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Author

Farrell, L, Sijbenga, A, Barrett, P

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An examination of childhood anxiety, depression and self-esteem across socioeconomic groups: a comparison study between high and low socio-economic status school communities

Lara Farrell, PhD

Griffith Institute of Health and Medical Research

Griffith University, Gold Coast, Australia

Anouk Sijbenga

Psychology, Utrecht University, the Netherlands

Paula Barrett, PhD

School of Education

The University of Queensland, Brisbane, Australia

Address for Correspondence: Dr Lara Farrell, Griffith Institute of Health and Medical Research, Griffith University, Gold Coast, QLD, 4222, Australia. Phone: +61 7 55528224  
Fax: +61 7 55528291 Email: [L.Farrell@griffith.edu.au](mailto:L.Farrell@griffith.edu.au)

## Abstract

Objectives: Anxiety and depression occur at alarmingly high rates in children and youth; hence the recent research and policy focus on school-based mental health promotion and prevention interventions. Currently little is known about the level of risk across different socio-economic school communities. Whilst disadvantaged socio-economic status (SES) has long been identified as a particular risk factor for mental health problems (Buckner & Bassuk, 1997), level of risk for anxiety and depression across different SES school community's has not been explored. This study explores the relationship between SES and anxiety and depression, as well as the protective factor self-esteem in children and youth. Design: In total 878 children participated (410 females, 458 males) between 8 and 12 years of age ( $M=10.58$  years,  $SD=.94$ ). Group comparisons on anxiety, depression and self-esteem were made between low SES state schools ( $n=466$ ), in comparison to higher SES independent schools ( $n=412$ ) in Brisbane, Australia. Methods: Participants were assessed by self-report measures of anxiety, depression and self-esteem. Results: Results indicated that children in the low SES schools scored significantly higher on depression and lower on self-esteem in comparison to children in the high SES schools. Interestingly and contrary to the hypotheses, children in the high SES school reported significantly higher anxiety than those in lower SES schools. There were significant gender effects on anxiety, with females scoring significantly higher on anxiety than males across high and low SES schools. In terms of predicting anxiety and depression in children and youth, the strongest predictors were anxiety or depression conversely; however, gender, SES and self-esteem were also significant predictor variables. Outcomes: The outcome of this research suggests that children from low SES schools may have a higher level of risk for depression with lower psychological protective factors, such as self-esteem; however, this result was not evident for anxiety. This was strengthened by the finding that there were significantly more children at risk for depression within low SES

schools, compared to high SES schools. In addition, females score significantly higher on measures of anxiety than males; however, there were no gender differences for depression.

Research exploring the risk for mental health disorders, as function of SES school community is important in terms of prevention programming.

An examination of childhood anxiety, depression and self-esteem across socioeconomic groups: a comparison study between high and low socio-economic status school communities

Emotional disturbances, such as anxiety disorders and depression, are responsible for a substantial component of the burden of disease in the western world. Occurring at alarmingly high rates in children and youth, anxiety and depression are associated with a number of negative life consequences, and come at a tremendous cost to society. Australian adolescents report symptoms of anxiety and depression at rates of 13.2% and 14.2% respectively (Boyd, Kostanski, Gullone, Ollendick, & Shek, 2000). In terms of childhood anxiety disorders, epidemiological research has found that 25.7% of 8-year-olds and 15.7% of 12-year-olds meet diagnostic criteria for an anxiety disorder (Kashani & Orvaschel, 1990). The rate of depressive disorder diagnoses in childhood and adolescence is similarly high; with up to 25% of young people likely to have experienced a clinically significant depressive episode by the time they turn 18 years of age (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; National Health and Medical Research Council, 1997).

Anxiety and depression in children and youth are frequently associated with other psychosocial impairments including; immaturity, inattention and concentration problems, academic difficulties, poor peer relations, low self-esteem, and low social competence (Ialongo, N., Edelsohn, Werthamar-Larsson, Crockett, & Kellam, 1994; Kashani & Orvaschel, 1990; Kendall, Cantwell, & Kazdin, 1989; Strauss, Frame, & Forehand, 1987). Furthermore, the experience of these childhood disturbances has also been shown to be associated with increased risk of experiencing other psychopathology later in life. Anxious children are more likely than their non-anxious counterparts to develop further psychiatric disorders in adulthood (Last et al., 1996; Woodward & Fergusson, 2001), including personality psychopathology (Rudd, Joiner, & Rumzke, 2004). Similarly, children and

adolescents with unipolar depression have an increased likelihood of developing bipolar disorder (Akiskal et al., 1995; Gellar et al., 1994; Strober & Carlson, 1982). Children with internalising disorders may also be at increased risk of suicidality and substance abuse problems in adolescence and adulthood (Compton, Burns, Egger, & Robertson, 2002; Rao et al., 1995; Rudd et al., 2004).

Beyond the personal suffering of children and families affected by these disorders, anxiety and depression also incur enormous costs to individuals and to society. One study estimating the costs of psychological interventions for internalising disorders found that treatment for child anxiety can cost as much as \$2,181.00 US dollars per client (Turner, Beidel, Spaulding, & Brown, 1995). The costs to the health system and society at large are also tremendous when consideration is given to the functional impairment frequently experienced by sufferers often leading to unemployment, hospitalisation, medication, and pension payments (Donovan & Spence, 2000; Kessler et al., 1995), particularly considering the chronic and recurrent course of these disorders if left untreated (Cole, Peeke, Martin, Truglio, & Seroczynski, 1998; Costello & Angold, 1995; Ferdinand & Verhulst, 1995; Harrington, Fudge, Rutter, Pickles, & Hill, 1990; Hudson, Kendall, Coles, Robin, & Webb, 2002; Ollendick & King, 1994; Pine, Cohen, Gurley, Brook, & Ma, 1998). According to a study sponsored by the Anxiety Disorders Association of America, anxiety disorders cost the US more than \$42 billion dollars a year (Greenburg et al., 1999).

