

TABLE 3. Correlations<sup>a</sup> Between SAICA Subscale Scores and Overall Role Functioning and SAICA Total Series

SAICA Subscales	Overall Role Area		Overall SAICA Total	
	Mother	Child	Mother	Child
School functioning	1.00	1.00	0.65	0.65
Grades	0.80	0.77	0.49	0.43
Academic track	0.43	0.51	0.30	0.31
Attitude toward school	0.74	0.62	0.52	0.42
School social	0.74	0.71	0.59	0.58
School problems	0.89	0.81	0.56	0.52
Spare time functioning	1.00	1.00	0.75	0.66
Activities	0.90	0.82	0.58	0.42
TV watching	0.37	0.36	0.32	0.25 ( $p < 0.01$ )
Time alone/with others	-.33	0.11 NS	0.41	0.23 ( $p < 0.05$ )
Problems	0.57	0.46	0.54	0.47
Peer interactions	1.00	1.00	0.73	0.66
Relationships	0.92	0.82	0.66	0.53
Problems	0.79	0.76	0.63	0.52
Heterosexual interactions	1.00	1.00	0.44	0.64
Relationships	0.97	0.98	0.40	0.58
Problems	0.13 NS	0.13 NS	0.21 NS	0.31
Interactions with siblings	1.00	1.00	0.53	0.59
Relationships	0.89	0.88	0.45	0.53
Problems	0.74	0.86	0.41	0.50
Interactions with parents	1.00	1.00	0.43	0.50
Relationship with mother	0.77	0.84	0.55	0.46
Relationship with father	0.82	0.81	0.32	0.33
Problems with parents	0.59	0.58	0.49	0.42

<sup>a</sup> Pearson  $r$  correlations are at the  $p < 0.001$  level unless otherwise noted. Correlations are based on 124 mother reports and 107 child reports.

and the overall role area scores, and between overall role area scores and the overall SAICA total, support the internal consistency of the a priori scoring system proposed for the SAICA. However, although not shown in Table 3, we also found high correlations between subscale and overall role area scores across role areas. For example, school functioning subscales and overall role area scores were found to be highly correlated with spare time functioning, peer interactions, interactions with siblings, and interactions with parents subscale and overall role area scores. Because of these across-role-area correlations, we undertook a factor analysis of the SAICA subscales in order to determine whether there were underlying factors that would explain the variance in subscale scores for this sample.

*Factor analysis of SAICA subscales.* Because the heterosexual interactions subscales and the academic track subscale did not apply to all of the children in the sample, they were not included in the factor analysis. Principal component analyses with varimax rotation were performed on the remaining 15 subscales. Only factors with eigen values greater than one were retained for analysis. Three factors emerged from the analysis of subscales derived from mothers' reports. The factors shown in Table 4 accounted for 24%, 14.7%, and 16.7% of the variance and were easily interpreted. Similarly, in the analysis of subscales derived from children's reports, three virtually identical factors emerged, each of which explained 16.7% of the variance. Factor loadings from each analysis are presented in Table 4.

The first factor contains all of the school subscales and the spare time activities subscale. Factor 1, by mothers' reports, also includes spare time problems. Because children's involve-

ment at school and in constructive spare time activities can be viewed as analogous to adults' involvement in work, task performance seemed an appropriate label for the first factor.

The second factor, which we labeled spare time sociability, contains TV watching, spare time alone versus with others, peer relations, and peer problems. By children's reports, factor 2 also includes spare time problems and problems with siblings. Factor 2 appears to be composed of subscales that assess the extent to which children spend their free time with age-peers and the quality of the time spent.

We labeled factor 3 family relations because relationships with family members and problems with parents are contained in it by both mothers' and children's reports. By mothers' reports, problems with siblings are also found there.

With a single exception, these factor analyses recombined the subscales of the SAICA into categories that are very similar to the a priori role area categories that we proposed. The subscales within the spare time role area did not factor together but were found to covary with either the school or the peer relationships subscales. The factors that emerged make intuitive sense of children's social adjustment patterns, and they were used as an alternative means to combine subscales for scoring the SAICA in the analyses that follow.

#### *Reliability of the SAICA*

The assessment of interinformant agreement can provide a stringent test of the occasion-specific reliability of an instrument. Because mothers and children were interviewed separately, we were able to examine the reliability of the SAICA through tests of their agreement on ratings.

TABLE 4. SAICA Subscale Loadings on Three Rotated Factors by Mothers' and Children's Reports<sup>a</sup>

	Factor 1: Task Performance		Factor 2: Sparetime Sociability		Factor 3: Family Relations	
	Mother	Children	Mother	Children	Mother	Children
Grades	0.72	0.73				
School attitude	0.77	0.68				
School social	0.74	0.63				
School problems	0.84	0.58				
Spare time activities	0.47	0.54				
Spare time problems	0.71	0.14 <sup>b</sup>	0.15 <sup>b</sup>	0.66		
TV watching			0.66	0.43		
Spare time alone vs. with others			0.82	0.55		
Peer relations			0.78	0.55		
Peer problems			0.52	0.75		
Relations with siblings					0.73	0.68
Problems with siblings			0.30 <sup>b</sup>	0.57	0.49	0.32 <sup>b</sup>
Relations with mother					0.68	0.75
Relations with father					0.76	0.77
Problems with parents					0.49	0.62

<sup>a</sup> Factor analyses based on 124 mother reports and 107 child reports.<sup>b</sup> These items loaded on other factors, but values are shown for comparison purposes.

