

UNIVERSAL SCREENING FOR SOCIAL–EMOTIONAL COMPETENCIES: A STUDY OF THE RELIABILITY AND VALIDITY OF THE DESSA-MINI

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The purpose of this study was to examine the reliability of the eight-item Devereux Student Strengths Assessment (DESSA)-mini and its validity in relation to the 72-item version DESSA. The sample included teacher ratings for 1,234 children in kindergarten through eighth grade who comprised the standardization sample. The median alpha reliability coefficients across grades for the four forms of the DESSA-mini ranged from a low of .915 (Mini 1) to a high of .924 (Mini 3). These findings suggested that DESSA-minis have excellent reliability. The differences between the DESSA Social–Emotional Composite (SEC) *T*-scores and *T*-scores obtained from each of the four DESSA-minis were trivial (the largest *d*-ratio was .023). The percentage of times the DESSA-mini and DESSA SEC *T*-scores yielded the same result was computed (i.e., the score indicates or does not indicate whether the child needs social–emotional instruction). Those percentages ranged from a low of 94.8 (Mini 3) to a high of 96.5 (Mini 1). Finally, sensitivity, specificity, and positive and negative predictive power were examined for each DESSA-mini. Findings suggested that the DESSA-mini is a viable tool for universal screening of social–emotional competencies related to resilience. © 2011 Wiley Periodicals, Inc.

In recent years, an increasing number of school districts have adopted procedures for universal screening of core academic subjects, such as reading and math. The hope is that early detection of academic need and progress monitoring within a multitiered model can improve student outcomes. To better manage the logistical demands of testing a large number of children, brief tools have been utilized to efficiently identify those children who are at risk for academic failure. Children identified as needing additional instruction may be assessed more thoroughly to determine their specific areas of needs and strengths. It is also becoming clear that academic achievement requires good mental health and that preventable mental, emotional, and behavioral disorders create a significant public health burden (O’Connell, Boat, & Warner, 2009). Similar to the evaluation of academic progress, one approach to addressing social–emotional problems is to assess predictors of such problems early and to intervene promptly to prevent the undesirable outcome from ever manifesting (Coie et al., 1993).

Universal screening for social–emotional competence has been promoted by the current presidential administration as well as the previous one. For example, the President’s New Freedom Commission on Mental Health (2003) established as its fourth goal that “Early Mental Health Screening, Assessment, and Referral to Services are Common Practice” (p. 57). Furthermore, noting that “schools are where children spend most of their day,” the Commission stated that, “schools are in a key position to identify mental health problems early and to provide a link to appropriate services,” and therefore, “schools must be partners in the mental health care of our children” (p. 58). Importantly, under the current administration, in December 2009, the Federal Academic, Social and Emotional Learning Act (HR 4223) was introduced. This legislation would authorize the U.S.

Department of Education to establish a national training and technical assistance center for social and emotional learning, which would support the widespread implementation of evidence-based social-emotional learning programs in schools.

The emphasis on social-emotional competence is important for several reasons. First, social-emotional competence is essential to learning and school success (Payton et al., 2008). Second, about 20% of school-aged children and youth have a diagnosable emotional or behavioral disorder that interferes with learning (Doll, 1996; U.S. Department of Health and Human Services, 1999). Third, in recognition of the important role social-emotional factors play in academic success, an increasing number of state departments of education have adopted or are examining social-emotional learning standards. This could lead to the inclusion of social-emotional skills in the regular education curriculum, with the goal of universal prevention of social-emotional disturbances. Those exposed to circumstances that increase the odds of poor developmental outcomes could receive selective or targeted prevention methods developed especially for students with early signs or symptoms of emotional or behavioral problems but who have not yet developed a diagnosable disorder. This tiered service delivery approach requires reliable and valid tools for assessing and monitoring social-emotional competencies (see Goldstein & Brookes, 2005 and Naglieri & LeBuffe, 2005).

