J Child Fam Stud (2009) 18:746–753
DOI 10.1007/s10826-009-9287-5

ORIGINAL PAPER

An International Assessment of the Emotional and Behavioral Strengths of Youth

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Published online: 24 June 2009

Abstract The assessment of emotional and behavioral strengths has been identified as an important part of the assessment process for children referred for specialized services. The Behavioral and Emotional Rating Scale-2 (BERS-2; Epstein, Behavioral and Emotional Rating Scale: a strength-based approach to assessment. PRO-Ed, Austin, TX, 2004) was developed as a standardized, norm-referenced instrument to measure strengths of children and youth, and has been found to be a psychometrically sound instrument. We determined the psychometric characteristics of the BERS-2 with a Finnish sample. The BERS-2 was translated in Finnish and 608 Finnish 9th graders filled in the self-evaluation. Results showed that the five subscales of BERS-2 have good reliability and formed a strong strength index. In general, females scored higher than males and special education students scored lower than non-special education students. This study suggests that the translated version of BERS-2 is a valid and reliable instrument in Finland.

Keywords Assessment · Strengths · Emotional and behavior disorder (EBD) · Special education

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Introduction

Assessment is conducted to make important decisions about children. These decisions involve screening, diagnosing, and placing children into specialized educational and social service programs and then evaluating the outcomes of these programs. Several assessment models are used to collect information for decision-making purposes. While these models differ with respect to assumptions, measures, and data-collection procedures, they are focused on and oriented to identifying deficits, problems and pathologies in children. In the area of children with emotional and behavioral disorders (EBD), several assessment measures are available that specify children's problems. Overall these measures possess very good psychometric properties and are useful in identifying children for services. While these scales are useful in identifying children in need of specialized services, they may not be helpful in describing the child or developing a child's support or treatment plan (Albrecht and Braaten 2008; Cox 2006; Drolet et al. 2007; Farmer et al. 2005; Furlong et al. 2007; Rhee et al. 2001).

Recently there has been an emerging emphasis on recognizing children's and youth's strengths and developing strength-based assessment and rating scale instruments for use in education, mental health, social work and family services (Albrecht and Braaten 2008; Cohn et al. 2009; Cox 2008; Drolet et al. 2007; Laursen 2000, 2003; Oswald et al. 2001; Pollard and Rosenberg 2003; Rhee et al. 2001; Van Roy et al. 2006). Strength-based assessment is defined 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 (Epstein 2004). Character strengths are related to achievement, life satisfaction, and well-being of children and youth (Nansook and Christopher 2008). A strength-based orientation views the students and family as individuals with unique talents, skills, and life events as well as having specific unmet needs. When assessment and interventions are based on strengths students and families are more likely to become full participants in the supporting practices.

In response to the need for a standardized, norm-referenced instrument whose primary purpose is measuring strengths of children and youth the Behavioral and Emotional Rating Scale (BERS; Epstein and Sharma 1998) was developed. The BERS-2 assesses the emotional and behavioral strengths of children 5–18 years of age and allows for parent, youth and teacher (professional) ratings. The scale consists of 52 items judged on a four-point Likert-type scale (0 = not at all like the child; 3 = very much like the child). Factor analyses indicated that the BERS overall strength index consists of five factors: Interpersonal Strength, Family Involvement, Intrapersonal Strengths, School Functioning, and Affective Strengths (Epstein et al. 2002). Validity and reliability studies of the original BERS (Epstein 1999; Epstein et al. 2002; Epstein and Sharma 1998; Harniss et al. 1999; Trout et al. 2003) and restandardized BERS-2 (e.g., Mooney et al. 2005; Synhorst et al. 2005; Epstein et al. 2004) indicate that the measure is psychometrically sound. To date, the BERS-2 has been used in a variety of school, mental health, and child welfare settings for planning, evaluation and research purposes.

