Youth development programs provide many youth with positive experiences, settings, and people, as well as abundant opportunities for them to develop life skills to build fulfilling relationships throughout adolescence and beyond. Programs that foster these skills in youth are an important component of an adolescent’s landscape, and the appropriate use of assessment measures is a key variable in determining the success of a program’s goals for the youth it serves.

In this era of accountability, supporters of the youth development approach need to establish agreed-upon, and measurable, developmental outcomes for all young people. Yet it is difficult to define normal adolescent development, the positive outcomes that further that development, and the measures used to assess it. It is, in many ways, easier for doctors to define an illness by a series of symptoms than it is for them to describe a healthy person. The range of “normalcy” in the culture is broad, and one must be careful not to define “positive youth development” in ways that exclude certain populations (NCFY, 1996).

Young peoples development is, in fact, determined by a number of factors. These include individual personality, familial ties and supports, access to education and opportunities, socioeconomic status, gender, racial or ethnic background, and physical capacity. These factors must be considered in developing or choosing assessment tools for measuring youth development outcomes (NCFY, 1996).

Many developmental outcomes have been described in the literature including: bonding; resilience; social competence; emotional competence; cognitive
Competence; behavioral competence; moral competence; self-determination; spirituality; self-efficacy; clear and positive identity; belief in the future; recognition for positive behavior; opportunities for prosocial involvement; and prosocial norms (Catalano et. al., 1998). This literature review details youth development assessment tools that comprise eight areas of youth development: self-concept; self-efficacy; social competence; self-esteem; problem solving and decision making; relationships and connectedness; communication; and resiliency.

It should be noted that for many of the components of youth development mentioned below, no consensus to a universal definition exists. Therefore some overlap exists between categories (such as self-concept and self-esteem) depending on one's definition of the terms.

Many of the tools mentioned below can also be used in compilation to assess adolescent resiliency. Protective mechanisms associated with resilience include: reduction of risk impact; reduction of negative behavior patterns; the establishment and maintenance of self-esteem and self-efficacy; and the opening up of opportunities (Catalano et al., 1998). Many of the tools that follow relate to these areas of resilience.

“Adolescence is a pivotal period for youth to acquire the attitudes, competencies, values and social connections that will help carry them forward to successful adulthood.”
Search for and Selection of Tools

The initial pool of youth development assessment tools from which the final set of instruments discussed in this literature review were drawn was determined from two primary sources, as summarized below:

1. *Evaluating the National Outcomes: Program Outcomes for Youth (NOWG, n.d.)* — A database containing a plethora of resources and materials to help community-based program developers and evaluators find information and resources on topics associated with social competencies and risk behaviors among youth. The project is supported by the Cooperative State Research, Education, Extension Service, U.S. Department of Agriculture, and the Cooperative Extension Service, University of Arizona.

2. *Compendium of Assessment and Research Tools (CART, n.d.)* — A database that provides information on instruments that measure attributes associated with youth development programs. The project is supported by The Star Center and the W.K. Kellogg Foundation’s Learning In Deed Initiative.

In addition to these sources, an on-line search was conducted by means of the PsycINFO database and *ProQuest Research Library (UMI)* with limited success in terms of on-line, full text articles of the resources needed. Therefore it was through the review and use of NOWG and CART that the primary pool of youth development assessment tools was generated.

It was then decided that a third source, Dissertation Abstracts/Digital Dissertations (UMI), would be utilized. This database was a key tool in acquiring detailed information about youth development assessment tools. Doctoral candidates often provide in-depth descriptions of their methodologies in their research. This provides one with insights into not only descriptions and samples of the tools they used, but also valuable information in terms of the tool’s development, reliability and validity, and use with adolescents.

Using the initial list of youth development assessment tools as keywords in searching the dissertation database, a final compilation of twenty-six tools was collected, utilizing information from over thirty doctoral dissertations.
In this review of youth development assessment tools, five measures of self-concept are identified and examined in detail. These include the Self-Perception Profile for Adolescents, the Multidimensional Self Concept Scale, the Piers-Harris Children’s Self-Concept Scale, the Self-Description Questionnaire II, and the Tennessee Self-Concept Scale.

**Self-Perception Profile for Adolescents**
(Byrne, 1996; Matyanowski, 2000)

The Self-Perception Profile for Adolescents (SPPA), developed by Harter (1988), is a 45-item self-report instrument containing nine subscales, each containing five items. Eight subscales are designed to measure self-perceptions in relation to specific areas of one’s life. These subscales include: scholastic competence; athletic competence; social acceptance; physical appearance; job competence; close friendship; romantic appeal; and behavioral conduct. One is designed to measure perception of self in general: global self-worth. Items are structured in a 4-point structured-alternative format to offset socially desirable responding. The SPPA can be administered either individually or in groups.

In the SPPA, adolescents are presented with a description of two types of teenagers and then asked to identify which one of the two most resembles them. They then determine whether the behavior described is really true, or just sort of true for them (See Exhibit 1).

Harter reported internal consistency reliabilities of scholastic competence (.83), social acceptance (.83), athletic competence (.88), physical appearance (.86), behavioral conduct (.59), close friendship (.81), romantic appeal (.81), job competence (.71), and global self-worth (.85). The instrument lacks validity research.

Although it can be used with young adolescents (ages 13-15), the SPPA is more ideally fit for adolescents in Grades 9 through 12. However it may not be appropriate for adolescents with learning disabilities or mental impairments. Although the SPPA lacks a national norm sample and limited external validation research, it is grounded in a solid theoretical base and may quickly prove to be an important and well-established self-concept measure for adolescents.
Multidimensional Self Concept Scale
(Byrne, 1996; Crosby, 2001)

The Multidimensional Self Concept Scale (MSCS), developed by Bracken (1992), is a behaviorally-based 150-item self-report instrument measuring self-perception in six subscales, each containing twenty-five items. These include: social competence related to interactions with others (social subscale); success/failure in attainment of goals (competence subscale); recognition of affective behaviors (affect subscale); academic achievement and competence in other school-related activities (academic subscale); competence related to interaction with family members (family subscale); and physical attractiveness and prowess (physical subscale). The MSCS can be administered either individually or in groups and can be completed in 20 to 30 minutes.

In the self-report children are asked to respond to a simple declarative statement by circling one of the four alternatives that they believe best describes them. The four alternatives are absolute (success or failure), comparative (in comparison with others’ performance), ipsative (performance in one area in relation to general performance), and ideal (expected level of performance (See Exhibit 2).

Bracken reported high internal reliability estimates, ranging from .87 on the Competence subscale to .98 on the Total scale. Test-retest reliability estimates have ranged from .73 for the Affect subscale to .90 for the Total scale over a 4-week period. Concurrent validity results have shown full-scale correlations between the MSCS and the Coopersmith Self-Esteem Inventory, the Piers-Harris Children’s Self-Concept Scale, and the Self Description Questionnaire II ranging from .69 to .83.

The MSCS can be used with children in Grades 5 though 12 (ages 9-19). Because of the wide age range, items have been carefully constructed to ensure that each is appropriate for use with younger children. As such, no item elicits a response that relates to dating. In addition, items are intentionally worded as concisely, simply, and briefly as possible to protect against any possibility of bias due to ethnicity, gender, or geographical location.
The MSCS has solid psychometric credentials in addition to a carefully constructed set of subscales. A well-established theoretical framework is solidly linked to the subscales. The MSCS represents an important tool that is worthy of consideration when the measure of preadolescent and adolescent self-concepts is of interest.

**Piers-Harris Children’s Self-Concept Scale**
(Byrne, 1996; Hawkins, 1998; Sweitzer, 1998; Healy, 2000)

The Piers-Harris Children’s Self-Concept Scale (PHCSCS), developed by Piers (1984), is an 80-item self-report instrument designed as a unidimensional measure of children’s self-perceptions in relation to six areas of daily functioning: behavior; intellectual and school status; physical appearance; anxiety; popularity; and happiness/satisfaction. The PHCSCS can be administered either individually or in small groups and can be completed in 15 to 20 minutes.