*Agreement between mothers and children on SAICA subscale and overall scores.* Although the same interviewer conducted the SAICA with both the mother about her child, and the child about him or herself, usually several days and interviews with other families separated the mother and child interviews. Nevertheless, one could argue that the interviewer's knowledge of the mother's ratings, and/or the child's awareness that mother had already answered the same questions with the same interviewer, may have influenced the child's ratings. However, the ratings were made by the informants and not the interviewer, and our findings that mothers and children did not agree well on symptoms and diagnosis indicate that interviewer bias did little to increase overall agreement between mothers and their children (Angold et al., in press; Weissman et al., 1987a).

Table 5 shows the intraclass correlations between mothers' and children's SAICA subscale and overall scores, and the results of a matched *t* test of differences on their mean scores. In general, correlations between mothers' and children's SAICA scores were adequate. The *t* test of differences between mean scores derived from mothers' and children's reports revealed that when informants differed significantly, children tended to rate themselves less positively on most SAICA subscales. The exception was the heterosexual relationships subscale.

*Agreement between mothers and children on SAICA subscale and overall scores by proband parents' diagnosis of major depression.* Several of the mean SAICA subscale and overall scores were found to differ significantly by whether the children had a parent with a history of major depression, primarily according to mothers' reports. Mothers in the depressed proband group, compared with mothers in the normal proband group, rated their children significantly less positively on SAICA subscales as follows: to spend relatively more time alone than with others, to have less positive relationships with peers, to have less positive relationships with siblings, to have

a less positive relationship with mother and with father. Furthermore, when based on mothers' reports, interviewers' overall mean global ratings were found to be higher (less positive) for the children of depressed probands than for children of normal probands. However, by children's reports, the children of depressed probands were found to differ significantly in their SAICA scores from the children of normal parents only with regard to their relatively less positive relationships with siblings.

Because over 80% of the mothers in the depressed parent proband group had a history of major depression, we wished to discern whether a negative depressive bias contributed to the between group differences by mothers' reports. In order to determine whether agreement on SAICA scores between mothers and children differed by parent proband group, intraclass correlations and matched *t* test of differences between mothers and children for the depressed and normal proband parent groups were calculated separately. Table 6 compares mean SAICA scores derived from mothers' and children's reports by proband parent group.

Even though correlation coefficients of agreement between mothers and children were generally lower in the depressed proband-parent group, the matched *t* test of differences in mean scores between mothers' and children's reports revealed more significant differences between mother-child pairs in the normal group. Children in both groups reported significantly less positive interactions with siblings and significantly more positive heterosexual relationships than their mothers reported, but children in the normal proband-parent group also reported their interactions with peers and parents to be significantly less positive and themselves to have significantly more problems overall than their mothers reported. These findings suggest that mothers in the normal group tended to be biased in their positive assessments of their children's behavior, and that the mothers in the depressed group were probably not biased in their less positive assessments of their

TABLE 5. Intraclass Correlations and Matched t Test of Differences Between Mothers' and Children's Mean SAICA Scores<sup>a</sup>

SAICA Score	Intraclass Correlation	Matched t Test <sup>b</sup>
Grades	0.48***	0.04
Academic track	0.65***	0.07
School attitude	0.36***	-0.01
Overall school academic	0.60***	0.05
School social	0.29***	-0.10
School problems	0.42***	-0.02
Overall school functioning	0.56***	-0.05
Spare time activities	0.65***	0.06
TV watching	0.45***	-0.27*
Spare time alone vs. with others	0.34***	0.14
Spare time problems	0.33***	-0.14***
Overall sparetime functioning	0.58***	-0.03
Peer relationships	0.55***	-0.10*
Peer problems	0.32***	-0.03
Overall peer interactions	0.48***	-0.05*
Heterosexual relationships	0.72***	0.37***
Heterosexual problems	0.10 NS	0.00
Overall heterosexual	0.65***	0.18***
Relationships with siblings	0.38***	-0.25***
Problems with siblings	0.41***	-0.08**
Overall sibling interactions	0.45***	-0.14***
Relationship with mother	0.30***	-0.05
Relationship with father	0.58***	-0.05
Problems with parents	0.48***	-0.02
Overall parent interactions	0.48***	-0.04
Task performance	0.54***	-0.09*
Spare time sociability	0.46***	0.11*
Family relations	0.41***	-0.14***
Mean interviewer globals	0.63***	-0.06*
Overall competence	0.62***	-0.03
Overall problems	0.46***	-0.05*
Overall SAICA total	0.57***	-0.01

<sup>a</sup> N = 107.

<sup>b</sup> Negative mean difference indicates that children reported less positive functioning.

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.

children. However, children in both groups probably tended to overreport positive heterosexual involvement and problems with siblings.

