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AN INVESTIGATION OF A BRIEF LIFE SATISFACTION SCALE WITH ELEMENTARY SCHOOL CHILDREN

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ABSTRACT. This study examined the psychometric properties of the Brief Multidmensional Student Life Satisfaction Scale (BMSLSS: Seligson et al., 2003) with elementary school children. The participants included 518 elementary school students in grades three through five in a Southeastern US state. The students completed the following measures: the BMSLSS, the Students' Life Satisfaction Scale (SLSS: Huebner, 1991a), the Children's Social Desirability Questionnaire (CSDQ: Crandall et al., 1965), and the Positive and Negative Affect Schedule-Children's Version (PANAS-C: Laurent et al., 1999). The results revealed acceptable internal consistency reliability, construct validity and concurrent validity for the BMSLSS. Overall, the use of the BMSLSS for research purposes was supported on a preliminary basis for this age group for research purposes. The study also investigated the usefulness of weighted importance ratings in the prediction of global life satisfaction judgments. Children's ratings of the importance of the specific domains, whether viewed separately or combined with ratings of levels of life satisfaction, did not enhance the prediction of global life satisfaction. The usefulness of such a brief measure for the assessment of positive indicators of well-being in large-scale national and international studies is highlighted. Recommendations for future research are delineated.

KEY WORDS: quality of life, life satisfaction, measurement, elementary school students

Most people consider happiness to be the foundation for a fulfilling life. It is something that most people strive for, but not everybody obtains. Subjective well-being is commonly discussed in the psychology literature in terms of happiness, quality of life, and life satisfaction, although these constructs vary somewhat in definition. Subjective well-being, particularly life satisfaction, has only recently received attention in the psychological literature because research in psychology has primarily concerned itself with negative experiences. However, individuals who are devoid of psychopathological symptoms may greatly range in their sense of well-being. While a person's level of distress may not obtain clinical significance, it may still harbor harmful consequences such as increased negative self-perceptions, maladaptive social interactions (Furr and Funder, 1998), and lower levels of well-being (Cowen, 1994; Greenspoon and Saklofske, 1997). Therefore, the inclusion of positive subjective well being in the assessment of mental health has been recommended.

Research has shown that positive affect, negative affect, and life satisfaction are the three interrelated components that comprise subjective well-being (Andrews and Withey, 1976; Campbell et al., 1976; Lucas et al., 1996). Although both affect and life satisfaction are related in that they involve judgments based on life circumstances, they diverge as well. Comparatively, while affect is defined in terms of aggregated emotional responses, life satisfaction is expressed more cognitively. Life satisfaction, which may be indirectly influenced by affect, has been largely defined as an evaluative response to life as a whole or with reference to specific life domains, such as family, friends, or school (Diener, 1984). Further support for the independence of life satisfaction and affect lies in their maintenance of separate correlates and distinct variation across time (Pavot and Diener, 1993). Based on the distinct nature of positive affect, negative affect and life satisfaction, it is suggested that each component of subjective well-being be examined separately (Diener et al., 1999).

Many reasons exist for studying life satisfaction and measures of life satisfaction, and research in this area may prove to be of great value. Individuals with decreased levels of life satisfaction are at a higher risk for a widened spectrum of both psychological and social problems such as depression, anxiety, and poor social interactions (Lewinsohn et al., 1991; Furr and Funder, 1998). Life satisfaction measures have displayed valuable predictive abilities in this respect. For example, longitudinal studies have shown that decreasing levels of life satisfaction often precede depression (Lewinsohn et al., 1991). For another example, life satisfaction has been found to moderate the effects of stressful life events on the development of subsequent externalizing behavior problems (Suldo and Huebner, 2004). Thus, knowledge about subjective well being components may have important implications for work in both applied settings and research settings. Subjective well being measures may provide important information for prevention, early identification, and intervention in various populations and serve useful purposes in longitudinal studies measuring specific satisfaction changes over time (Bender, 1997).