The original factor analytic research on the BERS identified a 5-factor model of emotional and behavioral strengths of children when rated by their teachers or other professionals (Epstein and Sharma 1998). In the restandardization and further development of the BERS-2, a confirmatory factor analysis of a nationally representative sample of parents and youth replicated the five-factor structure of the BERS (Buckley et al. 2006). More recently, this research was extended to a national sample of parents/caregivers of children with serious emotional disturbance. As in the earlier studies, a confirmatory factor analysis replicated the overall model of strengths in this population (Trout et al. 2009). To date, the results of this research indicate that the BERS-2 is a psychometrically sound system that adequately operationalizes the construct of behavioral and emotional strengths of children in the United States.

The concept of strength based assessment is relevant not only to a US audience but to an international audience as well. International educators, mental health, and social service practitioners and researchers have called for the use of strength based assessment for promoting students development and achievement, planning support services and research purposes (e.g., Finnish National Board of Education 2004; Galassi and Akos 2007; Pollard and Lee 2003; Van Roy et al. 2006). For instance in the field of special education in Europe there is a move away from a medical deficit model of assessment into assessment that uses a more educational and interactional approach. It has been suggested that this can increase the likelihood of successful inclusion of students with disabilities into general education settings as the assessment is based on students strengths and applies assessment findings directly to strategies for teaching and learning. The parents' and students' roles are central in this assessment process as well as general education teachers, special education teachers and related staff (Watkins 2007).

Regardless how well documented the psychometric properties of a test at the time that it is developed, it is necessary to determine these properties when the test is used in another culture or when translated from one language to another language. Well-accepted test standards require that when an instrument is translated for use in another culture that its psychometric properties, specifically, its structure, reliability, and validity need to be evaluated and re-established (American Educational Research Association, American Psychological Association, National Council on Measurement in Education 1999; Cha et al. 2007). Two changes in a test, in particular, require the further study of its psychometric properties (Geisinger 1994): (a) when tests are significantly modified such as translated from one language to another and (b) when tests are used with a population not in the original norming and standardization process.

In recent years in Finland, there has been increased interest to recognize children's and youth's strengths (e.g., Finnish National Board of Education 2004), yet to date there have been no valid and reliable assessment instruments that measure the emotional and behavioral strengths of school age children. Thus, the main purpose of the present study was to begin to assess the psychometric properties of a Finnish version of the BERS-2. Specifically, the study had several purposes. First, we determined whether the original BERS-2 strength index could be replicated in a group of Finnish school children. Second, we determined the internal consistency, a type of reliability, and intercorrelations of the subscales of the Finnish BERS-2. Third, we determined if any differences existed between Finnish boys and girls. Finally, we assessed whether there were any differences in the strength index score and subscale scores between special education and non-special education students, which would be an assessment of the test's convergent validity.

Methods

Participants

The Finnish sample ($N = 608$; mean age 15.5 years) consisted of 9th graders (the last grade of compulsory education) at an upper elementary school from a middle size Finnish city ($N = 497$; 47.7% girls) and a group of 9th graders ($N = 111$; 48.6% girls) from a metropolitan area in Finland. The students were studying in 36 classrooms from 6 different comprehensive schools. In general, the sample well-represented the age group student population in the two cities sampled as practically all children from the different socioeconomic backgrounds go to public schools in Finland for their education. The sample included 188 (30.9%) students who had received part-time special education support in grades 7–9 (hereafter referred to as special education students) and 420 (69.1%) students who had not received special education support. Information on special education status was not received on 18 (3%) students. Part-time special education is a flexible support system within the Finnish school system. Specific diagnoses are not required for eligibility to part-time special education support. Rather, any student having difficulties with a school subject or who behaves inappropriately may be referred to part—time special education for a period of time. Usually a student will receive individual or small group instruction in the specific subject that he or she has difficulties with 3–4 hours a week outside of the general education setting.

Measures

The BERS–2 Youth Rating Scale consists of 52 items that measure children's emotional and behavioral strengths. The BERS-2 consists of 5 subscales (Interpersonal Strength, Family Involvement Intrapersonal Strength, School Functioning, Affective Strength) as well as an overall Strength Index score.

