
Adolescent Development and Pathways to Problem Behavior

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Chapter One: Adolescent Development and Pathways to Problem Behavior

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- To describe the multidimensional tasks of adolescent maturation and development.
- To explain the overarching problem faced by some adolescents into a “deviant career.”
- To present theoretical models for explaining teenage involvement in substance abuse and criminal conduct.
- To provide an overview of adolescent problem behavior—its characteristics and prevalence.
- To present correlates of adolescent problem behavior such as parental influence and identification with the deviant subculture.
- To describe the interactions of personality, behavior, and perceived environment in relationship to risk and resiliency during adolescence.
- To describe the increased probability of adolescent problem behaviors in relationship to multiple risk exposures.
- To show the research evidence for an array of risk factors.
- To present evidence for protective factors in the individual, family, and community infrastructure.
- To present a summary of risk and resiliency factors for subtypes of adolescent problem behavior.
- To demonstrate the need for an adolescent, strength-based treatment model that addresses delinquency, substance abuse, and co-occurring mental disorders.

INTRODUCTION: DOMAINS OF ADOLESCENT MATURATION AND DEVELOPMENT

Our discussion of patterns of adolescent development begins with viewing adolescence in the context of physical, social and emotional, cognitive, and moral domains of growth and change. Although it is widely believed that adolescence is inevitably a period of *Sturm und Drang* (storm and stress; G. S. Hall, 1904), research supports a modified view of this notion. Arnett (1999) considers three domains of potential upheaval during adolescence: (1) conflict with parents, (2) mood disruptions, and (3) risk behavior.

The claim that adolescent storm and stress is characteristic of all adolescents and that the source of it is purely biological is clearly false. However, evidence supports the existence of some degree of storm and stress—at least for adolescents in the middle-class American majority culture—with respect to conflict with parents, mood disruptions, and risk behavior. Not all adolescents experience storm and stress in these areas, but adolescence is the period when storm and stress is *more likely* to occur than at other ages. . . . There are individual differences among adolescents in the extent to which they exhibit storm and stress and . . . there are cultural variations in the pervasiveness of adolescent storm and stress. (Arnett, p. 317)

We now address the four primary growth tasks of adolescence (physical, social and emotional, cognitive, and moral) as they are intertwined with parents, emotionality, and risk-taking behavior. Although the tasks of adolescence are sufficiently distinct to warrant consideration of each factor independently, they are in a steady state of flux and constantly affect one another. For example, physical growth of certain brain regions during the teenage period influences shifts in emotional, cognitive, and social perspectives and abilities. Correspondingly, development of certain cognitive abilities may shift social ties and patterns of emotional regulation.

Physical Development

Heightened pituitary sensitivity to gonadotropin-releasing hormone, leading to increased gonadal androgens and estrogens, triggers rapid changes in height, weight, body shape, and genital development.

Different maturational patterns are recognized for boys and girls (Hazen, Schlozman, & Beresin, 2008):

- Girls in the United States begin the physical changes of puberty between 8 and 13 in the following sequence: breast buds and additional breast development; enlargement of the ovaries, uterus, labia, and clitoris; and thickening of the vaginal mucosa.
- Menarche characteristically occurs 2 to 2½ years after breast buds, at an average age of 13.
- Boys develop most observable signs of puberty later than girls. Testicular enlargement usually begins around 12, followed by appearance of pubic hair and growth of the penis.
- Following the onset of puberty for both sexes, growth in weight and height usually begins distally in the hands and feet before moving proximally to the arms and legs and finally to the torso.
- Increase in muscle mass often lags behind growth in height, thus contributing to a period of awkwardness for some teens.
- On average, girls meet their peak in growth velocity around 12, two years before boys.
- The timing of puberty is influenced by health and nutrition. For example, puberty in girls has an earlier onset as compared to 30 years ago, with rates of precocious puberty in girls (defined as the appearance of secondary sex characteristics before the age of eight or the onset of menarche before the age of nine) rising.
- African American girls enter puberty slightly earlier than European American girls.

Gender Differences in the Psychological Impact of Puberty

There are salient gender differences in the psychological impact of variations in the timing of puberty. Early-developing males have greater self-confidence and are likely to have greater academic, athletic, and social success than their peers, especially when compared to late-developing males. In contrast, early pubertal development in girls is correlated with lower self-esteem and heightened concern over body image.

The Need for Sleep

Contrary to what teenagers would like their parents to believe (or let them get away with), adequate sleep is

essential for healthy development during adolescence: about 9 to 9½ hours per night. Working against a good night's rest are (1) hormonal changes, including melatonin secretion, which causes a relative sleep phase delay with a natural tendency toward later onset of sleep and later waking times; and (2) increased academic and social demands. In addition to fatigue and impaired performance in class, inadequate sleep may increase the risk of health problems such as obesity (Hazen et al., 2008).

Emotional and Social Development

Erikson's (1980) "epigenetic" model posits emotional development as a series of crises during which individuals must complete arduous, often conflicting tasks in order to maintain a developmental trajectory. Developmental challenges are bipolar crises that force the individual to choose a more adaptive (functional) emotional stance; for example, during infancy—*trust versus mistrust*—if infants do not learn to trust caretakers, they will develop a suspicious, even paranoid stance when moving along the developmental trajectory (Hazen et al., 2008). From a psychosocial perspective, Erikson views adolescence as a period of identity formation and role diffusion. An incoherent sense of self and values will result in the lack of a sense of identity. In essence, adolescence represents a second separation from adult caretakers, with the first having occurred when the youth attained the motor and cognitive ability to move away from the parents' constant watch. Adolescence marks the period where youth are biologically, albeit not usually psychosocially, capable of surviving on their own.

Group Membership

In terms of group alignment and social belonging, early teenage life is not so much concerned with identity formation as it is with group cohesion. Junior high school students (ages 12–14) who place a high priority on popularity are manifesting socialization patterns representative of a normal developmental stage (Noam, 1999). Successful membership within groups forms the prototype for later confidence to move to different groups. Whereas healthy early adolescence is characterized by identity with specific group values and norms, "healthy later adolescence is characterized by increasing comfort with one's capacity to choose among many different groups and to endorse selectively the values that have particular relevance to

the individual" (Hazen et al., 2008, p. 165). The clinical implication of these divergent tendencies is that in counseling younger adolescents, it is important to take into account increased susceptibility to peer pressure as a means of maintaining group identity. Older teens may have a far more positive response to challenges to resist peer pressure for the sake of forming their own unique sense of identity (Hazen et al.).

Parental Role-Modeling

During the process of separating and developing increasing autonomy from parents, teenagers occasionally revert to earlier coping patterns and require increased nurturance and support. Even though they may appear aloof or unaffected by parental values, they are actually strongly influenced by the attitudes, values, and behaviors modeled by their adult caregivers. Hence, "it is extremely important for adults to open lines of communication and be mindful of the values and behaviors they are demonstrating to youth" (Hazen et al., 2008, p. 166). Sometimes after long periods of rebellion and rejection, and after having romanticized relationships with surrogate parental figures (i.e., developing a "crush" on other adults), they become amenable to accepting the parental values and standards of conduct that they formerly rejected. Healthy parenting accepts individuated teenage identity formation and incrementally safer degrees of physical and psychosocial separation from parents.