Disadvantaged socio-economic status (SES) has long been identified as a particular risk factor for both physical and mental health problems (Buckner & Bassuk, 1997; Miech et al., 1999; McLeod & Shanahan, 1993; Curtis, et al., 2001). A study by Sawyer and colleagues (2001) found that young people were more likely to experience clinical or sub-clinical emotional and behavioural problems if they lived in a low-income family, with step- or single parents, had left school at an early age, or were unemployed. Anxiety and depression are more

common in low education and lower income groups (Alegria, et al., 2000; Wang, Berglund, & Kessler, 2000), with one study showing that female adolescents exposed to poverty in the first 5 years of life experience elevated scores on maternal-reported symptoms of depression and anxiety (Spence et al., 2002). Some studies have shown that low SES within a community can account for mental health problems above and beyond individual factors (Drukker, Kaplan, Feron, van Os, 2003). Research has highlighted multiple pathways by which the social environment impacts on psychological distress (Kessler, 1979) including, disruption of parenting and other familial processes as a result of poverty (Elder, Nguyen, & Caspi, 1985). Poverty has a profoundly negative impact on parents – leading to increased irritability, depression, and explosive behavior, which in turn, has been demonstrated to be associated with harsher and more arbitrary discipline practices that are linked to behavioral and emotional problems among children (Elder et al., 1985; Conger et al., 2002; Bradley, Corwyn, McAdoo & Garcia-Coll, 2001). Sadly, whilst social economic disadvantage is related to a higher prevalence of mental health problems experienced during childhood, the use of services in this particular population does not show simultaneous increases (Mifsud & Rapee, 2005). Research has generally concluded that there is poor service utilization by underprivileged populations and children with the poorest levels of functioning are the least likely to be seen for mental health problems (Buckner & Bassuk, 1997).

Whilst SES is a known risk factor for mental health problems generally, there is a paucity of research investigating the level of risk for anxiety and depression in school aged children from lower SES disadvantaged communities. Investigating the role and impact of SES at a community level on anxiety and depression is of key significance in both the development of etiological models of anxiety and depression, and in the development of successful interventions targeting at-risk groups and communities. Exploring constructs that may play a role in the emergence and maintenance of these internalizing disorders, such as

community factors and SES, have ramifications in current procedural practices and policies corresponding to public health services, allocation of funding, and use of funding in local school communities.

This study explores the role of SES as a risk factor for anxiety and depression in child and youth school communities and examines whether the protective factor self-esteem is related to SES status and or emotional distress. Given the well documented gender differences within childhood anxiety disorders, such that girls generally report high anxious symptomatology (Herbert, 1994; Costello & Angold, 1995), gender differences were also explored in this study across SES communities. Specifically, this study involved a community evaluation of self-reported anxiety and depression, as well as an examination of a known protective factor – self-esteem, across two distinct SES school communities – including low SES state schools and high SES independent schools within the greater Brisbane region, Australia. It was expected that the low SES schools would report higher levels of risk (anxiety and depression) and lower reported self-esteem compared to the high SES independent schools. Furthermore, it was expected that SES (low SES), gender (being female), and self-esteem (low) would be significant predictors of anxiety in school-aged children, while SES (low SES), anxiety (high) and self-esteem (low) would be significant predictors of depression in school-aged children.



## Method

### Participants

The entire sample for the present study consisted of 878 children, with 458 male respondents and 410 female respondents. Participants overall aged between 8 to 12 years with a mean age of 10.58 years ( $SD = .94$ ). Data from 3 low SES state schools were collected in the Beenleigh/Eagleby area of greater Brisbane. A total of 466 children were interviewed from low SES schools with children ranging in age from 8 to 12 years. The mean age of this sample was 10.52 ( $SD = 1.16$ ). Parents were fully informed of the study and given the opportunity to withdraw their child from the project if desired. Participation was 100% from the three schools selected to be involved. All classes were co-educational, with an approximately even number of boys to girls in each class. The three schools were selected based on a report from the Eagleby Vocational Education, Training and Employment Plan (Eagleby VETEP, 2001) identifying these schools as high need schools within a low SES community. The low SES areas were identified by the Queensland Development of Housing in conjunction with Queensland Government's agenda to improve social conditions and liveability of disadvantaged areas in Queensland. The Queensland Development of Housing used 2001 census data to identify low SES areas based on variables such as unemployment, education levels, housing tenure, lack of integrated transport, a critical gap in the service system (or lack of geographical access to services such as surgery or health centres, stores, etc) and lack of recreation facilities for youth. The end summary profiles derived for the low SES areas were highlighted by: low skilled populations (without qualifications, with less than 10 years of schooling, or high proportions in unskilled occupations); potentially vulnerable households (high proportions of one parent families, separated/ divorced persons, unemployed persons, people in public housing); young populations (high proportions of children aged under 15 years); and a high number of low-income households. Three schools in particular were

identified by the Queensland Department of Housing as being representative of this low SES region and referred those schools into the current study.

Three private independent schools were used for the high SES sample, with a total of 412 children. The age in this sample ranged from 10 to 12 years and all the classes were co-educational, with an approximately even number of boys to girls. The mean age was 10.66 ( $SD = 0.56$ ). These three schools were all within Brisbane metropolitan area, and according to the Eagleby VETEP (2001) the schools came from communities with on average, high household incomes, coupled with on average low unemployment rates across the community region. Parental informed consent was obtained from these high SES schools with participation rate above 98%. In addition to identifying SES based on community data reported in the VETEP (2001), this study also assessed SES at an individual level based on upon paternal occupation, via child report. Mother and father occupation was coded using the nine-point Australian Standard Classification of Occupations Dictionary (Australian Bureau of Statistics and Department of Education, Training and Youth Affairs, 1997). One way ANOVA's between high SES and low SES schools on mother and father occupation levels indicated significant differences between the high and low SES schools on both mother  $F(1) = 340.79; p < 0.001$ , and father occupation levels  $F(1) = 164.46; p < 0.001$ , adding some validity to the SES grouping status. The average SES rating of mothers in low SES schools was 2.58 ( $SD = 1.84$ ) indicative of student (rated 1) / domestic level (rated 2), whilst mothers in high SES schools were rated on average 4.95 ( $SD = 1.43$ ) indicative of skilled / trade / clerical level occupation. For fathers, in low SES the average rating was 4.11 ( $SD = 1.62$ ), indicative of unskilled worker (rated 4), whilst high SES fathers were rated on average 5.53 ( $SD = 1.18$ ) suggesting on average an occupation of skilled, clerical, trade occupations (rated as 5) / semi-professional occupations (rated as 6).

