

Gender Differences in Positive Social Emotional Functioning

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Abstract

This study investigated gender differences of children and adolescents on positive social and emotional competencies. We used a strength-based measure of positive social-emotional attributes and resilience—the Social-Emotional Assets and Resiliency Scales (SEARS) cross-informant system, using student, teacher, and parent ratings. Caregivers, teachers, and students in grades K through 12 from schools across several states completed SEARS rating scales and self-report forms. The results indicated that girls had significantly higher total scores on all versions of the SEARS assessment system ($p < .01$), indicating consistent perceptions of higher levels of their social-emotional competencies across raters. Separate two-way between-subjects analysis of variance found no significant interactions between the gender of the rater and the gender of the student, or between the grade level of the student and the gender of the student.

Gender Differences in Positive Social Emotional Functioning

A growing body of research indicates that child protective factors associated with resiliency better predict social, emotional, and behavioral outcomes than traditional deficit and pathology-based approaches (Garmezy, 1993). The increasing acceptability of a strength-based approach to mental health assessment and intervention with children has underscored the need for more standardized strength-based assessment measures (Walrath Mandell, Holden, & Santiago, 2004). Unfortunately, relatively few standardized strength-based assessments exist, and fewer still include substantial psychometric and normative data, including information about gender differences on factors associated with resilience.

Research based on pathology-centered approaches to assessment has identified trends in gender differences on internalizing symptoms, such as depression and anxiety (e.g., Allgood-Merten et al., 1990). For example, while the prevalence of childhood depression is approximately equal in males and females, during adolescence females outnumber males in exhibiting these symptoms (e.g., Birmaher, Ryan, Williamson, Brent, Kaufman, Dahl, et al., 1996). Similarly, gender differences with externalizing behavior problems have been well established, with boys exceeding girls in rates of externalizing problems throughout childhood and adolescence (e.g., Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; Reid et al., 2000).

Studies of gender differences in constructs such as self-esteem and self-concept have produced mixed results. It is generally believed that gender differences across various dimensions of self-concept (e.g., academic competence) become more apparent over time, and that there is a decline in the self-esteem and self-confidence of girls as move from childhood into early adolescence. However, in their meta-analysis of studies researching gender differences from a multi-dimensional perspective of self concept, Wilgenbusch and Merrell (1999) found

that gender differences varied depending on the dimension of self-concept that were being measured and that many of these differences were actually insignificant or very small. Furthermore, this meta-analysis did not support the popular notion that girls self-esteem plummets as they move into the middle school and high school years. Conversely, a study by Avison and McAlpine (1992) revealed that variations in self-esteem were strongly associated with observed differences in depression between males and females.

Assessments that focus on measuring self-concept, self-esteem, and other factors associated with an individual's social, emotional, and academic strengths and assets may provide more specific information related to behavior outcomes than measures of internalizing or externalizing behavior problems. Epstein and Sharma (1998) defined strength-based assessment as "the measurement of those emotional and behavioral skills, competencies, and characteristics that create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers, and adults; enhance one's ability to deal with adversity and stress; and promote one's personal, social, and academic development" (p.3). An accumulation of such protective factors has been shown to be related to resilience among high-risk youth.

Protective factors or strengths can be categorized into individual, family, and external support systems (Hartman, 2009). Gender differences have been identified in both individual and environmental variables associated with resilience. Kort-Butler reported that among individual protective factors self-esteem has been shown to be a significant factor in protecting girls from delinquency, but not boys (as cited in Hartman, 2009). Environmental variables such as religiosity and a positive school environment were also found to significantly increase resiliency among females (Hartman, 2009). Overall, girls also tend to exhibit greater ability in self-regulation than boys (e.g., Raffaelli, Crocket, & Shen, 2005).