There is a dearth of life satisfaction research where children and adolescents are concerned, which may perhaps be partially explained by measurement limitations. Although there is an assortment of measures for the assessment of adult life satisfaction, there is only a handful of measures specifically designed to assess life satisfaction in children and adolescents. Measures developed specifically for children and adolescents include the Perceived Life Satisfaction Scale (PLSS: Adelman et al., 1989), Students' Life Satisfaction Scale (SLSS: Huebner, 1991a), Quality of Life Profile-Adolescent Version (QOLPAV: Raphael et al., 1996), Multidimensional Student Life Satisfaction Scale (MLSS: Huebner, 1994), and the Comprehensive Quality of Life Scale-S (ComQol-S: Cummins, 1997).

The development of reliable and valid life satisfaction scales appropriate for children and youth is just beginning. Although each of the above scales seems promising for particular purposes, much work remains to be done. For example, Gilman and Huebner (2000) identified a number of concerns with existing child life satisfaction scales including; (1) influence of response distortions, (2) appropriate number of life satisfaction domains, (3) developmental changes, and (4) use with special populations. To advance the study of life satisfaction, there is a need for further reliable and valid measures, particularly measures appropriate for large scale surveys, for use in national and cross-national studies. Because of the length of most of the extant scales, brief measures would be invaluable. In order to address the shortage of brief life satisfaction scales, the Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) was developed.

The BMSLSS is a 5-item scale, which is based on the theoretical model of the MSLSS. Each of the five specific domains of the BMSLSS is represented by one question requiring a judgment of life satisfaction in that particular area. There is an additional, optional question that can be used to assess overall (i.e., global) life satisfaction. Students respond to all items with one of the following options: Terrible, Unhappy, Mostly dissatisfied, Mixed (about equally satisfied and dissatisfied), Mostly satisfied, Pleased, or Delighted (Andrews and Withey, 1976).

Preliminary research on the BMSLSS has shown adequate psychometric properties for research. An internal consistency coefficient of 0.75 has been reported for an adolescent sample (Seligson et al., 2003). In the study by Seligson et al. (2003), the total BMSLSS score (based on the sum of the five specific domain items) displayed a high degree of concurrent, criterion-related validity with two alternative life satisfaction instruments, the MSLSS and the SLSS. The convergent and discriminant validity of the BMSLSS was supported by patterns of correlations between the domains of the MSLSS and the single item domain-relevant questions of the BMSLSS, although the moderate magnitude of the convergent BMSLSS domain-based validity coefficients warrants some caution with respect to the use of the single domain items, especially with younger adolescents (ages 13-14). Evidence for the construct validity of the BMSLSS was provided by expected correlations with positive and negative affect and social desirability. The BMSLSS has been differentiated from adolescent HRQOL measures and predicts aggressive risk behavior (Zullig et al., 2001) as well as alcohol and drug use (Valois et al., 2001). The BMSLSS has also displayed sensitivity to treatment changes, following a conflict management program for middle school students (Farrell et al., 2003).

This study's first main goal is to extend the BMSLSS validation research that has been conducted with adolescents to children in grades three through five. Given differences in pre-adolescents' cognitive functioning, emotional maturity, and psychosocial concerns, it is necessary to investigate the psychometric properties of the BMSLSS separately with younger populations.

Second, the study addresses the usefulness of importance domains with the BMSLSS. Although some child and/or adolescent life satisfaction measures incorporate importance ratings (e.g., ComQol-S, QOLPAV), it is unclear whether or not importance ratings are essential to the measurement of life satisfaction in children and adolescents.

The utilization of weighted domains to determine aspects of subjective well-being has generated controversy in related literature, such as the self-concept literature. William James theorized that how people combined self-perceptions from specific domains to form overall perceptions of self-worth was a decisive matter (Marsh, 1993). He suggested that a weighted average of self-evaluation in individual

domains would best portray overall self-evaluation. Rosenberg (1979) supported James's theory of importance, arguing that the divergent components of self are most likely weighted and hierarchized into a complex equation of which the individual remains unaware. Rosenberg, who was the first to empirically test James's notion of importance, found that those with negative self-conceptions were more likely to have lower global self-esteem, if they viewed those characteristics as important. However, repeated attempts to replicate Rosenberg's findings have failed (Hoge and McCarthy, 1984; Marsh, 1986).

