The assessment of students’ counseling needs as an integral component of development and implementation of an effective school counseling program is widely recognized. Unfortunately, however, this mandate has been hindered by lack of a psychometrically sound measure of students’ counseling needs. Therefore, the Intermediate Elementary Students Counseling Needs Survey was created to alleviate this situation. Its development, psychometric properties, and potential applications are presented in this article.

One of Dr. Laurence Peter’s (1979) contributions to folksy wisdom was that, “If you don’t know where you’re going, you’ll probably wind up someplace else.” For school counselors, this wisdom suggests that school counseling programs should have clear purposes and direction. Schmidt (1999) made the point succinctly:

Implementing a [school counseling] program that is void of clear goals and objectives is like piloting a plane without a flight plan. The plane is airborne, all instruments are working, but the pilot has no idea where the plane is heading or why it is going in a given direction. (p. 40)

Because of the general understanding that school counseling programs should be goal directed, innumerable professionals have offered innumerable ideas about what should be the goals and objectives for school counseling programs, especially in elementary schools. Yet while numerous potential purposes can be promoted, surely being responsive to the specific counseling needs of elementary school students must be central among them.

Authorities in developmental school counseling (e.g., Baker, 1999; Gysbers & Henderson, 2000; Myrick, 1997; Schmidt, 1999; Wittmer, 2000) advocate that the counseling and other needs of the school population, and in particular the students, should be determined early in the program development process so that an effective developmental school counseling program can be built to be responsive to them. However, school counseling programs can be modified and improved even if the students’ needs are assessed within the context of an ongoing program. In either case, effective assessment of students’ counseling needs is a crucial component in the implementation of an effective school counseling program.

It is surprising that while the assessment of students’ counseling needs has been widely advocated, very few specifics have been offered about how their needs are to be assessed. As a result, a variety of needs-assessment methodologies has been suggested, often with emphasis on taking a relatively simplistic and subjective approach to information gathering (e.g., Wittmer, 2000). More recently, however, at least one specific guideline has been presented: assessment and evaluation of students’ counseling needs should be data-based. For example, this position is strongly endorsed in the recently presented elements of the American School Counselor Association National Model for School Counseling Programs:

A comprehensive school counseling program is data driven. The use of data to effect change within the school system is integral to ensuring that every student receives the benefit of the school counseling program. School counselors must show that each activity implemented as part of the program was developed from a careful analysis of students’ needs, achievement and/or related data. [emphasis added]

Clearly, the data obtained from an assessment methodology used for any professional purpose should be psychometrically appropriate and sound (Gall, Gall, & Borg, 2003).

Unfortunately, even in light of recognition of the importance of conducting a data-based needs assessment in elementary school counseling programs, little evidence exists that elementary school counselors...
are conducting need assessments (data-based or otherwise), and there is scant evidence that the few needs assessments being conducted are using psychometrically sound methodology. Why this situation exists in view of the many professional recommendations for use of needs assessment remains unexplained. However, it likely exists at least in part because there are not well-developed needs assessment instruments available to fulfill this programmatic function. Therefore, the research described here was undertaken to develop a psychometrically sound counseling needs assessment instrument appropriate for use with students in the upper three grades of an elementary school.

**INSTRUMENT DEVELOPMENT**

If an assessment instrument is to be both professionally credible and usable, it must be grounded in a framework that enjoys widespread and substantive endorsement. In regard to school counseling, clearly the *ASCA National Standards for School Counseling Programs* (ASCA, 1997) is the most well-recognized conceptual framework for an effective school counseling program. Indeed, “ACSA’s National Standards/competencies are the foundation for the National Model” (ASCA, 2003). The focus of the National Standards is on three broad and interrelated areas of student development: (a) academic, (b) career, and (c) personal/social. Each of the three areas of student development include a variety of desired student learning competencies, which in turn are comprised of specific knowledge, attitudes, and skills that form the foundation for the developmental school counseling program (ASCA, 1997). Because of their integral relationship to an effective school counseling program, these three areas constituted the initial conceptual basis for the students’ needs assessment instrument to be developed. The instrument is titled the Intermediate Elementary School Students Counseling Needs Survey (IESCNS).