Further explorations of perceived strengths that have been linked to resiliency could provide valuable insight into the social and emotional development of boys and girls and lead to more effective interventions. The exploration of gender differences from a complete mental health perspective may paint a more complete picture of how girls and boys function. This would involve conceptualizing gender differences based on symptoms of internalizing problems, as well as indicators of general wellbeing and resilience

The purpose of this study was to use a strength-based assessment system, the *Social Emotional Assets and Resiliency Scales* (SEARS; Merrell, 2008), to determine whether gender differences exist among factors related to resiliency. Six research questions were addressed:

1. How do male and female children and adolescents compare on self-ratings of social emotional strengths?
2. How do males and females compare on teacher-ratings of social emotional strengths?
3. How do males and females compare on parent-ratings of social emotional strengths?
4. Is there an effect of grade on self-perceived social emotional strengths for females and males?
5. Is there an effect of rater gender on SEARS-P scores for males and females?
6. Is there an effect of rater gender on SEARS-T scores for males and females?

Method

Sample

The sample was comprised of parent, teacher, and student participants who completed assessment forms as part of the SEARS norming project. Schools across the United States, including schools in the U.S. states of Massachusetts, Iowa, Georgia, Colorado, Ohio, Oregon, California, North Carolina, and Hawaii, participated in the project. Descriptive information on

the sample is provided in Table 1.

Parent forms were completed by 1,979 caregivers of students in grades K – 12, ranging in age from 4 to 20 years. The sample of students being rated included 48.7% female and 51.3% male students. The gender of the caregiver raters was 65.2% female, 24.1% male, and 9.9% unknown. The grade breakdown of the students was 4.2% K, 6.0% 1st grade, 5.1% 2nd grade, 5.4% 3rd grade, 8.9% 4th grade, 10.7% 5th grade, 14.5% 6th Grade, 14.7% 7th grade, 9.8% 8th grade, 5.2% 9th grade, 5.4% 10th grade, 6.1% 11th grade, and 4.1% 12th grade. White/Caucasian students comprised 65.6% of the sample rated by parents, followed by Asian/Pacific Islander (15.5%), Black/African-American (6.4%), Multiracial (6.1%), Hispanic/ Latino (5.5%), and Other/Unknown (1.0%). 10.2% of the students rated were identified by their caregiver as receiving Special Education services.

Participants also included 1,647 teachers who taught grades K-12. Of the students being rated by their teachers, 50.3% were female and 49.7% were male. The grade breakdown of students was 7.2% K, 6.3% 1st grade, 8.9% 2nd grade, 9.0% 3rd grade, 9.7% 4th grade, 9.3% 5th grade, 5.2% 6th Grade, 6.5% 7th grade, 6.1% 8th grade, 6.2% 9th grade, 8.4% 10th grade, 9.7% 11th grade, and 7.6% 12th grade. White/Caucasian students comprised 49.3% of the sample, followed by Black/African-American (18.9%), Hispanic/ Latino (18.8%), Asian/Pacific Islander (8.0%), Multiracial (3.1%), and Other/Unknown (1.9%). Teachers identified 18.1% of the students they rated as receiving Special Education services.

A total of 1,622 students in grades 3 thru 6 completed the SEARS-C self-report form and 2,348 students in grades 7 thru 12 completed the SEARS-A self-report form. An about equal sampling of male and female students completed the self-report forms. The SEARS-C was completed by 49.8% female and 50.2% male students, and the SEARS-A was completed by

50.2% female and 49.8% male students. Student ethnicity of the SEARS-C sample was 56.6% White/Caucasian, followed by Asian/Pacific Islander (12.6%), Black/African-American (11.7%), Hispanic/ Latino (9.4%), Multiracial (5.7%), American Indian/Native American (0.9%), and other (3.0%). Student ethnicity for the SEARS-A sample was 50.2% White/Caucasian, followed by Asian Pacific Islander (16.7%), Hispanic/ Latino (13.1%), Black/African-American (12.4%), Multiracial (5.5%), American Indian/Native American (0.6%), and other (1.7%). The grade breakdown of students who completed the SEARS-C and SEARS-A was 20.0% 3rd grade, 26.3% 4th grade, 33.2% 5th grade, 20.5% 6th Grade, 22.1% 7th grade, 24.7% 8th grade, 11.2% 9th grade, 12.1% 10th grade, 16.1% 11th grade, and 13.7% 12th grade.

