

CHAPTER

19

CONNECTEDNESS IN THE LIVES OF ADOLESCENTS

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LEARNING OBJECTIVES

After studying this chapter, you will be able to

- Define connectedness and explain its association with adolescent health risk behavior.
- Summarize key theoretical frameworks for understanding connectedness as a protective factor against adolescent risk behavior.
- Describe how adolescent connectedness in various contexts influences subsequent risk behavior.

Connections that young people have to adults, the schools they attend, and the communities in which they live are key determinants of the health and well-being of adolescents. Research during the past two decades shows that a sense of connectedness to others and key institutions in their lives is protective against an array of health risk behaviors and is associated with better mental health outcomes (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Resnick et al., 1997). The 2003 Commission on Children at Risk, a group of prominent physicians, research scientists, and youth service professionals, identified a lack of connectedness as a major contributor to deteriorating behavioral and mental health among youth in the United States (Commission on Children at Risk, 2003). Specifically, they concluded:

In large measure, what's causing this crisis of American childhood is a lack of connectedness. We mean two kinds of connectedness—close connections to other people, and deep connections to moral and spiritual meaning. Where does this connectedness come from? It comes from groups of people organized around certain purposes—what scholars call social institutions. In recent decades, the U.S. social institutions that foster these two forms of connectedness for children have gotten significantly weaker. That weakening, this report argues, is a major cause of the current mental and behavioral health crisis among U.S. children [pp. 1–2].

Based on current research from neuroscience and biology, the commission concluded that children are biologically primed to connect from birth, and the more this need is met the less likely it is that problems will develop.

KEY CONCEPTS AND RESEARCH FINDINGS: WHAT IS MEANT BY “CONNECTEDNESS”?

Connectedness is increasingly being used to refer to protective relationships that exist between adolescents and their environment. These include relationships that adolescents have with individuals (inside and outside of the family), as well as within their broader social context, including schools and other institutions (Allen, McElhaney, Kuperminc, & Jodl, 2004; Resnick, 2008). These anchoring points in the lives of young people represent the opposite of social isolation and disconnection, which is now described as a threat equal to that of tobacco use in terms of contribution to mortality (Putnam, Feldstein, & Cohen, 2003).

Theoretical Models

Several theories and models—including attachment theory, Hirschi’s theory of deviant behavior, and Hawkin’s social development model—serve as the foundation for understanding why connectedness may serve as a protective factor in the lives of adolescents. Perhaps the most important theory suggesting the strength of connectedness is attachment theory (Bowlby, 1980). *Attachment theory* describes the process by which infants become attached to their parents and provides a basis for how children form

connections to others. Thus, interactions between infants and their caregivers form the foundation for connecting with others.

Hirschi's theory of deviant behavior (Hirschi, 1969) states that bonding within a socialization unit, such as school or family, consists of four elements: (1) involvement in the unit, (2) attachment or affective relationships, (3) investment or commitment to the unit, and (4) belief in the values of the unit. According to the theory of deviant behavior, once a bond is established, it will likely affect future behavior.

Finally, the *social development model* incorporates ideas from numerous theories including social learning theory, social control theory, and differential association theory (Catalano & Hawkins, 1996). This model suggests that socialization occurs through (1) perceived opportunities to participate in activities with others, (2) development of skills for involvement, and (3) rewards for involvement. The model suggests that involvement that is skillful is more likely to be reinforced, and this reinforcement is more likely to lead to attachment and commitment. It is believed that individuals' behavior will conform to the norms and behaviors of the unit they are bonded to, whether prosocial or antisocial. In each of the above instances, interaction is the basis for the development of a sense of connection to others, and through that sense of connectedness come identity, meaning, and internalization of norms, beliefs, values, as well as behaviors that reflect those internalized standards and preferences.

As suggested by the theories just described, health risk behavior takes place in the contexts in which adolescents live. Comprehensive models of adolescent development emphasize the importance of considering factors at all levels of influence. Thus, this chapter reviews research related to adolescents' connectedness as it pertains to religion, parents, nonparental adults, school, and the community.