Weighted domains have also been utilized in the adult life satisfaction/quality of life body of research, although to a lesser extent. Andrews and Withey (1976) hypothesized that adults would place more weight on life concerns they deemed as important and less weight on life concerns they viewed as unimportant , when making evaluations of overall life satisfaction. However, they did not find that importance data, viewed separately or combined with satisfaction data, enhanced the accuracy of predictions of life as a whole. Similarly, in a study of adolescents, Seligson et al. (2003) failed to find support for the usefulness of domain-based importance ratings in the prediction of global life satisfaction. Cummins (2002) has also reported cautions related to the predictive utility and meaningfulness of importance ratings in quality of life scales.

To date, no studies have tested the role of importance ratings in the life satisfaction reports of pre-adolescent students. Therefore, the incremental validity of importance ratings in elementary school children's (grades 3–5) global life satisfaction reports was investigated. In order to assess the usefulness of importance weighted life satisfaction ratings, we compared individually weighted models to unweighted models using techniques reported by Marsh (1986, 1993).

METHOD

Participants

The participants consisted of 518 regular education students from grades 3 through 5, who received parental consent and gave assent to

participate. The students were from three elementary schools in a metropolitan area in a Southeastern USA state. A total of 242 males and 274 females participated in the study. The mean age of the students was 9.34 (SD = 0.95), with 174 participants from third grade, 185 participants from fourth grade, and 159 participants from fifth grade. There were 42 African-Americans, 15 Asian-Americans, 441 Caucasians, 7 Hispanics, 6 Native-Americans, and 6 participants who classified themselves as "Other".

Measures

Positive and Negative Affect Schedule-Children (PANAS-C: Laurent et al., 1999)

The PANAS-C is composed of two subscales: one measures positive affect and the other measures negative affect. The Positive Affect Scale has 12 items and the Negative Affect Scale has 15 items. Items are rated on a 5-point scale with responses ranging from not at all to extremely. The Negative Affect scale includes items such as upset, hostile, irritable, afraid, ashamed, and guilty. The Positive Affect scale includes items such as excited, proud, alert, determined, attentive, and active.

Laurent et al. (1999) reported evidence for the reliability and validity of the PANAS-C with elementary school age children. The positive and negative affect subscales showed an intercorrelation of -0.16. Internal consistency reliability was 0.92 for the Negative Affect scale and 0.89 for the Positive Affect scale. Support for construct validity was also provided.

Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) The BMSLSS is a 5-item measure, in which each item denotes one of the five life satisfaction domains (family, school, friends, self, and living environment) included on the MSLSS. The 5 items are summed to create a total life satisfaction score. Items are rated on a 7-point scale, with responses ranging from Terrible to Delighted (Andrews and Withey, 1976). Data related to the psychometric properties of the BMSLSS are described in detail in the introduction. In a separate set of questions, students' importance ratings for each domain were also obtained, using a scale with 1 = very important to 9 = very unimportant.

Rating of Global Life Satisfaction (GLLS)

The GLLS is a single item that measures overall (i.e., global) life satisfaction. The GLLS utilized the same seven response options as the BMSLSS and appeared at the end of the BMSLSS (i.e., "I would describe my satisfaction with my overall life as").

Students' Life Satisfaction Scale (SLSS)

The SLSS (Huebner, 1991a) is a self-report measure that examines children's GLLS. Students respond to seven concise items with Strongly disagree, Moderately disagree, Mildly disagree, Mildly agree, Moderately agree, or Strongly agree. Items are summed to produce a global index of life satisfaction. The items on the SLSS are not specific to particular domains or areas, rather they require children to make overall life assessments (e.g., My life is going well; I would like to change many things in my life).

The internal consistency of the SLSS has been reported as 0.82 (Dew and Huebner, 1994). Test-retest reliability has been reported as 0.74, based on a 1–2 week interval (Huebner, 1991a). The unidimensional factor structure of the SLSS has also been demonstrated (Huebner, 1995). The relationship between the SLSS and other measures of well-being such as the Piers-Harris Self-Concept scale (Piers, 1984), the Andrews and Withey Life Satisfaction Scale (Andrews and Withey, 1976), and the Dimensions of Temperament Survey-Revised Mood Subscale (Windle and Lerner, 1986), provide support for the construct validity of this instrument. The SLSS displayed a non-significant correlation with academic achievement (Huebner, 1991b) and social desirability (Huebner, 1991a).