Eighty-nine percent of the entire sample was Caucasian, with the remaining sample equally dispersed across Asian, European and Aboriginal and Torres Strait Islander nationality's. T-tests across SES conditions on age, gender and nationality indicated no significant differences across groups.

### Measures

*Self-Esteem Inventory (SEI)*. The SEI (Coopersmith, 1967) is a 58-item self-report measure suitable for use with 8- to 15-year-olds, which assesses self-esteem across four domains: general self-esteem (e.g., “things usually don’t bother me”); social self-esteem (e.g., “I’m popular with kids my own age”); home esteem (e.g., “my parents usually consider my feelings”); and school esteem (e.g., “I am proud of my school work”); and also includes a lie scale. Participants are requested to indicate whether each statement is “like me” (1) or “unlike me” (0), with higher scores indicating higher levels of self-esteem. The SEI has been demonstrated to have sound psychometric properties (Coopersmith, 1967, 1989) with studies indicating convergent validity with similar measures, an internal consistency of 0.86 (Johnson, Redfield, Miller & Simpson, 1983), and support for the initial factors (subscales) proposed (Kokenes, 1978; Robertson & Miller, 1986).— In this study, only the “social self/peers” (8 items) and “school/academic” (8 items) subscales were used, in order to limit the size of items in the questionnaire package.

*Children’s Depression Inventory (CDI)*. The CDI (Kovacs, 1981) is the most commonly employed self-report measure of depressive symptomatology in children and adolescents, comprising of 27 items representing the cognitive, affective, and behavioural symptoms of depression. Each item lists three statements of varying severity, scored from “0” to “2”, from which the child is instructed to choose that which best describes his or her current mood. The

sum of all item scores yields the total CDI score. The CDI has demonstrated sound psychometric properties when used with children aged 7 to 17 years (e.g., Saylor, Finch, Spirito, & Bennett, 1984), with the convergent validity of this measure evidenced by its utility for differentiating between clinically depressed and non-depressed children in both inpatient and non-referred groups (Kovacs, 1985; Lobovitsz & Handal, 1985; Saylor et al., 1984). In the present study, a cut-off score of 16, consistent with previous research, indicating clinical levels of depressive symptoms, is used to identify children “at risk” for depression (see Barrett et al., 2006).

*Revised Children’s Manifest Anxiety Scale (RCMAS)*. The RCMAS (Reynolds & Richmond, 1978) is a 37-item self-report questionnaire, consisting of 28 items assessing trait anxiety, and 9 items assessing social desirability. Children are instructed to identify whether each item is true or not true of them by selecting “yes” (1) or “no” (0). A total anxiety score is found by summing “yes” responses, with higher scores indicating more severe levels of anxiety. The RCMAS has been demonstrated to possess high internal consistency, moderate test-retest reliability (Reynolds & Richmond, 1985), and good convergent validity (Muris et al., 2002; Reynolds, 1980).

*Spence Children’s Anxiety Scale (SCAS)*. The SCAS (Spence, 1997) is a 44-item self-report measure that was developed for assessing dimensions of child anxiety disorders in community samples. The SCAS consists of 38 items assessing specific anxiety symptoms, with 6 positive filler items included for the purpose of reducing negative response bias. In this study these 6 items were eliminated in order to reduce the size of the questionnaire package (at the schools request). The 38 anxiety items comprise subscales assessing obsessions and compulsions (6 items), separation anxiety (6 items), social phobia (6 items), panic, agoraphobia, generalised anxiety (6 items), and physical injury concerns (6 items). Children are requested to rate the

frequency with which they experience each of the symptoms on a 4-point scale, from “never” (0), to “always” (3). A total anxiety score is found by summing the 38 anxiety items, with high scores indicating greater anxiety, with a maximum score of 114 (Spence, 1994). The SCAS has been demonstrated to have high internal consistency, satisfactory test-retest reliability, and adequate convergent and divergent validity (Spence, 1998; Spence, Barrett, & Turner, 2003). In the present study, a cut-off score of 42.48 was used to indicate children at high risk for anxiety. This cut-off was recommended by the author of the scale (Spence, 1997), and has been used in previous research (Barrett et al., 2006; Barrett & Turner, 2001; Lock & Barrett, 2003).

### Procedure

Parents from all schools were informed by a consent letter and were given the opportunity to attend a parent evening organised by the researchers. Children were assessed within classroom groups using self-report questionnaires. Assessments were completed by three research assistants, who were also assisted by at least one teacher per class. The assessment process was standardised, and all questionnaires were read out loud in front of the class by one of the research members. Children with reading or writing difficulties were given extra assistance by classroom teachers. In a few circumstances of children with significant learning difficulties, the questionnaires were completed individually, over a few sessions with a classroom teacher. The children sat separately from each other, so they wouldn't be able to look at each others answers, and were not permitted to discuss the questionnaires during assessment. Children were given standardised instructions at the beginning of the assessment and were instructed that the questions asked them about “their thoughts and feelings” and that there “were no right or wrong answers”. Following completion of the questionnaires, children were given the opportunity to ask questions about the assessment and questionnaires.

## Results

### Differences in Anxiety, Depression and Self-Esteem across SES and Gender

To examine whether there were differences across SES groups on measures of anxiety, depression and self-esteem, univariate analysis of variance tests (ANOVA's) were conducted. Given that studies generally report gender differences on measures of anxiety (i.e., Barrett et al., 2006; Lock & Barrett, 2003) and depression (i.e., Clarke et al., 2001) two-way ANOVA's were conducted to explore the main effects of SES and gender, as well as possible interaction effects. Given there was variation in age across the samples, age was entered into the analyses as a covariate. Bonferroni corrections were used to control for inflated experimentwise error across comparisons. Table 1 displays the means and standard deviations across SES the measures RCMAS, SCAS, CDI, SEI social and SEI school.

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Insert table 1 here

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On the RCMAS there was no significant main effect for SES condition or for the interaction. There was a significant gender main effect  $F(1) = 31.39; p < 0.01$  on the RCMAS, with females scoring significantly higher overall ( $M = 12.75; SD = 7.09$ ) in comparison to males ( $M = 9.91; SD = 7.03$ ). On the SCAS, there was a significant main effect for both gender  $F(1) = 45.48; p < 0.01$  and for SES condition  $F(1) = 14.55; p < 0.01$ , with females scoring significantly higher ( $M = 28.20; SD = 17.05$ ) on this measure of anxiety than males ( $M = 20.48; SD = 15.90$ ), and children in the high SES condition scoring significantly higher

( $M = 26.15$ ;  $SD = 15.21$ ) than children in low SES condition ( $M = 22.21$ ;  $SD = 18.03$ ). There was no significant interaction effect.