#### Similarities and Differences in SAICA Subscale and Overall Scores by Age and Sex of Children

The subscale scoring system for the SAICA was devised to take into account the shift in problems and activities that are likely to pertain to both sexes at different ages. For this reason, we did not expect the children in the high risk study to differ markedly on SAICA subscale and overall scores by age and sex.

As predicted, *t* tests of difference in mean SAICA subscale and overall scores of boys and girls by both mothers' and children's reports revealed virtually no significant differences by sex of child. Mothers reported their daughters to be more involved in spare time activities than their sons (*p* < 0.02),

and boys reported themselves to have more school problems than girls (*p* < 0.05).

However, *t* tests of difference in mean SAICA subscale and overall scores of children ages 6 through 11, and those 12 through 18 years, by mothers' and children's reports yielded significant differences (*p* < 0.05) on more subscale and overall scores. Both mothers and children reported significantly more involvement in spare time activities for the younger group, less TV watching for the older group, more active relationships with fathers for the younger group, and more problems with parents for the older group. Mothers reported their younger children to have more positive attitudes toward school and more positive school social relationships. Younger children reported themselves to have significantly more problems with peers and more active relationships with their mothers. Because these data are from a study in which the older children were more often found to receive a psychiatric diagnosis (Weissman et al., 1987b), some of the age differences in SAICA subscale and overall scores also may reflect the less positive adjustment of the disturbed adolescents.

#### Convergent Validity of the SAICA

In order to test the convergent or criterion validity of the SAICA, current role-area and overall scores were compared with other study assessments that were expected to provide measures of the same or similar dimensions of social competence and behavior problems.

**SAICA Correlations With IQ Measures.** We hypothesized that the children's academic performance as measured by the SAICA would be significantly correlated with their WISC subscale and PPVT scores, but that the children's other SAICA subscale scores would not be. As can be seen in Table 7, Pearson *r* correlations of SAICA subscale scores (by both mother and child reports) and WISC Vocabulary and Block Design and PPVT scores supported our hypothesis. Both mothers' and children's reports on the children's grades and academic track placement were found to be significantly correlated with the two measures of verbal IQ (the WISC Vocabulary and PPVT) and less significantly so with the measure of performance IQ (the WISC Block Design). The only other SAICA subscale score that was found to be significantly correlated with IQ test scores was spare time activities, which suggests that many of the constructive activities included in that subscale are more likely to be engaged in by children with higher IQs. Of the three factor scores, only task performance was found to be significantly correlated with the IQ scores. Overall mean competence SAICA and SAICA total scores derived from both mother and child reports were found to correlate significantly with the WISC Vocabulary scores, and children's overall mean SAICA scores were found to correlate significantly with the PPVT. These correlations were weaker than those between IQ scores and the school and spare time subscale and task performance scores, the item ratings from which were averaged into the overall mean scores.

**SAICA correlations with the Child Behavior Checklist (CBCL).** Achenbach's CBCL (Achenbach, 1980) was the study instrument that most closely corresponds to the SAICA in content, and against which we assessed the construct and

TABLE 6. Mean SAICA Overall Scores, Intraclass Correlations, and Matched t Test of Differences Between Mothers' and Children's Reports by Parent Proband Group<sup>a</sup>

SAICA Subscale	Depressed Proband Parent (N = 51)				Normal Proband Parent (N = 56)			
	Mean Score <sup>b</sup>		Intraclass	Matched t Test <sup>c</sup>	Mean Score <sup>b</sup>		Intraclass	Matched t Test <sup>c</sup>
	Mother	Child			Mother	Child		
Overall school	1.3	1.4	0.42***	0.00	1.3	1.4	0.67***	-0.03
Overall spare time	1.9	2.0	0.51***	-0.02	1.9	2.0	0.63***	-0.03
Overall peer	1.3	1.3	0.48***	-0.03	1.2	1.3	0.47***	-0.07**
Overall heterosexual relationships	1.8	1.6	0.65***	0.20**	1.8	1.6	0.67***	0.17**
Overall sibling interactions	1.3	1.4	0.42***	-0.16**	1.2	1.3	0.43***	-0.12**
Overall parent interactions	1.4	1.4	0.46***	0.06	1.3	1.4	0.50***	-0.12**
Task performance	1.6	1.6	0.55***	-0.06	1.6	1.7	0.58***	-0.11*
Sparetime sociability	1.8	1.7	0.60***	0.13	1.6	1.5	0.40**	0.10
Family relations	1.5	1.5	0.48***	-0.06	1.3	1.5	0.47*	-0.21***
Overall competence	1.9	1.9	0.51***	0.02	1.8	1.9	0.63***	-0.07
Overall problems	1.1	1.2	0.25 NS	-0.05	1.1	1.1	0.65***	-0.04**
Overall SAICA total	1.5	1.5	0.42**	-0.00	1.5	1.5	0.71***	-0.02
Overall Interviewer Global	1.5	1.6	0.53***	-0.06	1.4	1.4	0.72***	-0.06

<sup>a</sup> N = 107.<sup>b</sup> Lower scores indicate more positive functioning.<sup>c</sup> Negative mean difference indicates that children reported less positive functioning.