Children's Social Desirability Questionnaire (CSDQ: Crandall et al., 1965)

The CDSQ measures social desirability in children through self-report. Items reflect behaviors and viewpoints that are not likely to occur, although they are culturally-endorsed. The short form of the CSDQ includes 20 True or False items, whereby socially desirable responses are summed for a total score. Test–retest reliability has been reported as 0.85 for a one month period and split-half reliability coefficients range from 0.82 to 0.95. The CDSQ has shown

relationships with variables such as confidence, concern over others' evaluations, and behavioral inhibition (Crandall et al., 1965; Crandall, 1966; Paulhaus, 1991).

Procedures

Approval for the study was obtained from the university and school district institutional review boards as well as the school principals. Following approval, 3rd–5th grade teachers from the schools were informed of the nature and procedures of the study. All of the 3rd–5th grade teachers at each of the three schools participated in the study. The classroom teachers briefed their students on the purpose of the investigation and asked for student assent to participate. Students who agreed to participate were given a consent form for their guardians/parents to complete.

In two schools, the teachers administered the measures in their respective classrooms. In the other school, the first author and a team of graduate student volunteers administered the measures to the participants, working with one grade level at a time. Students completed the Positive and Negative Affect Schedule, the BMSLSS, the SLSS, and the CSDQ respectively. Participants also completed a demographic sheet in order to acquire information on gender, age, race, and grade. In all schools, the instruments were read aloud to all students to aid in their comprehension. Prior to administration of the measures, participants were notified of their right to withdraw from the study at any time. Participants completed the instruments anonymously. After completing the instruments, the participants were de-briefed.

RESULTS

Descriptive Statistics

Preliminary analyses were run to look for any variation across the three schools on the major variables of interest. Four one-way ANOVAS were run to determine if there were significant differences in the BMSSLS Total life satisfaction score, positive and negative affect, or social desirability across the three schools. Significant differences were only found on the PANAS-C Negative Affect scale, F

TABLE I

Mean BMSLSS scores

	М	SD
Family	5.88	1.41
Friends	5.90	1.38
School	5.52	1.48
Self	5.88	1.35
Environment	6.18	1.36
Overall	5.80	1.40
Total	5.88	0.92

Note: Ratings are made on a scale in which 1 = Terrible, 2 = Unhappy, 3 = Mostly Dissatisfied, 4 = Mixed, 5 = Mostly Satisfied, 6 = Pleased, 7 = Delighted.

(2, 474) = 4.133, p < 0.05). Thus, the data were collapsed into one total sample.

The means and standard deviations were computed for the BMSLSS domains and the overall life satisfaction score. The BMSLSS Total score was computed by adding the five domain scores and then dividing by five. The mean scores for the Family, Friends, School, Self, Total, and Overall life satisfaction scores corresponded to the response choice of "mostly satisfied. The mean score for the Living Environment domain corresponded to the response choice of "pleased." These descriptive statistics denote a fairly high degree of satisfaction in the domains as well as the total and overall life satisfaction for the participants (see Table I).

Descriptive statistics were also calculated for the level of importance ascribed by participants to the five domains in determining their overall life satisfaction. The means for each of these domain ratings indicate that children attribute a high level of importance to each of the five areas, with the Family and Self domains, receiving the highest ratings (Table II).

In addition, the means and standard deviations were computed for positive affect (M = 3.49, SD = 0.76), negative affect (M = 1.82; SD = 0.69), and social desirability (M = 10.07; SD = 4.29) for the entire sample. Children reported having feelings of positive affect "quite a bit" and experiencing only "a little" negative affect during the preceding weeks. On average, children endorsed about half of the socially desirable items on the CSDQ.

TABLE II

Mean importance ratings

	М	SD
Family	1.51	1.44
Friends	2.03	1.73
School	2.23	1.82
Self	1.92	1.82
Living environment	2.69	2.34

Note: Ratings are made on a scale in which 1 = very important to 9 = very unimportant.

Reliability

The internal consistency of the BMSLSS was determined using an alpha coefficient for the Total scale score. Using the entire participant sample, a coefficient alpha of 0.68 was acquired for the five domain-based items of the BMSLSS, providing support for the adequacy of the scale's internal consistency with an elementary school-age sample for research purposes. Reliability increased to 0.76 when the item measuring overall life satisfaction was included.