During autumn 2006 the BERS-2 was translated first in Finnish by researches and thereafter translated back into English by a professional translator, who had received the information on the content and purpose of BERS-2 and was familiar with the Finnish school culture. To ensure language and content equivalence, the back-translation version was compared with the original version, differences were discussed, and consensus on the needed modifications agreed between the researches and the translator. The wording of two of the original BERS-2 items was modified to make them compatible with the Finnish culture ("I join in community activities" was changed into "I participate activities outside of home" and "I go to religious activities" changed into "I participate in celebrations with my family").

Procedures

BERS-2 Youth Rating Scale data collection were part of a larger data collection effort related to a research project called "Behavioral and emotional strengths of youth". The aim of the project was to clarify reliability and validity of BERS-2 and determine the suitability of strength-based assessment in the Finnish school-context. The study design was approved by the school authorities from both sample locations. Before data collection the headmasters and teachers of each school as well as students themselves were informed about the purpose of the study. All students consented to participate in the study. Data were collected during spring 2007 (March–May) and four special education undergraduate students administered the questionnaires in groups, and they were completed during students' regular school hours. All of the students were capable of reading and comprehending the items of the Finnish BERS-2.

Analysis

Subscales of the translated version of BERS-2 were formed in a similar fashion as in the original study (Epstein 2004). For each of the four subscales, the raw scores were converted to standard scores with a mean of ten and a standard deviation of three. Then the sum of the subscale standard scores was converted into an overall strength index with a mean of 100 and a standard deviation of 15.

Confirmatory factor analysis (CFA) was used to test whether the five subscales of BERS-2 established earlier (Epstein 2004) form an overall strength index. CFA with Robust Maximum Likelihood estimation (MLR) was conducted using M*plus* 5.0 (Muthén and Muthén 2007). The model fit was assessed with the chi-square test and several other goodness-of-fit indices. These include the root-mean-square of approximation (RMSEA), the standardized root-mean-square residual (SRMR), and the comparative fit index (CFI). Each fit index evaluates a different aspect of the model fit, and each has a specific criterion for demonstrating goodness-of-fit. For the RMSEA, the recommended cutoff value for a reasonable fit is ≤ 0.11, and the value of 0.05 or less indicates a close fit of the model (Browne and Cudeck 1993). For the SRMR, the cutoff value is ≤ 0.08, and for the CFI values above 0.90 indicate a good model fit (Hu and Bentler 1999).

Reliabilities for the subscales and the overall strength index were calculated for the total sample and separately for males, females, special education students and students not receiving special education services. Finally, *t*-tests

were conducted contrasting the performance of males and females and students with and without special education services.

Results

Confirmatory Factor Analysis

Results from the CFA analysis indicated that the subscales clearly formed a strong strength index (see Fig. 1) very similar to the original model reported by Epstein (2004). The model fit was good and was improved by allowing the correlation between the error variances of intrapersonal strength and affective strength. According to Hopkins (2002), all standardized factor loadings associated with the five subscales fell within the medium to very large range. Statistical values for all the goodness-of-fit indices except the chi-square-test reached those recommended by Hu and Bentler (1999) as indicative of good model fit, $\chi^2(4) = 21.19$, $p > .05$, RMSEA = .08, SRMR = .02, CFI = .98.

Subscale Intercorrelations and Internal Consistency Correlations

The correlation matrixes for the subscales' standard scores are shown in Table 1, separately for girls (upper diagonal) and boys (lower diagonal). All of the coefficients in the table are statistically significant at beyond the .001 level. The coefficients range from .34 to .71; the median of the 20 coefficients was .54. According to Hopkins (2002) criteria, coefficients for the subscales fall within the moderate to large range. These findings indicate that the Finnish BERS subscales measure different aspects of behavioral and emotional strength and provide evidence for construct validity of the BERS.

