Measuring adolescent connectedness:

A guide for school-based assessment and program evaluation

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Introduction

School counselors who can demonstrate that their guidance and counseling programs result in improvements in their students' connectedness to school, teachers, and peers are less likely to be pulled in 100 different directions by administrators, teachers and parents. Based on their experiences, the authors' argue that this is because such counselors are viewed as providing a unique and highly valued service. School counselors who utilize a comprehensive and organized approach to deliver guidance presentations, individual student planning, system support, and responsive services (American School Counseling Association, [ASCA] 2003), and who can demonstrate that it results in improved connectedness among their students, are less likely to be asked (or expected) to supervise testing, class scheduling, or lunch duty. Or, if asked, they can turn to their impressive body of evaluative evidence, use it as to define the borders of her professional duties, and thereby educate parents and colleagues alike about the unique and valuable role that professional counselors play in schools.

It is incumbent upon school counselors to create and organize a quality program of guidance and counseling services that is amenable to evaluation in order to demonstrate accountability. The planning of such thoughtful, focused, and intentional services takes precious time, but it also requires forethought in order to anticipate desired outcomes and make certain, from the outset, that these outcomes are measurable. Compounding these time constraints on program planning, many school counselors may believe they have limited training or insufficient tools at hand to link their program components activities to program evaluations.

This chapter provides a guide that school counselors can use both to systematically assess the impact of a school counseling program and to strengthen it by focusing on promoting changes in students' connectedness. A theory of adolescent connectedness (Karcher, 2001) presented in this chapter in which connectedness is described as movement towards others through positive affect and activity. Connectedness is a students' response to feelings of relatedness and belonging; this definition provides the first key to intervention: to promote connectedness, school counselors must create school contexts where youth feels a sense of belongingness at school and relatedness to teachers and peers. When individuals feel a sense of relatedness to others and belonging in general they, in turn, value those relationships and social institutions in which they experienced belongingness and relatedness. But school counselors also must help students pursue related activities and relationships, which cements their connections

through behavioral and affective commitment. Connectedness reflects adolescents' perception of their own involvement in and affection for others, activities, and organizations. With such a definition, connectedness is measurable and can be used it as a indicator of program outcomes.

Of course, connectedness is but one outcome or construct a school counselor might wish to measure as evidence of outcomes. There also are measures of social skills, self-esteem, peer attachment, cultural competence, and a variety of other behavioral and attitudinal indices that a school counselor might choose to use. For the purposes of this chapter, connectedness is solely emphasized in order to provide a comprehensive overview of one measure, its norms, uses, and evaluative procedures, which we believe will allow the reader to make generalizations and comparisons to other measures.

The Problem—Capturing the Effects of School Counseling Programs

The notion of connectedness has become increasingly popular in both popular society (e.g., to Oprah), as well as in academic and educational settings. The construct of connectedness is viewed by many as increasingly important in a mobilized, post-industrialized, multicultural, and technologically alienating society, such as is found in the United States. Children and adolescents need healthy connectedness to family, siblings, friends, and eventually romantic partners in order to weave themselves tightly into a supportive social network. Connectedness to school, teachers, and peers during the middle and high school years is a particularly strong predictor of academic and future success, but it also helps to prevent alienation, which can lead to violence like that of the Columbine massacre, Washington D.C. shootings, or the countless other acts of desperation performed by students in recent years. Adolescents also need to learn to effectively connect with culturally different peers, the world of reading, a source of spirituality (regardless of persuasion, denomination, or creed), and to their neighborhoods. Because parents and researchers alike recognize the ubiquitous necessity of connectedness, it is important to for school counselors to know how they to both promote and measure connectedness.

Using Connectedness to Capture, Profile, and Predict Developmental Assets

The Measure of Adolescent Connectedness that is described in this chapter had direct parallels to the Developmental Assets described by the SEARCH Institute. The 40 Assets described in the SEARCH framework focus the attention of school counselors, teachers, parents, and youth on the positive relationships, opportunities, skills and values that can support the healthy growth and development of young people (Scales & Leffert, 1999). The model asserts

that the more young people experience these 40 Developmental Assets, the more likely they are to engage in prosocial behaviors and conversely, the less likely they are to participate in harmful behaviors (Benson, Galbraith, & Espeland, 1995). Using data collected with the SEARCH assets measure we illustrate these connections in later sections to illustrate ways in which the measure of adolescent connectedness can serve as a proxy measure of assets and can thereby be used to facilitate and extend the use of the Developmental Assets Framework.

The SEARCH Institute's Developmental Assets constructs have become a central organizational framework for many school districts, helping school counselors organize efforts to promote external and internal assets among students (Scales, 2005). Given recent federal mandates, schools must focus on improving school safety and academic success. Increasing student assets is a goal that targets both of these concerns, in part, by promoting connectedness to teachers, peers, and the learning process. Consequently, numerous school districts have used the SEARCH Institute's assets framework to make fundamental changes in the structure of their schools and to improve students' relationships with teachers and peers. In addition, statewide initiatives, such as California's Proposition 49 actually require that school connectedness be assessed in addition to other constructs currently guiding guidance programming in schools. The Measure of Adolescent Connectedness can be used to supplement and extend this assets framework by linking guidance program content with measurable outcomes. We argue that using the connectedness construct and measure described in this chapter may make the asset-promoting activities they propose even more useful in guidance programming.

Finally, our approach is based on the authors' combined experiences of conducting research on connectedness and our first-hand experience as school counselors and the director of school guidance programming for a large urban school district that used the SEARCH assets model as its organizing framework. Based on these experiences, we focus on illustrating ways to track changes in connectedness that result from guidance programming within the schools. In order to help the reader better understand how to assess connectedness among middle and high school-aged students, the authors present a theory of adolescent connectedness, describe the Hemingway Measure of Adolescent Connectedness, provide normative data for one district and new research on connectedness, and finally bring this theory and research to practice by describing several strategies for developing a program of services that carefully links evaluation with efforts to promote assets and connectedness as part of a comprehensive guidance program.

Theory

Connectedness has been described one of the five "C"s Lerner, Fisher, and Weinberg (2000) suggest that youth development programs must target. This is due, in part, to its usefulness as a predictor of a number of developmental competencies as well as risk behaviors. However, while to date no theoretically derived measure of adolescent connectedness has been empirically tested for use in schools, adolescent connectedness has landed squarely in the middle of the emerging field of applied youth development (Roth & Brooks-Gunn, 2003). For example, in their review, Roth and Brooks-Gunn found that all of youth development programs they reviewed attempted to promote one or more forms of connectedness. 73% of these programs explicitly "sought to improve adolescents' connections; connections with their families (40%) and peers (42%) were the most common connection goals for the programs" (p. 207). Yet, only half of those programs designed to promote connectedness actually used a measure of connectedness to evaluate program success. "More programs held goals of promoting... connections than actually measured these characteristics in the evaluations. Of 35 programs promoting connectedness only 19 (54%) reported measures of connectedness" (p. 215).

The absence of a measure of adolescent connectedness and definitional framework presents a huge barrier to fully exploiting the usefulness of the connectedness construct as a target of school counseling programs. Adolescent connectedness must be clearly defined and reliably measurable before research can have a positive influence on the field of school counseling and the applied developmental sciences. Measures used in most studies have been ad hoc, and when described within each study, the term connectedness often has been used interchangeably with other words like bonding, attachment, belongingness and relatedness. Not until a clear nomenclature for connectedness is established and measures of connectedness receive sufficient validity evidence will this, the third of the five Cs of applied youth development programs, be a useful and meaningful measure of programmatic influences of school counseling on youths' developmental competencies.

The Ecology of Adolescent Connectedness

The model of connectedness presented in this chapter is derived from ecological and developmental theory. From these perspectives each world of the adolescent's social ecology—school, friends, family and neighborhood—can be viewed as a world of

connectedness. Used in this way, the term "world" refers to common and important contexts, relationships, and activities of engagement in the lives of adolescents (Nakkula & Selman, 1991).

The concept of connectedness has sometimes been restricted to participation or involvement in interpersonal relationships (Gilligan, 1991; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991), but this definition is needlessly restrictive and inconsistent with the public's broader use of the term, which is more ecological in nature. Broadly defined, connectedness includes the acts of giving back to, being involved with, and investing oneself in an affective manner in places and activities as well as in relationships with other people. "Connectedness occurs when a person is actively involved with another person, object, group or environment, and that involvement promotes a sense of comfort, well-being, and anxiety-reduction" (Hagerty, Lynch-Sauer, Patusky, & Bouwsema, 1993, p. 293). Connectedness is not restricted to relationships. For example, youth can be connected to school and to reading just as they may care for, enjoy, and be actively involved with a teacher, peer, friend, or parent.

We suggest that there is a connectedness to self, which emerges during adolescence as a sense of self that is based on their unique relationships with family memberships, teachers, and friends (Erikson, 1950; Harter, 1999). Adolescents' self-esteem in these contexts informs a connectedness to self that is primarily present-oriented. In addition, the ability to think abstractly results in the differentiation of a *present self* and a *future self* (Harter, 1999), with the future self tied most closely to conventional and individualistic worlds. Because youth can have feelings about and engage in activities directed toward each of these selves, we include them as well.

The ecology of adolescent connectedness includes all of the significant ecological systems (micro, macro, and meso) that adolescents experience in their day-to-day lives (Bronfenbrenner, 1979). Microsystems include youths' important relationships at home with parents and siblings, in school with teachers and peers, and in their neighborhood with friends. Macrosystems of connectedness are the larger institutions in youths' lives in which these microsystemic relationships and activities occur and include one's neighborhood, family, school, religion, and cultural group. The mesosystems are those processes of connection that link microand macrosystems. For example, reading is one main mesosystem, which links home and school by orienting interpersonal connections. Reading is an activity that links the youth to school, teachers, and friends. Adolescent connectedness generalizes beyond immediate dyadic relationships (or microsystems) toward activities associated with these contexts, such as reading.