Construction and use of the scale is based on the belief that individuals possess a relatively stable and consistent view of themselves that develops and stabilizes during childhood. The PHCSCS can be used to measure children’s self-concept within three contexts. First, it can be used as a screening instrument in high-risk settings, with other methods of assessment. Second, it can be used in a variety of clinical and counseling settings in which it may be deemed important to integrate scores from this instrument with clinical observations and other test data to obtain an overall picture of a particular child. Finally, it is the most frequently cited test for preadolescents, and as such, its use as a research instrument in providing quantitative self-reported scores of self-concept is well established.

In the PHCSCS, children are asked dichotomously scaled (yes/no) questions (See Exhibit 3). To reduce the tendency toward acquiescence and negative response biases, positively and negatively worded items have been balanced throughout the scale.

The PHCSCS was normed on a population (1,183) of youth (Grades 4 through 12) in Pennsylvania. It was designed for youth between the ages of 8 and 18. Piers reported high internal reliability estimates, ranging from .88 to .93. The reliability was examined across normal, special education, and culturally diverse

<table>
<thead>
<tr>
<th>Strongly Agree (SA)</th>
<th>Agree (A)</th>
<th>Disagree (D)</th>
<th>Strongly Disagree (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a good sense of humor.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>I never seem to have good ideas.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>

**Exhibit 2 - Sample Items from the Multidimensional Self Concept Scale**
populations, as well as across grade, age, and sex variations. Test-retest reliabil-
ity estimates have ranged from .42 to .96 representing 8 month to 4-week inter-
vals. Concurrent validity results ranged from .32 to .85.

The PHCSCS has been widely used and highly recommended historically. 
However, since it was originally developed in the late 1960’s, the instrument is 
due for both a reassessment and retesting of its current structure. As such, the 
PHCSCS is most appropriately used as a measure of general self-concept, and 
the cluster scales should be used only as a guide in identifying areas pf particu-
lar concern for purposes of intervention program planning.

<table>
<thead>
<tr>
<th>Exhibit 3 - Sample Items from the Piers-Harris Children’s Self-Concept Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is usually my fault when something goes wrong.</td>
</tr>
<tr>
<td>I am a leader in games and sports.</td>
</tr>
</tbody>
</table>

**Self-Description Questionnaire II**  
(Byrne, 1996)

The Self-Description Questionnaire II (SDQ-II), developed by Marsh (1992), is 
a 102-item self-report instrument designed to measure multiple dimensions of 
self-concept in eleven subscales measuring nonacademic areas, academic areas, 
and global perception of self. Nonacademic areas include: physical ability; phys-
ical appearance; peer relations-same sex; peer relations-opposite sex; parent rela-
tions; emotional stability; and honesty/trustworthiness. Academic areas include: 
reading; mathematics; and general-school. Some subscales are made up of 8 
items, and other subscales are made up of 10 items. The SDQ-II can be admin-
istered either individually or in small groups and can be completed in 20 minutes.

In the SDQ-II, a 6-point Likert-type scale is used. Children are asked to identi-
ify which one of the six alternative responses listed at the top of each page best 
describes them by placing a check mark in the appropriate box accompanying 
each item (See Exhibit 4). To reduce the tendency toward acquiescence response 
biases, half of the items in each subscale are worded negatively.

The SDQ-II was normed on a population (5,494) of youth (Grades 7 through 12) 
in metropolitan Sydney, Australia. Marsh reported internal consistency reliability 
coefficients ranging from .83 (emotional stability) to .91 (physical appear-
ance). Test-retest reliability estimates have ranged from .73 (honesty/
trustworthiness) to .88 (mathematics) over a period of 7 weeks. Construct valid-
ity was also found to be exceptionally strong on the SDQ-II.

The SDQ-II is considered to be the most validated self-concept measure avail-
able for use with adolescent children. Is has undergoing extensive testing to 
establish its psychometric soundness as a measure of self-concept.
LITERATURE REVIEW OF YOUTH DEVELOPMENT/ASSET TOOLS

Tennessee Self-Concept Scale (Byrne, 1996)

The Tennessee Self-Concept Scale (TSCS), developed by Roid and Fitts (1988/1994), is a 100-item self-report instrument. Ten items measure self-criticism, a factor that serves the purpose of a lie scale. The remaining 90 items measure perceptions of the self from both an internal frame of reference and an external frame of reference. The instrument contains five external scales (physical, moral-ethical, personal, family, and social self-concepts); three internal scales (identity, behavior, and self satisfaction); a self-criticism score; four variability scores; and a time score. The TSCS can be administered either individually or in small groups and can be completed in 10 to 20 minutes.

In the TSCS, a 5-point Likert-type scale is used. Children are asked to choose one of five alternative responses listed at the top of each page that most closely matches their reasoning about a self-descriptive statement (See Exhibit 5). To reduce the tendency toward acquiescence response biases, half of the items in each subscale are worded negatively. The TSCS is appropriate for use with children who are 13 years of age or older and who are capable of reading at approximately a Grade 4 level or higher. The instrument is applicable to the full range of psychological adjustment, from healthy, well-adjusted individuals to those identified as psychotic.

Roid and Fitts reported internal consistency reliability findings ranging from .70 to .87. Test-retest reliability estimates showed an average absolute difference of .146 over a period ranging from 2 hours to 10 weeks. Validity was also found to be strong on the TSCS.

Exhibit 4 - Sample Items from the Self-Description Questionnaire II

<table>
<thead>
<tr>
<th>Item</th>
<th>False</th>
<th>Mostly False</th>
<th>More False Than True</th>
<th>More True Than False</th>
<th>Mostly True</th>
<th>True</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is difficult to make friends with members of my own sex...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My parents and I have a lot of fun together...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The TSCS has received many negative reviews over the years because of its lack of specific psychometric information. Recent revisions in the TSCS have addressed many of these issues. Regardless of criticism however, it continues to be one of the most popularly used personality instruments and is, by far, the most widely used self-concept measure.

Comparisons

The instruments mentioned above reflect some of the highest regarded and most often used tools to assess self-concept in youth. The number of items on these self-report instruments ranges from 45 (SPPA) to 150 (MSCS). A Likert-type response format is most often used, except for the PHCSCS, which uses a dichotomous scale. Subscales in these instruments cover similar areas related to academic competence, physical appearance, self-satisfaction, and peer relations. Differences between the tools include a measurement of global self-worth in the SPPA, measures related to family relations in the MSCS, SDQ-II, and TSCS, and specific academic subscales (i.e., reading and mathematics) in the SDQ-II. All of the measures reported strong internal consistency reliabilities. Validity results were strong for all of the measures except the SPPA, which lacked validity research.

The largest distinction between the measures is the populations to which they serve. The SPPA, for instance, is a good fit for youth in Grades 9-12, but not for those youth with learning disabilities or mental impairments. The PHCSCS, although designed for youth between the ages of 8 and 18, is the most frequently cited test for preadolescents. The SDQ-II is targeted for youth in Grades 7 through 12 and the TSCS is appropriate for youth 13 years or older. Only the MSCS is used with both preadolescents and adolescents. It is targeted for children in Grades 5 through 12 (ages 9-19) and is structured to protect against bias due to ethnicity, gender, or geographical location.

<table>
<thead>
<tr>
<th>Exhibit 5 - Sample Items from the Tennessee Self-Concept Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely False</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>I am a friendly person......................................................</td>
</tr>
<tr>
<td>I am as sociable as I want to be ........................................</td>
</tr>
<tr>
<td>I get along well with other people .......................................</td>
</tr>
</tbody>
</table>
In this review of youth development assessment tools, three measures of self-efficacy are identified and examined in detail. These include the Perceived Self-Efficacy Scale, the Self-Efficacy Scale, and the Adolescent Social Self-Efficacy Scale.

**Perceived Self-Efficacy Scale**

*(Watters, 2000)*

The Perceived Self-Efficacy Scale (PSE), developed by Cowen, Work, Hightower, Wyman, Parker, & Lotyczewski (1991), is a 20-item self-report instrument intended to measure generalized self-efficacy or the confidence with which one can deal effectively with everyday problems and challenges.

In the PSE, a 5-point Likert-type scale is used. Children are asked to rate how sure he or she is that things will work out well, using a 3-point or 5-point scale (See Exhibit 6). The PSE scales’ 3-point system is appropriate for younger subjects and a 5-point system can be used for older students. High scores on either version reflect a stronger sense of efficacy.