Progress has been made in recent years in operationalizing assessment of social-emotional competencies into practical measurement tools. Rating scales have been developed to measure protective factors that quantify children's social-emotional strengths related to resilience. For example, the Resiliency Scales for Children and Adolescents (Prince-Embury, 2005) measure areas of perceived strength and/or vulnerability related to psychological resilience along three dimensions (Sense of Mastery, Sense of Relatedness, and Emotional Reactivity). Additionally, a series of resilience scales have been published by researchers at the Devereux Center for Resilient Children. These include the Devereux Early Childhood Assessment for Infants and Toddlers (Mackrain, LeBuffe, & Powell, 2007), the Devereux Early Childhood Assessment (LeBuffe & Naglieri, 1999), the Devereux Student Strengths Assessment (DESSA; LeBuffe, Shapiro, & Naglieri, 2009) for children in kindergarten to eighth grade, and the DESSA-mini (Naglieri, LeBuffe, & Shapiro, 2011) for universal screening of social-emotional strengths. The availability of carefully developed measures of protective factors related to resilience offers the opportunity to examine validity questions related to these new instruments, especially as they may be used for universal screening.

The logistical demands of universal screening cannot be underestimated. For example, group assessment of academic skills using standardized achievement tests or those that assess state standards provides one way to assess academic progress. However, such measures consume a considerable amount of time and effort on the part of school personnel. Similarly, evaluation of emotional and behavioral problems and social-emotional competencies has been assessed using rather lengthy rating scales completed by a parent or teacher. An alternate solution is to use a brief measure of social-emotional competence—one that is predictive but not prescriptive in nature. The DESSA-mini was designed to meet this goal. However, beyond initial findings presented in the DESSA-mini manual (Naglieri et al., 2011), no studies that examine the extent to which this 8-item rating scale predicts scores obtained on the full 72-item DESSA have yet been reported. The goal of this study was, therefore, to assess the reliability of the four forms of the DESSA-mini by grade and to evaluate the accuracy of identification rates by form across grades.

METHODS

Participants

This study used the DESSA-mini standardization sample, which comprised 1,250 ratings of girls (49.4%) and boys (50.6%) in kindergarten through eighth grade. The sample was designed

Table 1
Numbers of Students Rated by Teachers by Grade and Region

Grade	Total <i>N</i>	Northeast		South		Midwest		West	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Kindergarten	270	75	27.8	99	36.7	52	19.3	44	16.3
1	190	31	16.3	79	41.6	36	18.9	44	23.2
2	187	38	20.3	86	46.0	31	16.6	32	17.1
3	156	41	26.3	70	44.9	35	22.4	10	6.4
4	149	62	41.6	48	32.2	26	17.4	13	8.7
5	146	35	24.0	58	39.7	36	24.7	17	11.6
6	60	6	10.2	14	23.7	28	47.5	11	18.6
7	36	4	11.1	18	50.0	12	33.3	2	5.6
8	44	12	27.3	11	25.0	19	43.2	2	4.5
Median			24.0		39.7		22.4		11.6
US Population			17.4		36.3		22.2		24.0

Note. The U.S. population data are based on the 2006 figures for 5- through 14-year-olds only in “Resident Population by Age and Sex: 1980 to 2006, Table 7,” in the *Statistical Abstract of the United States: 2008* (127th edition; U.S. Census Bureau, 2008).

to represent the U.S. population with regard to gender, grade, geographic region, race, Hispanic origin, and socioeconomic status, based on free or reduced-lunch eligibility status. Ratings were obtained from teachers, co-teachers, and before- and after-school staff across the United States. Table 1 provides the numbers of cases per grade and region of the United States. As can be seen, the percentages vary from grade to grade, but overall, percentages are similar to those for the U.S. population. Table 2 includes information about the racial and ethnic composition of the sample. There is some inconsistency between the U.S. population and the current sample regarding the percentages of Whites and African Americans. Naglieri et al. (2011) reported, however, that this imbalance has minimal effect because the means for the four DESSA-minis for African Americans were within a half a *T*-score of the normative mean of 50, and the means for Whites were no more than two *T*-scores from the mean of 50. More details about the sample are included in the DESSA-mini manual (Naglieri et al., 2011).