On the CDI there was a significant main effect for SES condition  $F(1) = 16.32$ ;  $p < 0.01$  with children in the low SES condition scoring significantly higher ( $M = 11.41$ ;  $SD = 8.42$ ) than children in the high SES condition ( $M = 8.98$ ;  $SD = 7.68$ ). There was no effect for gender or an interaction effect.

On the SEI social scale there was a significant main effect for SES  $F(1) = 739.87$ ;  $p < 0.01$  with children in the low SES condition scoring significantly lower ( $M = 5.58$ ;  $SD = 1.84$ ) than children in the high SES condition ( $M = 11.44$ ;  $SD = 4.01$ ). There was no effect of gender or an interaction effect. Likewise, on the SEI school scale there was a significant main effect for SES  $F(1) = 561.38$ ;  $p < 0.01$  with children in the low SES condition scoring significantly lower ( $M = 5.34$ ;  $SD = 1.79$ ) than children in the high SES condition ( $M = 10.29$ ;  $SD = 3.87$ ). There was no effect of gender or an interaction effect on this measure.

### Exploration of Predictors for Anxiety and Depression

Bivariate correlations across all measures were conducted to explore the relationships between measures of anxiety and depression, with measures of risk (i.e., SES and gender) and potential protective factors (i.e., SEI social and SEI school). There were significant correlations (at 0.05 significance level) among all variables, except between gender and SES; CDI and gender; and RCMAS and SES. However, only significant correlations above 0.3 are mentioned here as anything below this cut-off is generally agreed to be inconsequential.

SES was significantly (above 0.3) and negatively correlated with both scales of the SEI. Depression as measured by the CDI was significantly (above 0.3) and positively correlated with both measures of anxiety (RCMAS and SCAS) as well as negatively

correlated with both scales of the SEI. Anxiety, as measured by the RCMAS was significantly (above 0.3) and positively correlated with the SCAS. And on the SEI, both scales were significantly and positively correlated with each other, and were negatively correlated with SES, with the RCMAS and with the CDI. Table 2 presents the correlations among the variables.

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Given there were no a priori hypotheses regarding which predictors would be the best for predicting child anxiety and depression of those measured, stepwise regression analyses were conducted for both depression (CDI) and anxiety (SCAS), with all other variables included as IV's – that is, either alternate anxiety (SCAS) or depression (CDI) depending on the DV, SES, gender, SEI social and SEI school, to explore the predictive value of each variable on anxiety and depression variability. The SCAS was chosen as the best anxiety measure in this case given that it evidenced significant SES group differences in the ANOVA and given that it was significantly correlated with all variables. For the CDI, the best regression model was with the SCAS entered first, followed by SEI school, SEI social, SES and then gender, with all predictors significant and an adjusted  $R^2$  of 0.51. For the SCAS, the best regression model was with the CDI entered first, followed by gender, SES and SEI school (SEI social was not included in the model as it did not account for any unique variance due to the high correlation with SEI school), with all predictors significant and an adjusted  $R^2$  of 0.39. Table 3 presents the regression models for both CDI and SCAS.



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Table 3 here

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Table 4 here

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#### Examination of High-Risk Students across SES Conditions

Risk status in this study was defined as children scoring above the risk cut-off scores for either the CDI or SCAS (see measures section). Some children scored above the cut-off on both measures. The percentage of the sample at risk, across the SES schools, is presented in Table 4. Chi-square tests revealed that there were significantly more children at risk within the low SES schools (based on *either* CDI or SCAS scores above the cut-off) with 37% at risk in low SES schools, compared to 25% at risk in high SES schools overall  $\chi^2(1, 785) = 11.70$ ;  $p < 0.001$ . Across both SES schools there was little difference in the frequency of at risk students based on anxiety cut-offs alone, with 14% of children identified at high risk in the low SES schools, in comparison to 16% within the high SES schools. For depression, there were significantly more children identified as high risk in the low SES schools with 28% of this sample at risk, compared with 16% in the high SES schools  $\chi^2(1, 807) = 18.18$ ;  $p < 0.001$ .

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## **Discussion**

Previous research has suggested a higher prevalence of mental health problems in low SES communities (McLeod & Shanahan, 1993; Curtis, et al., 2001). Based on these findings, it was hypothesized that children in low SES areas would report higher levels of anxiety and depression, and lower levels of self-esteem. Furthermore, it was hypothesized that SES would predict anxiety and depression. Based on past research investigating gender differences in anxiety and depression, it was hypothesized that gender would also predict anxiety but not depression, given the current sample's mean age was pre-pubertal.

In support of existing literature and the hypothesis of the current study, results confirmed that children in low SES communities displayed elevated levels of depression compared to those in high SES communities, and significantly lower levels of self-esteem across social and school domains. Normative data for the CDI indicated that mean depression scores for the low SES schools were within average range. Results further revealed significantly more children at risk (based on anxiety and depression scores) in low SES schools in comparison to high SES schools. There were significantly more children within the high-risk range (total score CDI > 16) in low SES schools compared to high SES schools for depression (but not anxiety), with more than 28% of the low SES sample scoring above the cut-off.

Contrary to expectations, children in the high SES school reported significantly higher anxiety than those in low SES schools. Inspection of Australian normative data (Spence,

2005) for this measure of anxiety, revealed that while children in the high SES school reported higher anxiety, the means were actually no higher than expected from a normal sample (normative sample aged 8-11 years  $M = 26.65$ ,  $SD = 15.98$  boys;  $M = 34.02$ ,  $SD = 17.33$  girls). Furthermore, the means from the low SES schools were not significantly low, falling within one standard deviation of the normative mean scores. There were no differences across high and low SES schools on the percentage of children within the high-risk range for anxiety. This finding, while not particularly clinically meaningful, may suggest that there are some other processes impacting on anxiety from within higher SES communities. It may be that higher parental expectations, higher parental income, and / or higher educational attainment, to name a few possibilities, may be associated with increased SES and may mediate an effect on children's experience of anxiety. These questions have yet to be studied in school-based research.