During initial item development of the IESCNS, it was important to differentiate between a student’s personal need and school counseling need. A school counseling need exists whenever a particular student demonstrates that a specific developmental need has not been met and/or expresses the desire to talk with someone concerning a specific individual need. Because of the developmental level of intermediate elementary school students, they may not recognize when they should take the initiative to talk with some adult concerning the expressed need. Therefore, a counseling needs assessment item which reveals a counseling need must be specific enough to indicate clearly that school counselor intervention is implicit and necessary for that particular student, even if that intervention is in terms of referral to a more appropriate source of assistance. The focus of a specific item, therefore, must be in an area in which an elementary school counselor can take appropriate action on behalf of the child in question.

An initial set of 50 items for the IESCNS was created to reflect the three broad areas of the ASCA National Standards and to the greatest extent possible the more specific competencies within each area. A four-point, Likert-type response scale (i.e., strongly agree, agree, disagree, and strongly disagree) was determined to be the most appropriate response format for the items for elementary school children (Kelly & Ferguson, 1984). These items were reviewed for clarity and cogency by a group of school teachers, counselors, administrators, and other professionals. The initial IESCNS was administered in a pilot study to 11, 13, and 17 students in the third, fourth, and fifth grades, respectively. Four items were eliminated and several other items revised based on feedback from students after taking the initial IESCNS. The current form of the IESCNS is presented in the Appendix. Items 1–14 were developed to reflect academic counseling needs, items 15–21 to reflect career counseling needs, and items 22–46 to reflect personal/social counseling needs. The 46-item IESCNS has an upper limit of grade 2.1 reading level based on computation of the Flesch-Kincaid readability statistic, as generated by the Microsoft Word® word processing program.

**National Sampling**

Two procedures were used to identify school counselors who might assist with the conduct of the study. The National Board for Certified Counselors provided contact information for National Certified Counselors likely to be practicing school counselors. In addition, 55 counselor educators from across the country were asked to identify practicing school counselors who might assist. After initial and subsequent correspondence, 41 practicing school counselors assisted with administration of the IESCNS to students in their respective schools. This assistance included obtaining permissions from various authorities and the students’ parents for administration of the IESCNS.

Usable responses (i.e., fully completed, appropriately marked instruments) were received from a total of 970 elementary school students. Sampling by state was done to represent the four geographic regions of the American Counseling Association (ACA), including students from five Midwest (n = 128), five North Atlantic (n = 207), four Southern (n = 373), and six Western (n = 262) states. The respondent group included 496 girls and 474 boys. By grade level, the respondent group included 307...
third, 318 fourth, and 345 fifth grade students. Self-
identifications by race in the respondent group
included 631 White, 100 Black, 179 Hispanic, 12
Asian, 28 Native American, and 20 Other students.
Self-reported “lunch status” among the respondents
included 508 paid lunch, 82 reduced paid lunch,
and 380 free lunch.

One subset of students (n = 40; 22 girls and 18
boys) from the ACA Southern region completed the
IESCNS a second time 2 weeks after the first admin-
istration to enable computation of stability reliabil-
ity coefficients. Another subset of students (n = 75;
38 girls and 37 boys) from the same region com-
pleted the Piers-Harris Children’s Self-Concept
Scale (PHCSCS; Piers, 1984) immediately after
completing the IESCNS to enable computation of
concurrent validity coefficients.

Analyses and Results
The stability (i.e., test-retest ) reliability coefficients
across the 46 IESCNS items for the 40 students
ranged from −.11 to .86. These items had a mean
stability reliability coefficient of .43, with a standard
development of .17, and a median stability reliability
coefficient of .42. Coefficient Alpha as an indicator
of internal consistency reliability was computed to
be .93 for the 970 students responding.