Measures

Devereux Student Strengths Assessment-mini. The DESSA-mini (Naglieri et al., 2011) is a measure of social–emotional competence using positively worded items related to resilience. The DESSA-mini is comprised of four eight-item parallel forms designed to be technically sound, user-friendly screening and progress monitoring tools that help determine whether additional skill development is needed to prevent social–emotional problems from developing. The rater reads the stem: “During the past four weeks, how often did the child . . .” and then rates questions such as “accept responsibility for what she/he did” or “keep trying when unsuccessful” and “show good judgment.” Each item is rated using a 5-point Likert-type scale ranging from 0 to 4 (Never = 0, Rarely = 1, Occasionally = 2, Frequently = 3, Very Frequently = 4). Total raw scores range from 0 to 32, with high scores suggesting higher levels of social–emotional competency. Raw scores are converted to *T*-scores ($M = 50$, $SD = 10$) based on comparison with a large normative sample of 1,250 individuals in kindergarten through eighth grade, rated by teachers or staff in schools and in after-school programs. The sample closely approximated the kindergarten to eighth-grade population

Table 2
Numbers of Students Rated by Teachers by Grade and Race, and Ethnicity ($N = 1,269$)

Grade	White		Black		Asian		Other		Hispanic		Non-Hispanic	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
K	123	44.1	83	30.7	2	0.7	2	0.7	69	25.6	210	75.3
1	78	39.8	50	26.3	4	2.1	0	0.0	64	33.7	132	67.3
2	91	47.6	44	23.5	3	1.6	4	2.1	49	26.2	142	74.3
3	58	36.9	54	34.6	3	1.9	0	0.0	42	26.9	115	73.2
4	60	38.2	62	41.6	8	5.4	0	0.0	27	18.1	130	82.8
5	60	41.1	44	30.1	4	2.7	3	2.1	35	24.0	111	76.0
6	40	65.6	8	13.3	0	0.0	3	4.9	10	16.7	51	83.6
7	27	73.0	8	22.2	0	0.0	0	0.0	2	5.6	35	94.6
8	28	62.2	15	34.1	0	0.0	0	0.0	2	4.5	43	95.6
K–8	565	44.5	368	29.0	24	1.9	12	0.9	300	23.6	969	76.4
U.S. Population		76.3		15.4		4.0		1.4		19.9		80.1

of the United States with respect to age, gender, geographic region of residence, race, ethnicity, and socioeconomic status. The DESSA-mini yields one score, the Social–Emotional Total (SET). The authors recommend that the SET *T*-score value of 40 (1 *SD* below the normative mean) be used as the cutoff score that indicates a need for social–emotional instruction.

The DESSA-mini was developed by selecting items from the larger 72-item DESSA (LeBuffe et al., 2009). Efforts were made to ensure that the four forms had similar raw-score means and *SD*s, reliability, adequate coverage based on item content, and good relationships to the DESSA total score. Naglieri and colleagues (2011) found that the four DESSA-mini raw scores correlated highly (in the low to mid-.90s) with scores from the 72-item DESSA (with correction for overlap).

Devereux Student Strengths Assessment

The DESSA (LeBuffe et al., 2009) is a 72-item standardized, norm-referenced behavior rating scale designed to broadly assess social–emotional competencies related to resilience in children. The scale is completed by parents, teachers, or staff at child-serving agencies, including before- and after-school, social service, and mental health programs for children in kindergarten through the eighth grade. The DESSA standardization sample closely approximates the kindergarten through eighth-grade population of the United States on the basis of age, gender, geographic region of residence, race, ethnicity, and socioeconomic status (LeBuffe et al., 2009). A total of 2,494 children and youth in kindergarten through eighth grade represented the standardization sample. Ratings were obtained from teachers and teacher aides ($n = 778$), from parents and other adults living with the child ($n = 1,244$), and from after-school and other program staff ($n = 472$) ratings. (See the DESSA manual [Naglieri et al., 2011] for details, including evidence of reliability and validity.) The DESSA yields a total *T*-score ($M = 50, SD = 10$), as well as *T*-scores for eight conceptually derived social–emotional competence scales intended to be used to guide instruction and intervention. The scales included in the DESSA form a composite score called the SEC. This score, which is based on the combination of the eight scales, provides an overall indication of the strength of the child’s social–emotional competence. The eight subscales measure Self-Awareness (7 items), Social Awareness (10 items), Self-Management (11 items), Goal-Directed Behavior (10 items), Relationship Skills (10 items), Personal Responsibility (9 items), Decision-Making (8 items), and Optimistic Thinking (7 items).