Table 1 Intercorrelations of the strength subscales with Finnish girls and boys

	IS	FI	IaS	SF	AS
IS	–	.51	.57	.53	.63
FI	.59	–	.54	.49	.45
IaS	.67	.57	–	.49	.71
SF	.60	.50	.44	–	.41
AS	.58	.52	.63	.34	–

Note: Intercorrelations for girls ($n = 291$) in upper diagonal, and for boys ($n = 315$) in lower diagonal. All correlations $p < .001$

IS Interpersonal skills, *FI* family involvement, *IaS* intrapersonal skills, *SF* school functioning, *AS* affective strengths

To assess the homogeneity of the Finnish BERS, internal consistency reliabilities were calculated for the five subscales and total strength index score. Cronbach coefficient alphas were calculated for the entire sample and then separately for males, females, special education students and non-special education students. The alpha coefficients for the subscales and total scores for the total sample and subgroups were highly acceptable and ranged between .71 and .93 (see Table 2). The reliabilities did not have any meaningful variation between males and females or between special education students and other students. The large alphas in demonstrate that the Finnish BERS is equally reliable for all the subgroups investigated and support the premise that the test contains little or no bias relative to gender or education status.

Group Differentiation

There were small differences reported between males and females (see Table 3). No statistically significant differences were found on the interpersonal family and intrapersonal subscales. However, significant differences were noted on the school functioning and affective strength subscales as well as the overall strength index. In each case the females were judged as possessing more emotional and behavioral strengths than males. However, the effect sizes of the strength index and subscales differences were small in magnitude. Special education students with disabilities scored significantly lower on the overall strength index and all the subscales, except for family functioning and affective strength, than students without disabilities (see Table 3). According to Hopkins (2002) criteria, these differences ranged from small ($d = .29$) to moderate ($d = .35, .46$) to large ($d = .76$).

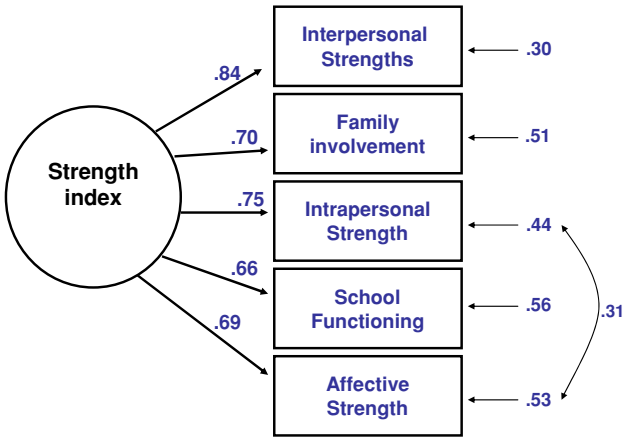

Fig. 1 The factor model of the strength index

Table 2 Cronbach alpha correlation coefficients of the BERS-2 subscales and strength index with selected Finnish subsamples

	Interpersonal strength	Family involvement	Intrapersonal strength	School functioning	Affective strength	Strength index
Male	.84	.77	.80	.84	.73	.93
Female	.82	.81	.80	.82	.75	.93
SNE students	.82	.77	.77	.82	.71	.92
Non-SNE students	.83	.79	.79	.79	.76	.93
Total	.83	.79	.79	.83	.75	.93

Table 3 Differences between males and females and students with and without special education services on the five BERS-2 subscales and strength index

	Mean (SD)		*t*-Values (effect size)	Mean (SD)		*t*-Values (effect size)
	Male	Female		SNE-students	Non-SNE students	
Interpersonal strength	9.85 (3.07)	10.16 (2.92)	1.29	9.39 (2.98)	10.25 (2.95)	3.30*** $d = .29$
Family involvement	9.92 (2.88)	10.09 (3.12)	.63	9.74 (3.04)	10.09 (2.96)	1.33
Intrapersonal strength	9.91 (2.94)	10.09 (3.06)	.72	9.40 (3.00)	10.25 (2.97)	3.22*** $d = .29$
School functioning	9.71 (3.10)	10.31 (2.86)	2.50* $d = .20$	8.54 (3.12)	10.68 (2.65)	8.59*** $d = .76$
Affective strength	9.43 (2.84)	10.61 (3.05)	4.90*** $d = .40$	10.07 (2.84)	9.94 (3.09)	.46
Strength index	98.53 (14.89)	101.59 (14.98)	2.53* $d = .20$	96.39 (14.76)	101.52 (14.72)	3.94*** $d = .35$
	$n = 315$	$n = 291$		$n = 187$	$n = 401$	