In order to examine individual item performance,
the response choices were weighted (strongly agree
= 1, agree = 2, disagree = 3, and strongly disagree =
4) such that a higher item mean reflected a greater
counseling need. The item means for the 14 aca-
demic items ranged from 1.38 to 1.85 (SD = .47 for
all 14 items), from 1.36 to 1.79 (SD = .43 for all
seven items) for the seven career items, and from
1.24 to 2.16 (SD = .92 for all 25 items) for the 25
personal/social items, and from 1.24 to 2.16 (SD =
.92) across all items. Also noted was that each
response choice was selected by at least some stu-
dents for each of the 46 IESCNS items.
The PHCSCS yields six subscale scores and a total
score. Correlations between each of the seven PHC-
SCS scores and each of the weighted item responses
were calculated. The correlation ranges, means, and
standard deviations between the seven PHCSCS
scores and the 46 IESCNS items respectively were:
Behavior −.39 to .16, −.10, .14; Intellectual and
School Status −.41 to .13, .10, .12; Physical
Appearance and Attributes −.47 to .15, −.12, .14;
Anxiety −.44 to .23, −.09, .14; Popularity −.46 to
.18, −.07, .13; Happiness −.53 to .15, −.14, .17; and
Total Score −.50 to .22, −.12, .15. Among the 322
correlations in the IESCNS item and PHCSCS scale
correlation matrix, 76 were positive and 246 were
negative. However, only 62 of the correlations were
statistically significant at the .05 level. In general, the
students’ level of self-concept was unrelated to the

level of their counseling needs.

The results of the IESCNS were factor analyzed
using the SPSSv10 program. Determination of the
best solution for a factor analysis involves judicious
consideration of both empirical and intuitive criteria
(Airasian & Gay, 1999). One important considera-
tion is which criterion to apply to determine how
many factors to retain.

To determine the number of factors to extract, a
scree plot was used which graphically displays the
relationship between eigenvalues and factors
(Gorsuch, 1983; Stevens, 1992). The cutoff point
for factor extraction is placed at the elbow of the
graph. Typically, the elbow is located where the rate
of change in eigenvalue differences drops precipi-
tously, resulting in a consistency of negligible eigen-
value differences for those factors located below the
elbow. Only those factors located above the elbow are
retained. The problem with using a scree plot is
that at times no clear-cut solution emerges.

Although upon initial inspection of the scree plot it
appeared that three factors should be retained, other
evidence suggested that a single factor solution best
fit the data. High factor intercorrelations associated
with the three-factor solution (i.e., .64 to .74) and
with the two-factor solution (i.e., .68) indicate a
strong dependency among the factors, which sug-
gests that perhaps the item responses are unidimen-
sional. Moreover, the percent of variance associated
with the three- and two-factor solutions was only
minimally larger than that associated with the one-
factor solution: the percent of variance was 32.2%
for the three-factor solution, whereas it was 24.6%
for the one-factor solution. Finally, an examination
of the salient factor loadings, by using a conservative
cutoff criterion of .40 (Stevens), indicated that the
three- and two-factor solutions resulted in multiple
items that loaded on more than one factor, which is
further support for a one-factor solution. The one-
factor solution resulted in salient loadings for the
majority of the items. Only seven items exhibited
loadings that fell below the cutoff criterion and of
these only one was below .36.