In principle, using this same logic, one could suggest that smoking, drinking, and fighting (as something youth do and care about with friends) are mesosystems as well, but we restrict the term connectedness to types of affective and behavioral engagements that are (at least potentially) catalysts for positive youth development. And although connectedness to one's friends and neighborhood can contribute to risk-taking behaviors, a sufficient degree of connectedness to friends and one's neighborhood environment is essential to positive youth development. Whereas engagement in smoking, drinking, and fighting do not provide a similar protective function for youth and are not included in our conceptualization of connectedness. *The Continuum from Conventional to Unconventional Connectedness*

Each of these worlds of connectedness can be characterized as falling somewhere along a continuum of conventionality. This concept of conventionality was initially proposed and described by Jessor and Jessor (1977), and is used here as it is defined in the Oxford Compact English Dictionary: Convention refers to the "way in which something is usually done" and "socially acceptable behaviors." Conventional means "following social convention; not individual or adventurous" (Soanes, 2003, p. 234), where the conventions are those set by adult society. Connectedness, then, can be characterized as either conventional (adult sanctioned) or unconventional (youth sanctioned).

Highly conventional worlds include those contexts, relationships, and activities that are structured, sanctioned, and supervised by adults. These conventional worlds of connectedness are antithetical to problem behaviors and risk taking (Donovan, Jessor, & Costa, 1988). Conventional connectedness typically includes the social worlds of school, teachers, reading, religion, and family: all of which are structured by adults and directed toward the future. Positive orientations towards and active involvement in all of these worlds serve to buffer against violence (Honora & Rolle, 2002; O'Donnell, Hawkins, & Abbott, 1995).

Conversely, connectedness to peers, friends, and the neighborhood may be conventional if the nature of these relationships and activities reflect attitudes and conventions prescribed by adults. However, this tends not to be the case for most youth (Karcher, 2003a). Due to its customarily unsupervised nature, connectedness to neighborhoods and time spent with peers, friends, romantic partners, and (for some) siblings is primarily unconventional. Being antithetical to adult conventions, unconventional connectedness often elicits activities that can lead to problem behaviors. The *un*conventional worlds of connectedness are those social ecologies in

which youth themselves typically dictate the norms, activities, and structures that govern or dictate appropriate interaction. Youths' neighborhoods (for early adolescents), friendships, and romantic relationships (for older adolescents), are the most common examples of contexts/relationships in which unconventional connectedness develops and drives behaviors.

All adolescents need to achieve a minimum amount of connectedness across their social ecology and in both conventional and unconventional worlds. Problems typically emerge for those youth who are not able to establish sufficient connectedness within the family, school, and other conventional contexts, relationships, and activities (e.g., reading). Youth at risk for academic underachievement often establish an imbalance, engaging in more unconventional than conventional connectedness.

Promoting connectedness in the school setting can serve to counterbalance the increasing importance of connectedness to peers, friends, and romantic partners during adolescence by providing an opportunity for conventionally disconnected youth to form connections with others in this conventional world. Youth whose primary affections and engagement are with peers and friends engage in more unconventional, illicit behaviors and are more likely to denounce school and other conventional contexts and relationships. In contrast, youth who are actively involved in, enjoy, and feel positively about school are less likely to engage in violent behavior, substance use, and other related problems that interfere with academic success (Cernkovich & Giordana, 1992; Farrington, 1991; O'Donnell et al., 1995; Olin, 2001). For this reason, promoting active engagement in school and positive feelings about school (viz., connectedness to school) should be at least one of the primary targets of school-based violence prevention programs. Promoting connectedness to friends who engage more in conventional, prosocial behaviors, such as by encouraging students to participate in extracurricular activities, clubs and organization where friendships grow in the context of conventional activities, should be another target of counselors. *The Developmental Origins of Adolescent Connectedness*

Connectedness has several likely precursors, including attachment to caregivers, relatedness to others, and feelings of belongingness within social groups. Karcher (2004) proposed that connectedness develops in reaction to (a) attachment, (b) interpersonal social support, and (c) group-level experiences of belonging. Defined as active involvement and caring for other people, places, and activities, connectedness is the reciprocation of the support and positive affect that other people, in specific places, have provided youth, which works to support

the youth's social development. This reciprocal process reveals an opportunity for structuring programs and experiences in schools that aim to promote connectedness.

Connectedness is not a feeling of belonging or relatedness; rather connectedness reflects a continuation and reciprocation of basic attachment and bonding processes into the adolescents' widening social ecology. Like indicators of attachment, connectedness reflects proximity seeking (i.e., movement towards) and positive affect for people, places, and activities in the adolescent's life. This is an important distinction. Connection is not a bond that is felt, but is a volitional, active "bonding" with other people, places, and activities. In this way, promoting connectedness in schools does not *only* mean "helping students feel supported," but *also* creating supportive conditions, such as through groupwork, activities, and collaborative learning, which acts to foster connections in the form of action-based, attitude-driven involvement in school.

Connectedness: The Reciprocation of Belonging, Relatedness, and Attachment

Connectedness has, as its source, positive relationships and experiences with others, and more specifically, relationships and experiences from which youth garner esteem and competence. Early in life, primary experiences of relatedness with caregivers result in positive attachments with caregivers and provide children with their initial sources of support, esteem, and praise (Ainsworth, 1989; Kohut, 1977). Later, other forms of social support build upon these early experiences, and provide interpersonal relatedness outside the family (e.g., teachers, peers, and friends) and experiences of group belonging beyond the family unit (See Figure 1). These socially supportive interactions result in positive feelings of relatedness and belonging. Youth reciprocate these feelings by "connecting" with others by assigning them positive affect and seeking continued interaction with them (Baumeister & Leary, 1995). This reciprocation is similar to that of plugging in a power cord whereby one actively seeks out the source of connectedness (relatedness and belonging). Connectedness is not synonymous with relatedness and belonging; connectedness is a behavioral and attitudinal response to those feelings.

Attachment. Connectedness is present early in life in the caregiver-child bond. Attachment reflects the behavioral reciprocation of affective experiences (Chodorow, 1978; Stern, 1985) by the child to the caregiver through proximity seeking and positive affect. Like the toddler, the adolescent becomes connected to those social worlds that provide the adolescent the basic interpersonal ingredients of development—empathy, praise, and attention within relationships in which they receive clear, consistent structure (Ainsworth, 1989; Kohut, 1977;

Kohut & Elson, 1987). Likewise, adolescents report positive affect and demonstrate proximity seeking most strongly toward those people—parents, siblings, peers, friends, or teachers—who have provided them with empathy, praise, and attention in a clear and consistent manner.

This is key to intervention and may explain why these qualities have been found in the most effective prevention programs (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Schorr, 1988). Arguably, no amount of skills training or heightened knowledge will effectively curb risk taking among youth if such interventions are devoid of positive interpersonal relationships in which youth can feel competent, understood, and important.

Social Support. Past and present levels of social support will affect youths' receptivity to interpersonal interventions. There is evidence that early attachment experiences predict individuals' openness to receiving help and willingness to accept social support during adolescence. For example, Mallinckrodt (1991) found that the quality of late adolescents' relationships with their families and with important non-family members were significant predictors of the quality of their therapeutic working alliance. The author argued that "the ability to meaningfully connect with others is presumed to be a good indicator of their capacity to form productive working alliances" (p. 402). Therefore, adolescents' ability to benefit from social support will be constrained by the quality of their past experiences with other people (Lee & Davis, 2000), such that those who have received the least social support in the past may be the hardest to reach school counselors. Indeed, others have found that aggressive youth who overestimate their social relatedness (and report excessively high self-esteem) can be the most difficult to reach through interventions (Prasad-Gaur, Hughes, & Cavell, 2001). Relatedness and belonging are two indicators of how open youth are to receiving social support from others.

Relatedness. Relatedness is the felt sense of closeness and of being valued by another individual. Relatedness is determined, in part, by the security youth experienced in early caregiver-child relationships, and relatedness predicts the degree to which youth will seek interpersonal connection in later relationships with peers, friends, and teachers (Kuperminc, Blatt, & Leadbeater, 1997). Hagerty et al. (1993) suggest that relatedness is a "functional, behavioral system rooted in early attachment behaviors and patterns" such that "affiliation or exploration are activated only after the attachment behavioral system" (p. 292). Breaks in relatedness, such as through forced separations, undermine connectedness by lessening youths' willingness to invest time and energy in relationships with others (Richters & Martinez, 1993;

Kuperminc et al., 1997). For example, Midgley, Feldlauffer, and Eccles (1989) reported that students who moved from elementary classrooms where they experienced high teacher support to middle school classrooms where they perceived less teacher support showed decreases in their interest in learning. In short, undermined relatedness creates a lapse in connectedness. When teachers do not provide consistent sources of empathy, praise, and attention, as well as a clear, consistent structure, youth will become less involved in school and will become less inclined to establish conventional school-based relationships (van Aken & Asendorpf, 1997).

Belonging. When relatedness occurs in groups of people or in defined contexts, the result is the experience of belonging. Belonging is of paramount importance to adolescents. The need to belong is defined, not as the need to be the passive recipient of supportive relationships, but as the need for "frequent [positive and pleasing] interaction plus persistent caring" (Baumeister & Leary, 1995). Hagerty et al. (1993) describe connectedness to others, as well as to organizations and their activities, as a reciprocation of experienced belonging and relatedness that has, directly or indirectly, primary attachment relationships at its source. How accepted and valued a youth feels by a particular group, shapes how connected—involved and concerned—that youth will be with people and activities in that organization. This is because youth confirm and acknowledge their experience of belonging by becoming connected through increased interaction and caring for other people and places (see Figure 1).