* $p < .05$; ** $p < .01$; *** $p < .001$; d Cohen's d

Discussion

While the psychometric properties of the BERS-2 have been repeatedly validated in the US, its psychometric properties have not been determined with an international group of children. The purpose of this study was to translate the BERS-2 into Finnish and to test the psychometric properties of the instrument in a Finnish context. Several findings emerged from this study. First, the major finding was that the five subscales and overall Strength Index emerged in a Finnish sample of children. The overall model fit was good and all subscales had medium to high loadings on the strength index. While the Chi-square statistic remained outside the desirable acceptance area that was probably caused by the relatively large sample size as all the other indices of goodness of fit implied excellent model fit. Second, the strength index and its subscales were internally consistent as shown by the relatively high Cronbach alpha values. The high internal reliability scores were demonstrated for males and females as well as students with and without special education needs. These findings are consistent with those reported in US samples (Epstein 2004), and indicate that the scales are reliable and highly stable. Third, the differences between boys and girls on the strength index and subscale scores were small with girls showing somewhat higher average strengths than boys. Again this finding is similar to those reported in US samples (Epstein and Sharma 1998). Finally, the difference between students with and without special education needs was significant with special education students scoring lower on the strength index and almost all of the subscales. The magnitude of these findings ranged between small and large. This finding is compatible with previous research conducted with US samples of students with and without disabilities (Epstein 2004; Reid et al. 2000) and provides support of the construct validity with a Finnish sample. This finding is particularly important, as special education students in Finland are a heterogeneous group of students. According to national statistics (Statistics Finland 2009) the primary reasons for special education need of students receiving part-time support are mathematical learning difficulties (32%), foreign language learning difficulties (31%), dyslexia (12%) and emotional or behavioral disorders (11%). Part-time special education refers to teaching that is organized for comprehensive school students when they have minor to mild difficulties in learning or adjustment. Including a student in part-time special education does not require making official administrative decisions (Kivirauma and Ruoho 2007). Overall, these findings clearly suggest that the translated Finnish version of BERS-2 is a valid and reliable instrument.

The movement towards inclusive education has become an internationally accepted goal. Educational inclusion focuses upon the development of the students potential in learning, communication, building relationships and socializing (Meijer 2003). Positive child and youth development involves nurturing and enhancing a variety of empirically identified student strengths or competencies.

Focusing on the predictors of positive outcomes by promoting social, emotional, behavioural, and cognitive competencies in children and youth can be seen as a key to preventing special educational needs as well as equipping students for adulthood (Galassi and Akos 2007).

According to Watkins (2007), one topic of assessment in inclusive settings is the development of new and different assessment methods and tools in many European countries. The role of early pedagogical assessment and support is crucial and puts great challenges on teachers, special educators and other professionals. Studies have shown that the development of students at-risk of learning and behavioural problems diverges very early from those who are not at-risk, and initial differences tend to increase rather than decrease (Stanovich 1986). Students with EBD especially manifest social, academic and language difficulties to such a degree that they need intensive and effective strategies to avoid negative outcomes (Kauffman and Landrum 2009; Webber and Plotts 2008). In addition emotional and behavior difficulties may have negative secondary consequences in adolescence and become a risk factor for marginalization (Lane and Carter 2006; Reid et al. 2004; Savolainen et al. 2008; Zigmond 2006). The potential effects of identifying a child or youth as having emotional and behavioral disorder necessitate the use of instruments that have empirically demonstrated high reliability and validity.