Cowen et al. (1991) reported internal consistency reliability findings for youth in Grades 3 through 12 from .65 to .78; the full scale alpha was .86. PSE scores related positively to child adjustment, achievement, locus of control, social problem solving, and realistic control and negatively to anxiety. There was also some evidence of convergent and divergent validity.

The PSE is consistent with its theoretical underpinnings. Its quick and easy administration is a plus. However further psychometric testing is needed to verify it as an effective assessment tool of self-efficacy.
The Self-Efficacy Scale (SES), developed by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers (1982), is a 30-item self-report instrument measuring general self-efficacy expectations in relation to educational, vocational, and social areas. The SES contains 23 items with two subscales and 7 filler items. These subscales include general self-efficacy (17 items) and social self-efficacy (6 items).

In the SES, a 5-point Likert-type scale format is used. Test items focus on one’s willingness to initiate behavior, willingness to expend effort to complete a task, and persistence when confronted with adversity (See Exhibit 7).

The SES was normed on 376 college students enrolled in an introductory psychology course. Internal consistency reliability findings for the General Self-Efficacy and Social Self-Efficacy subscales were .86 and .71. Construct validity with other instruments (including the Rosenberg Self-Esteem Scale) revealed correlations that were not of sufficient magnitude to indicate that any of the comparative scales measured the same underlying characteristics as the General and Social Self-Efficacy subscales.

Overall, the SES has not been verified as a general self-efficacy scale. Further psychometric research is needed as a verification of its merits as an assessment tool of self-efficacy. Despite the fact that the SES was tested on college freshman, it has been modified (to simplify its language) for use as a measurement of the self-efficacy of adolescents.
Adolescent Social Self-Efficacy Scale
(Saks, 1999)

The Adolescent Social Self-Efficacy Scale (S-EFF), developed by Connolly (1989), is a 25-item self-report instrument intended to assess adolescents’ perceptions of efficacy in a variety of peer situations. Items cover potentially problematic areas such as social assertiveness, performance in public situations, participation in social groups, aspects of friendship and intimacy, and giving or receiving help.

In the S-EFF, a 7-point Likert-type scale format is used. Adolescents are asked to rate each item ranging from “impossible to do,” to “extremely easy to do.”

Internal consistency reliability findings were determined by calculating Cronbach’s alpha coefficient. Values of .90, .92, and .95 were obtained for three normative samples: 87 high schools students, 76 high schools students, and 79 adolescents who were residents of a hospital-based psychiatric treatment facility. Test-retest reliability at 2 weeks was .84. Strong construct validity was also found by correlations between the S-EFF and the Perceived Competence Scale.

Comparisons

The three tools reviewed above are similar in many ways. All measure similar constructs of self-efficacy in youth. While the Perceived Self-Efficacy Scale (PSE) and Self-Efficacy Scale (SES) focus on generalized self-efficacy and how one deals with problems and challenges, the Adolescent Social Self-Efficacy Scale (S-EFF) focuses on self-efficacy within the context of peer situations – very applicable for this age group. The number of items on each measurement is similar, ranging from 20 items on the PSE to 30 items on the SES.

Differences between the tools include the fact that the PSE utilities a 3-point or a 5-point response scale, depending on the age of the subjects, whereas the SES and S-EFF use 5-point and 7-point scales. In addition, whereas the PSE and S-EFF were normed on adolescent populations, the SES was normed using college students in an introductory psychology course. Although it has been modified for an adolescent audience, researchers have warned of the dangers of norming an instrument on one population and then using it on another population of either different age, ethnicity, or culture (Byrne, 1996).
Instruments to Assess Social Competence

Socially competent adolescents have a sense of belonging, are valued, and are given opportunities to contribute to society which to a large extent is made possible within the various social environments where adolescents live such as family, school, and community. For example, family variables such as parenting style and family communication patterns are found to strongly influence adolescent social competence. Strong social support, through supportive relationships and a supportive sociocultural and physical environment facilitate the development of social competence; inhibitors of social competence include cultural and social barriers based upon factors such as race/ethnicity, gender, and socioeconomic status (NOWG, n.d.).

In this review of youth development assessment tools, three measures of social competency are identified and examined in detail. These include the Walker-McConnell Scale of Social Competence and School Adjustment, the Social Skills Rating System, and the Texas Social Behavior Inventory.

**Walker-McConnell Scale of Social Competence and School Adjustment**

(Kilgus, 2000)

The Walker-McConnell Scale of Social Competence and School Adjustment (SSCSA), developed by Walker and McConnell (1988), is a 53-item instrument that describes social behavioral competencies related to teacher-, peer-, and self-related school adjustment and social competence. Four subscales: self-control (13 items), peer relations (16 items), school adjustment (15 items), and empathy (6 items) are combined for a total score. The SSCSA requires no more than 10 minutes to complete.

In the SSCSA, a 5-point Likert-type scale format is used. Typically used by teachers, the rater responds to questions about the social competence of the adolescent (See Exhibit 8). It is suggested that the adult completing the scale observe the adolescent for at least 6 to 8 weeks.

The SSCSA was standardized on groups of approximately 2,000 students. Internal consistency reliability findings were determined by calculating Cronbach’s alpha coefficient. Values ranged from .95 to .97. Test-retest reliability over a 3-week period ranged from .88 to .92. Inter-rater reliability between teachers and classroom aides was .53. Item, concurrent, and discriminate validity was also adequate.
The SSCSA has been used on a variety of different target populations including students with learning disabilities in self-contained and resource rooms, adolescents in residential settings, students who are severely emotionally disturbed, youth who are on parole or probation, as well as students without disabilities and non-identified students.

<table>
<thead>
<tr>
<th>Exhibit 8 - Sample Items from the Walker-McConnell Scale of Social Competence and School Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Relates well to the opposite sex.</td>
</tr>
<tr>
<td>Makes friends easily with others.</td>
</tr>
</tbody>
</table>

**Social Skills Rating System**
*(Atkins-Burnett, 2001; Lilenstein, 2001)*

The Social Skills Rating System (SSRS), developed by Clark, Gresham, & Elliott (1985), is a 50-item self-report instrument which focuses on behaviors which affect parent-child relations, teacher-student relations, and peer acceptance. Three subscales are used including social skills (cooperation, assertion, self control); problem behaviors (externalizing problems, internalizing problems, hyperactivity); and academic competence (academic functions, performance in specific academic areas, student motivation level, general cognitive functions, parental support). The complete SSRS includes questionnaires for teachers, parents, and students and is available in a preschool, grades K-6, and secondary version.

The SSRS uses multiple raters who are familiar with the youths social context in order to assess the cultural and ecological validity of its items. In the SSRS, a 3-point Likert-type scale is used. Test items focus on ones willingness to initiate behavior, willingness to expend effort to complete a task, and persistence when confronted with adversity.

The SSRS was normed on 4,000 children. Internal consistency reliability finding ranged from .75 and .93. Test-retest reliability at 4 weeks was in the .80 range. Criterion-related and construct validity were established by finding significant correlations between the SSRS and other rating scales.

The strength of the SSRS is its integrative approach with forms for teachers, parents, and adolescents. The social skills section of the manual is comprehensive, yet the academic competence and problem behaviors sections are brief. The psychometric properties of the self-report forms do not appear as strong as the parent and teacher forms. The SSRS has consistently been identified as the most psychometrically sound instrument of assessing social skills.
Texas Social Behavior Inventory
(Willey, 2000)

The Texas Social Behavior Inventory (TSBI), developed by Helmreich and Stapp (1974), is a 20-item self-report instrument focusing on individuals perceived social situation, self-worth, and social competency in interactions with others.

In the TBSI, a 5-point Likert-type scale is used. Test items consist of declaratory statements with response options of “not at all characteristic of me,” to “very much characteristic of me.” All response items are given scores ranging from 1 to 5, with 1 associated with low self-esteem and social competence and 5 associated with high self-esteem and social competence. The response scored 5, “not at all characteristic of me” or “very much characteristic of me,” varies because statements may describe behaviors associated with either high or low self-esteem and social competence (See Exhibit 9).

The TSBI was normed on 1,000 students and factor analysis determined its validity. Test-retest reliability was .94 for males and .93 for females. Overall, the TSBI is a highly reliable and valid measure of perceived social competency.