Item-total correlations for the five items of the BMSLSS with the Total BMSLSS scale score were also calculated. The items also showed desirable item-total correlations spanning from 0.53 (Friends) to 0.74 (Family).

Intercorrelations among BMSLSS Items

Intercorrelations among the five BMSLSS items ranged from 0.15 to 0.45 with a mean of 0.30. These modest correlations provide evidence that the items are related, but separable (see Table III).

Factor Analysis

The factor structure of the BMSLSS was evaluated using a principal axis factor analysis (see Table IV). A screen test and an eigenvalue of one criterion were utilized to determine which factors to retain. The analysis revealed a one-factor solution which accounted for 44% of the variance. Factor loadings ranged from 0.46 to 0.77, and the eigenvalue was equal to 2.21.

TABLE III

Intercorrelations of BMSLSS domains

	1	2	3	4	5
Family	_	0.28*	0.41*	0.45*	0.29*
Friends	0.28*	-	0.15*	0.23*	0.18*
School	0.41*	0.15*	-	0.39	0.31*
Self	0.45*	0.23*	0.39*	_	0.29*
Living environment	0.29*	0.12*	0.31*	0.29*	_

Note: *p < 0.01.

TABLE IV

Factor loadings for the BMSLSS items

	BMSLSS
Family	0.77
Friends	0.46
School	0.71
Self	0.75
Living environment	0.60
Eigenvalue	2.21
% of Variance	44

Analyses of Importance Ratings

Zero-order correlations with the GLLS (i.e., overall life satisfaction item) ranged from 0.33 to 0.57 for the BMSLSS domains and from 0.16 to 0.33 for the domain-based importance ratings. Regression analyses were also used to determine the importance of individually weighted importance ratings in the determination of overall life satisfaction. Guided by the recommendations of Marsh (1986, 1993), hierarchical regression procedures were utilized with the GLLS overall life satisfaction score as the criterion variable and the five life satisfaction domains, five importance domains, and the five interaction terms entered respectively as three blocks of predictors (see Table V).

The overall model accounted for 49.10% of the variance in the overall life satisfaction scores. The importance and the interaction blocks entered second and third, did not account for a significant

TABLE V

Hierarchical regression for BMSLSS mean levels, importance, interactions and overall life satisfaction

Overall life satisfaction	<i>p</i> - values	Zero-order correlations	Beta weights	b-values	ΔR^2
Block 1					
BMSLSS mean levels					0.50
Family	0.01	0.57	0.26	0.257	
Friends	0.01	0.33	0.12	0.122	
School	0.01	0.48	0.22	0.207	
Self	0.01	0.53	0.27	0.281	
Environment	0.05	0.40	0.13	0.135	
Block 2					
Importance					0.01
Family	0.94	0.30	0.01	-0.007	
Friends	0.75	0.16	0.05	0.043	
School	0.95	0.33	0.02	-0.015	
Self	0.44	0.28	0.04	-0.035	
Environment	0.17	0.25	0.08	0.047	
Block 3					
Interactions					0.00
Family	0.56	-0.06	0.06	0.012	
Friends	0.87	-0.04	0.06	0.009	
School	0.36	-0.09	0.09	0.016	
Self	0.29	-0.08	0.09	0.013	
Environment	0.20	-0.08	0.05	0.005	

increment in the variance. The unweighted block of five life satisfaction domain ratings accounted for 49.20% of the variance, F(5, 504) = 99.59, $p \le 0.01$. The five importance domain ratings accounted for less than 1% of the variance, F(5, 499) = 1.336, p > 0.01. The block of life satisfaction x importance interaction terms also accounted for less than 1% of the variance, F(5, 494) = 0.439, p > 0.01. Additional inspection of the individual beta weights for the importance terms block and interactions term block, revealed that none significantly predicted overall life satisfaction.