Religiosity and Spiritual Connectedness

Interest in the role that religiosity and spirituality can play in the lives of adolescents has grown significantly in recent years. Adolescence may be an important time to study religiosity and spirituality (R/S), because it is a time when youths are seeking a sense of belonging and meaning in their life. However, little attention has been given to religiosity and spirituality in the scientific literature. Several studies, for example, suggest that less than 1 percent of articles on children and adolescents address religiosity (Boyatzis, 2003) and spirituality (Benson, Roehlkepartain, & Rude, 2003).

Measurement. In the majority of studies, *religiosity* refers to behavior, such as religious service attendance, prayer, and meditation, while *spirituality* refers to an internal process, such as spiritual well-being, support, and coping. Spirituality has also been characterized as development and deepening of a sense of awe, wonder, and mystery about the world and the universe (Lerner, 2000). A recent review of forty-three studies assessing the relationship between R/S and adolescent health found that more than half of the studies measured R/S as participation in religious activities or services (Rew & Wong, 2006). Other common measures of R/S include importance of religion and religious affiliation.

A substantial limitation of current research on religiosity and spirituality is related to the measurement of these constructs. Although religiosity is widely accepted as a multidimensional construct, single-item measures are often used. A recent review, for example, showed that of forty-three R/S studies, only fifteen studies on religiosity and three studies on spirituality included multi-item measures (Rew & Wong, 2006). Multidimensional, reliable, and valid measures are needed to better understand the relationship between spiritual connectedness and adolescent health and indicators of well-being, particularly those including beliefs, knowledge, and behaviors.

Research Findings. Data from the Monitoring the Future survey indicate that 43 percent of eighth graders, 40 percent of tenth graders, and 33 percent of twelfth graders attend religious services at least once a week (Child Trends, n.d.). These data are consistent with several studies showing that church attendance declines during the high school years (Kerestes, Youniss, & Metz, 2004). Interestingly, the importance of religion appears to remain stable across adolescence. These findings have been reported across various samples of adolescents. It is possible that younger adolescents go to church with their parents, but this practice becomes less common as youth get older. It is also possible that adolescents explore different ways to express beliefs as they reach young adulthood.

Spiritual or religious connectedness has been described as a protective factor against numerous health risk behaviors and negative health outcomes. Numerous literature reviews have recently been conducted showing that adolescents with higher levels of spirituality and religiosity are less likely to engage in risky sexual behavior (Rostovsky, Wilcox, Wright, & Randall, 2004) and substance use (Michalak, Trocki, & Bond, 2007) and have better mental health outcomes (Wong, Rew, & Slaikeu, 2006). These findings appear to hold true, regardless of denominational affiliation. Interestingly, adolescents from different denominational affiliations appear to be similar on measures of religiosity, including attendance and importance (Kerestes et al., 2004).

Exposure to more conventional beliefs, opportunities, and connections with others through church attendance may be the mechanism by which religiosity serves as a protective factor.

Adolescents for whom religiosity is important may engage in fewer health risk behaviors for several reasons. Religion may expose youth to more conventional beliefs and values (Walker, Ainette, Wills, & Mendoza, 2007), provide opportunities for adolescents to engage in prosocial activities, and connect youth to the broader community (King, 2003). One study, for example, found that regular church attendance was associated with more positive outcomes, regardless of whether adolescents believed in a higher power (Good & Willoughby, 2006). This finding supports the view that exposure to more conventional beliefs, opportunities, and connections with others through church attendance may be the mechanism by which religiosity serves as a protective factor.

The social context of religious group membership and religious observance may also invite a predilection toward an array of affiliative behaviors above and beyond the underlying human need for meaning

and belonging (Boyden, 1978). Particularly in religious groups where emphasis is placed on service, communality, and empathy, group norms and expectations might then reinforce the value placed on social bonding, close emotional communication, and responsiveness to the needs of others (Bakan, 1966).