Parents and other prestige or authority figures in a teenager's life can influence the development of a healthy self-concept by positive role-modeling (i.e., setting a good example through having responsible and gratifying experiences in their own lives) and by nonjudgmental acceptance of their children. Parents should affirm the positive qualities that they identify in their teenager's personality and overtly demonstrate admiration and praise for these qualities. In most cases, the higher rates of conflict with parents during adolescence are not indicative of a serious rift in parent-teenager relationships. Even when emotions run very high, both parents and adolescents report that the overall quality of their relationships remains strong, with a foundation of shared values and a considerable amount of mutual affection, respect, and family commitment. The conflicts are usually seen by both parties as relatively insignificant arguments about issues like dating curfews and personal appearance, while there is overall agreement about principal values such as honesty and the importance of a good education (Arnett, 1999).

Self-Image

A healthy and stable self-image is of primary importance in healthy adolescent development. Problems in the formation of a positive sense of self show significant correlations with disturbed peer and family relationships; depression and mood instability; and risky sexual or other acting-out behaviors, including substance abuse, crime, and poor school performance. Overt manifestations of physical illness (e.g., deformity) or less visible symptoms (e.g., diabetes) can have a negative impact on an adolescent's confidence and self-esteem. During the peak of reliance on group acceptance, illness may crystallize underlying fears of being unwanted, alienated, and flawed. During these threat points, individual counseling, peer support groups, and increased parental nurturance and support can impact healthy teenage development (Hazen et al., 2008).

Impulsivity and Risk Taking

During the earlier phase of adolescence, a heightened sense of grandiosity and invulnerability is merged with a more limited capacity to anticipate immediate danger and to foresee long-term negative consequences. Risk potential may be increased by advances in physical maturity, heightened sex drive, increased intellectual capacity, and greater earning potential and geographic mobility. The offshoot of these potentiating factors may be increased experimentation and involvement in sexual activity, use of alcohol or other drugs, and courting of danger.

In the United States and other Western countries, the teen years and early 20s are times of highest probability for the emergence of risk-taking activity (engaging in behaviors with potential for harm to self and/or others). This pattern is generalized for dangerous driving, risky sexual activities, and criminal conduct. In fact, adolescence has long been recognized as a period of "heightened rates of antisocial, norm-breaking, and criminal behavior, particularly for boys" (Arnett, 1999, p. 321). In the first decade of the 20th century, G. S. Hall (1904) formulated danger seeking as part of a usual pattern of adolescent storm and stress, arguing that "a period of semicriminality is normal for all healthy [adolescent] boys" (vol. 1, p. 404).

Even though a significant proportion of adolescent risk taking has a neurologic substratum, clear messages about healthy and safe lifestyles along with firm limits are required from parents, teachers, counselors, and other adult role models. Although teenagers may find adult rules and admonitions off-putting,

limit setting can also be perceived as a sign of protection, love, and support. When danger is not an issue, most experts view adolescent experimentation and environmental exploration as integral to the development of a healthy and individuated sense of self (Hazen et al., 2008).

Cognitive and Brain Development

Current perspectives on cognitive development during adolescence are rooted in the work of Jean Piaget (1896–1980). Piaget viewed adolescence as a period during which there is a shift from the rule-bound, concrete methods of problem solving during childhood (concrete operations) to more abstract thinking and more flexible problem solving (formal operations). At around the age of 11, teens begin to think hypothetically, draw logical conclusions based on observable data, and develop abstract concepts (e.g., freedom and equality for all) that guide future decisions and actions. These movements from literal, tangible, and static interpretations of the world to more fluid, principled, and logic-driven ideas are underpinned by changes in the structure and functional capabilities of the human brain.

Brain Development During Adolescence

On the basis of structural brain-imaging studies conducted during the past decade, we now know that significant increases in white matter (which represent fiber growth and myelination) take place during adolescence and continues into the early 20s (Hazen et al., 2008). Myelination occurs caudal to rostral (back to front); therefore, sensory and motor regions mature earlier than the prefrontal areas associated with reasoning and judgment. There is also a corresponding decrease in the density of gray matter in the frontal and parietal lobes, also in a caudal-to-rostral pattern. Neuroscience views the decrease in gray matter (cell bodies) to be due to a process of "pruning." Based on an individual's life experience and relative reliance on developing brain pathways, active neuronal connections are strengthened, and idle ones are sacrificed with subsequent apoptosis (cell death) of inactive neurons. We now have solid scientific evidence to support the long-standing biologic aphorism that the thinking region of the brain is *not* always functioning fully in teenagers; ergo, adolescents are *not* thinking through the consequences of their behaviors.

As in Shakespeare's (1623) *The Winter's Tale*, an older man laments the recklessness of youth: "I would

there were no age between sixteen and three-and-twenty, or that youth would sleep out the rest,” he grumbles, “for there is nothing in the between but getting wenches with child, wronging the ancients, stealing, fighting . . .” (Act III, Scene 3).

Clinical Relevance of Brain-Imaging Studies

There is definitive evidence for major changes in brain structure from childhood through the early adult years. These findings provide a basis for understanding differences between adolescent and adult thought processing. For example, the ventromedial prefrontal cortex is known to be associated with the ability to estimate risk and potential rewards and to guide decision making. Imaging studies that show this brain region is among the last to develop fully are consistent with observational studies of risk-taking behavior during adolescence (e.g., gambling) where teenagers take significantly greater risks than adults. Table 1.1 summarizes the implications of recent findings about the structure and function of the adolescent brain.

Based on Table 1.1, some broad recommendations emerge for understanding and mitigating the likelihood of harm during adolescence. Firstly, in the highly sexualized and aggressively energized social context of adolescence, teenagers make important decisions in emotionally charged settings. In the

course of a single evening of unsupervised peer interactions, a youth may be faced with having to navigate among challenges to drink heavily, ride in a vehicle with an intoxicated driver, consume one or more illicit drugs, participate in criminal acts, and engage in risky sexual practices. Each of these decisions may have to be made during a period of heightened emotional reactivity (e.g., competition for dominance, quest for increased status, or a display of sexual prowess).

Decisions that emanate from these “hot cognitions” are strongly influenced by a fully developed limbic brain region. As a function of the incomplete myelinations in cortical regions, these decisions do not enjoy comparable inputs from the executive brain regions (i.e., prefrontal cortex). It follows that efforts to help adolescents to make safer choices should eliminate some of the emotional energy (i.e., triggers for impulsive choices) that adolescents might feel when contemplating risky behavior. Therefore, effective adolescent treatment is predicated upon anticipating some of the difficult situations and associated decisions that teenagers are likely to confront (e.g., smoking marijuana, drunk driving, gang provocation, criminal trespassing, vandalism, unsafe sex). Treatment exercises and role-playing are geared toward helping youth to imagine and proactively work through the process before it occurs, outside of the emotional exigency of the moment. As a rule of thumb, conversations

Table 1.1 Clinical Implications of Adolescent Brain Research

- Recklessness may be related to a lesser ability during adolescence to utilize brain regions best equipped to assess risks and benefits.
- Maturation of other regions of the prefrontal cortex is consistent with observed gains in working memory, emotion regulation, and capacity for long-term planning.
- Impulsivity, shortsightedness, and risk-taking behaviors are, at least in part, biologically driven.
- The brain’s amygdala is associated with emotional and gut responses. Imaging studies suggest that teenagers, to a greater extent than adults, when asked to interpret emotional information, use this reactive part of the brain rather than the more “thinking” region of the frontal cortex.
- Campaigns designed to change adolescents’ thinking (e.g., cognitive-behavioral therapy) around smoking, drunk driving, or unsafe sex may not be sufficiently effective on their own. They may need to be bolstered by external controls, such as parental oversight, supervision at school proms, legal sanctions for selling cigarettes to minors, and strict drinking and driving legislation.
- Parents, counselors, or health care practitioners should view risk-taking behaviors in a developmental context rather than resorting to such overly simplified attributions as poor character or negative peer pressure.

