very least, there is no systematic social desirability bias on the schedule.

Also required is research providing an in-depth examination of contemporary changes in the fears of children and adolescents. Knowledge in this area is of major significance to caregivers and educators, particularly with regard to more recent, and as yet little understood, concerns such as that of AIDS (Lawrence & Kelley, 1989). Specifically, knowledge about the *nature* of youth's fears may be important in determining the relationship between such fears and behavior. For example, will adolescents' fear of AIDS result in safe sexual practices? In other words, do certain types of fears result in rational and desirable avoidance behaviors, whereas others are quite irrational

and likely to seriously interfere with everyday functioning? If so, which ones and why?

Not surprisingly, research has indicated that children's understanding of AIDS reflects their level of cognitive development. Young children have been reported to perceive AIDS as a supernatural phenomenon that causes death, whereas adolescents are more likely to accurately understand the disease (Walsh & Bibace, 1991). Such a pattern is consistent with the types of fears expressed by youths. Obtaining a detailed understanding of perceptions that youth hold of the stimuli and situations they fear may prove fruitful in elucidating the underlying nature of normative and pathological fear.

In-depth research may require a variety of methodologies. Use of a standardized self-report schedule such as the FSSC-II is not sufficient. Nevertheless, application of the FSSC-II to address other issues that, as yet, have not been adequately researched is both possible and desirable. One such application is the examination of the continuity or discontinuity in fear content, level, and intensity over time. Such research would more appropriately employ the longitudinal research design, rather than the more commonly used cross-sectional design. Further, fear processes—as yet, little researched or understood—require longitudinal investigation. Given the demonstrated soundness of the FSSC-II, it is an appropriate instrument for addressing such processes.

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