Defined from an ecological point of view, then, adolescent connectedness reflects a youth's volitional involvement in relationships, contexts, and activities in which he or she finds positive, worthwhile, and important (primarily because these relationships, contexts, and activities make the youth feel positive, worthwhile, and important). As a reciprocation of one's positive experiences of relatedness and belonging with others in particular places, connectedness is a function of the social support presented to individuals, their openness to receiving that social support, and security in those relationships and contexts. School staff and peers can vary the social support they provide to students (e.g., in an effort to promote connectedness), however, they cannot as easily change students' openness to receiving that social support. Receptivity to social support is partly driven by prior experiences with others, including early interactions with caregivers. In addition, openness to social support is influenced by recent and current experiences of ex/inclusion from groups, teams, relationships, or failures (e.g., academic) which suggest to youth whether others view him or her as positive, worthwhile, and important.

Three Additional Dimensions Key to Understanding Connectedness in Schools

Many school counselors work with a student body that reflects a great deal of ethnic, racial and socioeconomic diversity. Increased immigration from countries whose cultural beliefs differ from middle class American and white Protestant values forces school counselors to think more broadly about how adolescents experience connectedness as a function of their cultural backgrounds. Three key dimensions which need to be considered are time orientation, collectivism vs. individualism, and familism, all of which will influence how school counselors' work to promote assets and connectedness is understood and received by students.

The temporal nature of connectedness: Present and future-oriented connectedness.

Distinctions between conventional and unconventional connectedness parallel, but are distinct from, future- versus present-oriented connectedness. Just as connectedness may have both protective and risk-promoting properties, depending on those to whom or to what place the connectedness refers, most places and relationships can be considered to be future or present oriented. Time with friends tends to be present oriented, but so too, does time with family, such that both are focused on the here and now; whereas time spent in school, with teachers, and to some degree even in religious practice, are more oriented to the future. Future oriented connectedness tends to serve as a protective factor in adolescent development by buffering difficult circumstances and inhibiting impulsive, risky behavior that could pose negative consequences on future opportunities.

Collectivistic vs. individualistic connectedness. Some manifestations of connectedness reflect a relational emphasis, while others reflect a primarily self-oriented, individualistic emphasis (Cooper, 1999). For example, connectedness to schools is largely focused on individual achievement, due to the assessment process conducted by schools and teachers regarding positive, worthwhile, and important behavior. Conversely, in families, friendships, neighborhoods, and romantic relationships, we-focused or interdependent efforts typically are deemed more positive, worthwhile, and important.

Familial vs. non-familial connectedness. Some cultural groups make primary distinctions between family and non-family worlds (Karcher & Lee, 2002), instead of between youth-worlds and adult-worlds (as is typical in the U.S.). For example, in Taiwan, confirmatory factor analyses of the connectedness subscales indicate that family/non-family is a good if not better way to characterize the nature of adolescent connectedness than youth/adult-focused connectedness.

The Shape of Adolescent Connectedness

By plotting an individual or group of students subscale mean scores on a two-dimensional diagram that reflects each of the connectedness dimensions described above, the shape of a youth's or group's overall connectedness represented graphically. The diagram in Figure 2 arranges each of the connectedness subscales according to these dimensions. In the center of the diagram is "1" (on a one-to-five metric scale) referring to the lowest possible score. Each subscale has a corresponding line that goes outward from the center to a maximum of five. Placing a dot where each group or individual's mean for each scale fall, and then connecting the dots around the center, allows one to see how the "shape" of adolescent connectedness.

The shape of the connectedness triangle conveys different emphases. For example, in Figure 3, each of three different triangles reflects the plotting of an individual's subscales (or school or group's average score). Drawing a line between the three main connectedness poles of Friends, Family, and School, provides the overall connectedness triangle.

Shape A in Figure 3 reveals that this particular youth prioritizes unconventional connectedness, because the youth rated his or her connectedness to friends and neighborhood as 4.8 out of a 5-point scale, while both conventional worlds of parent and school connectedness were rated below 3 (M = 2.4). Such a youth is likely quite vulnerable to peer pressure, and vis-à-vis, to risk-taking behavior and underachievement (especially when the youth's friends are also highly unconventional in their connectedness). This youth needs help increasing connections with adults, and therefore, may be a good candidate for having a mentor. Receiving extra attention from teachers, and being given additional opportunities to interact in adult-oriented contexts, may provide positive experiences that make the youth feel important, valued, and seen as worthwhile by adults.

In contrast, Shape B highlights the importance the youth places on school and family connections (which share conventionality—viz. adult-oriented connections) over unconventional connectedness to friends, neighborhood, and peers. Some counselors might not view this child as having a problem. Certainly, this is not the type of youth typically referred by parents or teachers for presenting as disconnected, disobedient, or disengaged. However, the virtual absence of any connection with peers does not work to facilitate social skills and peer-based self-esteem. More than likely, this youth demonstrates lower than average social skills or peer

stigmatization that may in fact render the youth at risk for a Columbine-type outburst or at least an unsatisfactory developmental experience with peers.

Shape C conveys a more collectivistic (friend and family) oriented connectedness because individualistic connections (school) were rated much lower. Children whose parents have little experience of post-secondary education, and by extension, many ethnic minority youth, may be more vulnerable to this pattern of connectedness if their families are not able to model and strongly encourage individualistic achievement at school. Such youth may be more vulnerable to the long-term consequences of deemphasizing the type of school-based, conventional connections that help secure opportunities for employment or academic achievement in the future. In regards to the particular student in Shape C, there may not be an immediate problem. However, the absence of future-oriented, non-family, and individualistic connectedness presents warning signs. Such youth should be encouraged to participate in school programs (e.g., sports, extramural, or after-school academic enrichment) in order to help them feel positive, worthwhile, and important. These activities may provide opportunities for relatedness and belonging in response to which they can *reciprocate* by becoming more actively connected to school.

A Summary of the Theory of Adolescent Connectedness

Drawing on theories of problem behavior, belonging and attachment, and ecological development, we describe adolescent connectedness as an ecologically specific form of engagement with others and the environment. It occurs in response to feelings of belonging and relatedness, which can be fostered by increasing the social support a youth encounters in specific contexts and relationships. Building on the phenomenon of connectedness as a reciprocation of social support, the school counselor's main leverage gained by using this construct may come through applying the principle of "connectedness compensation." In doing so, the counselor may encourage youth to participate in activities that boost conventional connectedness for those reporting a disproportionately high level of unconventional connectedness, and vice versa. The starting place for such work, however, is for the school counselor to understand the behavioral consequences of disconnection in each world and to have tools that can be used to assess students' connectedness. One such tool is the connectedness diagram described above, which provides a way for students to see the shape of their connectedness in terms of the following dimensions: (a) conventional (adult sanctioned) and unconventional (youth sanctioned)

connectedness, (b) present-focused and future-oriented connectedness, (c) collectivistic and individualistic connections, and (d) family and non-family connections. By considering the interplay of these connectedness dimensions, and creating opportunities for youth to better understand the "shape" of their own ecology of connectedness, school counselors may be better able to target meaningful interventions for youth and measure important post-intervention changes in the adolescents' connectedness. Being successful at both, however, assumes the school counselor has a grasp of the research on connectedness and a valid assessment tool.

Research

Establishing and maintaining connectedness to others, to society, and to oneself is a pervasive human concern (Baumeister and Leary, 1995; Gilligan, 1982; Hagerty, Lynch-Sauer, Patusky, and Bouwsema, 1993; Kohut, 1977; Nakkula & Selman, 1991). Twenty-five years after Maslow (1968) described belongingness as the third most fundamental need of the self, Baumeister and Leary (1995) proposed that belongingness is perhaps the most important psychological resource for overall human well-being.

Adolescents Need a Balance of Connectedness Across their Social Ecology

Connectedness is a function of the need to belong, such that when an individual in one social ecology does not experience belonging and relatedness, he or she will become more connected to other social ecologies as a compensatory act (Baumeister & Leary, 1995). For example, research confirms that when disconnection occurs with family members, connectedness with friends may increase; when adolescents become disconnected from school, they often seek connectedness outside of school in their neighborhood (see Joo & Han, 2000; Hirschi, 1969). Other research suggests that adolescents' sense of self is born out of these sometimes divergent connections to family, teachers, friends and peers (Buhrmester, 1990; Harter, 1999) which facilitate the development of a sense of oneself in the present as well as oneself in the future. *An Emphasis on Unconventional over Conventional Connectedness Promotes Risk-Taking*

Because connectedness reflects the presence (often in the form of expectations) of such profoundly important experiences as relatedness and belonging, connectedness has been linked to physical health, clinical disorders, and risk-taking behaviors (Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Hendry & Reid, 2000; Lee& Robbins, 1998; Resnick, Harris, & Blum, 1993). A long line of research on delinquency and violent behavior among youth shows that connectedness and alienation are intimately linked with problem behaviors (Hawkins, Catalano,

& Miller, 1992; Hirschi, 1969; Jessor & Jessor, 1977), and therefore provide important targets for effective prevention programs in schools (Allen, Kuperminc, Philliber, & Herre, 1994; Hawkins, Von Cleve, & Catalano, 1991; Jason & Kobayashi, 1995; Jessor, 1992).

Not all forms of connectedness decrease risky behavior, however, because the protective functions of connectedness vary across the relationships and contexts in adolescents' lives. Depending on the individual youth and his or her specific set of peers, connectedness to peers can reflect the conventions of either the adult world or the unsupervised activities and norms of the adolescent world. As one good example, it is commonly believed that peer relationships facilitate misbehavior through processes of negative peer pressure, yet research shows that associating with conventional peers is one of the best protective factors against violent behavior (Hawkins et al., 1998; Hawkins et al., 1991; Olin, 2001).