<table>
<thead>
<tr>
<th>Exhibit 9 - Sample Items from the Texas Social Behavior Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not likely to speak to people until they speak to me.</td>
</tr>
<tr>
<td>A Not at all characteristic of me</td>
</tr>
<tr>
<td>B Not very characteristic of me</td>
</tr>
<tr>
<td>C Slightly characteristic of me</td>
</tr>
<tr>
<td>D Fairly characteristic of me</td>
</tr>
<tr>
<td>E Very much characteristic of me</td>
</tr>
</tbody>
</table>

| I frequently find it difficult to defend my point of view when confronted with opinions of others. |
| A Not at all characteristic of me                             |
| B Not very characteristic of me                               |
| C Slightly characteristic of me                               |
| D Fairly characteristic of me                                 |
| E Very much characteristic of me                              |

Comparisons

All three instruments are highly regarded measures of social competence in adolescents. Although the Texas Social Behavior Inventory contains less than half the questions (20) compared to the Walker-McConnell Scale of Social Competence and School Adjustment (53) and Social Skills Rating System (50), all nevertheless reported high internal consistency reliability and test-retest reli-
ability in tests with youth. Validity findings were also adequate for all three instruments.

The SSCSA has been recommended as one of the best instruments for teacher assessment of social competence of adolescents with mild disabilities in school. This might be due to the fact that its structure is a teacher-response survey, rather than a self-report survey on behalf of the student. The SSRS also contains questionnaires for parents and teachers, as well as self-report surveys for youth.
Self-esteem is the extent to which one prizes, values, approves, or likes oneself. It is widely assumed that levels of self-esteem are consistent over time within individuals. Self-esteem is defined as much in terms of its measurement and correlates as it is in terms of a well-developed theory. Self-esteem has been related to other variables such as happiness and shyness; cognitive correlates such as self-serving attributional bias; behavioral correlates such as task effort and persistence; and clinical correlates such as depression and coping ability (Reese, 1997).

Self-esteem is recognized as a basic personality characteristic of positive and productive behavior. Young people who have a positive self-esteem are apt to be better students, have healthier friendships, and progress to adulthood with a greater ability to overcome obstacles.

In this review of youth development assessment tools, three measures of self-esteem are identified and examined in detail. These include the Coopersmith Self-Esteem Inventory, the Rosenberg Self-Esteem Scale, and the Self-Esteem Questionnaire.

**Coopersmith Self-Esteem Inventory**  
(Robertson, 1997; Reese, 1997; Mathew, 2000)

The Coopersmith Self-Esteem Inventory (CSEI), developed by Coopersmith (1967), is a 58-item self-report instrument to which each subject responds “like me” or “unlike me” (See Exhibit 10). It was designed to measure in any individual those evaluative attitudes towards the self that one holds in five subscales: general (twenty-six items), social (eight items), academic (eight items), family (eight items), and a lie scale (eight items). A high score on the lie scale suggests that the subject responded defensively to the inventory or understood the intention of the inventory by attempting to respond positively to all items. The CSEI can be administered either individually or in small groups.

The major basis for the construction of the instrument was the belief that self-esteem is significantly associated with effective functioning and personal satisfaction. The scale is based upon Coopersmith’s definition of self-esteem as an attitude of approval or disapproval that an individual makes regarding himself and the extent to which the individual believes he is capable and worthy.
There are three forms of the CSEI: School Form, School Short Form, and Adult Form. The School Form is used with children between the ages of eight to fifteen. It consists of fifty-eight items containing four subscales that are used to derive the total CSEI score. The School Short Form is used with the same age group as the School Form. It contains twenty-five items, does not have a lie scale and does not provide subscale scores. The School Short Form was developed as an alternative to the fifty-eight-item School Form where time constraints can make it difficult to administer. The Adult Form contains twenty-five items and is used with individuals who are sixteen or older.

High internal reliability estimates, ranging from .81 to .86 have been found for the CSEI with 600 children in Grades 5 through 12. Test-retest reliability estimates (1748 school aged children) after a 5-week interval was .88. The test-retest reliability after a three-year interval of a subset (56 children) of the initial population was .70. The CSEI was found to be a reliable measure of global self-esteem for at-risk adolescent black males, where moderate to strong internal consistency measures were observed for three of the four CSEI subscales. Also, cross-cultural studies on the reliability of the CSEI conclude that the instrument is a reliable measure for evaluating self-esteem. Construct, concurrent, and validity results confirm the validity of CSEI subscales.

The CSEI has been well researched, documented, and widely used. It can be used to estimate an individuals' baseline of self-esteem before initiating a self-esteem enhancement program.

<table>
<thead>
<tr>
<th>Like</th>
<th>Unlike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td>Me</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

**Rosenberg Self-Esteem Scale**
*(Byrne, 1996; Sands, 1999; Gellman, 2001)*

The Rosenberg Self-Esteem Scale (RSES), developed by Rosenberg (1962), is a 10-item self-report unidimensional scale designed to measure only perceptions of global self-esteem. It measures the extent to which a person is generally satisfied with his or her life, considers herself or himself worthy, holds a positive attitude toward him or herself, or alternatively feels dissatisfied.
The RSES is intended for use with children in Grades 7 to 12 (ages 12-19 years). In designing the scale, Rosenberg took into consideration the important practical constraints of ease of administration, economy of time, the ability to rank individuals along a single continuum of global self-esteem, and face validity. The RSES can be administered either individually or in groups. Completion time is no longer than five minutes.

Participants use a 4-point Likert-type scale ranging from “strongly agree” to “strongly disagree” (See Exhibit 11). To reduce the tendency toward acquiescence and negative response biases, positively and negatively worded items have been balanced throughout the scale. Scores for the scale are obtained by adding the participants’ responses to the items, with higher scores indicating higher levels of self-esteem.

The RSES was normed on 5,024 high school juniors and seniors from 10 randomly selected schools in New York State. High internal reliability estimates, ranging from .77 to .88, were noted. Test-retest reliability correlations were in the range of .82 to .88. Construct validity was .59 with the Coopersmith Self-Esteem Inventory.

Subsequent research involved thousands of college students, junior and senior high school students, and adults from a range of professions and occupations.

The RSE scales’ greatest strength is the amount of research conducted over the years in support of it. The theoretical underpinnings of the RSES is consistent with Rosenberg’s conceptualization of a hierarchically ordered, albeit separate, self-esteem construct.

<table>
<thead>
<tr>
<th>Exhibit 11 - Sample Items from the Rosenberg Self-Esteem Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>I feel that I’m a person of worth, at least on an equal plane with others.</td>
</tr>
<tr>
<td>I take a positive attitude toward myself.</td>
</tr>
</tbody>
</table>

Self-Esteem Questionnaire
(Kalanek, 1996)

The Self-Esteem Questionnaire (SEQ), developed by DuBois (1996), is a multi-dimensional measure developed to assess the self-esteem of middle school and junior high school age adolescents. The questionnaires’ 42 items reflect the developmental-ecological perspective of self-esteem. Specifically, the instrument
is designed to reveal evaluations of the self relating to each of the major ecological contexts of early adolescent development (i.e., family, school and peer group) and two other salient domains of experience for this age group (i.e., sports/athletics and body-image). An additional set of items assess overall feelings of self-worth (i.e., global self-esteem).

Adolescents use a four-point scale to indicate how satisfied or dissatisfied one is with the aspect of his or herself that is described (See Exhibit 12). The safeguard against possible bias associated with response style, the measure includes a subset of items that describe negative, rather than positive, evaluations of the self. The SEQ can be completed in 45 minutes.

The SEQ was normed on students in Grades 5 through 9. Internal reliability estimates, ranging from .81 to .91, were noted.

<table>
<thead>
<tr>
<th>Exhibit 12 - Sample Items from the Self-Esteem Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>I am as good a student as I would like to be.</td>
</tr>
<tr>
<td>I am happy with myself as a person.</td>
</tr>
</tbody>
</table>

**Comparisons**

The Coopersmith Self-Esteem Inventory and the Rosenberg Self-Esteem Scale have both been well researched, documented, and used over the years. The Self-Esteem Questionnaire, having recently been developed (1996) is in need of further psychometric testing to confirm its validity as a measure of self-esteem in adolescents.