Demographic Variables

Correlations among the BMSLSS and SLSS Total scores and the demographic variables of gender, race (African-American and Caucasian), and age were calculated. Neither the Total BMSLSS score

TABLE VI

Correlations among BMSLSS, SLSS and demographic variables

	BMSLSS	SLSS
Gender	0.076	0.032
Age	0.065	0.052
Race	0.043	0.008

Note: $*p \le 0.01$.

nor the Total SLSS score was significantly correlated with gender, race, or age (Table VI). *T*-tests were utilized to examine if there were significant differences between the correlations of the demographic variables with the BMSLSS Total and SLSS Total scores. Non-significant differences were found for gender (t(500) = 0.74, p > 0.01), race (t,(469) = 0.96, p > 0.01), and age (t,(502) = 0.3677, p > 0.01).

Criterion-Related Validity

Concurrent criterion-related validity was investigated through the relationships between the BMSLSS and the SLSS, a relatively well-validated measure of life satisfaction. The criterion-related validity coefficient revealed a relatively strong relationship between the Total BMSLSS and the Total SLSS scores (r = 0.69).

Construct Validity

The PANAS-C, which measures both positive affect and negative affect, was targeted as a measure of different, but related constructs. As expected, the BMSLSS and the SLSS maintained positive correlations with positive affect (0.39 and 0.41 respectively) and negative correlations with negative affect (-0.36 and -0.42 respectively).

In order to investigate the relationship of social desirability to child life satisfaction, the domain and the Total scale scores from the BMSLSS and the SLSS were compared with scores on a youth social desirability measure. It was believed that the BMSLSS and the SLSS would maintain modest relationships with social desirability, a conceptually dissimilar, but somewhat related construct that has been demonstrated to have modest correlations with adolescent life satisfaction (Huebner et al., 1998). The obtained correlations among the

TABLE VII

Correlations among BMSLSS, SLSS, PA, NA, and CSDQ

	РА	NA	CSDQ	
BMSLSS Total	0.387*	-0.335*	0.253*	
SLSS Total	0.408*	-0.420*	0.265*	

Note: $PA = Positive affect; NA = Negative affect; CSDQ = Social desirability <math>*p \le 0.01$.

CSDQ and the Total BMSLSS (r = 0.25) and the Total SLSS (r = 0.27) were within expectations (see Table VII).

T-tests were utilized to examine the significance of the difference between the BMSLSS and SLSS correlations with positive affect, negative affect, and social desirability. Non-significant differences were found for positive affect (t(459) = -0.27, p > 0.01), negative affect (t(463) = 2.10, p > 0.01), and social desirability (t(494) = -0.36, p > 0.01).

DISCUSSION

The psychometric properties of the BMSLSS were examined with pre-adolescent students in grades 3–5. Children reported positive levels of overall life satisfaction on the BMSLSS. This finding is consistent with findings from other child and adolescent life satisfaction studies (Huebner, 1991a, b; Dew and Huebner, 1994; Seligson et al., 2003). In addition, similar to findings with an adolescent population, children rated all five areas (family, friends, school, living environment, and self) as being very important in determining their overall life satisfaction (Seligson et al., 2003), thus supporting the inclusion of the five domains in a measure designed to be relevant to students across a wide age range (8–18 years of age).

The 5-item version BMSLSS displayed an acceptable level of internal consistency reliability for research purposes, although lower than may be desirable for some researchers. The internal consistency reliability was higher with a 6-item version of the BMSLSS item, which included an item assessing overall life satisfaction. Thus, some researchers may wish to use the 6-item version due to higher levels of reliability.

The results of a principal axis factor analysis indicated a single, higher order (i.e., general) life satisfaction factor for the BMSLSS with this age group. Moderate intercorrelations among the BMSLSS items provided support for the notion that the items are related, yet differentiable.

The relationships between children's life satisfaction as reported on the BMSLSS and the demographic variables of age, sex, and race, were not significant. These findings are consistent with those of other studies using different life satisfaction measures (Huebner et al., 2000; Seligson et al., 2003).

The BMSLSS Total score displayed a high degree of concurrent, criterion-related validity with the SLSS Total score, an alternative measure of life satisfaction. The BMSLSS also showed evidence of construct validity in its relationship to the theoretically distinct, but related constructs of positive affect, negative affect, and social desirability. As predicted, the BMSLSS and the SLSS correlated positively with positive affect and negatively with negative affect. Also, the correlations between the BMSLSS Total score and social desirability demonstrated a positive modest relationship. Taken together, the findings suggest support for convergent and discriminant validity.