Sources: Hazen et al., 2008; Milkman & Sunderwirth, 2010.

about an adolescent's risk-taking behaviors, both past and future, might be most productive in moments of relative calm (Hazen et al., 2008).

A comprehensive discussion of how drug abuse interacts with the developing adolescent brain is presented in Chapter 4: Substance Abuse and the Adolescent Brain.

Moral Development and Reasoning

Despite widespread propaganda about the alarming extent of alienation and narcissism among today's youth, "most children most of the time do follow the rules of their society, act fairly, treat friends kindly, tell the truth and respect their elders" (Damon, 1999, p. 72). That said, moral development unfolds in stages and is heavily reliant on the aggregate of familial, community, and social exposures to standards of right and wrong.

Everything that psychologists know from the study of children's moral development indicates that moral identity—the key source of moral commitment throughout life—is fostered by multiple social influences that guide a child in the same general direction. Children must hear the message enough for it to stick. (Damon, p. 78)

On the strength of interviews about moral dilemmas, with large numbers across multiple age ranges, Kohlberg's theory of moral development (Colby & Kohlberg, 1987; Kohlberg, 1976, 1981, 1984) describes six stages of moral development, grouped into three levels.

- **Preconventional.** Rooted in a self-centered perspective, individuals at this stage follow rules to avoid punishment. This level is applicable to the majority of children younger than 9, many adolescents, and adult criminals.
- **Conventional.** As children mature into adolescence, moral thinking tends to be guided by interpersonal relationships and social roles. Others' perspectives are taken into account, and moral actions are affected by social role expectations and the need to be seen as "a good person." Cognitive development (i.e., abstract thinking, taking others' perspectives, feeling concern over how one is viewed by peers) is necessary but not sufficient for progression to the conventional level. Most

adolescents and adults remain in the conventional level of moral maturity.

- **Postconventional.** The minority of people who progress to the more principle-based postconventional level do so after the age of 20.

Note that Gilligan (1984) views Kohlberg's theory as too focused on a male perspective of morality based on justice. She proposes an alternative view based on caring for others.

What Is Normal?

Adolescence is a complex maturational and developmental process with great variation across individuals and cultures. Successful passage through this portal to adulthood results in biological maturity, a secure sense of self, the ability to enjoy close friendships and group belonging, and the mental capacity to deal with the onslaught of life's challenges. Given the theoretical and research perspectives presented above, it is possible to outline certain characteristics of "normal" adolescent development in Western society. Table 1.2 shows distinctions between normal and problematic adolescent adjustment

THE DEVIANT CAREER

As illustrated in Figure 1.1: The Deviant Career, in the earliest phase of deviant identity, a child may possess a subtle yet identifiable characteristic that steers him or her in the direction of behavior outside the norms of mainstream culture. Consider the two-year-old who is born with clubfoot or the young boy whose nickname is "Lucky" or "Romeo." The young person may be valued conditionally so that parental affection depends on performance of expected behaviors (i.e., channelization). Further socially driven behavior occurs when an early sense of low self-worth is relieved through rewards associated with a specific activity. The rejected child may begin to feel potent on attaining external reinforcers such as drugs, money, or sex.

Although parental role models and styles of child rearing are viewed as important contributors to future coping patterns, adolescent adjustment is inextricably bound to peer influence. According to Kandel & Maloff (1983), the most reliable finding in drug research is the strong relation between one person's drug use and concurrent use by friends. The strength of the adolescent's motive toward peer conformity is

Table 1.2 Distinguishing Between Normal and Problematic Adolescent Adjustment

- During times of stress, adolescents frequently regress to earlier stages of development (e.g., reading books from an earlier period of childhood, organizing or assessing a doll collection).
- Short-lived patterns of regressive behavior (i.e., less than a few weeks) do not warrant particular clinical attention.
- Becoming increasingly engrossed in more childlike activities does not necessarily represent a significant problem but may be viewed as a marker for additional attention.
- Adolescents often experiment with edgy topics and behaviors, but clinicians are obliged to understand teen pop culture to assess the degree of pathology associated with a particular form of interest or behavioral manifestation.
- Sexual behavior is a huge part of adolescence; ergo, experimentation is normal and expected.
- Clinicians are encouraged to assist teens to understand the risks of their behavior and to serve as a nonjudgmental source of information and guidance.
- Be aware of the distinction between intermittent experimentation and enduring patterns of problem behavior.
- Investigate whether problem behavior began in adolescence.
- Most of the problems experienced in adolescence will be resolved by early adulthood.
- Understand that problem behavior does not result from adolescence itself.
- Distinguish adolescents who display only one type of problem behavior from adolescents who display multiple or co-occurring problems.
- Determine if an adolescent's behaviors are defined as problems by parents but not peers or by both parents and peers.

Sources: Hazen et al., 2008, p. 168; Steinberg, 2011.

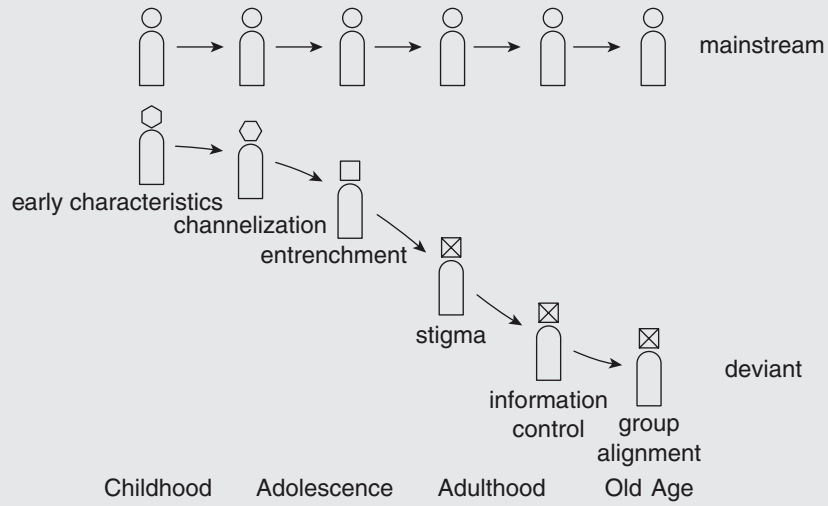
symbolized by the varied dress rituals among subculture groups. Although members of a particular subculture (e.g., rockabilly, hip-hop, punk, goth, stoner) differentiate themselves by style of dress, taste in music, choice of drugs, types of crime, etc., there is a remarkable degree of horizontal conformity within each group. Ironically, strong needs for nonconformity result in more parochial and rigid adherence to the norms of a particular subculture (see Figure 1.2).