The RSE is a unidimensional scale and only reports scores of global self-esteem. The SEQ contains a subscale of global self-esteem, but in addition to this, the SEQ measures self-esteem in specific areas such as family, school, peer group, sports, and body-image. The CSEI, in similar fashion to the SEQ, contains subscales in social, academic, family, and general constructs of self-esteem, as well as a lie score to account for subjects who respond defensively to the inventory or understand the intention of the inventory by responding positively to all items.

While the RSE and SEQ are comprised of one measure only, the CSEI contains three forms (School Form, School Short Form, and Adult Form) which can be used with children of different ages or when time is a limiting variable.
In this review of youth development assessment tools, three measures of problem solving and decision-making are identified and examined in detail. These include the Adolescent Coping Orientation for Problem Experiences, the Problem Solving Inventory, and the Adolescent Decision Making Questionnaire.

**Adolescent Coping Orientation for Problem Experiences**
(Sands, 1999; Gellman, 2001)

The Adolescent Coping Orientation for Problem Experiences (A-COPE), developed by Patterson and Hamilton (1991), is a 54-item questionnaire designed to measure self-reported coping behaviors in adolescents. The instrument measures coping patterns along 12 subscales (i.e., developing self-reliance and optimism; developing social support; solving family problems; seeking spiritual support; investing in lose friends; engaging in demanding activity).

An important characteristic of the A-COPE inventory is that the instrument is based on theory that integrates individual coping theory and family stress theory. The A-COPE was designed from the perspective that healthy coping skills for adolescents consist of successfully balancing the demands of the self, the family and the community. Coping is viewed as synonymous with effective problem solving, and this is achieved by maintaining a balance between utilizing both the inner and external resources to come to terms with difficulties.

Using a 5-point scale, youth are instructed to record how often they use each behavior by answering the question, “When you face difficulties or feel tense, how often do you…?” (See Exhibit 13). The A-COPE is scored by summing item scores for a total score; several items are reverse scored.
The original sample from which Patterson and McCubbin normed the A-COPE lacked diversity in racial, cultural, and economic populations. Their pilot samples were each from the Midwest and were composed almost exclusively of Caucasian adolescents from middle to upper socioeconomic families. Since then, however, the instrument has been used with more diverse groups of adolescents and the instrument does appear to have validity with diverse populations. For the A-COPE, internal reliability estimates using Cronbach's alpha ranged from .50 to .76. Test-retest correlations were .83. Construct validity results ranged from .50 to .76.

The A-COPE can be used with children between the ages of 13 and 18. It was designed at a reading level appropriate for young adolescents, and with items that realistically tap the range of behaviors used by today's adolescents.

### Problem Solving Inventory

*(Robertson, 1997)*

The Problem Solving Inventory (PSI), developed by Heppner (1998), is a 35-item self-report measure designed to assess an individual's perceptions of his or her capabilities with regards to problem-solving behaviors and attitudes. The PSI uses a 6-point Likert-type scale (See Exhibit 14). Three subscales including problem-solving confidence (self-assurance while engaging in problem-solving activities), approach-avoidance style (a general tendency to either approach or avoid problem-solving activities), and personal control (determines the extent of control one feels they have over emotions and behavior while solving problems) are used. The PSI can be administered either individually or in small groups and can be completed in 10 to 15 minutes.

For the PSI, internal reliability estimates using Cronbach's alpha was .90 for total measure. Test-retest correlation for a two-week period was .83, showing good stability. Extensive testing of the PSI revealed good validity in several areas. Concurrent validity was established by significant correlations between the PSI and scores on a self-rating scale of ones problem solving skills. Construct validity was demonstrated in a number of studies through high positive correlations to related theoretical constructs.
The PSI measures a person's self-assessed level of efficacy as a problem solver. Although the PSI has been used primarily on adults and the manual fails to specify the reading level required for its maximal use, the inventory has a strong track record in research with clinical usage needing further testing to determine its appropriateness and usefulness.

Adolescent Decision Making Questionnaire

(McKay, 1998)

The Adolescent Decision Making Questionnaire (ADMQ), developed by Mann, Harmoni, & Power (1988), is a 30-item self-report questionnaire measuring self-confidence in decision-making and four decision-making (coping) styles along five subscales including self-confidence, vigilance, panic, evasiveness, and complacency.

Using a 4-point Likert-type scale, youth are instructed to check one of four responses to each item of the scale. Options range from “not at all true for me” to “almost always true” (See Exhibit 15).

The ADMQ was normed with 556 adolescents at a South Australian High School. For the ADMQ, internal reliability estimates using Cronbach’s alpha ranged from .70 to .73. The scale was also found to have good test-retest reliability and high validity.

The ADMQ is widely mentioned and utilized in the literature on adolescent decision-making. It was designed by leading scholars in the field of decision-making.

Exhibit 14 - Sample Items from the Problem Solving Inventory

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>Moderately agree</td>
<td>Slightly agree</td>
<td>Slightly disagree</td>
<td>Moderately disagree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>When a solution to a problem was unsuccessful, I did not examine why it didn't work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After I have tried to solve a problem with a certain course of action, I take time and compare the actual outcome to what I think should have happened.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparisons

All three instruments reported are effective means to measure problem-solving and decision-making skills. Although the Problem Solving Inventory has been used primarily on adults, it has been modified for use with adolescents although the manual does not specify the reading level required for its maximal use.

One positive feature of the Adolescent Coping Orientation for Problem Experiences compared to the other instruments is that it acknowledges the connection and importance of family in the development of effective problem-solving strategies. It should also be noted that although the A-COPE was normed on an adolescent population lacking in racial, cultural, or economic diversity, research has been reported of its use and validity with these diverse populations.

Internal reliability estimates were high for the PSI (.90) compared to the A-COPE (.50 to .76) and ADMQ (.70 to .73). However, caution should be taken with these comparisons since the data sets were individuals of different ages (adults for the PSI, adolescents for the A-COPE and ADMQ).

<table>
<thead>
<tr>
<th>Statements</th>
<th>Not at all true for me</th>
<th>Sometimes true</th>
<th>Often true</th>
<th>Almost always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident in my ability to make decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don't like to take responsibility for making decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instruments to Assess Relationships and Connectedness

Relationships are an important part of adolescents personal and social lives. Relationships fundamentally influence not only ones own perception of self, but also ones perceptions of value to society. Adolescent relationships include parents, step-parents, siblings, peers, adult relatives, and other significant adults (i.e., teachers, mentors, religious figures). Relationships at this age are often complex and convoluted, since adolescents differ somewhat in their needs with respect to relationships compared to adults and younger children (NOWG, n.d.).

In this review of youth development assessment tools, five measures of relationships and connectedness are identified and examined in detail. These include the Adolescent Interpersonal Competence Questionnaire, The Social Connectedness and The Social Assurance Scale, Assessment of Interpersonal Relations, Index of Peer Relations, and Network of Relationships Inventory.

**Adolescent Interpersonal Competence Questionnaire**

*(Worthen, 1999)*

The Adolescent Interpersonal Competence Questionnaire (AICQ), developed by Buhrmester, Furman, Wittenberg, & Reis (1988), is a 40-item instrument designed to measure the utility of distinguishing among different domains of interpersonal competence. The instrument does so along five subscales including: relationship initiation; self-disclosure; negative assertion; offering emotional support; and conflict management. Each scale consists of eight items set up in a way that allows adolescents to respond to questions regarding common interpersonal situations.

Using a 5-point Likert-type scale ranging from “poor at this” to “extremely good at this,” participants respond to a series of questions focused on interpersonal competence (See Exhibit 16). Scale scores are determined by averaging the responses for each of the five scales. Higher scores indicate higher functioning in each area. Buhrmester suggests combining support competence and disclosure subscales of the AICQ to create a score for communal competence and combining assertiveness and initiation into agentic competence.

For the AICQ, internal reliability coefficients ranged from .77 to .87. Four-week test-retest reliability estimates ranged from .69 to .89 for the five scales. The validity of the independence of the five scales was tested by factor analysis.
There is also a shortened version of the AICQ, the Adolescent Interpersonal Competence Questionnaire—Revised (AICQ-R) that omits one item of each of the five subscales of the AICQ and was developed with early to middle adolescents. The AICQ-R has proven to be a reliable and valid assessment of adolescents’ interpersonal competence. Buhrmester suggests combining support, disclosure, and conflict management of the AICQ-R to form communal competence.