In terms of predicting self-reported depression – anxiety, SES, self-esteem and gender were all significant predictors, accounting for 51% of variance in depression scores. Anxiety was the strongest predictor accounting for 30% of unique variance, with school self-esteem accounting for 17 percent of variance. Social self-esteem and SES accounted for 2% of variance, and gender only 1% of variance. In terms of predicting self-reported anxiety – depression, gender, SES, and self-esteem accounted for 40% of the variance in anxiety scores in that order. Depression accounted for 30% of unique variance, with gender accounting for 5% and SES accounting for 4% unique variance. These results confirm existing research suggesting a strong relationship between anxiety and depression in young people, as well as research demonstrating more robust gender differences for anxiety, as opposed to depression. The effects of gender were examined in the analyses of variance, with gender differences evident on both measures of anxiety with females reporting significantly higher anxiety; however, there were no gender differences for depression.

The current study has a number of methodological strengths including the nature and size of the sample, which enabled the comparison of two distinct SES groups approximately matched for age and gender, increasing the generalisability of results. Additionally, psychometrically sound, well-established measures were employed in this study, along with adherence to standardisation of procedures. There are also a number of limitations to this research worthy of mention, including reliance on self-report data by children. This study would have been strengthened by the inclusion of multi-informant data, such as parent or teacher ratings and parental confirmation of socio-economic status (i.e., parental income) – although acquiring this kind of data from school-based samples is always very difficult. Furthermore, diagnostic information on risk would have added clinical utility to the reported findings. Finally, a more thorough analysis of risk and protective factors for anxiety and depression, across SES communities would have added a wealth of knowledge to this investigation. Other mechanisms of risk and protective value to investigate could include an examination of all or some of the following; adverse life events, parental psychopathology, child temperament, parenting practices, family structures, employment of parent(s), social support networks, educational attainment, problem solving abilities, cognitive style and so on. A further limitation of the current research is that because it is a cross-sectional design, results are correlational in nature. Thus a causal-directional relationship between ‘predictor’ variables and anxiety and depression may not be inferred. Future research involving longitudinal studies would yield more information on the nature of the relationships studied.

This study identified differences in self-reported anxiety, depression and self-esteem across two distinct SES school communities. Results indicate that children in low SES, disadvantaged school communities may be at higher risk for depression, and report significantly lower self-esteem across domains of social and school esteem. Given that SES was a significant predictor of both anxiety and depression (albeit minimally contributing

predictive value), it is likely that increased stressors (i.e., unemployment / lower income), limited resources, lower education, poorer utilization of services etc may contribute to increased distress and emotional disturbance in children and youth. There was some evidence that children in higher SES schools may experience higher anxiety levels – the underlying mechanisms for this is less well understood, and clearly warrants further investigation.

Further research into different SES school communities is critically important in terms of the development, focus of interventions and allocation of intervention resources in school prevention programming. Targeting protective factors associated with minimizing risk, as well as factors that increase risk, allow for the refinement of effective school-based prevention and early intervention programs. As mentioned previously, future studies investigating broader dimensions for protective and risk factors from the biological, psychological and social domains would provide more insight to how these may differ across SES and gender, in regards to anxiety and depression. Longitudinal and cohort studies would be useful in gaining more insight into how specific variables might impact childhood anxiety and depression, and shed more light on causal-directional relationships between such variables and mental health problems.

Anxiety and depression are a major problem for a vast number of children and youth. Given that adult health based research has identified an increased risk for physical and mental health problems in lower SES communities; a more thorough understanding of the implications for children in these communities is warranted. To date there has been significant progress in school-based prevention work; yet sadly much of the published research to date has occurred almost exclusively in within average or high SES communities. The next step for school based prevention programming is to understand the specific needs of low SES, disadvantaged communities and develop effective, and targeted approaches that can minimize

the increasing levels of risk for mental health problems such as anxiety and depression, that if left untreated, lead to chronic life long emotional and social problems.

## References

Australian Bureau of Statistics and Department of Education, Training and Youth Affairs (1997). Australian Standard Classification of Occupations (ASCO) Second Edition. *Statistical concepts library, Australian Bureau of Statistics*, (Cat no. 1220.0).

Akiskal, H.S., Maser, J.D., Zeller, P.J., Endicott, J., Coryell, W., Keller, M., Warshaw, M., Clayton, P., Goodwin, F.K. (1995). Switching from “unipolar” to bipolar II: an 11-year prospective study of clinical and temperamental predictors in 559 patients. *Archives of General Psychiatry*, 52, 114-123.

Alegria, M., Bijl, R.V., Lin, E., et al. (2000). Income differences in persons seeking outpatient treatment for mental disorders: a comparison of the United States with Ontario and the Netherlands. *Archives of General Psychiatry*, 57(4), 383-391.

Anderson, D.J., Williams, S., McGee, R., & Silva, P.A. (1987). DSM-III disorders in preadolescent children: Prevalence in a large sample from the general population. *Archives of the American Academy of Child and Adolescent Psychiatry*, 39, 39-48

Barrett, P.M., Dadds, M.R.; Rapee, R.M. & Ryan, S. (1996b). Family enhancement of

cognitive styles in anxious and aggressive children: the FEAR effect. *Journal of Abnormal Child Psychology*, 24, 187-203.

Barrett, P.M, Farrell, L.J., Ollendick, T., & Dadds, M. (2006). Long-term data from an Australian FRIENDS universal prevention trial. *Journal of Clinical Child and Adolescent Psychology*, 35(3), 403-411.

Barrett, P.M., & Turner, C.M. (2004). Prevention of Childhood anxiety and depression. In P.M. Barrett, & T.H. Ollendick (eds.), *Handbook of Interventions that Work with Children and Adolescents: Prevention and Treatment* (pp. 429-474). Chichester: John Wiley & Sons.

Barrett, P.M., & Turner, C.M. (2001). Prevention of anxiety symptoms in primary school children: Preliminary results from a universal school-based trial. *British Journal of Clinical Psychology*, 40, 399-410.

Benjamin, R.S., Costello, A.J. & Warren, M. (1990). Anxiety disorders of childhood and adolescence: A critical review. *Journal of American Academy of Child and Adolescent Psychiatry*, 30, 519-532.

Boyd, C.P., & Gullone, E. (1997). An investigation of negative affectivity in Australian adolescents. *Journal of Clinical Child Psychology*, 26(2), 190-197.