Connectedness to friends, however, is usually positively correlated with risk-taking (Karcher, 2002; Karcher & Finn, 2005). Although connectedness to friends could be called conventional because most parents/adult caretakers want their children to have friends, connectedness to friends serves a different function than does connectedness to school or family.

"Adolescents who describe positive relationships with parents and teachers show greater adaptation to school in terms of their academic coping, engagement, self-regulation, and perceived control. Relationships with friends are generally unrelated to these outcomes, suggesting the different functional significance of students' relationships during early adolescence. In addition, adolescents who strongly identify with parents and teachers show more positive school adjustment and motivation, whereas emulation of friends is negatively related to these variables." (Lynch & Cicchetti, 1997, p. 83-84)

Therefore connectedness to friends has *both* positive and negative effects on adolescent development and behavior. On one hand, any connectedness to friends is better than no connectedness at all in terms of promoting social development, avoiding experiences of alienation, and preventing aggression (Collins, 2002; Nakkula & Selman, 1991). On the other hand, when connectedness to friends is high, but connectedness to school or family low, this imbalance increases youths' risk for engaging in risk-taking and misbehavior (Jessor, 1993).

More recently, Dishion, Jessor and others have found that spending unsupervised time in one's neighborhood, with friends, or in other youth-governed contexts increases the risk that a youth will engage in unconventional behaviors (Dishion, McCord, & Poulin, 1999; Jessor, 1992;

Patterson, Dishion, & Yoerger, 2000). Taken to the extreme, unconventional connectedness can lead to activities that are unlawful and potentially damaging to self and others (Jessor & Jessor, 1977). Behaviors, such as stealing, drinking, delinquency, and violence, are most common when strong connectedness to friends is not balanced by equally strong connectedness to school or to family (Hirschi, 1969; Olin, 2001). In this way, conventional connectedness serves as a control against non-normative, antisocial, illicit, and aggressive behaviors (Hirschi, 1969).

School Counselors Should Avoid Grouping Highly Unconventional Youth

The conventionality phenomenon provides an important consideration for school counselors when choosing members for group counseling. Although formally screening youth in order to identify appropriate candidates for school counseling groups or other interventions has not been a standard practice in school counseling (Ripley & Goodnough, 2001; Sullivan & Wright, 2002), there is persuasive research suggesting that it should be. For example, Dishion, McCord, and Poulin (1999) presented surprising findings from a 30-year study of comprehensive services provided to youth at risk for delinquency. Analyses revealed that the long-term impact of aggregating at-risk youth within groups (such as in a counseling group) was to increase delinquency, regardless of the efforts of the counselors. Given this, it is wise to selectively include within group counseling both those youth at-risk for specific problems and those not at risk. In terms of the connectedness framework, this means school counselors should include youth who report both high and low levels of unconventional connectedness as opposed to targeting and aggregating unconventionally connected youth within the group counseling setting. The Promise and Perils of Connectedness Compensation

There appears to be an interaction between forms of conventional and unconventional connectedness, such that when connectedness is not achieved in one context it is overemphasized in others (Ainsworth, 1989). Baumeister and Leary (1995) argue that because the need to belong is so pervasive that there is a compensatory function which allows the absence of belonging in one ecology (e.g., family) to be countered by belonging in another (e.g., friends). They state "relationships should substitute for each other, to some extent, as would be indicated by effective replacement of lost relationships partners and by a capacity for social relatedness in one sphere to overcome potential ill effects of social deprivation in another" (Baumeister & Leary, 1995, p. 500). Although the absence of conventional connectedness with one parent can be compensated by connectedness with the other, unconventional connectedness, such as with friends, cannot

take the place of absent parental connectedness (van Aken & Asendorpf, 1997). The intervention opportunity presented by this compensatory function is the possibility for conventional experiences and relationships, such as in after-school programs or through natural mentoring by teachers (DuBois & Silverthorn, 2005), to compensate for prior deprivations of conventional connectedness that resulted from poor parental bonding, peer rejection, or school failure and underachievement.

The Ecology of Connectedness Widens and Becomes More Unconventional During Adolescence

Jessor and Jessor (1977) found that as the adolescent's ecology widens, so too do the opportunities to engage both in unconventional behaviors (e.g., risk-taking behaviors) that are encouraged by peers and in contexts not governed by parents (e.g., the neighborhood). This is partly because of normative declines in conventional behaviors (e.g., reading, working at school, spending time with family) relative to the increased opportunities to spend time with friends.

In several studies, both with adolescent samples from the U.S. and Asia, it appears that conventional connectedness declines during adolescence while unconventional connectedness increases (Karcher, 2003a; Karcher & Lee, 2002). These differences in mean levels of connectedness across the adolescent social ecology over time are illustrated in Table 1. This table is based on data from 342 students from a Midwestern town who completed both the Hemingway survey and the Assets survey. The students were equally divided between sixth and 12th grade. The majority were Caucasian (n = 265) and 185 were female. For the present purpose, notice mean changes among students in connectedness to school between 6th, 9th, and 12th grades, which go from 3.8 to 3.5 to 3.3 during that time period (with 5 being very connected and 1 being very disconnected). Similarly, changes in connectedness to parents are 3.9 to 3.7 to 3.6 during this time. This is expectable as increased freedom and mobility invite increased time spent with friends, peers, and romantic partners during adolescence. It also suggests that an *imbalance* between conventional and unconventional connectedness is normal in adolescence. *Girls Usually Report Higher Levels of Connectedness than do Boys*

Gender differences have received perhaps the most attention within the research on connectedness even though many of the studies of connectedness actually measured belonging. Statistical tests of the hypothesis that girls report greater relatedness and belonging than boys has been the focus on much research (e.g., Lang-Takac & Osterweil, 1992), but empirical studies of "connectedness" that used measures of belonging and relatedness (rather than of connectedness)

have failed to consistently reveal clear gender differences (Hagerty et al., 1993; Harter, Waters, Pettit, Kofkin, & Jordan, 1997; Jacobson & Rowe, 1999; Lee, Keough, & Seagal, 1999; Lee & Robbins, 1995). In most studies using the connectedness measure described below, girls scored higher on all scales of connectedness except the connectedness to self scales (Karcher, 2002; 2003a; Karcher & Lee, 2002; Karcher & Finn, 2005). Consistent with these findings, Table 1 reveals the girls in that our Midwestern sample of 342 middle and high school students also reported greater connectedness than did boys. This may be interpreted to mean that while experiences of belonging and relatedness may not differ between adolescent boys and girls, their response to these feelings—that it, their efforts to connected with others—appear to be stronger for girls than boys. These differences, however, may only be detected with a measure of adolescents' *engagement* (i.e., of connectedness) rather than of belongingness or relatedness. A Description of The Hemingway: Measure of Adolescent Connectedness

The Hemingway Measure of Adolescent Connectedness is a self-report instrument that includes subscales that assess engagement in the forms of caring for and involvement in close relationships and important contexts. The Hemingway consists of 78 items that are averaged to create subscales for 15 ecological worlds and four composite scales. The 15 subscales fall into three dimensions of connectedness: self, others, and society. Connectedness to self includes two scales: (1) positive feelings about the self in the present (e.g., self-esteem DuBois, Felner, Brand, & Phillips, 1996; Harter, 1999) and (2) sense of one's self in the future (Nakkula & Selman 1991). Connectedness to others included five scales: connectedness to (3) parents; (4) friends, (5) teachers, (6) siblings, and (7) peers,. Because the items in the longer version are sometimes problematic for school administrators, both short and long versions were created to include those scales. Connectedness to others scales which are included only in the longer version are connectedness to one's (8) mother, (9) father, and (10) a romantic partner, and (11) culturally different peers. Connectedness to society includes subscales measuring connectedness to (12) school, (13) neighborhood, and (14) reading. Included only in the longer version is the (15) connectedness to religion subscale. The four composite scales reflect the mean of all subscale items in each of four domains: Family (parents and sibling items), Friends (friends and neighborhood items), School (school and teacher items), and Self (present and future self items).

The psychometric properties of the scales across several samples as well as findings from multiple validity studies can be found in the manual and validity study (Karcher 2001; 2003b),

which is available upon request from the first author. In addition, in the last column in Table 1, reliability estimates for the sample used for the analyses discussed below are reported.

Scoring. Responses to each of the items are made using a five-point, Likert-type response scale which ranges from (1) not true at all, (2) not really true, (3) sort of true, (4) true, to (5) very true. There is at least one reverse scored item in each scale (identified in bold in Table 2). The items within each of the 15 worlds are averaged (once the reverse worded items are reverse scored) to get separate subscale scores means. It is these means that are plotted on the Connectedness Diagram in Figures 2 and 3 and are reported for one sample in Table 1.

The Hemingway is one of few self-report measure of adolescent connectedness that has undergone considerable empirical scrutiny and which has generated considerable validity evidence (Karcher, 2003a). The measure was developed through a series of exploratory and confirmatory factor analyses, which revealed the same structure of adolescent connectedness across several samples in the U.S. youth. This structure was used to create Figure 2. Karcher (2003a) found three underlying factors or subscale groupings in multiple adolescent samples in the U.S.. These are unconventional connectedness, academic connectedness, and family connectedness, which reflect the three corners on the Connectedness Diagram. The *unconventional connectedness* factor includes connectedness to friends, the neighborhood, a self-in-the-present, and romantic partner. The *school connectedness* factor includes connectedness to school, teachers, peers, culturally different peers, reading, and self-in-the-future. The *family connectedness* factor includes the connectedness to parents, siblings, mother, father, and religion.