Table 3
 DESSA-Mini Internal Reliability Coefficients by Grade ($N = 1,234$)

Grade	Mini 1		Mini 2		Mini 3		Mini 4	
	<i>N</i>	Alpha	<i>N</i>	Alpha	<i>N</i>	Alpha	<i>N</i>	Alpha
K	270	.913	270	.919	269	.916	269	.915
1	188	.905	188	.917	188	.917	188	.897
2	187	.909	187	.910	187	.916	187	.893
3	155	.929	155	.916	156	.924	155	.916
4	148	.918	149	.915	148	.913	149	.908
5	146	.942	145	.938	146	.949	146	.933
6	60	.921	60	.916	60	.929	60	.919
7	36	.920	36	.914	36	.937	36	.933
8	42	.902	44	.914	44	.930	44	.898
Median	–	.918	–	.916	–	.924	–	.915

RESULTS

The first step was to extract the sum of the raw scores for each DESSA-mini from the full 72-item DESSA using the standardization sample. Once the raw scores were obtained, they were converted to *T*-scores using the conversion tables included in the DESSA-mini manual. We then computed Cronbach's alpha reliability coefficients by grade (see Table 3) and obtained values that ranged from a low of .89 (Grade 2, Mini 4) to a high of .95 (Grade 5, Mini 3). These results extend considerably what is presented in the DESSA-mini manual. They also exceed standards suggested by Bracken (1987) and provide evidence that the SET *T*-scores of the four DESSA-mini forms have excellent internal reliability. The means and *SD*s for each form of the DESSA-mini and for the DESSA SEC *T*-score were obtained. The results, provided in Table 4, suggest that the average DESSA SEC *T*-scores and the SET *T*-scores of each of the four DESSA-mini forms differed only slightly. In fact, the largest *d*-ratio, which describes the differences between the means in average *SD* units calculated according to Cohen's (1988) formula, was only .023. This does not come close to the .2 needed to be considered an interpretable difference. These findings indicate that there is remarkable consistency between the eight-item DESSA-mini and the 72-item DESSA.

Next, to obtain a general picture of the consistency of prediction, we calculated the percentage of instances in which both the DESSA SEC and DESSA-mini SET *T*-scores yielded the same result (i.e., the child is below or above the benchmark *T*-score value of 40, 1 *SD* below the normative mean). The median percentages of agreement across the grades presented in Table 5 ranged from 94.8% (Mini 3) to 96.5% (Mini 1). These findings indicate that the *T*-scores obtained using the DESSA SEC and the SET of all of the DESSA-mini forms were consistent about 95% of the time. Thus, practitioners can be confident that decisions made on the basis of a score on each of the DESSA-mini forms would be consistent with the overall decision made on the full 72-item version about 95% of the time. Next, we conducted a more in-depth analysis of the accuracy of the DESSA-mini SET *T*-score as a predictor of DESSA SEC *T*-scores.

To more completely examine the degree to which predictions made using the DESSA-mini SET *T*-score are consistent with those obtained using the DESSA SEC *T*-score, we calculated sensitivity, specificity, and positive and negative predictive power. The results are provided in Table 6. The sensitivity results for each of the four DESSA-mini forms provide a measure of the proportion of those instances in which the DESSA-mini SET *T*-scores and the DESSA SEC

Table 4
DESSA and Each DESSA-Mini Means, SDs, and Numbers by Grade

Grade	DESSA SEC		Mini 1		Mini 2		Mini 3		Mini 4		d-ratio					
	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	SEC-1	SEC-2	SEC-3	SEC-4
K	51.0	10.1	269	51.4	10.0	270	51.6	10.3	267	51.0	10.1	270	.002	.002	.000	.001
1	49.0	8.7	187	49.5	8.9	188	49.8	9.0	187	49.8	8.9	190	.003	.004	.004	.003
2	49.9	9.2	187	50.3	9.3	187	50.8	9.4	186	50.3	9.3	186	.002	.005	.002	.003
3	49.3	10.1	155	49.6	10.5	155	50.0	10.0	155	49.4	10.0	156	.002	.004	.001	.004
4	52.8	9.6	148	53.5	9.5	148	53.2	9.3	147	52.9	9.6	148	.004	.003	.000	.002
5	49.4	10.6	145	50.0	10.3	145	49.6	10.5	145	50.1	10.8	146	.005	.002	.005	.005
6	50.9	9.4	60	51.8	9.5	60	51.2	9.6	58	51.8	9.5	58	.015	.005	.016	.012
7	48.0	9.1	36	47.9	9.1	36	47.9	9.1	36	48.8	9.6	36	-.001	-.002	.023	.012
8	47.5	9.5	42	48.5	9.9	42	47.1	10.0	44	48.2	10.6	43	.023	-.011	.016	-.001