Table 1
Characteristics of the Sample as a Percentage

Characteristic	SEARS-P (n = 1979)	SEARS-T (n = 1647)	SEARS-C (n = 1622)	SEARS-A (n = 2348)
Gender				
Female	48.7	50.3	49.8	50.2
Male	51.3	49.7	50.2	49.8
Rater Gender				
Female	65.2	73.0		
Male	24.1	25.1		
Unknown	9.9	1.8		
Ethnicity				
White/Caucasian	65.6	49.3	56.6	50.2
Hispanic/Latino	5.5	18.8	9.4	13.1
Black/African American	6.4	18.9	11.7	12.4
Asian/Pacific Islander	15.5	8.0	12.6	16.7
American Indian/ Native American	0.2	0.2	0.9	0.6
Multiracial (2+)	6.1	3.1	5.7	5.5
Other	0.5	1.2	1.5	1.1
Unknown	0.3	0.5	1.5	0.6
Identified Disability	10.2	18.1	n/a	n/a

Measure

The SEARS (Merrell, 2008) is a cross-informant social-emotional assessment system aimed at assessing positive social-emotional attributes of children and adolescents. Four rating forms comprise the system: a student self-report for children in grades 3-6 (SEARS-C), a student self-report for students in grades 7-12 (SEARS-A), a teacher report for teachers of students in grades K-12, and a parent report for caregivers of children ages 5-18 (SEARS-P). SEARS assessments range from 35 to 41 items, and require an average of about 15 minutes to complete. Items are rated using 4-point rating scale from 0 (never) to 4 (almost always) on the degree to which an item is true for the student who is being rated. A higher total score indicates a higher level of perceived social emotional strength and resilience. The parent, teacher, and adolescent versions of the SEARS have four subscales: Self-Regulation, Social Competence, Responsibility, and Empathy, that are summed together to create a total score. The SEARS-C assessment has only one scale computed by adding all item totals together. All four SEARS assessments have strong internal consistency with alpha coefficients above .90. As measured by Chronbach's alpha, the SEARS-P has a reliability coefficient of .96, the SEARS-T .98, the SEARS-C .92, and the SEARS-A .93. For the purpose of this project we analyzed total scores rather than subscale scores in order to look at broader gender differences in strength-based assessments.

Procedure

Data were collected over a two year period as part of the SEARS national norming project. Schools were invited to participate in the project through direct recruitment by the principal investigator and members of the Oregon Resiliency Project (ORP) research team, through the University of Oregon's Strong-Kid's website, and solicitation at guest lectures and trainings. Once schools volunteered to participate, informed consent was obtained from

participating parents, teachers, and students through a process approved by the Human Subjects Internal Review Board at the University of Oregon. Schools were provided directions and all the necessary materials to administer the forms. Upon completion, SEARS forms were returned to the principal investigator of SEARS norming project at the University of Oregon. Parents, teachers, and students received small forms of compensation, such as gift cards or copies of *Strong Kids or Strong Teens Curricula*, for their participation in this project.

Results

We used SPSS 17.0 Grad Pack to conduct our analyses using summative scores to conduct independent t-tests and two-way between groups analysis of variance. Because the research questions focused on differences between males and females, cases that did not identify the gender of the rated student, were excluded resulting in 5 missing cases on the SEARS-P, 26 missing cases on the SEARS-C, 6 missing cases on the SEARS-C, and 8 missing cases on the SEARS-A.

Gender Differences

To determine if there was a difference between reported social emotional strengths between male and female students, we conducted independent observations t-tests using SEARS total scores. On the SEARS-P, scores for female ($M = 76.62$, $SD = 18.04$) and male ($M = 72.59$, $SD = 18.73$) students were significantly different, $t(1977) = 4.88$, $p < .01$. On the SEARS-T scores for female ($M = 73.59$, $SD = 25.16$) and male ($M = 64.43$, $SD = 25.79$) students were significantly different, $t(1645) = 7.30$, $p < .01$. On the SEARS-C scores for female ($M = 70.61$, $SD = 15.54$) and male ($M = 65.59$, $SD = 16.71$) students were significantly different, $t(1620) = 6.26$, $p < .01$. On the SEARS-A scores for female ($M = 69.22$, $SD = 14.17$) and male ($M = 64.53$, $SD = 16.16$) students were significantly different, $t(2346) = 7.49$, $p < .01$. Results may be

viewed in Table 1. Female students were consistently rated as having higher amounts of social and emotional strengths than male students, as measured by the SEARS assessments completed by parents, teachers, and students themselves. Given the large size of the sample, we also calculated effect sizes using Cohen's d , which indicated that the effect for the difference between female and male scores on all SEARS scales was small.