The subscales in each of these three factors also can be characterized in terms of dimensions or continuum described earlier: *temporality, conventionality,* and *relational orientation* (collectivist/individualist; family/non-family). The items in each of the subscales reflect a balance of items reflecting the two primary means of connection—through activity or involvement and through caring (e.g., "I work hard at school." and "I enjoy being at school."). These subscales also reflect a time orientation. The social and family subscales are generally present-oriented, and the academic subscales are typically future-oriented. Subscale worlds may either reflect conventional, adult-mediated behaviors and attitudes (e.g., school and family subscales) or unconventional behaviors and attitudes (e.g., friends, neighborhood, and self-inthe-present subscales), which reflect youth-directed behaviors and youth-specific attitudes in the present. Finally the collectivistic and family-oriented subscales emphasize larger groups and

social hierarchy, and conversely, the individualistic, non-family, and future oriented scales reflect individual (self-directed) connections and achievement. These continua are presented as two-way arrows in Figure 2.

The Value of Connectedness in Predicting Assets

We believe the Hemingway connectedness scales can facilitate the use of the assets model and survey by providing an interim or proxy survey of assets. For example, one key asset is the "Adult Role Models" asset, which can be reliably predicted (with 83% accuracy) from the connectedness to teachers subscale (See second Row in Table 1). Table 1 illustrates the prediction accuracy of several key assets from related connectedness scale (using logistic regression). The first two columns of numbers indicate the mean on each connectedness scale for youth who did and did not have the related asset. In parentheses is the degree of predictive accuracy. For example, higher connectedness to reading scores predicted whether or not a youth had the asset "Reading for Pleasure" with 88% accuracy. The connectedness to religion subscale predicted having the Religious Community asset with 84% accuracy. In short, several of the connectedness subscales can serve as reliable proxy measures of specific assets.

For a given school district, the relationship between assets and connectedness may be linked in order to identify targets for interventions or guidance program goals. For example, in Figure 4, the means for connectedness to teachers at each grade were plotted for those who did and did not report having the asset "Community Values Youth" which assesses whether or not students perceives that adults in their community value youth. Across all grades, youth whose means on the connectedness to teachers subscale fell between 3.4 and 3.5 did not feel their community valued youth. How much improvement in connectedness to teachers would indicate that students in general did feel youth were valued in the community? Well, this depends on the grade, as the mean level of connectedness to teachers among youth who had the "Community Values Youth" asset ranged from 3.7 in 10th grade to 4.3 in 11th grade. However, a good range to set as a goal to measure the success of an intervention to increase this asset among students might be to have the majority of youth score between 3.8 and 4.2, depending on the grade. A school district could begin a campaign to promote feeling valued, starting with teacher relationships in the school but extending efforts beyond the school as well, and measure changes in connectedness to teachers every semester until that goal is achieved.

Charting Developmental Trends for Boys and Girls Across Grades to Identify Program Goals

Another way to use research to link the assets and connectedness subscales in a manner that can help school counselors plan guidance activities and program objectives is to plot connectedness scales for boys and girls across grades. In the second chart in Figure 4, we see that girls report greater connectedness to teachers, but similar to boys the girls show declines in connectedness to teachers from middle school to high school. By 11th grade, both boys and girls (those who have not dropped out, of course) are beginning to report more connectedness to teachers. The gap between the sexes is largest in 6th and 9th grades in this school district, which is a time of transition from one school level to another. Boys, it appears, are in particular need of connectedness to teacher at these times. For both sexes, the key times to target teacher connectedness (e.g., as a way to increase the "Community Values Youth" asset) appear to be during the 7th, 8th, and 9th grades. Such efforts could ward off declines assets as well.

Practice

A comprehensive school guidance and counseling program provides an "organizational framework with a specific configuration of planned, sequenced, and coordinated guidance and counseling activities and services based on student, school, and community needs and resources..." (Gysbers & Henderson, 2006). As previously stated, many school counselors are stretched for time and must serve the needs of parents, teachers, administrators, and students. However, through involving teachers, parents, administrators as well as children in a comprehensive guidance and counseling program, greater clarity about the guidance program goals as well as of the role of the counselor can be achieved. Our experience suggests that school counselors are less likely to be pulled in 100 different directions when they (a) base goals and related services on assessed needs of students and other stakeholders, (b) make the content and focus of their guidance program known to teachers, parents, and administration, (c) make clear to students and stakeholders how the four key components of their guidance programs (system support, guidance curriculum, individual student planning, and responsive services) are linked and (d) demonstrate the effectiveness of these programmatic efforts.

The Developmental Assets Framework presented by the SEARCH Institute is one approach chosen by many school districts with which to organize their comprehensive guidance model. The Northside Independent School District in San Antonio is an example of a large school district (the 4th largest in Texas) that has oriented its programming around the assets

model. This district was the testing ground for Gysbers and Henderson's (2006) developmental guidance model (which informed and mirrors the ASCA [2003] model). It is also a district we know well, It is where two of the authors worked, one as a licensed professional counselor and the other as the director of guidance, and it is a district from which the first author received his high school diploma. Already a nationally recognized program, Northside enhanced their model by using the Developmental Assets Framework and by developing materials and guidance activities based on this approach. The Developmental Assets Framework has been used district-wide to facilitate guidance program staff development efforts with counselors, teachers, administrators, and staff. The model informs such activities as campus mentoring, parent programs, policies, the content of the guidance program curriculum, intervention services, and the district's federal Safe and Drug Free Schools programming.

The Assets model has provided a useful framework for many of Northside's programs; however, it has not been an effective tool for assessing the needs that individual students bring to the classroom. Formal and informal asset surveys have been used to assess the presence of assets among the student body at Northside at the district level. The results provide a collective profile of students but no data representing individual students' assets. Nor can the assets survey be conducted frequently enough to gauge change resulting from guidance, individual planning, and responsive services for subgroups of students over a short time period.

For these reasons, the Hemingway can be utilized as a complementary tool in order to better assess individual student needs regarding their connectedness to friends, school, and family, and by extension provide a proxy measures of assets for individual students. This allows counselors and others to better plan and provided needed services for individual students. Combining the specificity of information provided by the connectedness scale with the collaborative and positive effects on school climate that a program oriented around the 40 Developmental Assets Framework can engender, school counselors can be better poised to enhance student success across the four delivery components of a comprehensive guidance program with this integrated approach. In the sections that follow, we provide examples of how the connectedness survey and its accompanying constructs can be used to facilitate an asset-promoting comprehensive program of school guidance in a school district.

System Support

The work that school counselors do with teachers can indirectly help students form connections to the school and foster developmental assets. ASCA (2003) suggests that in accordance with the systems support component of the comprehensive guidance program model, by providing in-service training to staff, counselors can provide leadership and advocacy in promoting systemic change on behalf of students. Providing in-service training using the Developmental Assets Framework provides teachers and other staff members with a framework for understanding the 40 Assets identified by the SEARCH Institute as promoting students' healthy development and protecting youth from negative and harmful behaviors (Benson, Galbraith, & Esplanade, 1995). The 40 Assets also reveal types of student attitudes and activities that promote or discourage students' conventional connectedness to the school.

As one way of promoting students' connectedness to school, counselors can work with teachers through in-service training to teach them how to utilize the connectedness constructs and assessment. Of course, some teachers might want to use the measure to identify needs among their students. Either in a large in-service training or with smaller groups of interested teachers, school counselors can walk teachers through the use and interpretation of the scale. These teachers can be taught how to use the data to addressing Developmental Assets that are absent in their students' lives. For example, if a student's connectedness profile suggests a marked degree of unconventional connections to peers, the teachers and others can collaborate to build more conventional connections to peers through individual peer-mentoring or collaborative learning projects. Teachers might also encourage youth who are disconnected to school to participate in school organizations related to the students' expressed interests.

It is critical that teachers understand the work of school counselors. Through system support activities such as those mentioned as well as others, school counselors also can facilitate experiences of belonging and relatedness in to classrooms, hallways, and other areas of the school that result in increased student connections. Through small group and larger in-service trainings on the Developmental Assets and the connectedness research presented above, school counselors also may promote a fuller utilization of comprehensive guidance activities by teachers and students. Other suggestions are in the sections below about how to integrate the assets and connectedness framework across the remaining components of a comprehensive guidance program—viz. guidance curriculum, individual planning, and responsive services.

School Guidance Curriculum

Classroom guidance provides counselors an opportunity to become familiar with the student climate as well as to screen for students who are appropriate for other services (e.g., individual and group counseling, mentoring, tutoring, or after-school programs). School counselors may find the connectedness scale particularly useful in guidance lessons because it provides a framework for introducing students to the four domains of adolescent connectedness.

Cobia & Henderson (2003) advise that all well-designed guidance lessons have a clear purpose, age-appropriate activities, coordinated and sequential lessons, and a summary or evaluative wrap-up. Each guidance lesson is designed to reach all students by delivering concepts that build on those learned in previous guidance lessons. Even though introducing the four domains of adolescent connectedness (friends, school, family, and self) to students through classroom guidance must be delivered in an age appropriate manner, it also can be done in ways that are fun, interactive, and memorable. One example of such a guidance lesson that can create an interactive and playful way to introduce the connectedness domains is entitled "The Connections I Make." This lesson asks students to identify themselves on one end each of the connectedness continua listed in Table 2. The goal of this guidance lesson is for students to understand the importance of connectedness by weighing the pros and cons of conventional and unconventional connectedness, which is achieved through two different activities. The first is interactive and interpersonal, and the second is reflective and more personal. Before beginning the activity, students are asked to complete the connectedness scale. Students should be told their answers will be kept confidential but that the counselor might talk with students afterwards about their responses. To foster buy-in, the students should clearly understand that this survey provides the basis for the content conveyed in the present and perhaps subsequent guidance lessons.