Future Directions. Further research is needed to develop multidimensional measures of religiosity and to better operationalize the more complex and elusive concept of spirituality. In addition, research is needed that examines religiosity and spirituality as dynamic processes during the adolescent years and to examine how social influences (such as parents and peers) relate to religiosity and spiritual connectedness across this developmental period. Finally, more research is needed to better understand how both religiosity and spirituality relate to positive outcomes in the lives of adolescents.

Parent-Child and Family Connectedness

Parents have perhaps the most influential role on their children. Although adolescence is often a time of gaining independence from one’s family, research suggests that adolescents want close relationships with their parents and rely on them for support and guidance (Ungar, 2004). Strong bonds between parents and adolescents protect youth from engaging in health risk behaviors, particularly when parents recognize, value, and reward prosocial behaviors (Resnick et al., 1997).

Measurement. *Parent-child connectedness* (PCC) generally refers to the quality of the bond between a parent and a child (Lezin, Rolleri, Bean, & Taylor, 2004). A recent review suggests that PCC measures generally assess characteristics such as attachment and bonding (parents and child share thoughts and feelings, for example), warmth and caring (parents help child), cohesion (family spends time together), support and involvement (parents attend school events), communication (frequency of discussions), monitoring and control (parental presence), autonomy (child has voice in family decisions), and maternal and paternal characteristics (depression, for example) (Lezin et al., 2004). A closely related construct is family connectedness, which refers to a sense of belonging and closeness to one’s family more broadly.

Research Findings. It has been well established that PCC is associated with lower levels of health risk behaviors. Using a nationally representative data set, for example, Resnick et al. examined the relationship between family connectedness and eight areas including emotional distress, suicide, violence, substance use (tobacco, alcohol, and marijuana use), sexual debut, and pregnancy (Resnick et al., 1997). Family connectedness (defined as closeness to parents, perceived caring, satisfaction, and feeling loved and wanted) was protective against all outcomes examined, except history of pregnancy. They also found that parental presence, shared family activities, and high expectations were important predictors of adolescent health outcomes. In a review of connections in the lives of adolescents, Blum and Rinehart noted: “Time and time again, the home environment emerges as central in shaping health outcomes for American youth. Controlling for the number of parents in a household, controlling for whether families are rich or poor, controlling for race and ethnicity, children who

report feeling connected to a parent are protected against many different kinds of health risk, including emotional distress, and suicidal thoughts and attempts; cigarette, alcohol, and marijuana use; violent behavior; and early sexual activity” (Blum & Rinehart, 1997, p. 16).

Family connectedness has been referred to as one of the most powerful protective factors in the lives of adolescents (Resnick, Harris, & Blum 1993). Questions used to assess family connectedness often do not specify the nature of family. Family connectedness in its most basic form refers to connectedness with at least one competent and caring adult. Thus, families of many different types may play a protective role in the lives of adolescents. Indeed, analyses have indicated the primacy of family dynamics over family structure in terms of buffering effects against self-destructive, risky behaviors in adolescents (Gil, Vega, & Biafora, 1998).

Research has begun to investigate how PCC may work to reduce negative outcomes and increases the likelihood of positive outcomes. Although extensive research exists on the importance of *parental monitoring* (parents knowing where their children are and who they are with), research indicates that parental monitoring is particularly effective when it increases communication between a parent and child and the child informs parents of their whereabouts (Stattin & Kerr, 2000). Thus, direct control of a child’s behavior does not necessarily explain the protective effect of parental monitoring on health outcomes of adolescents. However, parents who are close to their children may be better able to monitor and control how their children spend their time, which may reduce the likelihood that they will become involved in health risk behaviors (Henrich, Brookmeyer, & Shahar, 2005). To date, it is unclear whether PCC is protective once adolescents have become engaged in risky behaviors. A recent study on weapon violence, for example, found that relationships with parents were not as protective once youth became engaged in these behaviors. This suggests that promoting parent-child connectedness may be particularly important for primary prevention programs that begin prior to adolescence or before the onset of particular health risk behaviors.