Boyd, C.P., Kostanski, M., Gullone, E., Ollendick, T.H., & Shek, D.T.L. (2000). Prevalence of anxiety and depression in Australian adolescents: Comparisons with worldwide data. *The Journal of Genetic Psychology*, 161(4), 479-492.

Brady, E.U., & Kendall, P.C. (1992). Comorbidity of anxiety and depression in children and adolescents. *Journal of Consulting and Clinical Psychology*, 111, 244-255.

Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & Garcia-Coll, C. (2001). The home

environments of children in the United States. Part I: Variations by age, ethnicity, and poverty status. *Child Development*, 72, 1844–1867.

Buckner, J.C., & Bassuk, E.L. (1997). Mental disorders and service utilization among youths from homeless and low-income housed families. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 890-900.

Clarke, G.N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., Beardslee, W., O'Connor, E., & Seeley, J. (2001). A randomized trial of group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of general Psychiatry*, 58 (12), 1127-1134.

Cole, D.A., Lachlan, G., Peeke, J.M., Martin, J.M., Truglio, R., & Serocynski, A.D. (1998). A longitudinal look at the relation between depression and anxiety in children and adolescents. *Journal of Consulting and Clinical Psychology*, 66(3), 451-460.

Conger, R. D., Wallace, L. E., Sun, Y., Simons, R., McLoyd, V.C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38, 179–193.

Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco, CA: Freeman.

Coopersmith, S. (1989). *Self-esteem Inventories*. Palo Alto, CA: Consulting Psychologists Press.

Costello, E.J., & Angold, A. (1995). Epidemiology. In J.S. March (Ed.). *Anxiety disorders in children and adolescents* (pp. 109- 124).

Cowen, E.L., Pedro-Carroll, J.L., & Alpert-Gillis, L. J. (1990). Relationships between



support and adjustment among children of divorce. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 31, 727-734.

Curtis, L.J., Dooley, M.D., Lipman, E.L., Feeny, D.H. (2001). The role of permanent income and family structure in the determination of child health in Canada. *Health Economics*, 10, 287-302.

Donovan, C.L., & Spence, S. H. (2000). Prevention of childhood anxiety disorders. *Clinical Psychology Review*, 20 (4), 509- 531.

Eason, L.J., Finch, A.J., Brasted, W., & Saylor, C.F. (1985). The assessment of depression and anxiety in hospitalized pediatric patients. *Child Psychiatry & Human Development*, 16, 57-64.

Elder, G. H., Nguyen, T. V., Caspi, A. (1985). Linking family hardship to children's lives. *Child Development*, 56, 361–375.

Education Queensland (2001). *Eagleby Vocational, Education Training and Employment Plan (Eagleby VETEP)*.

Ferdinand, R.F., & Verhulst, F.C. (1995). Psychopathology from adolescence into young adulthood: An 8-year follow-up study. *American Journal of Psychiatry*, 152(11), 1586-1594.

Gellar, B., Fox, L.W., & Clark, K.A. (1994). Rate and predictors of prepubertal bipolarity during follow-up of 6- to 12-year-old depressed children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 461-468.

Greenberg, M.T., Sisitsky, T., Kessler, R.C., Finkelstein, S., Berndt, E., Davidson, J., Ballenger, J., & Fyer, A. (1999). The economic burden of anxiety disorders in the 1990s. *Journal of Clinical Psychiatry*, 60, 427-435.

Harrington, R., Fudge, H., Rutter, M., Pickles, A., & Hill, J. (1990). Adult outcomes of childhood and adolescent depression. *Archives of General Psychiatry*, *47*, 465-473.

Herbert, M. (1994). Etiological considerations. In T.H. Ollendick, N.J. King, & W. Yule (Eds.), *International handbook of phobic and anxiety disorders in children and adolescents*. NY: Plenum Press.

Herman-Stahl, M., & Petersen, A.C. (1996). The protective role of coping and social resources for depressive symptoms among young adolescents. *Journal of Youth and Adolescence*, *25*(6), 733-753.

Hudson, J.L., Kendall, P.C., Coles, M.E., Robin, J.A., & Webb, A. (2002). The other side of the coin: Using intervention research in child anxiety disorders to inform developmental psychopathology. *Development and Psychopathology*, *14*, 819-841.

Ialongo, N., Edelsohn, G., Werthamar-Larsson, L., Crockett, L., & Kellam, S. (1994). The significance of self-reported anxious symptoms in first-grade children. *Journal of Abnormal Child Psychology*, *22*(4), 441-455.

Kashani, J.H., & Orvaschel, H. (1990). A community study of anxiety in children and adolescents. *American Journal of Psychiatry*, *147*, 313-318.

Kendall, P.C., Cantwell, D.P., & Kazdin, A.E. (1989). Depression in children and adolescents: Assessment issues and recommendations. *Cognitive Therapy and Research*, *13*, 109-146.

Kessler, R.C. (1979). Stress, social status, and psychological distress. *Journal of Health and Social Behavior*, *20*, 259- 273.

Kessler, R.C., Foster, J., Saunders, W.B., & Stand, P.E. (1995). Social consequences of psychiatric disorders I: Educational attainment. *American Journal of Psychiatry*, *152*, 1026-1032.

Kovacs, M. (1985). The natural history and course of depressive disorders in Childhood. *Psychiatric Annals*, 15(6), 387- 389.

Kovacs, M.,(1989). Affective disorders in children and adolescent. *American Psychologist*, 44, 209-215.

Kovacs, M. (1980/1981). Rating scales to assess depression in school-aged children. *Acta paedopsychiat*, 46, 305-315.

Last, C.G, Perrin, S., Hersen, M., & Kazdin, A.E. (1996). A prospective study of childhood anxiety disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(11), 1502-1510.

Lewinsohn, P.M., Clarke, G.N., & Rohde, P. (1994). Psychological approaches to the treatment of depression in adolescents. In W.M Reynolds & H.F. Johnston (Eds.), *Handbook of depression in children and adolescents: Issues in clinical child psychology* (pp. 309-344). New York: Plenum Press.

Lock, S. & Barrett, P.M. (2003). A longitudinal study of developmental differences in universal preventive intervention for child anxiety. *Behaviour Change*, 20(4), 183-199.