A multifaceted set of analyses of variance
(ANOVARs) was computed to determine differences
in IESCN item means based on the demographic
data collected. In general, few statistically significant
(p < .01) differences were found for the variables
investigated. For example, only eight (of a possible
46) significant differences for gender, six for ACA
region, one for race, and three for lunch status were
found. The greatest number of statistically signifi-
cant differences (16) was found for grade level. The
fifth grade students had 14 item means significantly
higher than the corresponding item means for either
third or fourth grade students, 10 of which were
among the personal/social items.

| While the assessment of students’ counseling needs has been widely advocated, very few specifics have been offered about how their needs are to be assessed. | |
DISCUSSION

The results of the analyses of the data from the IESCNS suggest that it is a psychometrically sound instrument that can be used to assess the counseling needs of students in the upper grades of an elementary school effectively. For example, although the item stability coefficients found are relatively moderate, they are neither low nor unusual for students at the elementary school age level. Further, its overall reliability is well above minimum requirements for a survey of its nature. In addition, responses to it are apparently unrelated to a student’s self-concept, which suggests that it has generalized applicability. That is, because students with high self-concepts sometimes have counseling needs and students with low self-concepts sometimes do not have counseling needs, the assessment of a student’s counseling needs should be independent of the student’s self-concept. Few significant differences were found on the bases of geographic region, gender, race, and socioeconomic status (to the extent that lunch status reflects socioeconomic status) which suggests that these variables are not strong determinants of variations in student’s counseling needs. Although relatively more differences were found on the basis of grade level, the differences are of a nature that would be expected. Most of the significant differences by grade level were among the personal/social items and reflected greater counseling needs by the fifth grade students. Fifth grade students are at the onset of adolescence and also are aware of the imminent transition to middle school and, in general, are amidst a variety of developmentally appropriate interpersonal and social issues. Therefore, it is reasonable and understandable that they would have greater counseling needs in the personal/social area.

Although the IESCNS items were conceived to reflect three areas of counseling needs (i.e., academic, career, and personal/social), the results of the factor analysis did not support this conceptualization; responses to the IESCNS appear to be unidimensional. This suggests that elementary school students who have strong counseling needs tend to have them (simultaneously) in all their life arenas. The unidimensionality of the IESCNS precludes computation of valid subscale scores based on the respective item clusters. However, it does enable computation of a “total counseling need score” based on summation of the weighted item responses. Thus, an IESCNS total score would be the best indicator of the relative level of counseling need(s) of any individual student.

Implications for School Counseling
Because of its psychometric properties, the IESCNS has good potential to be used in a variety of ways within an elementary school counseling program. For example, it might be administered to all students in a school to achieve indication of the general (i.e., school wide and/or classroom) level of counseling needs among the students. Also, although individual item results would have to be considered cautiously because of the variations in the psychometric qualities of the items, inspection of individual item results might suggest specific types of programmatic interventions needed. The IESCNS also might be administered school wide periodically to give indication of changes in the students’ general level of counseling needs over time, with the resultant data used for program accountability purposes. However, such results would have to be interpreted carefully. For example, although an effective school counseling program likely would be expected to reduce students’ counseling needs over time, an increase in reported counseling needs might reflect that a school counseling program has been effective in encouraging students to express their counseling needs more clearly.

The IESCNS also might be used with individual or small groups of students as a means to allow them to express their counseling needs without specifically having to voice their concerns and issues. Here too a cautious interpretation of item responses could yield more specific counseling intervention information. Also, if the IESCNS were administered to an individual student or small group of students on a pre-post counseling basis, it could generate individual or small group counseling accountability data.

The need for school counselors to move toward results-based school counseling programs is widely recognized and suggestions have been made about how school counselors should implement such movement. For example, Lapan (2001) wrote that:

[P]ractioners in a results-based system would consistently engage in two interlocking processes. First, the program-planning process would require counselors to identify those critical aspects of human development that the program can directly influence. ... Second, an evaluation process assesses the extent to which the results are subsequently attained. ... School counselors are continually immersed in the search for more effective ways to bring about results that are valued by students, parents, school personnel, and the local community. (pp. 219–293).

Obviously a results-based school counseling program necessitates the collection of data, but the data collected are meaningful and useful only to the extent that the means used to obtain them are psychometrically sound. The IESCNS appears to be...
one resource that school counselors can use to collect such data.

References