Several limitations of the present study should be noted. First, the obvious limitation was that the study was conducted on one age-group, namely ninth grade youth. A clear challenge for future research is to enlarge the scope of the study across the age-range of Finnish children and youth. In this way direct comparison between the US and Finnish samples can be conducted. Second, although the sample was large, it was a convenience sample and not representative of school-age children in Finland. Future researchers need to test the psychometrics of the Finnish BERS with a more broadly geographically representative sample of Finnish children. The study's results should be replicated with other school children to determine that the results are not unique to this study's sample. Third, there are limitations of the extent of the confirmatory factor analysis. For example, factor invariance was not examined for subsamples such as gender or ethnicity. In addition, no CFA tested second order factors underlying the five-factor structure to confirm the utility of the strength index. Further research is warranted evaluating demographic variables that may influence the factor structure underlying the Finnish BERS.

Additionally, as with all assessment instruments, more research needs to be conducted on the psychometric properties of the BERS-2 with a Finnish sample. First, parent and teacher ratings should be completed on a large representative sample of Finnish school children. Then, the factor structure and psychometrics, similar to the present study, could be replicated with these respondents. Second, there is a need to conduct additional reliability (e.g., test–retest and inter-rater reliability) and validity (e.g., convergent and discriminant validity) studies. These studies will aid in determining the psychometric characteristics of the BERS with a Finnish population. Third, future researchers need to study the predictive validity of the BERS subscales and strength-index in determining how well the BERS predict students' later emotional and behavioral strengths and difficulties. If the Finnish BERS shows acceptable predictive validity it could be a meaningful tool for universal early screening (primary prevention) of emotional and behavioral problems.

The value of a strength-based perspective extends well beyond the assessment and support of child and youth with special educational needs and may also be relevant to the prevention of later accumulated problems (Farmer et al. 2005). An instrument such as the BERS-2 that is based on strengths offers a positive starting point for teachers and parents for planning interventions aimed to prevent later problems of children. One of the biggest challenges to educators is the negative starting point in the collaboration with parents of children with EBD. A discussion beginning with an analysis of the strengths, which each and every child undoubtedly has, may offer important assistance in reaching some of the parents that otherwise might be defensive and unwilling to co-operate.

In this pilot study, the Finnish BERS demonstrated acceptable psychometric properties that enables professionals to confidently conduct strength-based assessment using this instrument. While more international research is definitely needed, the BERS appears to be a promising instrument appropriate for use by school and mental health workers not merely in the US but internationally as well. These results suggest that a strength based assessment approach may be effective as the foundation of a stable and potentially reliable assessment of youth. The BERS provides a concise and powerful means to gather and track essential information about children's behavioral and emotional strengths to support long-term gains in educational interventions. Strength based assessment has a great potential for charting, analyzing and, furthermore, promoting student well-being.

Acknowledgments This research was supported by The Competence Center of Pedagogical Wellbeing, University of Joensuu, Finland.

References

Albrecht, S. F., & Braaten, S. (2008). Strength-based assessment of behavior competencies to distinguish students referred for

disciplinary intervention from nonreferred peers. *Psychology in Schools, 45*, 91–103.

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: American Psychological Association.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sociological Methods & Research, 21*, 230–239.

Buckley, J. A., Ryser, G., Reid, R., & Epstein, M. H. (2006). Confirmatory factor analysis of the Behavioral and Emotional Rating Scale–2 (BERS-2) Parent and Youth Rating Scales. *Journal of Child and Family Studies, 15*, 27–37.

Cha, E. S., Kim, K. H., & Erlen, J. A. (2007). Translation of scales in cross-cultural research: Issues and techniques. *Journal of Advanced Nursing, 58*, 386–395.

Cohn, B., Merrell, K. W., Felver-Grant, J., Tom, K., & Endrulat, N. R. (2009). Strength-based assessment of social and emotional functioning: Sears-c and sears-a. Presented at the meeting of the National Association of School Psychologists Boston, MA.

Cox, K. F. (2006). Investigating the impact of strength-based assessment on youth with emotional or behavioral disorders. *Journal of Child and Family Studies, 15*, 287–301.