Note. Differences between the DESSA SEC and each DESSA-Mini T-scores were compared using the following formula:

$$\frac{(X_{SEC} - X_{Mini})}{\sqrt{\frac{(n_{SEC} \times SD_{SEC}^2 + n_{Mini}^2 \times SD_{Mini}^2)}{(n_{SEC} + n_{Mini})}}}$$

Table 5
Prediction Consistency Between the DESSA and Each DESSA-Mini

Grade	Mini 1			Mini 2			Mini 3			Mini 4		
	N	n of Agreements	% Agreements	N	n of Agreements	% Agreements	N	n of Agreements	% Agreements	N	n of Agreements	% Agreements
K	267	258	96.6	267	254	95.1	267	253	94.8	267	256	95.9
1	187	178	95.2	187	180	96.3	187	178	95.2	187	177	94.7
2	186	176	94.6	186	179	96.2	186	176	94.6	186	179	96.2
3	155	147	94.8	155	149	96.1	155	151	97.4	155	153	98.7
4	147	143	97.3	147	140	95.2	147	141	95.9	147	136	92.5
5	144	139	96.5	144	140	97.2	144	136	94.4	144	135	93.8
6	58	57	98.3	58	57	98.3	58	54	93.1	58	56	96.6
7	36	35	97.2	36	36	100.0	36	35	97.2	36	34	94.4
8	42	38	90.5	42	38	90.5	42	36	85.7	42	41	97.6
Median			96.5			96.2			94.8			95.9

Table 6
Sensitivity, Specificity, and Positive and Negative Predictive Power for Each DESSA-Mini

	Sensitivity	Specificity	Positive Predictive Power	Negative Predictive Power
Mini 1	.770	.848	.912	.963
Mini 2	.810	.845	.892	.969
Mini 3	.793	.836	.831	.966
Mini 4	.799	.842	.869	.967

T-scores both indicated that the child was in need of instruction (i.e., *T*-scores < 41), using the formula: Sensitivity = True Positives/(True Positives + False Negatives). Specificity identifies the proportion of individuals who earned a *T*-score greater than 40 on the DESSA and each DESSA-mini form, using the formula: Specificity = (True Negatives/(True Negatives+ False Positives)). Once again, there was very good correspondence between the two measures. Positive predictive power provides an index of the proportion of the sample that earned *T*-scores of 40 or less on the DESSA-mini and also had a *T*-score of 40 or less on the DESSA. This measures the extent to which a need suggested by the DESSA-mini is confirmed by the DESSA using the formula: Positive Predictive Power = (True Positives/(True Positives + False Positives)). The DESSA-mini forms performed very well on this measure.

Negative predictive power identifies the proportion of those who earned high DESSA-mini scores and also high DESSA scores, using the formula: Negative Predictive Power = (True Negatives/(True Negatives + False Negatives)). Negative predictive value indicates the extent to which a score that does not exceed the benchmark on the DESSA-mini is confirmed by the DESSA. On this indicator, the DESSA-minis were most effective. In general, the results varied from a low of about .80 for sensitivity values to a high of .97 in negative predictive power. These findings provide very good support for the value of the four DESSA-mini forms along all criteria of sensitivity, specificity, and positive and negative predictive power.

Finally, a receiver operating characteristic curve analysis was conducted, and the results are provided in Table 7 by grade. The area under the curve represents the relationship between the sensitivity and specificity. The optimal outcome is to have 100% sensitivity (no false negatives) and 100% specificity (no false positives). The values for the area under the curve ranged from a low of .739 (Grade 4, Mini 4) to a high of 1.00 (Grade 7, Mini 2). These findings suggest that the DESSA-mini forms showed considerable sensitivity and specificity.