\* p &lt; 0.05; \*\* p &lt; 0.01; \*\*\* p &lt; 0.001.

measurement validity of the SAICA subscales. The CBCL has been widely used and studied, and the reliability and validity of the parent version has been well established. Only mothers completed the self-administered CBCL, but we compared SAICA mean scores derived from both mother and child SAICA interviewers with mothers' reports on the CBCL. Table 8 shows the Pearson *r* correlation matrix of SAICA and Achenbach (CBCL) Competence and Problem behavior subscales when the mothers' SAICA reports were compared with the CBCL. The correlations of most relevance to the construct validity of the SAICA are highlighted in the table. Not surprisingly, SAICA scores derived from interviews with mothers were more highly correlated with the relevant CBCL scores than were the SAICA scores derived from children's reports, (not shown), but respectable correlations were found between the child-derived SAICA scores and the mother-derived CBCL scores.

As can be seen from Table 8, mothers' reports on their children's school performance, spare time activities, and peer relationships as measured independently by the SAICA and CBCL are very highly correlated. The less impressive correlations found between the relationships with siblings and relationships with parents subscales of the SAICA and those of the CBCL are probably caused by the fact that the CBCL contains only one item for the assessment of each of those relationship areas, whereas the SAICA contains several items for the assessment of each area. With the exception of sibling problems, the problem subscale scores derived from mothers' SAICA reports were found to be very highly correlated with the CBCL total problem score. The similarities between the measurement structure of the SAICA and the measurement structure of the CBCL are reflected in the high correlations found between the mother-derived SAICA overall competence and CBCL total competence scores, and the mother-

derived SAICA overall problem and CBCL total problem scores (0.52 and 0.64, respectively).

*SAICA correlations with the Children's Global Assessment Scale (C-GAS).* Two separate C-GAS ratings were completed for each child based on separate interviews with mothers and their children, and the SAICA interview with the mother or the child was taken into account in the C-GAS rating. Despite the lack of independence in C-GAS ratings, the correlations between SAICA subscale and C-GAS scores were of interest to us in assessing the relative contribution that a child's reported behaviors on the current SAICA made to the clinician-interviewer's assignment of a lifetime C-GAS score. Most of the SAICA subscale scores derived from interviews with both mothers and children were found to be significantly correlated with the C-GAS ratings based on interviews with either mothers or children. Table 9 shows the correlations between mothers' and children's mean role area scores, mean factor scores, mean interviewer global ratings, and mean overall scores on the SAICA and the C-GAS ratings based on the comprehensive psychosocial and diagnostic interviews with the mothers and children about the children. These results indicate that the SAICA ratings were very likely used by the clinician-interviewers in their C-GAS assessments of children, with overall school functioning and interactions with siblings and parents on the SAICA showing the highest correlations with the C-GAS ratings. The mean interviewer global scores on the SAICA were found to correlate more highly with the C-GAS scores than the mean overall SAICA score, which suggests that the judgment of the interviewers regarding the children's reported social functioning probably influenced their subsequent C-GAS assessments more than the ratings endorsed by the informants themselves—particularly with regard to the children's reports.

*Discriminant validity of the SAICA subscale and overall*

TABLE 7. Significant Correlations<sup>a</sup> of IQ Scores With SAICA Subscales and Overall Scores by Mother and Child Reports

IQ Scores <sup>b</sup>	SAICA Subscale and Overall Mean Scores											
	School Grades		Academic Placement		Spare Time Activities		Task Performance		Overall Competence		Overall Problems	
	Mother	Child	Mother	Child	Mother	Child	Mother	Child	Mother	Child	Mother	Child
WISC Vocabulary	0.35***	0.29***	0.24*	0.40***	0.41***	0.30**	0.31**	0.30**	0.39***	0.36***	0.10	0.04
WISC Block Design	0.25*	-0.11	0.12	0.03	0.24*	0.14	0.04	0.30**	0.20	0.05	0.20	0.21
PPVT	0.36***	0.33***	0.39***	0.50***	0.29**	0.23*	0.37***	0.27**	0.24*	0.27**	0.03	0.08

<sup>a</sup> Pearson *r* correlations that were negative are shown here as positive; IQ tests and the SAICA are scored in opposite directions, with high IQ scores and low SAICA scores indicating better performance.

<sup>b</sup> 107 children had PPVT scores; 89 had WISC subscale scores.

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

scores. SAICA subscale, factor, and overall mean scores by mother and child reports were examined by comparing children who were assigned various current and/or past DSM-III diagnoses by best estimate with children who received no best estimate lifetime diagnoses. Any DSM-III diagnosis, and the DSM-III diagnoses of major depression, dysthymia, and conduct disorder were the categories that were compared with "no diagnosis," because they occurred with sufficient frequency and recency among the children in the sample. Overlap was found between major depression, dysthymia, and conduct disorder, but more than half of the children in each of the categories did not receive the other two diagnoses being compared.