Another line of research has begun to examine the interplay of family characteristics and PCC in relationship to health risk behaviors. For example, it is known from previous research that parents’ own behaviors play an important role in adolescent development, as parents are primary role models for their children. For example, a recent study examined the interplay between parental tobacco smoking and PCC on youth smoking (Tilson, McBride, Lipkus, & Catalano, 2004). This study found that high PCC was not protective against smoking among youth whose parents smoked. The findings showed that adolescents whose parents smoked were equally likely to become smokers, regardless of how connected they were to their parents.

Future Directions. Future research should continue to examine how and when PCC is protective for adolescents. It is also critical to continue to examine how PCC interacts with other parental influences and family characteristics. Also, examining differential effects of connections adolescents have to mothers and fathers is an important direction for future research.

Connections to Nonparental Adults

Although parents are among the most influential adults in the lives of young people, adolescents develop important relationships with adults besides their parents. These relationships may include teachers, coaches, friends’ parents, neighbors, counselors, and religious leaders. The relationships may develop through existing social networks or as part of formal mentoring programs. Research shows that relationships with prosocial nonparental adults can have a strong positive effect on adolescent development.

The majority of adolescents report having at least one important relationship with a nonparental adult. In a recent study, nearly three quarters (73 percent) of adolescents from a nationally representative sample reported having a mentor (DuBois & Silverthorn, 2005). Extended family members (such as aunts, uncles, cousins, and grandparents) are among those most commonly reported as *mentors* (Rhodes, Ebert, & Fischer, 1992; Zimmerman, Bingenheimer, & Notaro, 2002). Other commonly reported mentors included those involved in the day-to-day lives of adolescents, including teachers, religious leaders, coaches, and friends’ parents; some of this research has suggested the particular salience of the parent(s) of a best friend, in terms of willingness to communicate and confide (Benson, 2006).

Measurement. Researchers have used different terminology to study the role of nonparental adults in the lives of adolescents. The two terms most commonly used are “natural mentors” (DuBois & Silverthorn, 2005; Zimmerman et al., 2002) and “very important nonparental adults” (Beam, Chen, & Greenberger, 2002). There is general agreement, however, that mentors are nonparental adults who provide support and guidance to adolescents. *Natural mentors* are individuals within the adolescent’s existing social network, as opposed to a relationship that develops through a formal mentoring program.

Research Findings. Studies have been conducted to assess the overall effects of both natural mentors and formal mentoring programs (such as Big Brothers Big Sisters of America) on a range of outcomes including academic achievement, problem behaviors, physical health, and mental health. A recent study of the effects of natural mentors on adolescents using a nationally representative sample found that adolescents with natural mentors were more likely to complete high school and college, have higher self-esteem and life satisfaction, and engage in healthy lifestyle behaviors such as physical activity and birth control use (DuBois & Silverthorn, 2005). Adolescents with natural mentors were also less likely to engage in problem behaviors such as violence. Overall, however, these results show that natural mentors can have a broad effect on the health and well-being of adolescents. Further, findings did not vary by individual or environmental risk factors, suggesting that all adolescents can benefit from relationships with nonparental adults. It is worth noting, however, that the effects of natural mentors do not completely offset individual and environmental risk factors, suggesting that natural mentors alone are not enough to undo multiple risk factors that may exist in the lives of adolescents. An enduring research agenda with substantive implications for health and social service providers is the extent to which the protective effects

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of connectedness to natural mentors can offset the deleterious effects of neglectful or overtly damaging family environments. Many interventions are grounded in the assumption that when families cannot be a source of nurturance for adolescents, the protective effects of connectedness with caring, competent adults can be transplanted into the lives of adolescents who are bereft of such nourishment (Bernat & Resnick, 2006).