Exhibit 16 - Sample Items from the Adolescent Interpersonal Competence Questionnaire

<table>
<thead>
<tr>
<th>1</th>
<th>Poor at this: would be so uncomfortable and unable to handle this situation that it would be avoided if possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Fair at this: would feel uncomfortable and would have some difficulty handling this situation.</td>
</tr>
<tr>
<td>3</td>
<td>O.K. at this: would feel somewhat uncomfortable and have a little difficulty handling this situation.</td>
</tr>
<tr>
<td>4</td>
<td>Good at this: would feel quite comfortable and able to handle this situation.</td>
</tr>
<tr>
<td>5</td>
<td>Extremely good at this: would feel very comfortable and could handle this situation very well.</td>
</tr>
<tr>
<td>-</td>
<td>How good is this person at asking someone new to do things together, like go to a ball game or movie?</td>
</tr>
<tr>
<td>-</td>
<td>How good is this person at saying “no” to someone when it is the right thing to do?</td>
</tr>
</tbody>
</table>

Social connectedness measures connectedness (4 items), affiliation (3 items), and companionship (1 item). The items portray a general emotional distance between self and others that may be experienced even among friends or close peers, as attested by items “Even among my friends, there is no sense of brother/sisterhood” and “I don’t feel related to anyone.” Social assurance measures companionship (4 items) and affiliation (4 items). The items portray a general need for reassurance from at least one or more persons for a sense of belongingness, as attested by items “I’m more at ease doing things together with other people” and “My life is incomplete without a buddy beside me.”

Using a 6-point scale ranging from “strongly agree” to “strongly disagree,” participants respond to a series of questions focused on the emotional distance or connectedness between the self and other people, as well as the reassurance from others in social situations to sustain a sense of belongingness. A strong sense of belongingness is reflected in higher scores, whereas lower scores reflect a lack of a strong sense of belongingness.
The scales were normed on 626 college students from a large suburban south-eastern university. Coefficient alphas for the Social Connectedness Scale and the Social Assurance Scale revealed alphas of .91 and .77, respectively. Test-retest correlations revealed good test stability over a 2-week period (.96 and .84).

The scales need to be validated and supported with additional research before further conclusions on the meaning of the scales can be drawn. Both scales are promising instruments for understanding the complex dynamics underlying the sense of belongingness. However, the scales were developed with college-age students, so their applicability with adolescents has yet to be proven.

**Assessment of Interpersonal Relations**

(Sanchez, 2000; Glenn, 2001)

The Assessment of Interpersonal Relations (AIR), developed by Bracken (1993), is a 105-item self-report measure assessing perceptions of youth in regard to relationships with parents (mother and father), with peers (male and female), and with teachers. These items are equally distributed across the three separate scales, with 35 items per scale, seven of which are negatively worded. There are a total of five subscales, perceived relationship with mother, father, male peers, female peers, and teachers.

Using a 4-point Likert-type scale, youth reply to each item by circling whether they “strongly agree, agree, disagree, or strongly disagree” (See Exhibit 17). All of the subscale raw scores are summed into the AIR Total Relationship Index (TRI) raw score and this too is converted into a standard score.

The AIR was normed on with a population of 2,501 children from Grades 5 through 12 (ages 9-19). The examiner’s manual reports internal consistency coefficients ranging from .93 to .96 for all five subscales, and .96 for the TRI. Test-retest reliability estimates at intervals of two-weeks were also strong with coefficients in the .90’s for the scale’s scores.
The Index of Peer Relations (IPR), developed by Hudson (1992), is a 25-item self-report scale to measure the quality of peer relations from adolescence through adulthood. The IPR uses a 7-point Likert-type scale with 1 being “true none of the time,” and 7 being “true all of the time” (See Exhibit 18). The items are worded both positively and negatively to control for response set bias. Scoring is reversed for positively worded items. The higher the total score the greater the likelihood of peer relation problems.

In designing the IPR, Hudson sought qualities of brevity, ease of completion and scoring, low response decay over repeated administration, and high validity and reliability. The IPR was normed on a sample of 107 people undergoing counseling ranging from 18 to 60 years of age. The internal reliability coefficient was for the IPR was .94. Construct and concurrent validity was also high. Forte and Green (1994) carried out a validity study to evaluate the use and appropriateness of the IPR with adolescents. They noted high criterion and construct validity using the scale with adolescents as well.
Network of Relationships Inventory

(Miller, 2001)

The Network of Relationships Inventory (NRI), developed by Furman & Buhrmester (1985, 1992), is a 30-item instrument to assess both positive and negative qualities that may be associated with friendships and romantic relationships. The NRI is comprised of ten scales: (a) companionship, (b) conflict, (c) instrumental aid, (d) antagonism, (e) intimacy, (f) nurturance, (g) affection, (h) admiration, (i) relative power, and (j) reliable alliance.

Using a 5-point Likert-type scale ranging from “little or none” to “the most,” adolescents rate how much the ten subscales occur within a specified relationship (i.e., same-sex friendship, romantic relationship) (See Exhibit 19). Averaging the three items that assess each relationship quality derives scores for each scale, and separate scores are obtained for each relationship.

The NRI had internal consistency, Cronbach’s alpha of .80. One-month test-retest reliability estimates ranged from .66 to .70. A significant link was found between friendship features and adjustment for children and adolescents, offering evidence for construct validity as well.

Comparisons

While the Assessment of Interpersonal Relations (AIR), Index of Peer Relations (IPR), and Network of Relationships Inventory (NRI) focus on the quality of one’s relationship with others in one’s environment, the Adolescent Interpersonal Competence Questionnaire (AICQ) and The Social Connectedness and The Social Assurance Scale (SCSA) tend to focus a sense of competence about relationships in general.

The SCSA targets the sense of feeling connected to peers and belongingness to a group, which are important components of adolescence. The AICQ, on the other hand, focuses on specific components of relationships themselves, and measures the interpersonal competence youth feel within this domain. The other
measures (AIR, IPR, & NRI) focus on the relationship with a specific other party in mind. While the IPR and NRI target relationships with peers, the AIR contains multiple scales to assess one's relationship not only with peers, but with parents and teachers as well. The NRI also assesses romantic relationships, which none of the other measures address.

All of the measures have been suggested as useful tools in the area of relationships and connectedness for adolescents. It should be cautioned however, that while the SCSA has high reliability, it was developed with college-age students, so its validity as an effective measure of adolescents’ skill level in this area is yet to be proven. Likewise, the IPR was normed on a wide range of people in terms of age (18-60 years), with high reliability. However unlike the SCSA, the IPR was validated as an effective scale for use with adolescents.

The range of scales in the AICQ and AIR might be of interest if a specific age range of adolescents or a specific relationship is a focus of study. The AICQ has a shortened version, the Adolescent Interpersonal Competence Questionnaire—Revised (AICQ-R) targeted for use with early to middle adolescents. And if a specific relationship other than peers is of interest, such as parents or teachers, the AIR fits this need. In addition, the AIR was normed on a large population of youth with high reliability.
Instruments to Assess Communication

Communication helps adolescents stay in touch with their world, share their feelings and ideas with others, and shape their relationships. In order for communication to be effective, it is important for adolescents to be mindful of the process of communication and of possible differences between self and others in how messages are conveyed and interpreted (NOWG, n.d.).

Communication within families in particular takes on a complex form as it is often dictated by such factors as rules, roles, and hierarchies. Effective communication in families has been associated with many aspects of adolescent functioning and development including identity development, social and coping skills, self-esteem and; adolescent resiliency; and social competence (NOWG, n.d.).

In this review of youth development assessment tools, two measures of communication are identified and examined in detail. These include the Parent-Adolescent Communication Scale, and Family Assessment Device.

**Parent-Adolescent Communication Scale**
*(Lloyd, 2000)*

The Parent-Adolescent Communication Scale (PAC), developed by Barnes and Olson (1982), is a 20-item questionnaire composed of two subscales that measure degree of openness and extent of problems in family communication. The first subscale focuses on open family communication that emphasizes responses regarding the open exchange of both factual and emotional information between parents and adolescents, as well as including the degree of satisfaction experienced during the interaction. The second subscale focuses on problems in family communication including responses regarding a hesitancy to share information, negative styles of communication interaction, and the need for selectivity and caution in what is shared between parent and adolescents.

