

Reliability

Internal Reliability

Internal reliability was examined for the total scale and the subscales. The coefficients are shown in Table 1. The internal consistency (reliability) of the total scale was extremely high (Cronbach alpha = .93) confirming that the items of the scale are clearly measuring the same construct. The internal consistency co-efficients for the subscale scores were also adequate, being .74 for separation anxiety, .74 for social phobia, .76 for obsessive compulsive, .82 for Panic/Agoraphobia, and .77 for Generalized Anxiety. The internal consistency was lower for the Physical Injury Fears (alpha = .60) reflecting greater variation in children's responses on this dimension.

The internal reliability of the SCAS total scale and subscales was also examined separately for each age group and gender, to check that the results were equivalent. As can be seen from Table 1 the internal consistency of the total scale and all subscales, except the physical injury subscale were good, for both genders and both age groups. The weaker internal consistency for the physical injury fears subscale suggests that, although children tend to respond in a similar way to each item within this subscale, this effect is not as strong as for the other subscales. Internal consistency also fell below .70 on the separation anxiety subscale for younger boys and older girls.

Table 1
Internal Reliability Coefficients for Total Scale and Subscales by Age Group and Gender

	N	Total Scale	Sep Anx	Social Phobia	OCD	Panic/ Ag	Phys Injury	GAD
Boys 8-11 years	1172	.92	.69	.70	.71	.80	.64	.73
Boys 12-15 years	1214	.93	.74	.73	.76	.84	.64	.76
Girls 8-11 years	1185	.93	.72	.75	.75	.83	.57	.75
Girls 12-15 years	1345	.92	.68	.72	.78	.81	.50	.78
Total Sample	4916	.93	.74	.74	.76	.82	.60	.77

Table 2 also shows the item-total correlations for each item for the total scale and the subscales, using the total population. Again these coefficients were generally strong, indicating that all items associated with the dimensions that they were supposed to be measuring. The results were very similar for boys and girls, and for the younger and older age groups.

Table 2. Item-Total Correlations for the Total SCAS Scale and Subscales for Total Sample

	Total Scale	Sep Anx	Soc Ph	OCD	Pan /Ag	Phy Inj	GAD
1. I worry about things	.47					.36	.47
2. I am scared of the dark.	.47						
3. When I have a problem, I get a funny feeling	.45					.49	
4. I feel afraid	.55					.49	
5. I would feel afraid of being on my own at home	.50	.51					
6. I feel scared when I have to take a test	.48		.50				
7. I feel afraid if I have to use public toilets or bathrooms	.45		.32				
8. I worry about being away from my parents	.51	.58					
9. I feel afraid that I will make a fool of myself in front of people	.51		.56				
10. I worry that I will do badly at my school work.	.47		.52				
12. I worry that something awful will happen to	.52	.41					
13. I suddenly feel as if I can't breathe when there is no reason for this	.50				.51		
14. I have to keep checking that I have done things	.46			.47			
15. I feel scared if I have to sleep on my own.	.50	.49					
16. I have trouble going to school in the mornings because because I feel nervous or afraid	.55	.40					
18. I am scared of dogs	.30					.32	
19. I can't seem to get bad or silly thoughts out of my head.	.47			.46			
20. When I have a problem, my heart beats really fast.	.52						.51
21. I suddenly start to tremble or shake when there is no reason for this	.57				.58		
22. I worry that something bad will happen to me.	.65						.53
23. I am scared of going to the doctors or dentists	.42					.37	
24. When I have a problem, I feel shaky	.60						.58
25. I am scared of being in high places or lifts (elevators)	.37				.34		
27. I have to think of special thoughts to stop bad things from happening (like numbers or words).	.52			.52			
28. I feel scared if I have to travel in the car, or on a bus or a train.	.45				.45		
29. I worry what other people think of me.	.53		.53				
30. I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)	.52				.50		
32. All of a sudden I feel really scared for no reason at all.	.60				.63		
33. I am scared of insects or spiders	.38					.41	
34. I suddenly become dizzy or faint when there is no reason for this	.45				.50		
35. I feel afraid if I have to talk in front of my class	.41		.43				
36. My heart suddenly starts to beat too quickly for no reason	.55				.62		
37. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	.59				.59		
39. I am afraid of being in small closed places, like tunnels or small rooms.	.46				.40		
40. I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	.42			.48			
41. I get bothered by bad or silly thoughts or pictures in my mind.	.62			.56			
42. I have to do some things in just the right way to stop	.51			.56			
44. I would feel scared if I had to stay away from home overnight	.44	.50					

Test-Retest Reliability

Test re-retest reliability was examined and reported by Spence (1998) for a sample of 344 children aged 8-12 years from a community sample. Children were assessed on two occasions over a 6-month period. The analyses showed a 6-month test-retest reliability co-efficient of .60 for the total score on the SCAS. This suggests reasonably high reliability over a 6-month period for the total score. The temporal stability of the subscale scores were lower for the individual subscales, being .57 for separation anxiety; .57 for social phobia; .53 for obsessive-compulsive problems; .45 for panic-agoraphobia; .54 for physical injury fears; and .56 for generalized anxiety. Repeated measures anovas were used to examine changes in scores over time. Significant decreases in scores were found for the SCAS total score and separation anxiety $F(1,342) = 11.41, p <.001$; social phobia $F(1,342) = 5.24, p <.05$; physical injury fears $F(1,342) = 6.90, p <.01$; obsessive-compulsive problems $F(1,342) = 20.43, p <.05$; and generalized anxiety $F(1,342) = 14.50, p <.001$). Only panic-agoraphobia symptoms did not change significantly over the six month period (panic-agoraphobia $F(1,342) = 3.34, p=.07$). These results suggest that children's reports of anxiety symptoms tend to decrease after a six month retest interval. This finding is consistent with the general tendency for children to show reducing scores on the SCAS with age.

Similar test-retest results were found for 12-14 year olds by Spence, Barrett et al (2003) for 362 adolescents who were reassessed 12-weeks after the initial data collection. A 12-week test-retest reliability co-efficient of .63 was found for the total score on the SCAS. The temporal stability of the sub-scale scores were .52 for separation anxiety; .75 for social phobia; .69 for obsessive-compulsive problems; .51 for panic-agoraphobia; .59 for physical injury fears; and .66 for generalized anxiety.