DISCUSSION

The overarching goal of this investigation was to examine the relationships between ratings obtained using the four eight-item forms of the DESSA-mini in relation to ratings obtained using the 72-item DESSA for the large representative normative sample of 1,234 children in grades kindergarten through 8. The four forms of the DESSA-mini showed excellent internal reliability (range = .915 for Mini 1 to .924 for Mini 3). The differences between the mean DESSA SEC *T*-scores and the means of the four DESSA-minis SET *T*-scores were trivial (the largest *d*-ratio was .023), and the percentage of times the DESSA-mini SET and DESSA SEC *T*-scores yielded the same categorical result (i.e., the child does or does not need social-emotional instruction) was also high (range = 94.8% for Mini 3 to 96.5% for Mini 1). Importantly, sensitivity, specificity, and positive and negative predictive power findings suggested that the DESSA-mini is a viable tool for universal screening of social-emotional competencies related to resilience.

Table 7
Receiver Operating Characteristic Curve by Grade

	Area Under the Curve	Standard Error	Confidence Interval	<i>p</i>
Grade K				
Mini 1	.873	.046	.782 – .964	<.001
Mini 2	.905	.038	.830 – .980	<.001
Mini 3	.862	.046	.772 – .953	<.001
Mini 4	.882	.044	.796 – .968	<.001
Grade 1				
Mini 1	.859	.053	.755 – .963	<.001
Mini 2	.865	.053	.762 – .969	<.001
Mini 3	.875	.050	.777 – .973	<.001
Mini 4	.856	.053	.752 – .960	<.001
Grade 2				
Mini 1	.845	.057	.734 – .956	<.001
Mini 2	.890	.050	.792 – .987	<.001
Mini 3	.863	.054	.758 – .968	<.001
Mini 4	.907	.045	.818 – .996	<.001
Grade 3				
Mini 1	.901	.046	.812 – .991	<.001
Mini 2	.909	.045	.820 – .998	<.001
Mini 3	.985	.009	.962 – 1.000	<.001
Mini 4	.958	.033	.000 – 1.000	<.001
Grade 4				
Mini 1	.875	.065	.743 – 1.000	<.001
Mini 2	.781	.079	.626 – .936	<.001
Mini 3	.840	.071	.701 – .979	<.001
Mini 4	.739	.081	.579 – .898	.002
Grade 5				
Mini 1	.922	.041	.840 – 1.000	<.001
Mini 2	.940	.036	.838 – 1.000	<.001
Mini 3	.880	.049	.785 – .975	<.001
Mini 4	.876	.049	.781 – .971	<.001
Grade 6				
Mini 1	.929	.079	.000 – 1.000	<.001
Mini 2	.990	.012	.000 – 1.000	<.001
Mini 3	.899	.080	.000 – 1.000	.001
Mini 4	.980	.017	.000 – 1.000	<.001
Grade 7				
Mini 1	.929	.079	.000 – 1.000	.001
Mini 2	1.000	.000	1.000 – 1.000	<.001
Mini 3	.929	.079	.000 – 1.000	.001
Mini 4	.966	.029	.000 – 1.000	<.001
Grade 8				
Mini 1	.834	.091	.639 – 1.000	.002
Mini 2	.869	.079	.630 – 1.000	<.001
Mini 3	.803	.092	.622 – .984	.004
Mini 4	.950	.056	.000 – 1.000	<.001

(Continued)

Table 7
Continued

	Area Under the Curve	Standard Error	Confidence Interval	<i>p</i>
Grades K-8				
Mini 1	.879	.019	.841 – .917	<.001
Mini 2	.897	.018	.862 – .932	<.001
Mini 3	.883	.018	.847 – .920	<.001
Mini 4	.890	.018	.854 – .925	<.001

These findings should be considered in light of an important limitation of this study. That is, the scores used to examine the relationships between the DESSA and DESSA-minis were obtained from the same administration. Examination of the DESSA-mini forms in relation to the DESSA would ideally involve administering these two measures separately in counterbalanced order. Such a study would be difficult to achieve with a sample size equivalent to that used in this study; thus, the methodology used here has the clear advantage of the stability of findings based on such a large representative sample. However, the issue of item overlap was addressed by Naglieri et al. (2011) in the DESSA-mini manual in two ways. First, DESSA-mini raw scores were correlated with the total DESSA raw score *excluding* the eight items included in each respective DESSA-mini form. All of the resulting correlations were significant ($p < .01$) and very high (range = .93 to .96). Second, in an independent study, DESSA-mini *T*-scores were correlated with DESSA *T*-scores obtained for 43 children. The correlation between the two sets of scores obtained with separate administrations of the two forms was high (.87) and significant ($p < .01$). The current study, in conjunction with the two studies provided in the DESSA-mini manual, provide strong evidence that the SET scores of the four DESSA-mini forms are excellent predictors of the DESSA SEC score. When placed within the context of findings for other research involving short forms, these findings are particularly encouraging.