After the students complete the connectedness scale, the scales are set aside, unscored, and students are asked to participate in the first activity. This activity requires them to identify their connectedness status by identifying which of two ends of each connectedness continuum shown in Figure 2 they like and engage in more. To indicate their preference, students move from one side of the room to the other, providing a visual representation of each end of the continuum. The goal is for each student to identify the set of connections that they are more inclined towards from each of the dimensions listed in Figure 2.

In the second part of the lesson, the school counselor guides the students through a student-centered discussion by encouraging the class to discuss the pros and cons of each type of connectedness. These dimensions should be discussed in an age appropriate manner, such that discussing the concepts of conventional and unconventional connectedness would be inappropriate for all but the oldest of youth. Instead, the basic terms—youth vs. adultfocused—can be defined and written on either an overhead or chalkboard. Once defined, the counselor sets the stage for discussion by providing some of the research findings presented in the Research section of this chapter. For example, if the youth are familiar with the Developmental Assets Framework, this language can be incorporated into the discussion by linking assets to types of connectedness. The pros and cons of high connectedness in each world should be presented by the counselor for middle school students, while for high school students, these can be solicited from the students themselves. During the summary portion of the guidance lesson, the counselor asks students for feedback regarding lessons they learned in order to make sure their understanding is accurate and so that no one feels criticized or labeled. The goal of this activity is to help students identify variations in their connectedness and to more fully understand the benefits and risks posed by each kind of connection.

The counselor's next step toward integrating connection promotion activities into her guidance program can be to take the students' surveys, score them herself, and use the data to identify individuals who could be appropriate for individual planning meetings or responsive services. The student discussion during the guidance lesson activity also can help school counselors to identify the direction of future guidance lessons or individual planning sessions. *Individual Planning*

Having completed this guidance activity, the school counselor now has valuable information both by collecting and scoring the completed connectedness scale for each student as well as through the lessons revealed through the experiential activity and discussion afterwards. The individual student planning component of the comprehensive guidance program provides the counselor with a vehicle for assisting all students in developing, monitoring, and assessing educational, occupational, and personal goals (ASCA, 2003). However, the connectedness data gleaned from the classroom guidance activity can also be used to target those students whose connectedness profile suggests a high degree of unconventional connectedness or a greater orientation to the present than to the future. Using this information, the school counselor might

invite such students to participate individual planning meetings. Doing so, for example, the school counselor could then work with targeted students individually or in groups in order to establish future-oriented goals related to specific careers. A sample activity may include an individual planning session where the student and counselor investigate a student's areas of interest and strength with the assistance of a computer-based interest inventory. This can help students begin to connect present performance in the classroom and participation in related clubs and community activities to future interests and aspirations.

Responsive Services

Finally, when engaging in responsive services, school counselors can use the measure of adolescent connectedness as a tool for screening students for appropriate counseling groups. Keeping in mind that there are two main types of connectedness—conventional and unconventional—the counselor's goal in group selection should be to identify youth whose interpersonal needs, problems, and skills could compliment those of other students in the group. Doing so can help to avoid the problem described by Dishion et al. (1999) wherein well-meaning interventions actually become contexts for deviancy training.

Once the students have been identified for group, connectedness may be used to provide the underlying theme for the group's work or to help link the youths' connectedness to specific developmental assets. For example, the school counselor might encourage discussions centered on the importance of establishing a balance between conventional and unconventional connectedness. The connectedness terms also may provide a shared language for the group, allowing a variety of individual problems (e.g., dealing with divorce, problems with peers, risk-taking behaviors) to be discussed indirectly and more inclusively by referring to the role of connectedness within each of these individual issues.

Another way to introduce the issue of connectedness would be for the school counselor to start the group by asking group members to determine which one of the three shapes in Figure 3 they most identify with. The school counselor can then facilitate a discussion regarding the group member's experiences of connection and disconnection, and how these experiences have led the students to take on the "shape" they identified. One goal the counselor may pursue is helping the group members encourage one another to seek out connectedness where it may previously have been lacking in the youth's life. The counselor might encourage group members

both to create an action-oriented plan that facilitates their own connectedness s well as support fellow group member's development and achievement of their plans.

Counselors also should move beyond promoting feelings of belongingness and relatedness in the group and actively help students find ways to establish desired connections. For example, a group member may lack connectedness to school and decide he would like to become more involved at school. This group member's action-oriented connectedness plan may include joining a school club, sport, or after-school program. The school counselor could assist this student by helping the student identifying *and achieving* concrete steps toward becoming more connected to school. For example, the counselor may assist the student by setting up the initial appointment for the student to meet with the club sponsor or coach.

Afterword: The Naming of "the Hemingway"

In 1994, Brad Powell and Father Patrick Gahan, at Saint Stephen's Episcopal School in Austin, Texas, asked the measure's creator, Michael Karcher, to develop an instrument that could help them assess student changes resulting from their cross-age peer mentoring program. The main concept of connectedness was derived from a paper by Michael Nakkula and Robert Selman (1991), both of whom were Karcher's academic mentors at Harvard. Nakkula's notion of youth development suggests that programs should serve to promote youth's "interpretation of his or her connectedness to the world over time." This suggestion served as the basis of the Hemingway and guided the development of adolescent connectedness theory (Karcher, 2003a).

The name, Hemingway, also has its origin in the biography of Michael Nakkula. The first son of a blue-collar family in the Upper Peninsula of Michigan, Michael Nakkula was the first individual in his family to attend college. Nakkula's subsequent attainment of a professorship at Harvard, led Karcher to ask him how he understood his academic achievements. Nakkula explained his connectedness to academe through a story involving one of his high school teachers, who, after reading a paper Nakkula wrote for a class assignment, told Nakkula that he wrote like Hemingway. The interpretation Nakkula made about his connectedness to school and the future helped him achieve his potential in the world of post-secondary education. In honor of that high school teacher's impact, this measure of adolescent connectedness was named *the Hemingway*.

References

- Allen, J. P., Kuperminc, G., Philliber, S., & Herre, K. (1994). Programmatic prevention of adolescent problem behaviors: The role of autonomy, relatedness, and volunteer service in the Teen Outreach Program. *American Journal of Community Psychology*, 22(5), 617-637.
- Ainsworth, M. S. (1989). Attachments beyond infancy. American Psychologist, 44(4), 709-716.
- American School Counseling Association [ASCA] (2003). *The ASCA national model: A framework for school counseling programs*. Alexandria, VA: Author.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Benson, P. L., Galbraith, J., & Espeland, P. (1995). What kids need to succeed: Proven practical ways to raise good kids. Minneapolis, MN: Free Spirit Publishing, Inc.
- Bonny, A. E., Britto, M. T., Klostermann, B. K., Hornung, R. W., & Slap, G. B. (2000). School disconnectedness: Identifying adolescents at risk. *Pediatrics*, *106*(5), 1017-1021.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Massachusetts: Harvard University Press.
- Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development*, *61*, 1101-1111.
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002, June 24). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention & Treatment, 5*, Article 15. Retrieved October 9, 2002, from http://journals.apa.org/prevention/volume2005/preoo50015a.html.
- Cernkovich, S. A., & Giordana, P. C. (1992). School bonding, race, and delinquency. *Criminology*, *31*, 261-291.
- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the reproduction of mothering*. Berkeley: The University of California Press.
- Cobia, D. & Henderson, D. (2003). *Handbook of School Counseling*. Columbus, Ohio: Merril Prentice Hall.
- Collins, W. A. (April 13, 2002). *The development of physical aggression from early childhood to adolescence*. Paper presented at the Society for Research on Adolescence: Ninth biennial meeting, New Orleans.

- Cooper, C. R. (1999). Multiple selves, multiple worlds: Cultural perspectives on individuality and connectedness in adolescent development. In A. S. Masten (Ed.) *Cultural Processes in Child Development: The Minnesota Symposia on Child Psychology* (Vol. 29, pp. 25-57). Mahwah, NJ: Lawrence Erlbaum.
- Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*, *54*, 755-764.
- Donovan, J. E., Jessor, R., & Costa, F. M. (1988). Syndrome of problem behavior in adolescence: A replication. *Journal of Consulting and Clinical Psychology*, *56*, 762-765.
- DuBois, D. L.; Felner, R. D.; Brand, S.; Phillips, R. S. C. (1996). Early adolescent self-esteem: A developmental-ecological framework and assessment strategy. *Journal of Research on Adolescence*, 6, 543-579.
- DuBois, D. L.; Silverthorn, N. (2005). Characteristics of Natural Mentoring Relationships and Adolescent Adjustment: Evidence from a National Study. *Journal of Primary Prevention*, 26, 69-92.
- Erikson, E. H. (1950). Childhood and society. New York: W. W. Norton.
- Farrington, D. (1991). Childhood aggression and adult violence: Early precursors and later life outcomes. In D. Pepper & K. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 5-29). Hillsdale, NJ: Erlbaum.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.*Cambridge: Harvard University Press.
- Gilligan, C. (1991). Women's psychological development: Implications for psychotherapy. Special Issue: Women, girls and psychotherapy: Reframing resistance. *Women & Therapy*, 11(3-4), 5-31.
- Gysbers, N. C., & Henderson, P. (2006). *Developing and managing your school guidance and counseling program*. Alexandria, VA: American Counseling Association.
- Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., & Bouwsema, M. (1993). An emerging theory of human relatedness. *Journal of Nursing Scholarship*, 25(4), 291-296.
- Harter, S. (1999). The construction of the self: A developmental perspective. New York: Guilford.