The goal of the developers was to design a tool that would aid researchers to describe parent-adolescent communication in a variety of family types and to identify a diversity of experiences within different family units. There are three forms to the complete instrument including the parent form, the adolescent-mother form, and the adolescent-father form. All three forms have been individually normed with separate scores, making the various forms accurate for use separately and individually.
Participants use a 5-point Likert-type scale ranging from “strongly disagree” to “strongly agree” (See Exhibit 20). Higher scores indicate a greater degree of openness and fewer problems in family communication.

The PAC was normed on 433 subjects composed of adolescents from college, university, and high school levels with an age range of 16 through 20 years old. The PAC has been described as having internal and external validity consistency, with test-retest reliability of .78 and internal consistency, Cronbach’s alpha of .91.

The PAC has been used in various published studies to identify the perception of parent-adolescent communication from the perspective of the adolescent. The scales measure both positive and negative aspects of communication as well as some content and process of the parent-adolescent interactions.

### Exhibit 20 - Sample Items from the Parent-Adolescent Communication Scale, Adolescent-Father Form

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Neither Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

- I can discuss my beliefs with my father without feeling restrained or embarrassed.
- My father tries to understand my point of view.

**Family Assessment Device**

(Besett-Alesch, 2000)

The Family Assessment Device (FAD) developed by Epstein, Baldwin, & Bishop (1983), is a 60-item self-report instrument designed to measure six dimensions of family functioning: problem solving (6 items); communication (9 items); roles (11 items); affective responsiveness (6 items); affective involvement (7 items); and behavior control (9 items). It also contains a general functioning scale (12 items) that can be used independently. The FAD was meant to be a screening device in order to identify problem areas within the family system in a simple and efficient manner.

Using a 4-point Likert-type scale, individuals indicate the degree to which they agree or disagree with each statement about their family’s functioning (See Exhibit 21). Scores are computed by summing the responses for each of the seven subscales.

Internal consistencies for each subscale of the FAD ranged from .72 (roles) to .92 (general functioning) for a heterogeneous sample of 503 clinical and nonclinical participants. Test-retest reliabilities were found to be adequate, ranging from .66 (problem solving) to .76 (affective responsiveness). The FAD also showed evidence of concurrent and predictive validity.
This is a well-established and highly utilized self-report instrument. The FAD has been used in clinical studies of families responding to adolescent suicide and other mental health issues. The FAD is based on a sound, theoretical model.

**Comparisons**

Effective communication between adolescents and family is critical to the successful development of the adolescent, and this is evidenced by the two measures reviewed to assess communication skills.

The Parent-Adolescent Communication Scale and the Family Assessment Device assess the communication skills between adolescent and family members. However, the PAC uses two subscales and focuses on the broader, more generalized characteristics of communication within the family, while the FAD uses six subscales and links to specific constructs of communication within the family. It should also be noted that the PAC has three forms that complete the instrument, the parent form, the adolescent-mother form, and the adolescent-father form, which can shed light into communication problems with specific family members, which the FAD cannot do.

A potential disadvantage of the PAC however, is that it has mainly been used with older adolescents (16-20 years), so its validity as a measure for use with younger adolescents is uncertain. The appropriate age range for the FAD was not determined in this review.

**Exhibit 21 - Sample Items from the Family Assessment Device**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>When you ask someone to do something, you have to check that they did it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We cannot talk to each other about the sadness we feel.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instruments to Assess Resiliency

Resilience is an individual’s capacity for adapting to change and stressful events in healthy and flexible ways. Resilience has been identified in research studies as a characteristic of youth who, when exposed to multiple risk factors, show successful responses to challenges, and use this learning to achieve successful outcomes. Protective mechanisms associated with resilience include: reduction of risk impact; reduction of negative behavior patterns; the establishment and maintenance of self-esteem and self-efficacy; and the opening up of opportunities (Catalano et al., 1998).

In this review of youth development assessment tools, two measures of resiliency are identified and examined in detail. These include the Healthy Kids Resilience Assessment and the Individual Protective Factors Index.

**Healthy Kids Resilience Assessment**  
*(Constantine & Bernard, 2001)*

The Healthy Kids Resilience Assessment (HKRA) is an optional module of the California Healthy Kids Survey (See Exhibit 22). The survey was initially designed with 11 protective factors and 11 resilience traits, organized into six clusters. The conceptual framework, and the content of the HKRA that was based upon it, were revised several times as pilot, field test, and regular administration data was collected and analyzed over a two-year extended field test. The HKRA, when administered concurrently with the CHKS, can be completed in 50 minutes.

Validity data was collected from a population of 56,398 students across 479 schools in 164 districts across the state of California. Most districts assessed all 7th, 9th, and 11th grade and alternative school students who received written parental permission. Internal-consistency reliability analyses have been conducted at several stages of the development of the HKRA with revisions of the tool as a result. Although version 3.0 is currently available, a revised version (4.0) is currently in development. Internal-consistency reliability results for version 3.0 were not available at this time. Validation results were also not reported.

The most recent recommendations to the tool include six scales to assess protective factors (family connection, school connection, community connection, autonomy experience, pro-social peers, and pro-social group participation) and six scales to measure resilience traits (cooperation and communication, general self-efficacy, empathy, effective help-seeking, self-awareness, and goals and aspirations). Three additional scales were recommended (family behavioral monitoring, appreciation of diversity, and spiritual/religious connection). The total question set would comprise of 52 items.
The Individualized Protective Factors Index (IPFI), developed by Springer & Phillips (1995), is a 71-item self-administered questionnaire designed to measure adolescent resiliency as defined by ten attitudinal orientations in three major domains (social bonding, personal competence, and social competence). The measure construct focuses most predominantly on protective factors associated with healthy personal and social development among youth in high-risk environments (See Exhibit 23).

The social bonding component of the IPFI concerns positive response and commitment to basic social institutions such as family, school, and community. It assesses the level to which youth feel satisfactory involvement and motivation for accomplishment and effort in various social institutions. It reflects the component of resiliency in that positive ties to social institutions give the individual and investment in them and in pro-social behavior. The IPFI contains three dimensions in this area (pro-social norms, school bonding, and family bonding).

The personal competence of the IPFI focuses on one’s sense of individual identity. This relates to the personal development of youth, the development of their own self-image and outlook, and the ability to function effectively as a decision-making person in control of one’s future. The IPFI contains four dimensions in this area (self-concept, self-control, self-efficacy, and positive outlook).

The social competence of the IPFI is considered to be a commonly identified attribute of resilient children. The common theme of social competence is the ability to be responsive, caring and flexible in social situations. The child or adult who has these qualities will elicit positive response and reinforcement, with positive personal results. The IPFI has three dimensions in this area (assertiveness, confidence, and cooperation).

The IPFI was pilot tested with 642 youths (10-16) in five states nationwide. Reliability and validity analyses were done with a sample of 2,416 youths in 15 sites nationwide. Springer and Phillips reported reliability of dimensions coefficients, ranging from .46 (assertiveness, social competence) to .65 (self-control,
personal competence). Reliability for the total IPFI was .93. Positive construct validity was also found on the IPFI.

The IPFI was designed for youth between the ages of 10 and 16. It has been used with older populations, and a version appropriate for younger children (8 to 9) is under development.

### Comparisons

The Healthy Kids Resilience Assessment (HKRA) and the Individualized Protective Factors Index (IPFI) are new tools in a relatively new area of research with youth, resiliency. The HKRA distinguishes between two types of resilience constructs: (1) protective factors and (2) resilience traits, while the IPFI focuses solely on protective factors. The HKRA is a new tool and therefore lacks reliability and validity data. In addition, test-retest psychometric data is missing from analyzes of the HKRA. The IPFI has more psychometric support in terms of reliability and validity data than the HKRA. However both instruments are currently being used to measure resiliency in youth at this time.
Conclusion

The twenty-six youth development assessment tools described in this literature review are several of a multitude of tools currently accessible for use to assess positive outcomes of youth development programs. Although each one is important in its own regard, it has been noted that one tool cannot adequately assess the skills and competences needed for a well-rounded, balanced youth (NOWG, n.d.).