The accuracy and efficiency of the DESSA-mini compare favorably with other commonly used screening instruments used in schools. For example, Reynolds and Kamphaus (2007) reported that the Behavioral and Emotional Screening System sensitivity rates ranged from 53% to 80% and specificities ranged from 90% to 95% when predicting BASC-2 scores. The Dynamic Indicators of Basic Early Literacy (Kaminski & Good, 1996) has good sensitivity (80%-100%) but limited specificity rates, ranging from 21% to 40% (Hintze, Ryan, & Stoner, 2003). The evidence from our study demonstrates a good balance of sensitivity and specificity as well as positive and negative predictive power. These findings suggest that the four eight-item DESSA-mini forms have the psychometric quality to effectively meet the logistical demands of universal screening for social-emotional competencies. The results also illustrate how the DESSA-mini adds to a growing literature on tools for universal screening in the schools.

Additional examination of the validity of the DESSA-mini forms, however, is needed. For example, it is important to determine whether DESSA-mini scores are sensitive to changes in social-emotional competencies. This, of course, requires effective instructional methods for improving these competencies. Researchers should also examine the relationships between the DESSA-mini forms and academic achievement and whether differences in scores are related to important demographic variables, such as socioeconomic levels, family status, and geographic region.

The availability of an efficient, effective, and practical universal screening tool in the social-emotional domain can enhance the practice of school psychology and student outcomes in several important ways. First, it can assist school psychologists in complying with the new Integrated and

Comprehensive School Psychological Services Model (National Association of School Psychologists, 2010). These new standards emphasize the importance of using valid and reliable assessment tools and methods to measure not only deficits, but also the strengths of students, including those related to social–emotional competence and resilience. The model clearly conveys that school psychology should be concerned with the promotion of social–emotional competence and resilience in all students. The DESSA-mini provides an important tool for use at the universal level in meeting these expectations.

Second, there is growing evidence that social–emotional competence is related to academic achievement and other important student outcomes. Durlak, Weissberg, Dymnicki, Taylor and Schellinger (2011) conducted a meta-analysis of school-based social and emotional learning programs implemented at the universal level. Their review included 213 studies involving more than 250,000 children. Among other outcomes, they report that well-implemented social and emotional learning programs have sustained positive effects on student attitudes, behavior, and academic achievement. The DESSA-mini provides an efficient, effective means of identifying those children whose social–emotional competencies are low compared with a large representative sample and who, therefore, might benefit from social and emotional learning programs implemented with integrity. The relationship between social–emotional competence and academic achievement suggests that enhancing a student's social and emotional skills might also positively influence their academic achievement. Therefore, a universal screener that supports social–emotional learning programs also will help the schools to meet their mission of promoting academic achievement.

Third, a growing number of state departments of education as well as local school districts are adopting social and emotional learning standards. Districts are being challenged to demonstrate their progress in meeting these new standards. Recently, to assist these districts in identifying appropriate measures, both the Collaborative for Academic, Social, and Emotional Learning (Denham, Ji, & Hamre, 2010) and the Raikes Foundation (Haggerty, Elgin, & Woolley, 2011) have published reviews of social and emotional assessments that are appropriate for use in the schools. The DESSA and the DESSA-mini are included in these reviews. To meet these standards, many districts are adopting social and emotional learning programs to enhance the skills of their students. The DESSA-mini can assist school personnel in determining children, classrooms, or grade levels with the greatest needs and evaluating the individual and programmatic impact of these programs.

Finally, and perhaps most importantly, the DESSA-mini can support universal efforts to not only promote social–emotional competence but also to help prevent emotional and behavioral disorders. These tools can help identify students who are at risk of developing social and emotional disturbances because of poor social and emotional skills. Of critical importance, at least some of these students can be identified before the problem behaviors begin to emerge. Although much more research remains to be done, strength-based screeners and assessments such as the DESSA-mini and DESSA raise the possibility that we might now be able to effectively identify children in need of support before the problem behaviors emerge. For these and other reasons, the DESSA-mini and the DESSA provide important new tools to school psychologists, administrators, and teachers to promote the social-emotional competence of children in kindergarten through the eighth grade.

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