If a youth's channelization toward problem behaviors continues into early adulthood, opportunities for normal adjustment diminish as he or she is increasingly imprisoned, both socially and personally, within a deviant role. The adolescent reaches a point of no return when the social and personal costs of changing lifestyles seem to outweigh the benefits. Imagine the difficulty of a 17-year-old high school dropout and long-standing street gang member suddenly attempting to become an athlete or college

student. Eventually the young addict is labeled by those around him or her as a member of a deviant subgroup such as alcoholic, obese, or criminal. This stigmatization tends to further decrease the individual's sense of self-worth. A youngster may begin to enact socially expected roles such as being irresponsible, nonconforming, or impulse ridden. The stereotyped individual thus becomes further engulfed in a pattern that restricts his or her life opportunities. As the teen now drifts from stable family and love relationships, social settings are increasingly selected because of their potential for immediate gratification. The gang hangout, bar, sex parlor, discotheque, or video arcade may become important islands of alienated comfort.

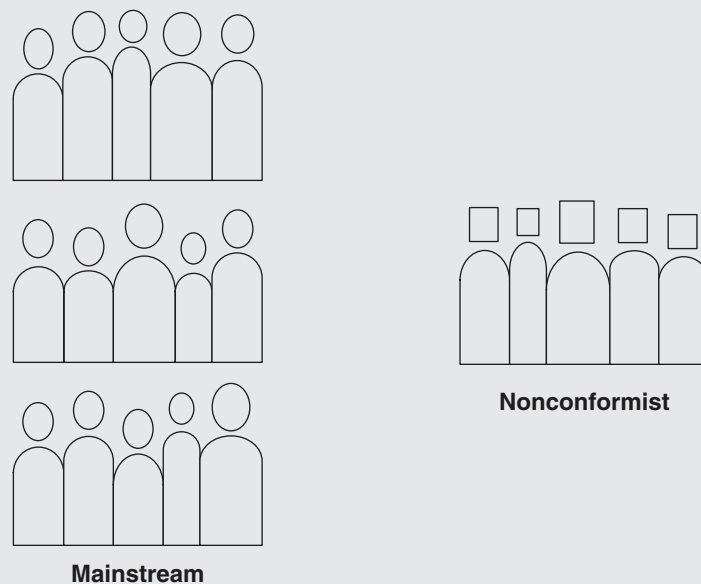
The progression of a deviant career often culminates in dramatic conflict with the environment. Heightened environmental demands and repeated personal failures require increasingly severe efforts to

Figure 1.1 The Deviant Career. The process of becoming dependent on a deviant (albeit need-gratifying) lifestyle may be conceptualized as a “deviant career.” Novices advance through a series of socially influenced stages as they progress to full status in their offbeat “professions.” The negative effects from being marked or stigmatized (i.e., X) as an “addict” or otherwise deviant personality—junkie, criminal, alcoholic, and so on—may last throughout a person’s life.



Source: Based on Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice-Hall.

Figure 1.2 Horizontal Conformity. While mainstream vertical conformity involves adherence to the transgenerational norms of society at large, “nonconformist” subgroups also adhere to the standards of their group by conforming to the patterns of thought and action of the subculture to which they belong.



Source: Based on Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice-Hall.

recoup self-esteem through excessive pleasure-seeking activity. The downward spiral of functioning may lead to a variety of social-service interventions, including hospitalization, incarceration, or both, often occurring on a cyclical basis.

PATHWAYS TO ADOLESCENT PROBLEM BEHAVIOR

Our exploration of the physical, emotional, cognitive, and moral unfolding of adolescence and a discussion of the general progression of a deviant identity, have set the stage to present several theoretical models for how derailment from healthy adjustment can occur. Firstly, a number of common childhood risk factors predispose adolescents to delinquent behavior (Hazen et al., 2008):

- Parental psychiatric illness.
- Learning disabilities.
- History of serious head trauma.
- Severe behavioral problems (e.g., fire setting or cruelty to animals).
- School problems.
- Family dysfunction.
- Alcohol or drug abuse.
- Delinquent peers.
- Emotional distress.
- Criminal activity.

In general, to the degree that these factors are unmitigated by success in one or more of the above (e.g., well-functioning family, academic achievement, positive peer associations), the risk of problem behavior increases exponentially (i.e., head trauma plus family dysfunction coupled with academic failure dramatically increases the risk for mental health, substance abuse, and conduct disorder).

As a platform for developing evidence-based treatment for juvenile crime and substance abuse, we begin by presenting a number of prominent concepts and theories designed to explain the combined forces that propel youth into deviant activities. These provide a conceptual framework for understanding, interpreting, and predicting the development, dynamics, and outcome of adolescent problems. Each model contributes to a greater understanding of the necessary components to include in an effective treatment model. We summarize the following theories, which are particularly relevant to understanding the causal

and dynamic factors of teenage alcohol and other drug (AOD) abuse and criminal conduct:

- Social learning theory (SLT).
- Problem behavior theory (PBT).
- Theory of planned behavior (TPB).
- Social norms theory (SNT).
- Transitional teens theory (TTT).
- Cognitive-behavioral therapy (CBT).
- Acquired preparedness model (APM).
- Social and community responsibility theory (SCRT).

Social Learning Theory (SLT)

We consider social learning theory (SLT; Bandura, 1969, 1973, 1977, 1986; Bandura & Walters, 1963) as providing a broad-band explanation for both desirable and undesirable behavioral outcomes. It includes a broad array of theory and practice in learning and change and encompasses both cognitive and behavioral approaches. It moves beyond the narrower perspective defined by the early behaviorists (e.g., N. Miller & Dollard, 1941; Skinner, 1938, 1953) and includes the cognitive perspective. Cognitive learning assumes that there are psychological factors that influence behavior. However, SLT holds that behavior is influenced by environmental factors, not just psychological or cognitive factors. Thus, SLT assumes that psychological and environmental factors combined influence the development of specific behaviors.

SLT stresses the importance of attending to and modeling the behaviors, cognitions (e.g., attitudes and beliefs), and emotions of others. SLT sees an interactive process among cognitive, behavioral, and environmental influences.

Three principles help define SLT:

- Observational learning is achieved when the modeled behavior is structured or organized, rehearsed symbolically, and then overtly enacted. Retention of that behavior occurs when the modeled behavior is coded into words, labels, or images.
- The adoption of the modeled behavior is strengthened when the outcomes of that behavior are valued, seen as important to the individual, or lead to desirable and expected outcomes.
- The observer is more likely to integrate the modeled behavior when the model has characteristics

similar to those of the observer, there is a cognitive-behavioral connection with the model, the model is admired by the observer, and the behavior that is adopted has practical or functional value.