Forty-two children on whom mothers' SAICA reports were available and 35 children on whom SAICA data were available from both mothers' and children's reports received no DSM-III diagnosis. Eighty-two of the children for whom SAICA data were available received at least one DSM-III diagnosis. However, in a number of cases the diagnoses were for nonemotional disorders, e.g., an articulation disorder, or represented transient conditions that met minimum-level criteria for a positive diagnosis, e.g., a 2-week episode of minor (atypical) depression.

Seventy-six percent of the children ages 16 to 18, 60% of the children ages 12 to 15, and 60% of the children ages 6 to 11 received at least one diagnosis by best estimate, but the higher percentage of diagnoses among the older children was not found to be statistically significant. However, the fact that children with diagnoses tended to be older than children without diagnoses (mean age 13.7 and 12.7, respectively) has been considered in the analyses to be described.

In all diagnostic categories except "other psychiatric disorder," which included primarily nonemotional disorders, children reported diagnoses in themselves significantly more often than their mothers reported diagnoses for them, and in general, agreement between mothers and children on diagnosis was quite poor (Weissman et al., 1987a). The discrepancies in mothers' and children's reports on diagnosis prompted us to ask the following question as we examined the discriminant validity of the SAICA: Even though mothers and children did not agree well with regard to the children's diagnoses, when children were assigned various diagnoses, did mothers and children nevertheless report similar patterns of (i.e., agree better with regard to) social adjustment in the children?

We first compared the SAICA subscale, factor, and overall mean scores (derived from mothers' and children's reports separately) of children who had any current and/or past DSM-III diagnosis and children who had no DSM-III diagnosis. No significant differences in subscale or overall scores were found between children with current and children with past diagnoses, but a number of highly significant differences were found between children with a lifetime diagnosis of at least one DSM-III disorder and children with no history of DSM-III disorder. Table 10 shows the SAICA subscale, factor, and overall mean scores by diagnosis in children, and these scores are presented by mothers' and children's reports separately. As can be seen in Table 10, when the SAICA scores of children with a history of "any diagnosis," major depression, dysthymia, and conduct disorder were compared with the SAICA

TABLE 8. Comparison of SAICA Subscales With Achenbach Social Competence and Problem Behaviors Reported by Mothers<sup>a</sup>

SAICA Subscales	Achenbach Social Competence <sup>b</sup> and Problem Behaviors							
	School Performance	School Total	Activities Total	Peer Relations	Sibling Relations	Relation With Parents	Competence Total	Problem Total
School grades	-0.71**	-0.51**	-0.42**	-0.04	-0.15	-0.26 <sup>+</sup>	-0.45**	-0.26 <sup>+</sup>
School academic	-0.68**	-0.46**	-0.41**	-0.07	-0.12	-0.38**	-0.48**	-0.29 <sup>+</sup>
School problems	-0.49**	-0.43**	-0.23	-0.02	-0.04	-0.35*	-0.35*	-0.53**
Overall school	-0.69**	-0.52**	-0.35*	-0.08	-0.10	-0.39**	-0.47**	-0.47**
Spare time activities	-0.41**	-0.34*	-0.50**	-0.09	-0.21	-0.34*	-0.53**	-0.18
Spare time problems	-0.36*	-0.28 <sup>+</sup>	-0.28 <sup>+</sup>	-0.01	+0.01	-0.12	-0.27 <sup>+</sup>	+0.44**
Overall spare time	-0.48**	-0.40**	-0.49**	-0.20	-0.19	-0.31 <sup>+</sup>	-0.53**	+0.35*
Peer relationships	-0.34*	-0.23	-0.19	-0.61**	-0.29 <sup>+</sup>	-0.24 <sup>+</sup>	-0.34*	+0.30 <sup>+</sup>
Peer problems	-0.28 <sup>+</sup>	-0.23	-0.03	-0.39**	-0.19	-0.16	-0.21	+0.57**
Overall peer	-0.35*	-0.26 <sup>+</sup>	-0.14	-0.59**	-0.28 <sup>+</sup>	-0.23	-0.32*	+0.46**
Sibling relationships	-0.20	-0.02	-0.16	-0.06	-0.27 <sup>+</sup>	-0.09	-0.16	+0.22
Sibling problems	-0.15	-0.03	+0.08	-0.27 <sup>+</sup>	-0.30 <sup>+</sup>	-0.21	-0.07	+0.17
Overall interactions with siblings	-0.22	-0.03	-0.07	-0.18	-0.34*	-0.17	-0.14	+0.24
Relationship with mother	-0.30 <sup>+</sup>	-0.27 <sup>+</sup>	-0.19	-0.22	-0.22	-0.38**	-0.31*	+0.50**
Relationship with father	-0.03	+0.06	-0.24	-0.12	-0.20	-0.07	-0.17	+0.12
Problems with parents	-0.25	-0.29 <sup>+</sup>	-0.13	-0.12	-0.15	-0.34*	-0.30 <sup>+</sup>	+0.40**
Overall interactions with parents	-0.21	-0.19	-0.24	-0.19	-0.25	-0.30 <sup>+</sup>	-0.30 <sup>+</sup>	+0.41**
Overall home	-0.27 <sup>+</sup>	-0.20	-0.18	±0.26 <sup>+</sup>	-0.33*	-0.33*	-0.28 <sup>+</sup>	+0.48**
Overall competence	-0.44**	-0.34*	-0.38**	-0.41**	-0.32 <sup>+</sup>	-0.34*	-0.52**	+0.33
Overall problem	-0.44**	-0.36**	-0.15	-0.20	-0.15	-0.29 <sup>+</sup>	-0.33*	+0.64**
Total SAICA	-0.53**	-0.38**	-0.33**	-0.40**	-0.36*	-0.43**	-0.52**	+0.51**

<sup>a</sup> The Achenbach was only completed by parents, usually the mother; N = 98.<sup>b</sup> The negative Pearson r correlations result from the opposite scoring of the SAICA and Achenbach Competence items.