Although many adolescents have natural mentors, many also receive mentoring through formal mentoring programs. Although the benefits of having natural mentors have been well documented, it is unclear whether mentoring relationships through a formal program can produce similar results. A recent meta-analysis including fifty-five evaluations of formal mentoring programs found positive effects of formal mentoring programs on emotional, behavioral, and educational outcomes; however, the overall effect was small (DuBois, Holloway, Valentine, & Cooper, 2002). Mentoring programs in general had the largest effect on adolescents from disadvantaged backgrounds, which may be because formal mentoring programs are often designed specifically for those at higher risk for negative outcomes. A critical aspect of formal mentoring programs is the quality of program implementation. This meta-analysis revealed substantial heterogeneity in estimates of effect size for the programs included, which may account for the overall small effect found. Future evaluations of formal mentoring programs need to give careful consideration to quality of implementation.

Beyond understanding the overall effects that mentoring can have on the lives of adolescents, researchers have also been working to understand the role that nonparental adults play in the lives of adolescents and how they may benefit from these relationships. Research suggests that mentors may affect adolescent development both directly and indirectly. Because mentors are outside the family context, mentors provide a safe context for adolescents to talk about their lives and at the same time provide opportunities for mentors to instill adults' values and perspectives. Thus, mentors may directly reduce the likelihood of adolescents engaging in risky behaviors by conveying messages about the dangers associated with these behaviors. Mentors may indirectly affect health-compromising behaviors by affecting factors related to these behaviors, such as self-worth, future aspirations, and academic achievement. Positive effects of mentors may also be the result of improving relationships with parents and peers. Mentors have been shown to improve relationship skills, which may improve adolescents' ability to communicate with parents and build relationship with prosocial peers (Rhodes, Haight, & Briggs, 1999).

School Connectedness

Adolescents' relationship to school plays an important role in their development. Work by the Search Institute in Minneapolis, Minnesota, and results from the National Longitudinal Study of Adolescent Health (Add Health) have increased attention to school connectedness as an important protective factor in the lives of adolescents during the past decade. Greater school connectedness has been associated with (1) better academic outcomes, including higher academic performance (Anderman & Freeman, 2004) and school completion (Bond et al., 2007); and (2) lower levels of involvement in health-risk behaviors,

including substance use (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004), violent behavior (Karcher, 2002), and risky sexual behavior (Catalano et al., 2004). The Institute of Medicine (1997) suggests that “in some situations, a healthful psychosocial environment (in school) may be as important—or even more important—than classroom health education in keeping students away from drugs, alcohol, violence, risky sexual behavior, and the rest of today’s social morbidities.”

Measurement. *School connectedness* generally refers to students’ beliefs that adults in their school care about them as students and as individuals (Blum & Libbey, 2004). A variety of constructs have been used to evaluate a student’s relationship to school, including school connectedness, school attachment, school bonding, orientation towards school, school engagement, school involvement, satisfaction with school, identification with school, and teacher support (Libbey, 2004). Many of these constructs measure similar aspects of a student’s relationship to school, including academic engagement, belonging, fairness in discipline practices, participation in extra-curricular activities, liking school, student voice, peer relationships, safety, and teacher support (Libbey, 2004).

Summary of Research Findings. Despite various measures of school connectedness, research consistently shows that students who feel connected to school report higher levels of academic performance and lower levels of involvement in health risk behaviors compared to those who feel less connected to school. In a nationally representative sample of adolescents across the United States, school connectedness was found to be protective against emotional distress, suicidal thoughts and behaviors, violence, substance use, and age of sexual debut (Resnick et al., 1997). As noted previously, in this study school connectedness was related to all health outcomes examined, except history of pregnancy. Some research suggests this relationship may be causal, because interventions designed to increase school bonding or school connectedness have resulted in decreases in health risk behavior (Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 2001).