SLT defines four requirements for learning and modeling behavior:

- Attention to the modeling events in the environment and the characteristics that influence the observer's attention to those events (emotional, perceptual set, arousal level).
- Retention, of which the cognitive component is remembering what one observed and coding, organizing, and rehearsing it at the cognitive level.
- Reproduction of or the ability to reproduce or copy the behavior, which includes observation of the self reproducing the behavior and feedback on the accuracy of that reproduction.
- Motivation or behavioral consequence that justifies wanting to adopt the behavior, which includes self-reinforcement.

Rotter's (1954) work on social learning involved the desire to avoid negative consequences, the likelihood of engaging in a behavior if the expectation is that it will lead to positive outcomes and the reinforcement of the behavior when it does lead to positive outcomes. Bandura expanded on the social learning concepts of Rotter and of N. Miller and Dollard (1941).

Social learning theory can be used to explain the development of deviant behavior, substance use and abuse, and criminal conduct. Theoretically, if an individual never observed these behaviors, then those behaviors would never be learned. If a child or adolescent never was exposed to substance use, to individuals committing crimes, or to risky sexual practices, theoretically the individual would never adopt the behavior. Once it is adopted, the behavior leads to consequences that lead to some kind of positive outcomes (e.g., acceptance by the group, sense of power, attention of peers, establishment of a group role that instills a sense of pride, etc.). The degree of positive reinforcement will determine whether the behavior is continued. Group norms become a power base for this reinforcement.

SLT has its limitations with respect to explaining certain behaviors learned under certain conditions. For example, it is conceivable that a child could commit

a crime having never observed someone committing a crime. However, in today's world, that is unlikely. Observing and modeling behavior can be very subtle. Certainly, many circumstances will determine the individual's exposure to potential models. The important factor is that once the behavior is adopted, internally coded, and reproduced in such a manner that it leads to some kind of positive reinforcement, that behavior will continue to be reproduced. The endpoint of the behavior may be due to many circumstances, one of which is punishment and other negative consequences that the individual perceives to be undesirable.

Emerging out of Bandura's SLT is self-efficacy theory (1982, 1986, 1995, 1997). He saw outcome expectancy as the individual's judgment that a certain behavior will lead to a certain and desired outcome. He defined self-efficacy as the belief that one can successfully engage in a behavior that is required to produce a desired outcome. Bandura saw self-efficacy as a critical factor in cognitive and behavioral change, since it determines the execution of learned cognitive and behavioral coping skills.

Problem Behavior Theory (PBT)

Problem behavior theory (PBT; Jessor, 1987a, 1991, 1998; Jessor & Jessor, 1977) is a broad-band and widely used theory to explain dysfunction and maladaptation in adolescence. The fundamental premise of PBT, developed initially from Merton's (1957) concept of anomie and Rotter's (1954) social learning theory, is that all behavior emerges out of the structure and interaction of three systems:

- The **behavior system** includes both problem and conventional behavior structures. *Problem behavior* is defined as behavior that departs from the social and legal norms of society and causes social-control responses from external sources. Underage drinking, risky and impaired driving, violating the rights of others, irresponsible sexual activity, abuse of illicit drugs, gang affiliation, and the panoply of criminal acts are seen as problem behaviors. *Conventional behaviors* are those that are socially and normatively expected and accepted.
- The **personality system** involves a composite of persistent, enduring psychological factors and includes the *motivational-instigation structure*, determined by value placed on achievement and independence; the *personal belief structure*,

related to a person's concept of self relative to society; and *personal control structure*, which gives a person reasons not to participate in problem behavior. Problem behavior in the personality often results in low achievement, focus on independence, favorable attitudes towards deviancy, adoption of values that are counter to social expectations, and lower self-esteem.

- The **perceived environment** system includes two structures: *distal*, inclusive of a person's relationship to his or her support network, and *proximal*, which deals with a person's environment in relationship to available models of behavior. Problem behavior in the environment is often associated with high peer approval; peer models; low parental control, support, and influence; and incompatibility between parental and peer expectations.

PBT holds that when the personality system and perceived environment system clash, behavioral problems become manifest (Jessor, 1987a). The core features of the adolescent personality—impulsivity, risk taking, perceived invulnerability (“can't happen to me”), struggling to find personal identity, errors in thinking due to being locked into normative peer culture (“everybody does it”), rebellion toward authority—coupled with the disturbances in psychosocial adjustment, clash with the norms and expectations of the culture and society (e.g., abstinence from intoxicants, positive peer culture, healthy sexual adjustment) and result in problem behavior (e.g., marijuana smoking, gang membership, drunk driving, vandalism, and theft). We can develop effective interventions when we see adolescent substance abuse and criminal conduct as part of the behavioral system that interacts with the personality and environment.

From a PBT perspective, youth who are at high risk for becoming involved in AOD abuse and criminal conduct may have the following characteristics:

- Predominate behavior structure featuring normalized images of illicit drug use and crime.
- Low value placed on achievement and success.
- Poorly developed personal control structure.
- Perceived environment steeped in role models and opportunities (e.g., peers who approve of substance abuse, crime, and violence).

Although risk factors play a strong role in the determination of adolescent problem behaviors, their

influence is moderated by protective factors, which are also important determinants of adolescent adjustment. According to Jessor (1998), risk factors that contribute to the formation of deviance are low self-esteem, low success expectations, a sense of alienation and desperation (*personality system*); orientation toward antisocial friends and parents as well as peer models with problem behavior (*perceived environment*); and disconnection with conventional institutions and the lack of success in school (*behavior system*).

Protective/resiliency factors are relationships with adults, supportive family relationships, the perception of a normative control from the outside, conventional friends' models of behavior, good school results, involvement in pro-social groups and in positive social activities, positive attitude toward school and intolerance of deviance, religious faith, and volunteer activity. Jessor (1998) shows that protective factors interact with risk factors in such a way that when protection is high, risk factors have little impact on problem behavior, whereas when there is no protection, a linear relationship exists between risk factors and problem behavior. These results point out the importance of promoting protective factors rather than adopting more conventional approaches, which focus almost exclusively on reduction of risk.

PBT shows that problem behaviors are related and that any single problem behavior, such as illicit drug abuse, gang involvement, or criminal activities, must be viewed within the complex system of both adaptive and problem behavior, personality, and perceived environment. Attempts to develop intervention strategies for the juvenile justice client must address all of these systems, with particular attention to affirmation and cultivation of existing protective factors within the individual client, his or her family, and surrounding community. Hence, a primary feature of the Pathways to Self-Discovery and Change (PSDC) curriculum is a comprehensive skills-training approach that integrates cognitive and behavioral restructuring in the context of environmental obstacles and systems of support.

Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) was developed by Ajzen (1989, 1991, 2001) and is seen as an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The theory of reasoned action holds that the intention (*motivation*) to perform a certain behavior is dependent on whether individuals evaluate the behavior as positive

(*attitude*) and if they judge others as wanting them to perform the behavior (*subjective norm*). TPB builds on this theory and holds that all behavior is not executed under purposeful control and that behaviors lie on a continuum from total control to complete lack of control. Both internal factors (cognitive skills, knowledge, emotions) and external factors (situations or environment) determine the degree of control. TPB is based on the connection between attitudes and behaviors. Behavior is based on and guided by three kinds of beliefs and cognitive outcomes:

- **Behavioral beliefs.** Beliefs about the expected or likely outcome of the behavior that produce a favorable or unfavorable *attitude toward the behavior* (outcome).
- **Normative beliefs.** Beliefs about what others expect (normative expectations) and the desire of the individual to follow those expectations. These beliefs result in the degree of social pressure to comply or *subjective norm* (outcome); the adolescent thinks others (e.g., peers) want him or her to perform the behavior.
- **Control beliefs.** Beliefs about the ease or difficulty of performing the behavior, resulting in the degree of *perceived behavioral control* (outcome). The concept of perceived control in TPB is similar (if not the same) as Bandura's concept of self-efficacy; it is the belief or judgment that one can successfully perform a behavior under certain conditions.