Cox, K. F. (2008). Tools for building on youth strengths. *Reclaiming Children and Youth, 16*, 19–24.

Drolet, M., Paquin, M., & Soutyrine, M. (2007). Strengths-based approach and coping strategies used by parents whose young children exhibit violent behaviour: Collaboration between schools and parents. *Child and Adolescent Social Work Journal, 24*, 437–453.

Epstein, M. H. (1999). Development and validation of a scale to assess the emotional and behavioral strengths of children and adolescents. *Remedial and Special Education, 20*, 258–262.

Epstein, M. H. (2004). *Behavioral and Emotional Rating Scale: A strength-based approach to assessment* (2nd ed.). Austin, TX: PRO-Ed.

Epstein, M. H., & Sharma, J. (1998). *Behavioral and Emotional Rating Scale: A strength-based approach to assessment*. Austin, TX: PRO-Ed.

Epstein, M. H., Nordness, P. D., Nelson, J. R., & Hertzog, M. (2002a). Convergent validity of the Behavioral and Emotional Rating Scale with primary grade-level students. *Topics in Early Childhood Special Education, 22*, 114–121.

Epstein, M. H., Ryser, G., & Pearson, N. (2002b). Standardization of the Behavioral and Emotional Rating Scale: Factor structure, reliability, and criterion validity. *The Journal of Behavioral Health Services & Research, 29*, 208–216.

Epstein, M. H., Mooney, P., Ryser, G., & Pierce, C. D. (2004). Validity and reliability of the Behavioral and Emotional Rating Scale: Youth rating form. *Research on Social Work Practice, 14*, 358–367.

Farmer, T. W., Clemmer, J. T., Leung, M.-C., Goforth, J. B., Thompson, J. H., Keagy, K., et al. (2005). Strength-based assessment of rural African American early adolescents: Characteristics of students in high and low groups on the behavioral and emotional rating scale. *Journal of Child and Family Studies, 14*, 57–69.

Finnish National Board of Education. (2004). *National core curriculum for basic education*. Helsinki: Finnish National Board of Education.

Furlong, M. J., Sharkey, J. D., Boman, P., & Caldwell, R. (2007). Cross-validation of the Behavioral and Emotional Rating Scale-2 youth version: An exploration of strength-based latent traits. *Journal of Child and Family Studies, 16*, 696–711.

Galassi, J. P., & Akos, P. (2007). *Strengths-based school counseling. Promoting student development and achievement*. London: Lawrence Erlbaum.

Geisinger, K. F. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment, 6*, 304–312.

Harniss, M. K., Epstein, M. H., Ryser, G., & Pearson, N. (1999). The Behavioral and Emotional Rating Scale: Convergent validity. *Journal of Psychoeducational Assessment, 17*, 4–14.

Hopkins, W. G. (2002). A scale of magnitudes for effect statistics. In *A new view of statistics.* Retrieved June 13, 2002, from http://www.sportsci.org/resource/stats/effectmag.html.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.

Kauffman, J. M., & Landrum, T. J. (2009). *Characteristics of emotional and behavioral disorders of children and youth* (9th ed.). Upper Saddle River, NJ: Merrill.

Kivirauma, J., & Ruoho, K. (2007). Excellence through special education? Lessons from Finnish school reform. *Review of Education, 53*, 283–302.

Lane, K. L., & Carter, E. W. (2006). Supporting transition-age youth with and at risk for emotional and behavioral disorders at the secondary level: A need for further inquiry. *Journal of Emotional and Behavioral Disorders, 14*, 66–70.

Laursen, E. K. (2000). Strength-based practice with children in trouble. *Reclaiming Children and Youth, 9*, 70–75.

Laursen, E. K. (2003). Frontiers in strength-based treatment. *Reclaiming Children and Youth, 12*, 12–17.

Meijer, C. J. W. (2003). *Special education across Europe in 2003. Trends in provision in 18 European countries*. Middelfart: European Agency for Development in Special Needs Education.