\* p &lt; 0.01; \* p &lt; 0.001; \*\* p &lt; 0.0001.

TABLE 9. Correlations<sup>a</sup> Between SAICA Role Area, Interviewer Global, and Overall Scores, and C-GAS Ratings Based on Comprehensive Interviews With Mothers and Children

SAICA Scores	Informant	C-Gas Ratings	
		Mother Interview	Child Interview
		N = 124	N = 107
School functioning	Mother	0.55***	0.36***
	Child	0.39***	0.38***
Spare time functioning	Mother	0.32***	0.26***
	Child	0.11	0.23*
Peer interaction	Mother	0.36***	0.18*
	Child	0.21*	0.34***
Heterosexual interaction	Mother	0.13	0.28*
	Child	0.16	0.21
Sibling interaction	Mother	0.37***	0.33***
	Child	0.28**	0.40***
Parent interaction	Mother	0.32***	0.33***
	Child	0.26**	0.40*
Task performance	Mother	0.51***	0.35***
	Child	0.33***	0.34***
Spare time sociability	Mother	0.23**	0.03
	Child	0.23*	0.23*
Family relations	Mother	0.38***	0.29**
	Child	0.35***	0.42***
Overall competence	Mother	0.39***	0.20*
	Child	0.21*	0.28**
Overall problems	Mother	0.56***	0.41***
	Child	0.43***	0.52***
Overall SAICA	Mother	0.46***	0.27**
	Child	0.26**	0.35***
Overall interviewer global	Mother	0.51***	0.46***
	Child	0.36***	0.52***

<sup>a</sup> Pearson r correlations that were negative are shown here as positive; the SAICA and C-GAS are scored in opposite directions, with low SAICA scores and high C-GAS scores indicating better functioning.

\* p &lt; 0.05; \*\* p &lt; 0.01; \*\*\* p &lt; 0.001.

TABLE 10. Comparison of SAICA Subscale and Overall Mean Scores by DSM-III Diagnoses in Children<sup>a</sup>

SAICA Scores	DSM-III Diagnoses									
	No Diagnosis		Any Diagnosis		Major Depression		Conduct Disorder		Dysthymia	
	Mother N = 42	Child N = 35	Mother N = 82	Child N = 72	Mother N = 29	Child N = 24	Mother N = 15	Child N = 14	Mother N = 19	Child N = 19
School academic	1.36	1.48	1.75*	1.67 NS	1.87**	1.72+	1.96**	1.71 NS	2.00***	1.89*
School social	1.15	1.25	1.38*	1.49+	1.47*	1.47+	1.64**	1.74**	1.60**	1.58*
School problems	1.06	1.13	1.26**	1.26*	1.44***	1.31**	1.47***	1.32*	1.51***	1.31*
Spare time activities	2.34	2.35	2.53+	2.41 NS	2.57 NS	2.37 NS	2.65 NS	2.48 NS	2.56 NS	2.48 NS
Spare time problems	1.04	1.19	1.18+	1.33+	1.25*	1.42*	1.38	1.46*	1.41**	1.50**
Peer relationships	1.49	1.64	1.74+	1.71 NS	1.75 NS	1.63 NS	1.40 NS	1.49 NS	1.91+	1.86 NS
Peer problems	1.03	1.06	1.12*	1.14+	1.12+	1.13+	1.15**	1.16*	1.23**	1.15*
Heterosexual relationships	2.54	2.46	2.43 NS	1.95+	2.21 NS	1.74*	1.65*	1.52*	2.41 NS	1.93 N
Heterosexual problems	1.02	1.03	1.07 NS	1.07 NS	1.11 NS	1.10 NS	1.18+	1.14+	1.18+	1.18+
Sibling relationships	1.49	1.65	1.53 NS	1.76 NS	1.50 NS	1.75 NS	1.64 NS	1.92 NS	1.73 NS	2.39***
Sibling problems	1.05	1.07	1.11 NS	1.20+	1.09 NS	1.20 NS	1.11 NS	1.26*	1.26**	1.51***
Relationship with mother	1.29	1.40	1.47+	1.46 NS	1.41 NS	1.64 NS	1.69*	1.54 NS	1.67*	1.77+
Relationship with father	1.67	1.50	1.65 NS	1.70 NS	1.77 NS	2.03*	1.97 NS	2.11*	1.80 NS	1.87+
Problems with parents	1.07	1.08	1.14 NS	1.16 NS	1.16 NS	1.22+	1.40***	1.29*	1.30**	1.26*
Task performance	1.38	1.54	1.64**	1.71+	1.76***	1.74+	1.88***	1.84*	1.87***	1.85*
Spare time sociability	1.59	1.53	1.81+	1.63 NS	1.77 NS	1.55 NS	1.42 NS	1.53 NS	2.01*	1.82*
Family relations	1.31	1.41	1.39 NS	1.51 NS	1.41 NS	1.63+	1.58*	1.68*	1.57*	1.79**
Overall SAICA total	1.41	1.46	1.55*	1.53 NS	1.58*	1.52 NS	1.57+	1.53 NS	1.70***	1.65**
Overall Interviewer Global	1.31	1.38	1.54**	1.56+	1.60**	1.62*	1.63**	1.67*	1.79***	1.88***