Each of these beliefs and outcome factors—attitude toward the behavior, subjective norm, and perceived behavioral control—combine to determine the behavioral intention. For example, the more favorable the attitude toward the behavior, the more favorable the subjective norm, and the greater the perceived control, the stronger the potential of the intention to perform the behavior.

Illicit drug use is an example. The intention to smoke marijuana, use Ecstasy, or inject methamphetamine is strengthened when individuals believe that nothing bad will happen and that they can handle their drugs. Users expect to feel powerful when experiencing the high (behavioral beliefs). They perceive value in using with peers who adhere to a normative belief that a “rush” and shared euphoria is worth everything. The behavior and attitude toward the behavior is further strengthened when users believe that peers expect them to function well (stay cool) in an impaired condition (subjective norm). The behavior

of illicit drug abuse is further advanced and reinforced when the outcome is “handling the situation okay” and the experience of power is connected with the thought “I’m so freakin’ high and I’m doin’ it” (control belief).

Social Norms Theory (SNT)

Social norms theory (SNT; A. D. Berkowitz, 2003, 2005; Perkins, 2003) had its start with research in the 1980s by Perkins and Berkowitz, who found that college students typically had exaggerated beliefs around the drinking habits and consumption of other students and that these misperceptions were at significant variance with actual drinking patterns and consumption norms. The social norms approach to prevention of excessive AOD consumption is to correct these misperceptions in order to reduce extreme drinking. SNT is generally based on social learning theory and, more specifically, theory of planned behavior and reasoned action theory (Myers, 2006).

SNT holds that subjective norms, or the perceived expectations of others or of peer groups who approve or disapprove of a particular behavior, along with attitudes toward the behavior are determinants of that behavior. SNT posits that people are highly influenced by what they think their peers are doing or thinking and then conform to what they believe is the norm, or social expectation. Thus, people may overestimate the value of problem behaviors and underestimate healthy behaviors, tending to increase problem behaviors (NSNI, 2008). SNT also posits that subjective norms that come from incorrect assessment of what others do will influence social behavior (A. D. Berkowitz, 2005; DeJong, 2003; DeJong et al., 2006).

For example, even though 25% of Americans do not drink, many believe that “everyone drinks” or “everyone parties.” One study showed that college students perceived that 60% of their peers drink three or more times a week; the survey showed that 33% actually drink that often (NSNI, 2008). An even more problematic aspect of adherence to perceived social norms is the widespread belief among some youth that it is the norm to claim allegiance to gang membership.

The first objective of intervention is to get individuals to understand their subjective perception of the behaviors of their peers and what they think the normative behaviors of their peers are (subjective norms) and then to get them to compare these with the actual normative behavior. A further step is to relate their subjective norms to healthy norms. If individuals can

understand the perceptions of their peers in the society at large, they will be more apt to identify unhealthy and harmful behaviors and, in response, begin to identify and even normalize healthy behaviors (UCASA, 2008).

Social norms include a broad array of attitudes, beliefs, and behaviors, including cultural traditions, community standards and mores, customs, shared beliefs, and common behavioral patterns (Ferris State University, 2008). The power of social norms is that they influence people in either unhealthy or healthy ways. For example, if we perceive that most people care about others, we are more likely to care about others and treat others in a positive way. If we perceive that most people drink heavily, use drugs, and pick fights at parties, we are likely to do the same.

SNT offers an intervention approach based on the following features of social norm marketing:

- Actions are often based on misinformation about or misperceptions of the attitudes and/or behaviors of others.
- When social norm misperceptions are interpreted as real, they reinforce the behavior that is adopted around these misperceptions.
- There is often a passive acceptance of these misperceptions with little effort to change them.
- The misperceptions are self-reinforcing in that they support problem behaviors that are falsely believed to be normative and act to discount opinions and actions that indicate them to be false, seeing these opinions as being nonconforming.
- When accurate information about the actual norms is given to individuals, they begin to express them as consistent with the accurate, healthier norms, and the adoption of these new beliefs puts up barriers to problem behaviors inconsistent with the actual norms.

Transitional Teens Theory (TTT)

Although this theoretical framework focuses largely on the problems associated with adolescent impaired driving, transitional teens theory (Voas & Kelley-Baker, 2008) also provides a general framework for understanding trajectories into adolescent substance abuse and criminal conduct. Transitional teens represent the 15- to 17-year-old age group, which Voas & Kelley-Baker describe as “encompassing the first 3 years of high school and the point at which teenagers first become eligible to drive” (p. 93). This is when the

adolescent begins to travel outside the home, either in a car or by public transportation, and be away from the supervision of parents and adults. It is when teens experience expanded horizons, which can include risks such as riding with intoxicated peers, exposure to illicit drugs, and opportunities to commit criminal activities. Voas and Kelley-Baker call this a *stage* in that members of the group share common traits, are affected by similar environments, and share common experiences and skills such as driving a motor vehicle or riding in a vehicle with peers, absent of parental supervision.

The transitional teen model defines four key elements that significantly affect and influence behavior: (1) the developmental dynamics and status of the adolescent; (2) parental influence; (3) social, environmental, and community influences; and (4) peer influences. The latter three are considered to be external influences. All four can operate as either risk or protective factors that influence adolescent behaviors, development, and decisions.

During this period, parental influence and supervision decrease, and time independent of that influence increases. The automobile enhances this independence from parents. The protective components of the community and environment substitute somewhat for the decrease in parental supervision. These influences include laws regulating underage driving and drinking and impaired driving. The structure of the school environment also provides protective factors. Adult role models (e.g., ministers, coaches) can also provide a protective effect, which can counterbalance the move away from the supervision of the home.

The environment can also present risk factors for the transitional teen. Because of mobility within the community, whether via the motor vehicle or public transportation for teens who cannot afford a car or whose peers do not have motor vehicles, teens can access neighborhoods and communities that are high risk for AOD use and exposure to crime.

It is inevitable that the teen will experience more and more independence from adult influences during this period. Most relevant during this transition is the peer group and, more specifically, what Voas and Kelley-Baker (2008) call *small affinity groups*, mainly defined by the number of teens who can fit into an automobile. This small group, because of the car, can travel away from the home environment’s supervisory regulations to locations where they perceive themselves to have more control over their own behavior. However, this sense of self-control may be a distortion since they may find themselves in environments with which they are less familiar and in which they have less control.