Lobovits, D.A., & Handal, P.J. (1985). Childhood depression: Prevalence among DSM-III criteria and validity of parent and child depression scales. *Journal of Pediatric Psychology*, 10, 45-54.

Lock, S. & Barrett, P.M. (2003). A longitudinal study of developmental differences in universal preventive intervention for child anxiety. *Behaviour Change*, 20(4), 183-199.

McGee, R., & Williams, S. (1988). A longitudinal study of depression in nine-year-old children. *Journal of the American Academy of Child & Adolescent Psychiatry*. 27(3), 342-348

McLeod, J.D., & Shanahan, M.J. (1993). Poverty, parenting and children's mental health. *American sociological review*, 58 (3), 351- 366.

Miech, R.A, Capsi, A., Moffitt, T.E., Entner Wright, B.R., & Silva, P.A. (1999). Low socio-economic status and mental disorders: a longitudinal study of selection and causation during young adulthood. *The American Journal of Sociology*, 104(4), 1096-1131.

Mifsud, C., & Rapee, R. (2005). Early intervention for Childhood Anxiety in a School Setting: Outcomes for an Economically Disadvantaged Population. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(10), 996-1004.

Muris, P., Merckelbach, H., & Meesters, C. (2001) Learning experiences and anxiety sensitivity in normal adolescents. *Journal of Psychopathology and Behavioral Assessment*, 23(4), 279-283.

Muris, P., Merckelbach, H., Ollendick, T., King, N., & Bogie, N. (2002). Three traditional and three new childhood anxiety questionnaires: Their reliability and validity in a normal adolescent sample. *Behaviour Research and Therapy*, 40, 753-772.

National Health and Medical Research Council. (1997). *Depression in Young People: Clinical Practice Guidelines*. Canberra: Australian Government Publishing Service.

Norvell, N., Brophy, C., & Finch, A.J. (1985). The relationship of anxiety to childhood depression. *Journal of Personality Assessment*, 49, 150-153.

Ollendick, T.H., & King, N.J. (1994). Diagnosis, assessment, and treatment of internalising problems in children: The role of longitudinal data. *Journal of Consulting and Clinical Psychology*, 62, 918-927.

Ollendick, T.H., & Yule, W. (1990). Depression in British and American children and its relation to anxiety and fear. *Journal of Consulting and Clinical Psychology*, 58 (1), 126-129.

Orvaschel, H., Lewinsohn, P.M., & Seeley, J.R. (1995). Continuity of psychopathology in a community sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 1525-1535.

Pine, D.S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry*, 55, 56-64.

Plancherel, B., & Bolognini, M. (1995) Coping and mental health in early adolescence. *Journal of Adolescence*, 18(4), 459-474.

Pollack, M.H., Otto, M.W., Sabatino, S., Majcher, D., Worthington, J.J., McArdle, E.T., & Rosenbaum, J.F. (1996). Relationship of childhood anxiety to adult panic disorder: Correlates and influence on course. *American Journal of Psychiatry*, 153(3), 376-381.

Rao, U., Ryan, N.D., Birmaher, B., Dahl, R.E., Williamson, D.E., Kaufman, J., Rau, R., & Nelson, B. (1995). Unipolar depression in adolescents: Clinical outcome in adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 566-578.

Reynolds, C.R. (1980). Concurrent validity of the What I Think and Feel: the Revised Children's Manifest Anxiety Scale. *Journal of Consulting and Clinical Psychology*, 48, 774-775.

Reynolds, C.R., & Richmond, B.O. (1978). What I think and feel: A revised measure of children's manifest anxiety. *Journal of Abnormal Child Psychology*, 6, 271-280.

Rosenbaum, J.F., Biederman, J., Gerten, M., Hirshfeld, D.R., Meminger, S.R., Herman, J.B., Kagan, J., Reznick, J.S., & Snidman, N. (1988). Behavioral inhibition in children of parents with panic disorder and agoraphobia: A controlled study. *Archives of General Psychiatry*, 45, 463-470.

Rudd, M.D., Joiner, T.F., & Rumzek, H. (2004). Childhood diagnoses and later risk for multiple suicide attempts. *Suicide and Life-Threatening Behaviour*, 34(2), 113-125.

Sawyer, M.G., Arney, F.M., Baghurst, P.A., Clark, J.J., Graetz, B.W., Kosky, R.J., Nurcombe, B., Patton, G.C., Prior, M.R., Raphael, B., Rey, J., Whaites, L.C., & Zubrick, S.R. (2001). *The Mental Health of Young People in Australia: The Child and Adolescent Component of the National Survey of Mental Health and Well-Being*. Canberra: AGPS.

Saylor, C.F., Finch, A.J., Spirito, A., & Bennett, B. (1984). The Children's Depression Inventory; A systematic evaluation of psychometric properties. *Journal of Consulting & Clinical Psychology, 52*, 955-967.

Seligman, L.D., & Ollendick, T.H. (1998). Comorbidity of anxiety and depression in children and adolescents: An integrative review. *Clinical Child and Family Psychology Review, 1*, 125-144.

Spaccarelli, S., & Fuchs, C. (1997). Variability in symptom expression among sexually abused girls: Developing multivariate models. *Journal of Clinical Child Psychology, 26*(1), 24-35.

Spence, S.H. (1994). Prevention. In: T.H. Ollendick, N. King, & W. Yule (Eds.), *International handbook of phobic and anxiety disorders in children and adolescents* (pp. 133-154). New York: Plenum.

Spence, S.H. (1997). Structure of anxiety symptoms among children: a confirmatory factor-analytic study. *Journal of Abnormal Psychology, 106*, 280-297.

Spence, S.H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy, 36*, 545-566.

Spence, S.H. (2005). Australian normative data for the Spence Children's Anxiety Scale. Unpublished raw data.

Spence, S.H., Barrett, P.M., & Turner, C.M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Anxiety Disorders, 17*, 605-625.

Strauss, C.C., Frame, C.L., & Forehand, R. (1987). Psychosocial impairment associated with anxiety in children. *Journal of Clinical Child Psychology, 16*, 235-239.

Strober, M., & Carlson, G. (1982). Bipolar illness in adolescents with major depression. *Archives of General Psychiatry, 39*, 549-555.

Turner, S.M., Beidel, D.C., & Costello, A. (1987). Psychopathology in the offspring of anxiety disorder patients. *Journal of Consulting and Clinical Psychology, 55*, 229 -235.