<sup>a</sup> SAICA scores are presented by mothers' and children's reports separately; lower SAICA scores indicate more positive functioning; SAICA scores of children with various diagnoses are compared with SAICA scores of children with no diagnosis, and significance levels refer to those comparisons.

+ p < 0.05; \* p < 0.01; \*\* p < 0.001; \*\*\* p < 0.0001.

scores of children with no diagnosis, children with diagnoses were found to have significantly less positive scores on most subscales. A notable exception was the heterosexual subscale, on which children with diagnoses—particularly conduct disorder—were found to have more positive heterosexual relationship scores, i.e., to be more involved with members of the opposite sex. However, children with conduct disorder and major depression were also found to be significantly older than children with no diagnosis (mean ages 16.4, 15.4 and 12.9, respectively), and we suspected that age contributed more than diagnosis to the more positive heterosexual relationship scores.

Because the mean ages of children with conduct disorder and major depression were higher than the mean age of children with no diagnosis, it seemed possible that other of the significant between-group differences may have been the result of age differences. Therefore, we performed analyses of covariance to control for age in our comparisons of the SAICA scores of children with and without diagnoses. Age of child was not related to the significant differences between the SAICA scores of children with no diagnoses and dysthymia. Indeed, dysthmics were found to have the least positive SAICA scores compared with all other groups, and, by both mothers' and/or children's reports, to be significantly less well adjusted overall and according to all subscale scores. For "any diagnosis," major depression, and conduct disorder, age was found to account entirely for the significant differences between heterosexual subscale scores of children with and without diagnosis, but diagnosis accounted for all of the other significant differences in scores.

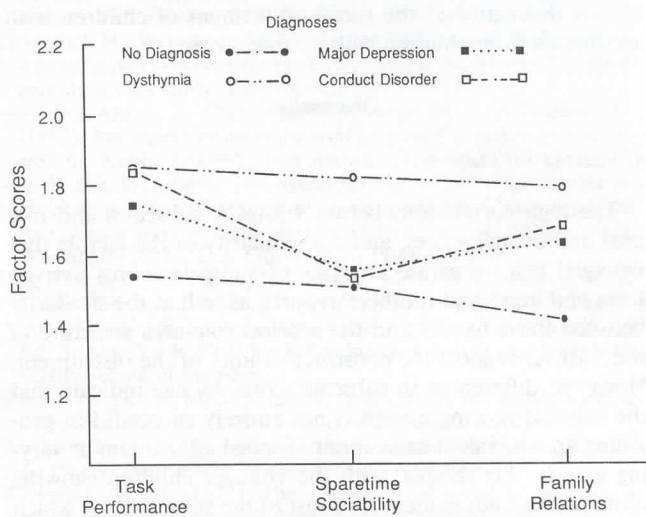


FIG. 1. SAICA factor scores from children's reports by diagnosis.

Figure 1 displays graphically the SAICA factor scores of children by diagnosis according to the children's reports on themselves. It shows that children with dysthymia and conduct disorder were found to be similar with regard to their less positive task performance scores than children without diagnoses and those with major depression. Dysthmics were found to have the least positive spare time sociability and family relations scores. Children with conduct disorder, major depression, and no diagnosis had virtually identical spare time sociability scores by children's reports; but with regard to

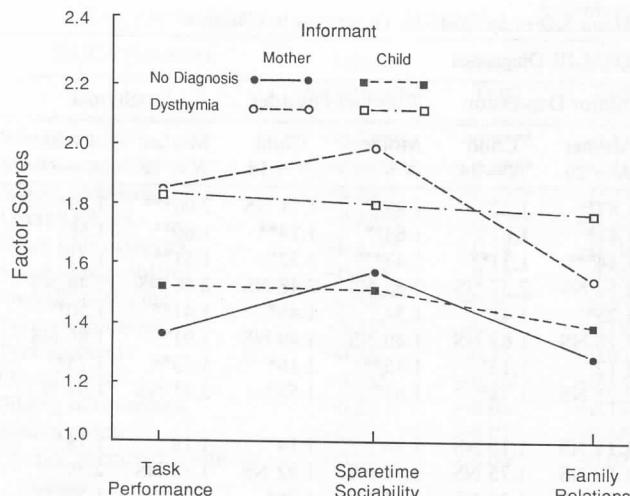


FIG. 2. SAICA factor scores from children's and mothers' reports by no diagnosis and a diagnosis of dysthymia.

family relations, the scores of the children with conduct disorder and major depression were again less positive than the scores of children with no diagnoses.