The risk increases when the small affinity or intimate group has deviant behavior norms. The effects of these norms were mitigated to a large degree as long as there was supervision by adults to counter them or impose compliance expectations and controls. Again, the vehicle gives the affinity group opportunity to escape supervision of the home and other adults and go to environments where these normalizing factors are not operating. In essence, whereas away-from-home transportation destinations prior to traveling in a vehicle with peers were controlled and limited by parents and adults, during this transitional period these controls are now attenuated or even absent. The result is opportunity for exposure to risk environments and risk-taking behaviors. Again, the level of risk is determined by the degree to which the affinity group is deviant from normalizing influences.

The transitional teen theory provides a framework for understanding and addressing AOD abuse and criminal conduct. The mitigation of potential risks during the transitional teen period is bound up with the degree of parental supervision and the willingness of the community to enforce informal and formal controls over deviant behavior (e.g., nighttime curfews, graduated licensing, zero tolerance for AOD abuse, supervised events, community-oriented policing, neighborhood crime watch procedures).

Cognitive-Behavioral Therapy (CBT)

Cognitive-behavioral (CB) theory and approaches emerged from two paths: cognitive theory and therapy and behavioral theory and therapy. The development of behavioral therapies in the late 1950s and 1960s provided the foundation of the behavior component of cognitive-behavioral therapy. The roots of this development go back to the early work of Pavlov, Skinner, Watson, and others in the first half of the 20th century. The early focus was on changing behaviors through the management of anxiety and applying contingency reinforcements to desirable behaviors and behavioral change.

Contemporary *behavior therapy* places the focus on current determinants of behavior with an emphasis on changing overt behavior to meet specific treatment objectives (Kazdin, 1978). It involves environmental change and social interaction using approaches that enhance self-control (Franks & Wilson, 1973–1975) and a focus on client responsibility and the therapeutic relationship (Franks & Barbrack, 1983). The common intervention approaches used in behavioral therapy are coping and social skills training, contingency

management, modeling, anxiety reduction and relaxation methods, self-management methods, and behavioral rehearsal (Glass & Arnkoff, 1992).

Cognitive therapy is premised on the idea that our view of the world shapes the reality that we experience. The cognitive approach was a reaction to the narrow view of early behavioral psychology, which did not attend to, and even rejected, the importance of the effect of the inside-the-mind happenings on behavioral outcomes. Cognitive therapy began mainly with the work of Albert Ellis and Aaron Beck, who introduced cognitive-restructuring therapies beginning in the 1950s and 1960s. Beck is often seen as the founder and developer of cognitive therapy in his work with depression in the early 1960s (Leahy, 1996).

The underlying principle of contemporary cognitive therapy is that disturbances in behaviors, emotions, and thought can be modified or changed by altering the cognitive processes (Hollen & Beck, 1986). In straightforward terms, “cognitive therapy is based on the simple idea that your thoughts and attitudes—and not external events—create your moods” (Burns, 1989, p. xiii). Thus, emotions are experienced as a result of the way in which events are interpreted or appraised (A. T. Beck, 1976). “It is the meaning of the event that triggers emotions rather than the events themselves” (Salkovskis, 1996, p. 48).

Cognitive psychology assumes an interplay among thought, emotion and action. Freeman, Pretzer, Fleming, and Simon (1990) note, “the cognitive model is not simply that ‘thoughts cause feelings and actions’” (p. 6). Emotions and moods can change cognitive processes. Actions can have an influence on how one sees a particular situation. The common intervention thread across the spectrum of cognitive therapy is cognitive restructuring. The more specific approaches are (1) restructuring cognitive distortions found in negative thinking, maladaptive assumptions, and automatic thoughts; (2) self-instructional training; (3) problem solving; (4) mental coping skills; (5) relaxation therapy; (6) modeling strategies; and (7) specific cognitive techniques such as thought stopping, thought replacement, thought conditioning, thought countering, etc.

Although behavioral therapies and cognitive-restructuring approaches seemed to develop in parallel paths, over time the two approaches merged into what we now call *cognitive-behavioral therapy* (CBT). Bandura’s work on behavioral modification, social learning theory, and how internal mental processes regulate and modify behavior provided an important bridge in the merging of behavioral and cognitive approaches (1969, 1977). Following the work of Ellis

and Beck, the different approaches to cognitive therapy and cognitive restructuring were blended with the elements of behavioral therapy. Examples of this blending include coping-skills training and self-instructional training (Meichenbaum, 1975, 1977, 1985, 1993a, 1993b). Other blending approaches include problem solving, assertiveness and other social skills training, and managing relationship stress. Contemporary CBT, then, is an integration of the key components of behavioral and cognitive therapy. It is common to see cognitive restructuring as the cognitive part of CBT and social skills training as the behavioral component of CBT.

An important combining element of CB approaches is the principle of *self-reinforcement*. It represents a main component of social learning theory (Bandura, 1977, 1978, 1997). This concept simply states that cognitive and behavioral changes reinforce each other. When changes in thinking lead to positive behavior outcomes, the outcomes strengthen both the behavior and the cognitive structures that lead to those outcomes. In turn, the changes in thinking reinforced by the changes in behavior further strengthen those behavioral changes. It is not just the reinforcement of the behavior that strengthens the behavior; it is the reinforcement of the thought structures leading to the behavior that strengthens the behavior.

CB theory and therapy provide a critical perspective in understanding the causative and dynamic factors of adolescent substance abuse and criminal conduct. The CB approach has many of the components of PBT described above and focuses on the behavioral, personality, and perceived environment (cognitive) systems. It also rests on many of the concepts of SLT. The CB approach is one of the foundational models for the education and treatment protocols of *Pathways to Self-Discovery and Change* (PSDC). The reader is referred in this volume to Chapter 9: Treatment Systems, Modalities, and Models of Care and Chapter 11: Community Reintegration: Reinforcing Change through Continuing Care for a thorough discussion of the cognitive-behavioral approach for treating adolescent substance abuse and criminal conduct.

Acquired Preparedness Model (APM)

G. T. Smith and Anderson (2001) present a risk model for understanding the development of adolescent problem drinking based on personality and learning factors. They combine personality factors based on traits that are predictive of alcohol problems and that have genetic loadings with learning factors

that are more environmentally determined. The combination of these two risk factors creates what they call an *acquired preparedness* for the development of alcohol abuse and associated problem behaviors.

Interwoven with this model is the crucial stage of development in which adolescents are faced with, and engage in, the task of differentiating themselves from parents and family and broadening their range of experiences beyond family and parental protection and control. They must confront the challenges of controlling urges and managing potentially risky behaviors while at the same time managing their interpersonal and social experiences. These challenges have potentially positive or negative outcomes. One area of challenge is drinking alcohol, which some researchers conclude is part of this development process (see G. T. Smith & Anderson, 2001, for discussion of this issue).

One personality trait cluster that G. T. Smith and Anderson (2001) identify and that increases the risk of this “normal” developmental challenge of teenage drinking is “trait disinhibition.” This involves the combination of disinhibition, impulsivity, or behavioral undercontrol (Sher & Trull, 1994; Sher, Walitzer, Wood, & Brent, 1991). G. T. Smith and Anderson provide documentation to suggest that this cluster represents a stable personality trait pattern that is found in childhood, has significant genetic loadings, and is predictive of early-onset of drinking and the development of drinking problems (see, e.g., p. 111).