Table 2

Preliminary Data: Gender Differences on SEARS Rating Scales Based on Independent t-tests

Scale	Group	N	$M(SD)$	df	t -score	ES
SEARS-P	Female	964	76.62 (18.04)	1977	4.88*	0.22
	Male	1015	72.59 (18.73)			
SEARS-T	Female	829	73.59 (25.16)	1645	7.30*	0.36
	Male	818	64.43 (25.79)			
SEARS-C	Female	807	70.61 (15.54)	1620	6.26*	0.31
	Male	815	65.59 (16.71)			
SEARS-A	Female	1179	69.22 (14.17)	2346	7.49*	0.31
	Male	1169	64.53 (16.16)			

* $p \leq .01$.

Grade Level Differences

A two-way between-subjects analysis of variance was conducted to evaluate the effect of gender and grade on total SEARS scores (see Tables 3, 4, 5, and 6). On the SEARS-P, the grade-by-gender interaction was not statically significant, $F(12, 612) = 0.86, p > .05$, and the main effect for grade was not significant, $F(12, 612) = 1.47, p < .05$, and the main effect for gender was significant, but small, $F(1,612) = 3.64, p < .10$. On the SEARS-T, the grade-by-gender interaction was not significant, $F(12, 1621) = 0.49, p > .05$, the main effect for grade was significant, $F(12, 1621) = 4.16, p < .01$, and a significant main effect was found for gender $F(1, 1621) = 50.51, p < .01$. On the SEARS-C, the grade-by-gender interaction was not significant, $F(3, 1614) = 1.00, p > .05$, the main effect for grade was not significant, $F(1, 1614) = 0.95, p >$

.05, and a significant main effect was found for gender, $F(1, 1614) = 39.19, p < .01$. On the SEARS-A, the grade-by-gender interaction was not significant, $F(5, 2336) = 1.72, p > .05$, the main effect for type of grade was significant, $F(5, 2336) = 3.69, p < .01$, as was the main effect for gender, $F(2, 2336) = 22.90, p < .01$. Results were consistent with the findings from the independent t-tests and revealed that the gender of the student played a greater role in differences between total scores and that this difference did not depend upon the grade level of the student.

Table 3
SEARS-P Gender by Grade Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	1	1013.19	1013.19	3.64*
Grade	12	4916.802	409.734	1.47
Grade by gender	12	95.36	95.36	0.86
Error	612	170241.74	278.17	
Total	637	178484.31		

* $p < .10$.

Table 4
SEARS-T Gender by Grade Analysis of Variance Summary Table

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	1	32013.72	32013.72	50.51*
Grade	12	31646.46	2636.37	4.16*
Grade by gender	12	7257.50	604.79	0.49
Error	1621	1027281.22	633.73	
Total	1646	1101914.89		

$p < .01$.

Table 5
SEARS-C Gender by Grade Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	1	10209.18	10209.18	39.19*
Grade	1	738.58	246.20	0.95
Gender by grade	3	784.02	261.34	1.00
Error	1614	420452.83	260.50	
Total	1621	7951068.00		

$p < .01$.

Table 6
SEARS-A Gender by Grade Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	2	10496.11	5248.05	22.90*
Grade	5	4229.59	845.92	3.69*
Gender by grade	5	1969.48	393.90	1.72
Error	2336	535286.66	229.15	
Total	2348	554940.24		

$p < .01$.

Rater Differences

To determine if there was an effect of rater gender on SEARS-P and SEARS-T scores for males and female students, we conducted a two-way between-subjects analysis of variance on total SEARS scores for each of the respective scales (see Tables 7 and 8). On the SEARS-P, the rater gender by student gender interaction was not significant, $F(1, 634) = 0.34, p > .05$, the main

effect for rater gender was not significant, $F(1, 634) = 0.50, p > .05$ and the main effect for student gender was not significant, $F(1,634) = 2.26, p > .05$. On the SEARS-T, the rater gender by student gender interaction was not significant, $F(1, 1613) = .79, p > .05$, the main effect for rater gender was not significant, $F(1, 1613) = .62, p > .05$, however, the main effect for student gender was significant, $F(1, 1613) = 37.67, p < .01$. These results reveal that the gender of the rater did not have an effect on the scores of the female and males students that were being rated.