Mooney, P., Epstein, M. H., Ryser, G., & Pierce, C. D. (2005). Reliability and validity of the Behavioral and Emotional Rating Scale-2: Parent Rating Scale. *Children and Schools, 27*, 147–155.

Muthén, L. K., & Muthén, B. O. (2007). *Mplus user's guide* (5th ed.). Los Angeles: Muthén and Muthén.

Nansook, P., & Christopher, P. (2008). Positive psychology and character strengths: Application to strengths-based school counseling. *Professional School Counseling, 12*, 85–92.

Oswald, D. P., Cohen, R., Best, A. M., Jenson, C. E., & Lyons, J. S. (2001). Child strengths and the level of care for children with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 9*, 192–199.

Pollard, E., & Lee, P. D. (2003). Child well-being: A systematic review of literature. *Social Indicators Research, 61*, 59–78.

Pollard, E. L., & Rosenberg, M. L. (2003). The strength-based approach to child. In M. H. Borstain, L. Davidson, C. L. M. Keys, & K. A. Moore (Eds.), *Well-being. Positive development across the life course* (pp. 13–22). London: Lawrence Erlbaum.

Reid, R., Epstein, M. H., Pastor, D. A., & Ryser, G. R. (2000). Strength-based assessment differences across students with LD and EBD. *Remedial and Special Education, 21*, 346–355.

Reid, R., Gonzalez, J. E., Nordness, P. D., Trout, A., & Epstein, M. H. (2004). A meta-analysis of the academic status of students with emotional/behavioral disturbance. *The Journal of Special Education, 38*, 130–143.

Rhee, S., Furlong, M. J., Turner, J. A., & Harari, I. (2001). Integrating strength-based perspectives in psychoeducational evaluations. *The California School Psychologist, 6*, 5–17.

Savolainen, H., Ahonen, T., Aro, M., Tolvanen, A., & Holopainen, L. (2008). Reading comprehension, word reading and spelling as predictors of school achievement and choice of secondary education. *Learning and Instruction, 18*, 201–210.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*, 360–407.

Statistics Finland. (2009). Osa-aikaista erityisopetusta lukuvuonna 2006/2007 saaneet peruskoulun oppilaat erityisopetuksen ensisijaisen syyn mukaan [Students receiving part-time special education according to primary cause of special educational need]. Retrieved May 29, 2009, from http://www.tilastokeskus.fi/til/erop/2007/erop_2007_2008-06-10_tau_008.html.

Synhorst, L., Buckley, J., Reid, B., Epstein, M. H., & Ryser, G. (2005). Cross informant reliability of the Behavioral and Emotional Rating Scale-2 (BERS-2). *Child and Family Behavior Therapy, 27*, 1–11.

Trout, A. L., Ryan, J. B., La Vigne, S. B., & Epstein, M. H. (2003). Behavioral and Emotional Rating Scale: Two studies of convergent validity. *Journal of Child and Family Studies, 12*, 399–410.

Trout, A. L., Xu, Y., Stephens, R. L., Walrath-Greene, C. M., & Epstein, M. H. (2009). Strength based assessment in systems of care: A confirmatory factor analysis of The Behavioral and Emotional Rating Scale-2 (Bers-2) Parent Rating Scale. Manuscript submitted for publication.

Van Roy, B., Grøholt, B., Heyerdal, S., & Clench-Aas, J. (2006). Self-reported strengths and difficulties in a large Norwegian population 10–19 years. Age and gender specific results of the extended SDQ-questionnaire. *European Child and Adolescent Psychiatry, 15*, 189–198.

Watkins, A. (Ed.). (2007). *Assessment in inclusive settings: Key issues for policy and practice*. Odense: European Agency for Development in Special Needs Education.

Webber, J., & Plotts, C. (2008). *Emotional and behavioral disorders: Theory and practice*. Boston: Pearson, Allyn, Bacon.

Zigmond, N. (2006). Twenty-four months after high school: Paths taken by youth diagnosed with severe emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 14*, 99–107.