- Harter, S., Waters, P. L., Pettitt, N. W., Kofkin, J., & Jordan, J. (1997). Autonomy and connectedness dimensions of relationship styles in men and women. *Journal of Social and Personal Relationships*, *14*(2), 147-164.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, *112*(1), 64-105.
- Hawkins, J. D., Farrington, D., & Catalano, R. F. (1998). Reducing violence through the schools. In D. S. Elliott, B. A. Hamburg & K. R. Williams (Eds.), *Violence in American schools*. Cambridge: Cambridge University Press.
- Hawkins, J. D., Von Cleve, E., & Catalano, R. F. (1991). Reducing early childhood aggression:
 Results of a primary prevention program. *Journal of American Academy of Child Adolescent Psychiatry*, 30(2), 208-217.
- Hendry, L. B., & Reid, M. (2000). Social relationships and health: The meaning of social "connectedness" and how it related to health concerns for rural Scottish adolescents. *Journal of Adolescence*, 23(6), 705-719.
- Hirschi, T. (1969). Causes of delinquency. Berkeley, CA: University of California Press.
- Honora, D., & Rolle, A. (2002). A discussion of the incongruence between optimism and academic performance and its influence on school violence. *Journal of School Violence*, *1*(1), 67-82.
- Jacobson, K. C., & Rowe, D. C. (1999). Genetic and environmental influences on the relationships between family connectedness, school connectedness, and adolescent depressed mood: Sex differences. *Developmental Psychology*, *35*(4), 926-939.
- Jason, L. A., & Kobayashi, R. B. (1995). Community building: Our next frontier. *Journal of Primary Prevention*, 15(3), 195-208.
- Jessor, R. (1992). Risk behavior in Adolescence: A psychosocial framework for understanding and action. *Developmental Review*, *12*, 374-390.
- Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. American Psychologist, 48, 117-126.
- Jessor, R., & Jessor, S. L. (1977). Problem behavior and psychological development: A longitudinal study of youth. New York: Academic Press.

- Joo, E., & Han, B. (2000). An investigation of the characteristics of "classroom alienated" middle school students in Korea. *Asia Pacific Education Review, 1*(1), 123-128.
- Jordan, J. V., Kaplan, A. G., Miller, J. B., Stiver, I., & Surrey, J. (1991). Women's growth in connection: Writings from the stone center. New York: Guilford Press.
- Karcher, M. J. (2001, August). Measuring adolescent connectedness: Four validation studies. Poster presented at the annual convention of the American Psychological Association, San Francisco, CA.
- Karcher, M. J. (2002). The cycle of violence and disconnection among rural middle school students: Teacher disconnection as a consequence of violence. *The Journal of School Violence*, *1*(1), 35-51.
- Karcher, M. J. (2003a). The Hemingway: Measure of Adolescent Connectedness: Validation studies. *ERIC/CASS* no. CG032433.
- Karcher, M. J. (2003b). The Hemingway—Measure of Adolescent Connectedness: A manual for interpretation and scoring. Unpublished manuscript, University of Texas at San Antonio.
- Karcher, M. J. (2004). Connectedness and school violence: A framework for developmental interventions. In E. Gerler (Ed.) *Handbook of school violence* (pp. 7-42). Binghamton: NY: Haworth Press.
- Karcher, M. J. & L. Finn. (2005). How connectedness contributes to experimental smoking among rural youth: Developmental and ecological analyses. *Journal of Primary Prevention*, 26, 25-36.
- Karcher, M. J, & Lee, Y. (2002). Connectedness among Taiwanese middle school students: A validation study of the Hemingway Measure of Adolescent Connectedness. *Asia Pacific Education Review*, *3*(1), 95-114.
- Kohut, H. (1977). Restoration of the self. New York: International Universities Press.
- Kohut, H., & Elson, M. (1987). *The Kohut seminars on self psychology and psychotherapy with adolescents and young adults*. New York, NY: W. W. Norton.
- Kuperminc, G. P., Blatt, S. J., & Leadbeater, B. J. (1997). Relatedness, self-definition, and early adolescent adjustment. *Cognitive Therapy and Research*, 21(3), 301-320.
- Lang-Takac, E., & Osterweil, Z, (1992). Separateness and connectedness: Differences between genders. *Sex Roles*, *27*, 277-289.

- Lee, R. M., & Davis, C. (2000). Cultural orientation, past multicultural experience, and a sense of belonging on campus for Asian American college students. *Journal of College Student Development*, 41(1), 110-115.
- Lee, R. M., Keough, K. A., & Seagal, J. D. (1999). Belongingness, appraisal of campus climate, and perceived life stress in college women and men. Unpublished manuscript. University of Minnesota-Twin Cities.
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance Scales. *Journal of Counseling Psychology*, 42(2), 232-241.
- Lee, R. M., & Robbins, S. B. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology*, 45(3), 338-345.
- Lerner, R. M., Fisher, C. B., & Weinberg, R. A. (2000). Toward a science for and of the people: Promoting the civil society through the application of developmental science. *Child Development*, 71, 11-20.
- Lynch, M., & Cicchetti, D. (1997). Children's relationships with adults and peers: An examination of elementary and junior high school students. *Journal of School Psychology*, *35*(1), 81-89.
- Mallinckrodt, B. (1991). Clients' representations of childhood emotional bonds with parents, social support, and formation of the working alliance. *Journal of Counseling Psychology*, *38*, 401-409.
- Maslow, A. H. (1968). Toward a psychology of being. Princeton, NJ: Van Nostrand.
- Midgley, C., Feldlauffer, H., & Eccles, J. S. (1989). Student/teacher relations and attitudes towards mathematics before and after the transition to junior high. *Child Development*, 60, 981-992.
- Nakkula, M., & Selman, R. (1991). How people "treat" each other: Pair therapy as a context for the development of interpersonal ethics. In J. L. Gewirtz and W. M. Kurtines (Ed.), *Handbook of moral behavior and development, Vol. 3: Application* (pp. 179-211). Hillsdale, NJ: Lawrence Erlbaum.
- O'Donnell, J., Hawkins, J. D., & Abbott, R. D. (1995). Predicting serious delinquency and substance use among aggressive boys. *Journal of Consulting and Clinical Psychology*, 63, 529-537.
- Olin, S. S. (2001). Youth violence: Report from the Surgeon General. *The Child, Youth, and Family Services Advocate, 24*(2), 1-7.

- Patterson, G. R., Dishion, T. J., & Yoerger, K. (2000). Adolescent growth in new forms of problem behavior: Macro- and micro-peer dynamics. *Prevention Sciences*, 1, 3-13.
- Prasad-Gaur, A., Hughes, J. H., & Cavell, T. (2001). Implications of aggressive children's positivity biased relatedness views for future relationships. *Child Psychiatry and Human Development*, 31(3), 215-230.
- Resnick, M. D., Harris, L. J., & Blum, R. W. (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Paediatrics & Child Health*, 29, S3-S9.
- Richters, J. E., & Martinez, P. E. (1993). Violent communities, family choices, and children's chances: An algorithm for improving the odds. *Development and Psychopathology*, *5*, 609-627.
- Ripley, V. V. & Goodnough, G. E. (2001). Planning and implementing group counseling in a high school. *Professional School Counseling*, *5*, 62-65.
- Roth, J. L. & Brooks-Gunn, J. (2003). What is a youth development program? Identification of defining principles. In F. Jacobs, D. Wertlieb, & R. M. Lerner (Eds.) *Handbook of Applied Developmental Science* (Volume II; pp. 197-223). Thousand Oaks, CA: Sage Publications.
- Scales, P. C. (2005). Developmental assets and the middle school counselor. *Professional School Counseling*, December, 104-111.
- Scales, P. C., & Leffert, N. (1999). Developmental assets: A synthesis of the scientific research on adolescent development. Minneapolis, MN: Search Institute.
- Schorr, L. B. (1988). *Within our reach: Breaking the cycle of disadvantage*. New York: Doubleday.
- Soanes, C. (Ed.). (2003) *The Oxford compact English dictionary* (2nd ed.). Oxford: Oxford University Press.
- Stern, D. (1985). The interpersonal world of the infant: A view from psychoanalysis and developmental psychology. New York: Basic Books.
- Sullivan, J. R. & Wright, N. (2002). The collaborative group counseling referral process: Description and teacher evaluation. *Professional School Counseling*, *5*, *366-368*.
- van Aken, M. A. G., & Asendorpf, J. B. (1997). Support by parents, classmates, friends, and siblings in preadolescence: Covariation and compensation across relationships. *Journal of Social and Personal Relationships*, *14*(1), 79-93.

Table 1. Connectedness Report: District Profile of Average Level of Connectedness by Sex, Grade, & Related Developmental Asset.