Table 7
SEARS-P Gender by Rater Gender Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	1	633.09	633.09	2.26
Rater Gender	1	140.35	140.35	0.50
Rater gender by gender	1	95.36	95.36	0.34
Error	634	177592.33	280.11	
Total	637	178484.31		

Table 8
SEARS-T Gender by Rater Gender Analysis of Variance Summary Table

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Gender	1	24559.98	24559.98	37.67*
Rater Gender	1	403.31	403.31	0.62
Rater gender by gender	1	47.32	47.32	0.79
Error	1613	1051630.64	651.92	
Total	1616	1085615.14		

* $p < .01$

Discussion

The purpose of this poster presentation was to investigate gender differences using a strength-based assessment system. The results of our analyses indicated that girls obtained significantly higher total scores on all versions of the SEARS assessment system. Parents, teachers, and students all perceived girls as demonstrating more social and emotional strengths and assets that include skills related to self-regulation, social competence, responsibility, and empathy. However, these differences appear to be quite small, and the interpretation of these results should, therefore, be made cautiously. Nonetheless, these findings raise interesting questions regarding the socialization and emotional development of boys and girls, especially within the context of schools, where social and emotional skills have been linked to positive, long-term academic outcomes (Zins, Bloodworth, Weissberg, & Walberg, 2004).

Gender differences in social and emotional strengths may provide valuable insight to why girls earn higher grades than boys across subject areas and grade levels. Yet, despite the academic success of girls relative to boys, girls tend to experience more internal distress (Pomerantz, Altermatt, & Saxon, 2002). Conversely, boys appear to demonstrate fewer social and emotional skills and exhibit more behavior problems, which often impacts academic performance. The trends observed in K-12 schooling are also mirrored in current college populations with more females graduating college than male students. Furthermore, longitudinal data suggests that these differences can be at least partially explained by behavioral and developmental differences between boys and girls (Golden, Katz, & Kuziemko, 2006). More research is needed to determine to what extent, if any, gender differences in social and emotional assets impact learning and other long-term positive outcomes (e.g., interpersonal skills, general

well-being, career development), and how such differences might influence assessment and intervention practices.

We found no significant interactions between the gender of the rater (for both parents and teachers), and the gender of the student. It is important to note that more female parents and teachers completed rating scales on students than male parents and teachers, which may have influenced our results. Our study revealed no significant differences between how fathers and mothers rated their children. Similar findings in parental agreement have been found on other strength-based measures (Synhorst, Buckley, Reid, Epstein, & Ryser, 2005), whereas many pathology-based rating scales have historically reported differences between mother and father ratings.

There were several limitations to this study. While our sample was large and included an equal sample of male and female students that were rated by parents, teachers, and students themselves, some of the sample was not representative of current U.S. census data. For example, across all four versions of the SEARS there was an overrepresentation of Asian/Pacific Islanders, and on the SEARS-P the sample underrepresented Hispanic/Latino and Black/African American students. However, our sample was overall aligned with the current demographic trends in that it had a smaller representation of White/Caucasian students and generally higher representation of other students who were identified as belonging to other ethnic groups.

Although we found significant differences between the social and emotional strengths of boys and girls, the effect sizes suggest that these differences may actually be quite small. As mentioned previously, additional research is needed to determine to what extent these differences have clinical and practical implications. Our own future research efforts will also involve

determining if gender differences can be found on the individual subscales of the SEARS assessment system.

The results of this study provide insight into gender differences from a strength-based perspective. Previous research has identified gender differences in the prevalence of risk factors associated with internalizing or externalizing problems (e.g., Leadbeater, Blatt, & Quinlan, 1995), and our findings suggest that gender differences also exist when assessing children's individual strengths. Finally, additional research is needed to determine how gender impacts children's functioning in regard to both their strengths as well as their deficits, since children with functional impairments can exhibit average or near average strengths (Walrath, Mandell, Holden, & Santiago, 2004).

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