It should also be cautioned that the demographics of youth are rapidly changing, and will continue to do so as this century progresses. While many youth development tools were developed in the eighties and nineties, some of the most popular ones used today (i.e., Coopersmith Self-Esteem Inventory and Rosenberg Self-Esteem Scale) were developed in the sixties, when the faces of youth were very different from those of today. Therefore care must taken in terms of cultural, ethnic, and racial differences when using or designing assessment tools (NRC, 2002).

In addition, many scales that were developed and normed for one population are often used with samples representative of another population. Such use of a measuring instrument makes the very strong assumption that the interpretation of all questionnaire items and the conceptual structure of the underlying construct are equivalent across the two populations. It is critically important that researchers be fully cognizant of all normative information related to a particular measuring instrument before finalizing any decision regarding its use. Researchers need to evaluate the relevancy, recency, and representativeness of the normative data in selecting the instrument of their own use (Byrne, 1996).

And finally, the issue of whether youth development assessment tools measure positive-focused outcomes has important implications for the future of the youth development field, and is currently the subject of considerable discussion among practitioners, prevention scientists, and the policy community. Programs tend to focus on measures that assess reductions in problem behavior, positive outcome measures, or both. Catalano et al. (1998) noted that there is a need for all positive youth development programs to measure both types of outcomes in order to assess fully the effects of these programs on youth. Although this literature review primarily focused on positive outcome measures, they feel that an integrated measurement approach (i.e., one that includes positive outcome measures and problem behavior measures) provides funders of promotion and prevention programs a greater understanding of program effects on all important youth outcomes.
Finding reliable and valid youth development tools for use is a complex, challenging process. There are many tools currently in existence, but finding a tool or multitude of tools that are the best fit with a program’s mission and goals for its youth may not be an easy process. It is hoped that this literature review sheds light on some of the tools currently used to assess competences in youth, and may serve as a guide as programs develop or use assessment tools on their own.
Psychometric Terminology
(Bryne, 1996)

Reliability: The extent to which measurements (or scores) on an assessment instrument are consistent. The indicator of such consistency is the reliability coefficient, which is often reported and interpreted as a Pearson r statistic; the closer the value is to 1.00, the higher the reliability. Recommended criterion values have ranged from .70 to .98. The lower the reliability of a measuring instrument, the less consistent will be any scores resulting from its use.

**Internal consistency reliability:** The extent to which items measuring the same construct (i.e., items in the same subscale) are homogeneous. Content sampling error focuses on and is represented by this. Internal consistency reliability is typically estimated by means of one of three procedures: the split half-method, the coefficient alpha formula (developed by Cronbach), or the Kuder—Richardson (K—R 20) formula.

*Split-half method:* Involves administering a questionnaire once to a group of subjects, splitting the items into equivalent halves using some logical procedure (e.g., odd/even numbers), scoring and summing the scores for each half, and computing the correlation between the two summative scores. This correlation then represents the internal consistency reliability coefficient.

*Coefficient alpha formula:* Involves the mean of all possible split-half correlations that have been calculated by means of the Rulon (or Guttman) method. It is most appropriately used on test that comprise polychotomous items.

*K—R 20 formula:* Yields a reliability coefficient that is a special case of coefficient alpha when the items of the test are dichotomously scored.

Stability reliability: Represents the time-sampling error focused on the stability of measurements over time. It is based on a suitable intervening time interval. Stability reliability is most commonly represented by the test—retest reliability coefficient.

*Test—retest reliability coefficient:* Computed through the correlation of scores on the same subjects obtained from an administration of the same test on two different occasions. Ideally, the pair of scores should be the same or, at least, highly similar. Although the time delay between tests can vary from a few days to several months, 2 weeks has been found to be the most common practice. The time period between testing should be long enough to
allow the effects of memory or practice to dissipate but short enough to ensure that test scores are not adversely affected by developmental or historical changes.

**Validity:** Refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores. Test validation involves the gathering of evidence in support of these inferences. Note that it is not the instrument per se that is valid, but rather, the scores that derive from the administered and completed instrument. Evidence in support of validity can be categorized as content-related, criterion related, and construct related.

**Content validity:** Refers to the extent to which the sample of items on a measuring instrument adequately represents some defined universe or domain of content. Typically, content-related validity is sought in support of achievement measures.

**Criterion validity:** Refers to the correlations between a score on a particular instrument with some criterion (or standard of judgment) such as a test, diagnostic classification, or performance of a specific task. The two types of criterion validity are predictive validity and concurrent validity.

**Predictive validity:** In seeking evidence of predictive validity, a researcher examines the correlation between scores on the measure of interest, and performance (or other) scores on some related criterion, at some later time. Typically associated with aptitude and achievement tests as predictors of job performance and academic success, although also used in relation to self-concept.

**Concurrent validity:** In seeking evidence of concurrent validity, a researcher typically correlates scores on the instrument of interest with those on some well-established instrument designed to measure the same construct (or constructs, in the case of subscales). The scores used in measuring concurrent validity derive from measures that were administered at the same point in time. Another approach is to correlate scores on particular domain-specific subscales of an instrument with the criterion variable that each is designed to measure. Associated with self-concept measures.

**Construct validity:** Refers to two modes of inquiry; (1) The validation of a theory and (2) the validation of a measuring instrument. In validating theory, a researcher seeks empirical evidence in support of hypothesized construct relations both among facets of the same construct (within-network relations) and among different constructs (between-networks relations). Validation of a measuring instrument entails the testing of construct inter-
pretation of scores derived from the instrument. The researcher seeks empirical evidence that the constructs purportedly measured by the instrument are, in fact, the ones being measured. In the case of an instrument comprising several subscales, evidence of construct validity is demonstrated if the scales exhibit a well-defined factor structure that is consistent with the underlying theory.
## Table of Contact Information for Youth Development/ Asset Tools

*Evaluating the National Outcomes (http://ag.arizona.edu/fcr/fs/nowg/ythindexintro.html)

** CART (http://cart.rmcdenver.com)

### Self-Concept

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
### Self-Efficacy

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>

### Social Competence

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
### Self-Esteem

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
### Problem Solving and Decision Making

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
### Relationships and Connectedness

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
### Communication

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>

### Resiliency

<table>
<thead>
<tr>
<th>Name</th>
<th>Lit. Reference</th>
<th>Contact Information</th>
<th>Fee</th>
<th>Author(s)</th>
<th>Created in</th>
</tr>
</thead>
</table>
APPENDIX C

Sample Assessment Tools

**Self-Concept**
- Self-Perception Profile for Adolescents
- Multidimensional Self Concept Scale
- Piers Harris Self Concept Inventory
- Self-Description Questionnaire-I

**Self-Efficacy**
- The Self-Efficacy Scale

**Social Competence**
- Walker-McConnell Scale of Social Competence and School Adjustment
- Texas Social Behavior Inventory

**Self-Esteem**
- Coopersmith Self-Esteem Inventory
- Rosenberg Self-Esteem Scale
- Self-Esteem Questionnaire.

**Problem Solving and Decision-Making**
- Adolescent Coping Orientation for Problem Experiences
- Problem Solving Inventory
- Adolescent Decision Making Questionnaire

**Relationships and Connectedness**
- Adolescent Interpersonal Competence Questionnaire
- Assessment of Interpersonal Relations
- Index of Peer Relations
- Network of Relationships Inventory

**Communication**
- Parent-Adolescent Communication Scale
- Family Assessment Device

**Resiliency**
- California Healthy Kids Survey
- Individual Protective Factors Index
REFERENCES


Sanchez, R. (2000). Internalizing symptomatology and perceived interpersonal relations among middle school students identified by their school district as having a learning disability. Unpublished doctoral dissertation. The University of Iowa, IA.


This editorial is published by The EMT Group, Inc., under its Community Alcohol and Other Drug Prevention contract with The California Department of Alcohol and Drug Programs (DADP). The purpose of this publication is to help practitioners in the prevention field stay abreast of best practices emerging from current research and to provide practical tools and resources for implementing proven strategies.

The information or strategies highlighted in this document do not constitute an endorsement by DADP nor are the ideas and opinions expressed herein those of DADP or its staff.

Permission to reproduce is granted, provided credit is given.

Author: Belinda Basca
Editor: Chrissy Kord
Graphic Design: Art Farmer Design

2002