Because school connectedness measures tap different dimensions of a student’s relationship to school, research has begun assessing which aspects of school connectedness relate to positive outcomes. A review of the most recent theoretical and empirical work on school connectedness suggests that the most important environmental factors associated with school connectedness include high expectations for academic success, perceived support from school staff, and a safe school environment (Blum & Libbey, 2004). These findings are consistent with research that has compared effects of teacher support versus social belonging on health outcomes. One study, for example, found that students who felt their teachers were fair and cared about them were less likely to initiate six health risk behaviors (smoking tobacco, drinking to the point of getting drunk, marijuana use, suicidal ideation or attempt, sexual intercourse, and weapon-related violence), whereas feeling a part of school and enjoying school were not protective against any of these behaviors (McNeely & Falci, 2004).

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Understanding why some students feel connected to school but other students do not has also been a focus of numerous studies. Research consistently shows that school connectedness is higher in younger students, students from two-parent households, students who perform well in school, students who participate in extracurricular activities, and students with more friends (McNeely, Nonnemaker, & Blum, 2002; Thompson, Iachan, Overpeck, Ross, & Gross, 2006). Studies also suggest a relationship between connectedness and gender, race, and having educated parents, but current findings regarding these factors are equivocal. Some studies, for example, show that males are more connected to school than females, while other studies show higher connectedness among females. More recent studies have also examined how school and neighborhood characteristics may be associated with school connectedness. Connectedness appears to be higher in schools with wealthier students and lower in neighborhoods with more renters, which may be related to living in a more transient environment.

Future Directions. Future research on school connectedness should continue to identify individual, school, and community characteristics associated with connectedness that could be modified through interventions. In addition, identifying aspects of school connectedness that are most strongly related to health outcomes could clarify intervention targets. It is also important to assess school connectedness over time. Age clearly plays an important role in school connectedness, and understanding the needs of students at various ages is critical. In the context of eroding school budgets and the growing complexity of health and social issues presented at school by young people, educators and school administrators have a particular interest in research that informs the question of how to enhance and deepen school connectedness and positive school climate, particularly in a context of scarce resources and little discretionary funding for schools.

Community Connectedness

Research designed to better understand how the broader social context affects adolescent health is growing. Research to date suggests that connection to one's community is associated with lower levels of health risk behaviors and higher levels of prosocial behavior.

Measurement. Community connectedness often refers to adolescents' perceptions of caring by adults in the community (Rauner, 2000). Several terms are used in the scientific literature to refer to *community connectedness*, including collective efficacy, social capital, social cohesion, and community attachment. Measures of caring by adults in the community often ask about adolescents' perception of caring by adults, including neighbors, school staff, and church leaders (Borowsky, Resnick, Ireland, & Blum, 1999). *Sense of community* refers to emotional connection and belonging in the neighborhood (Chavis & Pretty, 1999; Chavis & Wandersman, 1990). This is often measured by items such as "I feel connected to this neighborhood," "I feel at home in this neighborhood," and "It is very important to me to live in this particular neighborhood." In addition, community connectedness measures often assess collective action, such as how much neighbors will work together to solve problems, how much neighbors are willing to share, and how much fun neighbors have with each other. To be

clear, most measures of community connectedness could rightly be viewed as subsumed under the larger construct of social capital, of which community identification and collective efficacy are a part.

Research Findings. Research to date suggests that connection to community is associated with lower levels of health risk behaviors and higher levels of prosocial behavior among adolescents. A recent study, for example, found that communities with greater social capital (measured as resources for adolescents in the community) had lower rates of health risk behaviors, higher rates of health care utilization, and lower health care expenditures than communities with less social capital (Youngblade, Curry, Novak, Vogel, & Shenkman, 2006). Another study using a large sample of adolescents from the National Survey of Children's Health found that adolescents who lived in neighborhoods with greater connectedness (measured as how much neighbors help each other) had greater social competence and health-promoting behavior compared to adolescents living in less connected communities (Youngblade et al., 2007). This finding was consistent across sociodemographic groups.

For community connectedness, the most influential factors are relations between adults and adolescents, voice in the community, attitudes toward adolescents, and opportunities for creative engagement.