Turner, S.M., Beidel, D., Spaulding, S., & Brown, J. (1995). The practice of behavior therapy: A national survey of cost and methods. *Behavior Therapist, 18*, 1-4.

Verhulst, F.C., (2002). *Inleiding in de kinder en jeugd psychiatrie*. Gorcum b.v.: Konink Van.

Wang, P.S., Berglund, P., Kessler, R.C. (2000). Recent care of common mental disorders in the United States. *Journal of General International Medicine, 15*(5), 284-292.

Windle, M., Windle, R. C. (1996). Coping strategies, drinking motives, and stressful life events among middle adolescents: Associations with emotional and behavioral problems and with academic functioning. *Journal of Abnormal Psychology, 105*(4), 551-560.

Weissman, M. M., Leckman, J. F., Merikangas, K.R., Gammon, G.D., & Prusoff, B.A. (1984). Depression and anxiety disorders in parents and children: Results from the Yale Family Study. *Archives of General Psychiatry, 41*, 845-852.

Woodward, L.J., & Fergusson, D.M. (2001). Life course outcomes of young people with anxiety disorders in adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1086-1093.

**Table 1**

Means and standard deviations across SES schools and gender for anxiety (SCAS, RCMAS), depression (CDI) and self-esteem (SEI social; SEI school)

	SEI* social	SEI* school	CDI*	RCMAS	SCAS*
<b>Low SES</b>					
M	5.53	5.39	11.06	11.79	22.22
SD	1.87	1.78	8.21	7.36	17.71
<b>High SES</b>					
M	11.44	10.29	8.99	10.71	26.16
SD	4.00	3.87	7.70	7.06	15.24

*Note:* SEI = Self-Esteem Inventory (social=social self/peers; school=school/academic);  
 CDI=Children's Depression Inventory; RCMAS=Revised Children's Manifest



Anxiety Scale; SCAS=Spence Children's Anxiety Scale; \* = significant SES group differences at  $p < 0.01$  level

**Table 2**

Bi-variate correlations among variables including socio-economic status, gender, depression, anxiety and self-esteem

		SES high(0)/low(1)	Gender	CDI	RCMAS	SCAS	SEI school	SEI Social
SES high(0)/low(1)	Pearson Correlation		.046	.147(*)	.064	-.119(*)	-.647(**)	-.696(**)
gender	Pearson Correlation			.060	.192(*)	.224(*)	-.097(*)	-.081(*)
CDI	Pearson Correlation				.716(**)	.546(**)	-.526(**)	-.473(**)
RCMAS	Pearson Correlation					.729(**)	-.465(**)	-.395(**)
SCAS	Pearson Correlation						-.241(*)	-.182(*)

SEI school	Pearson Correlation	.735(**)
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Note: \* significant at either 0.01 or 0.05 level however  $r < 0.3$ ;

\*\* significant at 0.01 level and  $r > 0.3$ ;

SEI = Self-Esteem Inventory (social=social self/peers; school=school/academic);

CDI=Children's Depression Inventory;

RCMAS=Revised Children's Manifest Anxiety Scale;

SCAS=Spence Children's Anxiety Scale

**Table 3**

Stepwise regression model for CDI scores

Model	Beta	<i>t</i>	<i>p</i>	<i>F</i> (model)	<i>R</i> <sup>2</sup> (model)	Adjusted <i>R</i> <sup>2</sup>	SE
1. constant		8.51	.000	318.11	.299	.298	6.78
SCAS	.546	17.84	.000				
2. constant		17.88	.000	320.20	.462	.460	5.94
SCAS	.445	16.06	.000				
SEI school	-.417	-15.05	.000				
3. constant		18.76	.000	227.29	.478	.476	5.86
SCAS	.443	16.24	.000				
SEI school	-.281	-7.14	.000				
SEI social	-.186	-4.77	.000				
4. constant		16.17	.000	193.01	.509	.507	5.68
SCAS	.361	12.44	.000				
SEI school	-.380	-9.31	.000				

SEI social	-.320	-7.54	.000				
SES	-.278	-6.90	.000				
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5. constant		16.12	.000	157.62	.515	.511	5.66
SCAS	.382	12.83	.000				
SEI school	-.378	-9.31	.000				
SEI social	-.318	-7.53	.000				
SES	-.270	-6.70	.000				
Gender	-0.77	-2.90	.004				

*Note:* SEI = Self-Esteem Inventory (social=social self/peers; school=school/academic);  
 CDI=Children's Depression Inventory; RCMAS=Revised Children's Manifest Anxiety Scale;  
 SCAS=Spence Children's Anxiety Scale

**Table 4**

Stepwise regression model for SCAS scores

Model	Beta	<i>t</i>	<i>p</i>	<i>F</i> (model)	<i>R</i> <sup>2</sup> (model)	Adjusted <i>R</i> <sup>2</sup>	SE
1. constant		15.64	.000	318.11	.299	.298	13.90
CDI	.546	17.83	.000				
<hr/>							
2. constant		1.68	.093	195.69	.344	.342	13.44
CDI	.531	17.87	.000				
Gender	.214	7.19	.000				
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3. constant		3.29	.001	156.35	.386	.384	13.02
CDI	.560	19.28	.000				
Gender	.221	7.63	.000				
SES	-.208	-7.16	.000				
<hr/>							
4. constant		4.64	.000	121.76	.396	.392	12.92
CDI	.493	14.07	.000				
Gender	.215	7.51	.000				

SES	-.295	-7.63	.000
SEI school	-.153	-3.38	.001

*Note:* SEI = Self-Esteem Inventory (social=social self/peers; school=school/academic);  
 CDI=Children's Depression Inventory; RCMAS=Revised Children's Manifest Anxiety Scale;  
 SCAS=Spence Children's Anxiety Scale.

**Table 5**

Percentage of sample at risk across SES and mean scores for risk group and by gender.

	Low SES		High SES	
	%	n	%	n
<b>BOTH CDI &amp; SCAS</b>				
Frequency high risk	36.5	152	25.2	93
<b>CDI</b>				
Frequency high risk	28.3	124	15.7	58

**SCAS**

Frequency high risk	13.6	58	15.7	58
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Note: CDI=Children's Depression Inventory, SCAS=Spence Children's Anxiety Scale.