Connectedness Domain	Develop- Conn. for kids Average Level mental Asset with/out asset by Sex					Mean Level of Connectedness in Each Grade								
School Connectedness: Future- oriented, Conventional	Akin Asset:	Does not have	Does Have asset	Girls	Boys	6th	7th	8th	9th	10th	11th	12th	α (#)	
School: Involvement in and positive feelings toward school	24. Bonding to School (5)	3.2	3.7 (72%)	3.5	3.2	3.8	3.5	3.5	3.5	3.3	3.4	3.3	.84 (6)	
Teachers: Caring for; wanting respect; working to gain trust	14. Adult Role Models	3.5	3.7 (83%)	3.7	3.5	3.8	3.6	3.6	3.5	3.5	3.5	3.6	.83 (5)	
Reading: Reading regularly, independently, and for fun	25. Reading for Pleasure	2.5	3.4 (88%)	2.8	2.5	3.3	2.9	3.0	2.8	2.8	2.9	3.0	.92 (4)	
Peers: Can work cooperatively with and likes one's own peers	15. Pos. Peer Influence	3.0	3.4 (68%)	3.3	3.1	3.1	3.2	3.3	3.2	3.2	3.2	3.3	.74 (6)	
Culturally different peers: Interest in and values diversity	34. Cultural Competence	3.2	4.3 (85%)	3.9	3.6	4.0	3.6	3.6	3.6	3.9	3.7	3.9	.91 (3)	
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Self-Perception: Temporal	Akin Asset:	Don't Have	Does Have	Girls	Boys	6th	7th	8th	9th	10th	11th	12th	α (#)	
Self-in-the Future: Actively working toward hopeful future	37. Personal Power (& 40)	3.6	4.2 (62%)	3.9	3.8	4.0	4.0	3.8	3.7	3.7	3.7	4.0	.79 (5)	
Self-in-the-present: Feels esteemed, unique, likeable	38. Self- Esteem (17)	3.2	3.7 (71%)	3.4	3.4	3.5	3.5	3.5	3.3	3.3	3.3	3.4	.78 (5)	

Social Connectedness: Present Oriented, Unconventional	Akin Asset:	Don't Have	Does Have	Girls	Boys	6th	7th	8th	9th	10th	11th	12th	α (#)
Friends: Trusts, spends time with, & talks openly w/ friends	33. "Social" Competence	3.4	3.7 (72%)	3.7	3.4	3.7	3.7	3.7	3.3	3.4	3.5	3.6	.85 (6)
Neighborhood: Activity in and sense of safety & belonging	20. (-) Time at home (10 Safe)	3.5	3.2 (-63%)	3.3	3.4	3.7	3.4	3.3	3.2	3.2	3.1	3.2	.80 (6)
Romantic partner: Has, relies on, values boyfriend/girlfriend	31. Restraint	3.5	2.7 (67%)	3.3	2.9	3.2	3.2	3.0	2.8	2.9	3.3	3.2	.95 (4)
Family Connectedness: Present- oriented, Conventional	Akin Asset:	Don't Have	Does Have	Girls	Boys	6th	7th	8th	9th	10th	11th	12th	α (#)
Parents: Spends time with, wants trust, cares for	1. Family Support	3.3	4.0 (77%)	3.7	3.6	3.9	3.6	3.7	3.7	3.4	3.6	3.6	.83 (6)
Mother: Fees close to, cares for, & communicates well with	2. Positive Fam. Comm.	3.6	4.2 (77%)	3.9	3.8	4.3	4.0	3.7	3.8	3.9	3.7	3.8	.83 (4)
Father: Fees close to, cares for, & communicates well with	2. Positive Fam. Comm.	3.3	4.1 (76%)	3.9	3.8	3.9	4.0	3.8	3.5	3.5	3.4	3.7	.86 (4)
Siblings: Frequent, enjoyable contact with siblings	1. Family Support	2.8	3.3 (70%)	3.5	3.0	3.2	3.0	3.0	3.2	3.0	2.9	2.9	.89 (5)
Religion: Faithfulness; involvement in, importance of	19. Religious Community	2.0	3.9 (84%)	3.2	2.9	3.2	3.2	2.8	2.8	2.9	2.6	3.2	.86 (3)

Notes: α = scale reliability (< .70 fair; .70 - .79 good; > .80 very good); * significant sex differences.

Scale Anchors: 1 = Not at all true; No 2 = Not really true; 3 = Sort of true; 4 = True; 5 = Very true;

Low connectedness includes anchors 1-3 (Mean < 3.5) and High connectedness includes anchors 4-5 (Mean ≥ 3.5)

Table 2. Items for Select Subscales of the Hemingway Measure of Adolescent Connectedness

Subscale Items—Reverse score items 2, 7, 13, 18, 26, 30, 34, 45, 51, 55, 64, 70, 71

Neighborhood (6 items)

- (1) I like hanging out around where I live (like my neighborhood).
- (11) I spend a lot of time with kids around where I live.
- (21) I get along with the kids in my neighborhood.
- (31) I often spend time playing or doing things in my neighborhood.
- (41) I hang out a lot with kids in my neighborhood.
- (51) My neighborhood is boring.

Friends (6 items)

- (2) Spending time with friends is not so important to me.
- (12) I have friends I'm really close to and trust completely.
- (22) Spending time with my friends is a big part of my life.
- (32) My friends and I talk openly with each other about personal things.
- (42) I spend as much time as I can with my friends.
- (52) My friends and I spend a lot of time talking about things.

Self-in-the-present (6 items)

- (3) I can name 5 things that others like about me.
- (13) There is not much that is unique or special about me.
- (23) I can name 3 things that other kids like about me.
- (33) I really like who I am.
- (43) I have special hobbies, skills, or talents.
- (53) I have unique interests or skills that make me interesting.

Parents (6 items)

- (4) My family has fun together.
- (14) It is important that my parents trust me.
- (24) I enjoy spending time with my parents.
- (34) My parents and I disagree about many things.
- (44) My parents and I get along well.
- (54) I care about my parents very much.

Siblings (5 items)

- (5) I have a lot of fun with my brother(s) or sister(s).
- (15) I feel close to my brother(s) or sister(s).
- (25) I enjoy spending time with my brothers/sisters.
- (35) I try to spend time with my brothers/sisters when I can.
- (45) I try to avoid being around my brother/sister(s).

School (6 items)

- (6) I work hard at school.
- (16) I enjoy being at school.
- (26) I get bored in school a lot.
- (36) I do well in school.
- (46) I feel good about myself when I am at school.
- (56) Doing well in school is important to me.

Peers (6 items)

- (7) My classmates often bother me.
- (17) I like pretty much all of the other kids in my grade.
- (27) I like working with my classmates.
- (37) I get along well with the other students in my classes.
- (47) I am liked by my classmates.
- (57) I rarely fight or argue with the other kids at school.

Teachers (6 items)

- (8) I care what my teachers think of me.
- (18) I do not get along with some of my teachers.
- (28) I want to be respected by my teachers.
- (38) I try to get along with my teachers.
- (48) I always try hard to earn my teachers' trust.
- (50) I usually like my teachers.

Self-in-the-Future (6 items)

- (9) I will have a good future.
- (19) Doing well in school will help me in the future.
- (29) I do things outside of school to prepare for my future.
- (39) I do lots of things to prepare for my future.
- (49) I think about my future often.
- (55) What I do now will not affect my future.

Reading (4 items)

- (10) I enjoy spending time by myself reading.
- (20) I like to read.
- (30) I never read books in my free time.
- (40) I often read when I have free time.

Kids from other cultures (3 items)

- (60) I like getting to know kids from other cultural or racial groups.
- (65) I would like to know more people from different cultural groups.
- (69) I like getting to know people who are culturally different from me.

Figure 1. A hypothesized model of the sequence of attachment, social support, relatedness, and belonging in the development of adolescent connectedness.

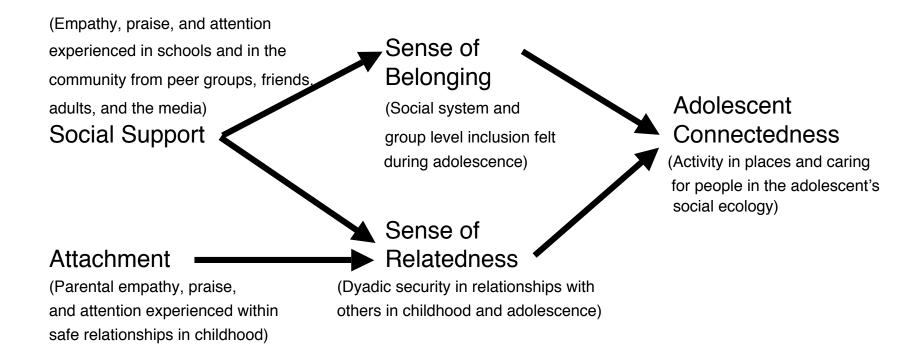


Figure 2. A means of plotting the ecology of adolescent connectedness by its dimensions

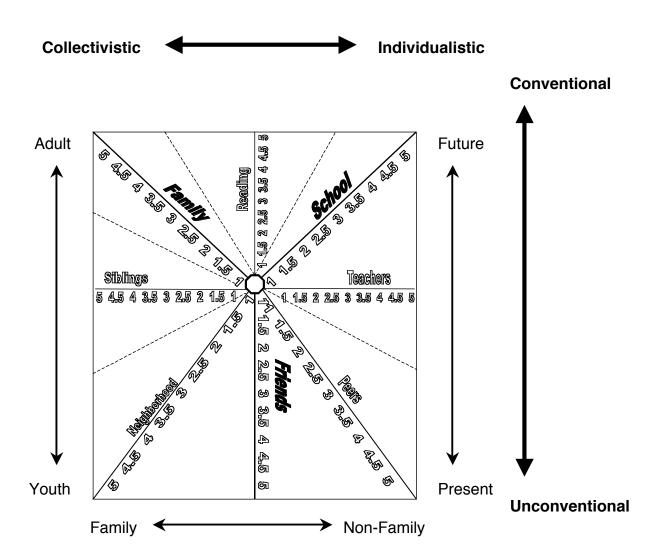
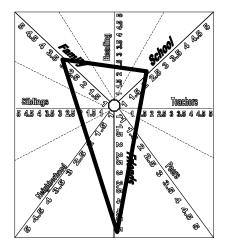


Figure 3: The "shape" of adolescent connectedness: Three examples

Shape A: Unconventional Connectedness

Subscale Means

School = 2.4Family = 3.3Friends = 5

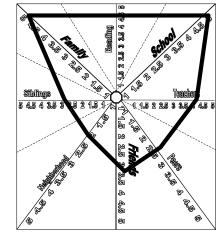


Shape B: Conventional Connectedness

Subscale Means

School = 4.9Family = 4.9

Friends = 3.3



Shape C: Collectivistic Connectedness

Subscale Means

School = 2.1

Family = 4.6

Friends = 4.9

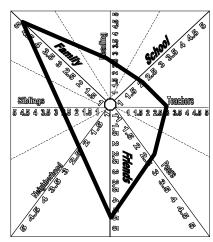


Figure 4. Two Charts Showing Connectedness to Teachers Across Adolescence