Figure 2 compares the children and mother reported SAICA factor scores for children with no diagnoses and children with dysthymia, and it shows the similarities and differences between the social adjustment patterns derived from those sets of scores. The mothers' tendency to provide a generally more positive picture of the children except in the area of spare time sociability is evident, but both groups of informants clearly distinguished the social adjustment of children with dysthymia from children with no diagnoses.

### Discussion

#### Construct Validity

The high correlations between SAICA subscales and role area and overall scores, and the similarity of the factors that emerged from separate analyses of subscale scores derived from children's and mothers' reports, as well as the similarity between those factors and the *a priori* role area structure of the SAICA, support the construct validity of the instrument. However, differences in subscale scores by age indicate that the subscale scoring system is not entirely successful in providing an equivalent assessment of social adjustment at varying ages in this sample, with the younger children showing more positive adjustment on most of the subscales for which differences were found. Of course, there is some logic in the obtained differences, in that prepubertal children generally tend to be more involved with parents and in spare time activities at home and to adopt more positive attitudes toward school and teachers, whereas adolescents tend to spend more time away from home with peers and to be less favorably inclined toward adult authority structures such as school. A large developmental study that includes well-characterized age groups of children of both sexes with no diagnoses, as well as of children with a range of specific diagnoses, will be necessary to examine the item structure of the SAICA.

#### Reliability

The moderately high correlations between children's and mothers' reports suggest that interinformant agreement on most subscales was acceptable, but significant differences on the matched *t* tests between several subscale scores derived from children's and mothers' reports indicate that there may have been a social desirability response bias—particularly among mothers in the normal proband group—with regard to family relationships and problem behaviors. That mothers in the normal group reported significantly more positive social adjustment for their children than the children reported for themselves, and that this was not the case in the depressed proband group, is contrary to the prediction that a negative response bias will operate among parents who themselves have a history of psychiatric disorder (Boyle and Chambers, 1981). Even though children in both groups tended to report their adjustment to be less positive than their mothers (which might be construed as a negative response-bias on the part of the children in this study), there were fewer instances of significant differences in subscale scores between mother-child pairs in the depressed proband group.

#### Validity

High correlations between IQ scores and relevant SAICA subscales, and between mothers' and children's reported SAICA subscale scores and the CBCL (Achenbach, 1980) scores by mothers' self-administered report are evidence for the convergent (criterion) validity of the SAICA. Further, the fact that regardless of informant or age of child, the SAICA scores of children with best-estimate diagnoses differed significantly from the children with no diagnoses supports the discriminant validity of the measure. Although the patterns of social adjustment of children with and without diagnoses were not identical by children's and mothers' reports, within the characteristic response set of each informant group, SAICA scores were found to distinguish similarly among children in the various diagnostic categories. By both children's and mothers' reports, most subscale and overall scores were progressively less positive for children with "any diagnosis," major depression, conduct disorder, and dysthymia, the latter two of which were most likely to have persisted throughout the time period assessed by the SAICA.

Although the results have not been uniform, in a number of studies the children of parents with major affective illness have been found to be less socially competent than children of normal control parents, and in some studies they were indistinguishable from children of schizophrenic parents by teacher and peer ratings (Beardslee et al., 1983). In this study, the children of depressed proband parents received significantly less positive SAICA scores than children of normal proband parents only by mothers' reports. Because these differences may be caused largely by a social-desirability response bias on the part of mothers in the normal proband group, they are not as convincing as our findings with regard to the relationship between less positive social adjustment scores and diagnoses in children.

### Study Limitations

This study does not provide normative data on the SAICA items, nor on subscale, role area, or overall scores. A much larger and diagnostically diverse sample will be required to fully explore the measurement capacity and scoring of this new instrument. Most of the children in our sample were functioning in their communities, and fewer than 20% had been treated for psychopathology, which limited the range of their scores. Nevertheless, testing the psychometric properties of the SAICA among a group of school-aged children at high and at low risk for depression increased the likelihood that we would find sufficient variation in the children's psychiatric and social adjustment status (Weissman et al., 1984). Indeed, one of the hypotheses of the main study was that the children of depressives would evidence significantly less positive social adjustment. Another hypothesis is that, in the longitudinal analyses, less adaptive social adjustment scores will not only be found to correlate with diagnoses, but will indicate increased vulnerability to subsequent onset of psychopathology. However, these analyses will not be possible until data from future waves of the study become available. The cross-sectional data presented in this paper only support the association between less positive social adjustment and current and/or past psychiatric diagnoses.

### Comment

In conclusion, although normative data on a large probability sample of children are not yet available on the SAICA, this study indicates that it is a promising new research instrument for the assessment of social adjustment among children and adolescents 6 to 18 years old. In addition to its inclusion in this high risk study, the SAICA is being used in a number of inpatient, outpatient, and community studies, which will soon provide additional data on its measurement characteristics.

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