Future Directions. The work of Putnam, Feldstein, and Cohen (2003) demonstrates that even in the context of poverty, health is better in communities characterized by strong social capital and interpersonal bonds. Little, however, is known about the potentially detrimental effects of feeling closely connected to a community where there is substantial role modeling of antisocial behavior—where negative, antisocial behaviors are perceived to be (or may actually be) the norm. In such instances, it might be expected that community connectedness would portend more rather than fewer risky behaviors, consistent with evidence, for example, that the social norms of groups that teens are connected to will influence their sexual behavior (Kirby, 2001).

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SUMMARY

The research summarized in this chapter indicates the importance of adolescents' connections to others and institutions for their health and well-being. A sense of connectedness has been found to be protective against an array of health risk behaviors including substance use, risky sexual behavior, and violence (Catalano et al., 2004; Resnick et al., 1997; Resnick, Harris, & Blum, 1993). Research suggests that positive connections are beneficial for all adolescents—across gender and racial, ethnic, and social class groups (Bernat & Resnick, 2006; Resnick et al., 1997). This is important insofar as most interventions are designed to target specific groups of adolescents, but this also suggests the utility of broad, adolescent development-focused strategies that seek to promote universal, cross-cutting protective factors across social groups of youth (Resnick, 2005).

It is important to note, however, that connections to others may not always provide protection to adolescents. In particular, connections to peers (as well as adults) have been shown to relate to both positive and negative outcomes, depending on whether their peers are engaging in prosocial or antisocial behavior. Thus, it is critical that connections involve prosocial adults and prosocial peers to create a positive effect on adolescent development.

In this chapter, we have synthesized five areas of connectedness that have been related to better health outcomes among adolescents. These areas are not independent of one another. For example, schools and nonparental adults exist within communities and may represent an important aspect of community connectedness. Furthermore, the more connected adolescents feel in one area, the more likely they are to feel connected in another (analogous to a long-standing line of research that documents the clustering of health-jeopardizing behaviors). It is possible that when adolescents feel connected in one area, this builds skills and access to resources that are transferable to other settings. Thus, interventions designed to build connectedness in one aspect of adolescents' lives may have implications for other areas—as has been amply demonstrated by successful service-learning programs, where participation in community service in the second decade of life is predictive of future civic engagement (Zaff, Malanchuk, Michelsen, & Eccles, 2003).

Overall, connectedness is a dynamic process that varies throughout adolescence. Adolescents may need different relationships, opportunities, and experiences to maintain a sense of connectedness to prosocial individuals, groups, and institutions over time. The opportunities and experiences adolescents need may vary greatly from ninth to twelfth grade. Thus, it is critical to better understand the needs of adolescents over time and, in a corresponding fashion, how institutions and adults can support these needs as they change, particularly as young people grow in their need for differentiation, independence, and autonomy.

Despite tremendous growth in the area of connectedness research in the past two decades, research in this area is still limited. Given the various definitions that have been assigned to the concept of connectedness and the challenges in implementing and maintaining longitudinal studies that include both large and socially diverse groups of adolescents, we still need to explore the more encompassing question, What forms of connectedness have what kinds of impact and outcomes among what groups of adolescents? This question alone creates a substantive, long-term agenda for research, with potentially great implications for understanding both fundamental processes of healthy adolescent development, as well as the application of such knowledge to programs, policy, and practice among the wide array of adults working with and on behalf of adolescents.



KEY TERMS

Connectedness	Religiosity
Attachment theory	Spirituality
Hirschi's theory of deviant behavior	Parent-child connectedness (PCC)
Social development model	Family connectedness

Parental monitoring
Mentors
Natural mentors

School connectedness
Community connectedness
Sense of community



DISCUSSION QUESTIONS

1. Elaborate on some of the challenges faced by researchers when trying to measure connectedness in different contexts.
2. Does one level of connectedness have more influence over another in terms of reducing risk behavior among adolescents (such as school connectedness versus parent-child connectedness)? Explain.
3. How can health interventionists better incorporate the concept of connectedness when targeting adolescents? Is it possible to alter or strengthen connections that have already been formed to promote behavior change?

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