This study also investigated whether ratings of the importance of the domains (e.g., school, family) increased the accuracy of predictions of global life satisfaction, that is, whether a weighted average of life satisfaction best exemplified global judgments of life satisfaction. The unweighted life satisfaction scores accounted for a significant amount of variance in the overall life satisfaction scores, however, the weighted scores failed to add significant variance. Therefore, support was *not* provided for the inclusion of importance ratings in the model. These findings are similar to those obtained with an adolescent sample (Seligson et al., 2003), offering further evidence to question those researchers who advocate the necessity of obtaining importance ratings from respondents.

Overall, the findings of this study extend preliminary support for the usefulness of the scale to pre-adolescent students in grades 3–5. The study has thus shown initial evidence for the use of the BMSLSS as a brief measure of elementary school age children's life satisfaction for research purposes.

The BMSLSS may thus be of assistance in investigating child and adolescent well-being in large-scale research projects, including community, state, national, and international studies (cf. Grob et al., 1999). Subjective indicators of well-being can provide invaluable information beyond the objective indicators (e.g., family income, housing quality, access to medical services, drug and alcohol usage), that are most often used in national and cross-national surveys to assess individuals' well being (Valois et al., 2001; Huebner et al., 2004). In such studies, single item or brief measures of life satisfaction with demonstrated validity offer a practical alternative to lengthier, more expensive assessment devices.

For example, a recent study of the responses of more than 5545 high school students in South Carolina to the BMSLSS revealed large numbers of students who reported dissatisfaction with their school experiences, including the 9% of the students who reported their experiences as "terrible" (Huebner et al., 2000). The lower ratings attributed to school in the study, as well as in the current study, may have significant implications for the well-being of children and youth and imply that public officials should focus greater attention on the affective correlates and/or consequences of schooling. School reform efforts have been directed towards academic issues, while ignoring or overlooking affective concerns such as school dissatisfaction and alienation (Philips, 1993; Baker, 1998). Poor school achievement, behavior problems, and school dropout, have been linked to dissatisfaction with school life (Epstein and McPartland, 1976; Fine, 1986; Ainley, 1991). It is possible that a heightened awareness by educational policy makers to students' perceived quality of school life may reduce or eliminate such negative affective outcomes and enhance academic outcomes.

Pending further research and scale development, the BMSLSS may eventually prove useful for clinical purposes as well. Measures with ratings above the neutral point, as well as below (e.g., dissatisfaction), should provide more comprehensive portraits of the wellbeing of children who are not presenting with any indications of psychopathology. For instance, many traditional psychological assessment measures appear to imply that children who do not display psychopathology are thus demonstrating subjective well-being. These conclusions may be deceptive because children who do not

exhibit clinically significant pathological signs (e.g., depression symptoms) are not necessarily experiencing elevated levels of subjective well-being. As a result, some groups of children may go unnoticed by mental health professionals, with negative consequences for their welfare. Furthermore, subjective well-being measures that assess multiple domains as well as general life satisfaction, such as the BMSLSS, may also aid in the development of more comprehensive individual intervention plans. For example, a child who indicates lowest satisfaction ratings in the school and peer domains would necessitate a different intervention relative to a child who indicates lowest satisfaction in the family domain.

Future research is needed to evaluate the psychometric properties of the BMSLSS. First, studies that extend the normative data base would be useful. The generalizability of the findings would be enhanced by additional studies that encompass participants from other regions of the country as well as a more inclusive sampling of different ethnic groups (e.g., Hispanic, Asian-American) and children of divergent ability levels (e.g., children with learning disorders). Second, BMSLSS studies to date have only collected data at one point in time. Future studies are needed to assess its test-retest reliability over varying time periods in order to establish the short- and longterm stability of BMSLSS reports. Third, the BMSLSS may be useful as an intervention outcome measure. Nevertheless, little research has been conducted to examine its sensitivity to changes in treatment, although initial efforts have been promising (Farrell et al., in press). Fourth, research should assess the convergent and discriminant validity of the domain (i.e., item) scores to further determine their meaningfulness. Finally, future studies examining the relationships between the BMSLSS and other important variables in the expected network of relationships (e.g., stressful life events, temperament, coping) are needed to assess its construct validity with child populations.

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