When this personality trait cluster is combined with environmentally based learning factors, such as expectations around the outcomes of drinking, the risk of problem outcomes related to alcohol use in adolescence is significantly increased. “These two sets of factors combine to create what we will call an *acquired preparedness* for alcohol-related problems” (G. T. Smith & Anderson, 2001, p. 111). The risk of adolescent problem drinking, based on this acquired preparedness, is increased because of the challenge of impulse control in adolescence and the need to manage rewarding and meaningful relationship and social experiences.

Relevant to G. T. Smith and Anderson’s (2001) model, the literature defines three personality traits that are risk factors for the development of problem drinking: emotional reactivity to external events or neuroticism/emotionality, extraversion and sociality, and impulsivity or disinhibition. G. T. Smith and Anderson suggest that the first two do not show strong evidence of being predictive of alcohol problems but argue that the last trait has good evidence of predicting alcohol problems. Individuals with the

disinhibition trait are more likely to take risks with their drinking, mainly to seek greater rewards, but may end up with greater punishment. These individuals also fail to accurately evaluate or anticipate the risks of their behaviors. Disinhibited individuals are “more likely to learn the reinforcing consequences of events and less likely to learn the punishing consequences.” They have a “general tendency to learn the rewards more strongly than the punishments for a given behavior” (pp. 116–117).

What completes the G. T. Smith and Anderson (2001) model is the connection between this high-risk trait for alcohol problems in adolescence and the environmental learning conditions for alcohol use. Expectancy theory is based on the concept that associations between a behavior and desired outcomes become cognitions that are stored in the memory. These associations influence decisions. Expectations of a desired outcome will reinforce the behaviors that lead to that outcome. With respect to drinking (or drug abuse), information regarding the positive or negative outcomes related to AOD abuse are stored in the memory. The decision to drink or use drugs is based on this stored information or expectancy of positive outcomes. G. T. Smith and Anderson review the research, which provides strong support for alcohol expectancy theory—that the expectation of certain outcomes of alcohol use reinforce drinking behavior. Alcohol expectancy has robust correlations with drinking behavior in both adults and adolescents.

In summary, APM holds that adolescents who show the disinhibited personality trait—disinhibition, impulsivity, and behavioral undercontrol—are ready to learn the positive reinforcing aspects of risk-taking behavior more than they are ready to learn the punishing aspects of risk-taking behavior. When this readiness (disinhibition) is combined with alcohol-expectancy learning—or other drug-expectancy learning—there is a bias toward positive AOD expectancies over negative expected outcomes. Alcohol expectancies, enhanced by disinhibition, can predict the onset of alcohol use and related problems. This model is applicable to some adolescents as they navigate through the various developmental tasks and stages of adolescence, particularly those who tend to fit the disinhibited personality pattern. G. T. Smith and Anderson (2001) make it clear that the APM can help identify “one sub-group of high-risk adolescents” and is not necessarily applicable to all adolescents.

A number of intervention approaches have spun off from the APM. To intervene effectively, it is helpful for providers to identify those individuals who

tend to fit the disinhibited pattern. APM stresses the importance of expectancy outcomes of AOD use. Thus, expectancy intervention or challenge is one approach to intervention. This might involve reducing positive expectancies from AOD use, particularly with the disinhibited group.

Broadening the perceptual outcomes of drinking is another approach. Most adolescents who drink and abuse drugs are locked into forecasting good or positive outcomes. Focusing attention on the bad outcomes will help balance the perception of the good outcomes and make the memory of bad outcomes of AOD abuse more accessible. Helping adolescents develop memory structures of bad outcomes, even if the individual has not experienced the particular outcome, is another approach. However, just exposing adolescents to examples of the bad outcomes is not sufficient. There must be some personal identification with the bad outcome being illustrated. Changing the cognitive structures that identify the positive associations with AOD abuse to positive associations with non-drug-using events and behavior is another approach.

Social and Community Responsibility Theory (SCRT)

This theory holds that individuals engage in irresponsible and even harmful behavior toward others and the community because of deficits in cognitive skills that determine moral reasoning and moral and community responsibility. As mentioned above, the work of Piaget (1932/1965), followed by the work of Kohlberg (1976, 1984), provided sound theory and research (Colby & Kohlberg, 1987) not only for understanding moral reasoning and development but for developing strengths that can lead to moral reasoning and caring. Moral development and related strengths progress in stages.

As stated earlier (Kohlberg’s theory of moral development), the initial stage of the development of moral judgment involves doing what is right in order to avoid punishment and because it is labeled as right by an authority or to get something in return. The next stage involves doing what is right and wrong at the relationship and broader social level. At the relationship level, what is right will foster or nurture a relationship, and what is wrong will harm a relationship. At the broad social level, what is right will enhance and serve the social system or keep one on track with respect to social obligations. The highest level of moral development broadens moral responsibility to universal

considerations and to principles of justice: Right is based on fulfilling responsibilities we have agreed to as members of society yet allows for morally based objections to society and a desire to change society as a whole.

Cognitive deficits can prevent individuals from understanding the impact of their behavior on others or prevent interpersonal empathy. Social and community responsibility theory extends this idea further and sees these deficits as having an impact on the person's relationship to the community. These deficits prevent the person from having sociocentric or community empathy. *Sociocentric empathy* is a way of being connected so as to create contextual awareness and relational consciousness (O'Hara, 1997). Sociocentric empathy allows the person to be aware of the harm and injury that the abuse of substances and criminal conduct do to others and to the community.

The community and social responsibility approach has emerged as a significant force in the treatment of deviant, antisocial, and criminal conduct (G. Little & Robinson, 1986; Ross & Fabiano, 1985; Wanberg & Milkman, 1998, 2006, 2008; Yokley, 2008). When cognitive deficits in moral reasoning are addressed, modified, and changed to pro-social and responsibility reasoning, they lead to behaviors that respect the rights of others, comply with the laws of society, show care about the welfare and safety of others, contribute to the good of others and society, and engage with society in productive harmony.

SCOPE OF ADOLESCENT SUBSTANCE ABUSE

According to the 2010 National Survey on Drug Use and Health (SAMHSA, 2010), 8.7% of the population aged 12 and older reported using illicit drugs during the prior month, up from 7.9% in 2004. Marijuana use was most common, representing 76% of all current users. Marijuana usage increased from 5.8% in 2007 to 6.6% in 2009. Among 12–17 year olds, 10.8% were described as current illicit drug users. According to the Monitoring the Future study (Johnston, O'Malley, Bachman, & Schulenberg, 2011), the lifetime use of any known illicit drug for 12th graders is 48%, with marijuana, LSD, and cocaine showing lifetime use rates for 12th graders of 43.8%, 4.0%, and 5.5%, respectively. These rates were more than double those shown for 8th graders. Lifetime usage of alcohol increases from 35.8% of the population of 8th graders to 71.0% of 12th graders. The steep increase in use rates from the 8th to 12th

grade justifies targeted prevention/intervention/treatment efforts during adolescence, which may yield maximum benefits to youth and society. The use of any illicit drugs during the previous 30 days was 9.5% for 8th graders and 23.8% for 12th graders. When including inhalants, the figures rise to 11.7% for 8th graders and 24.5% for 12th graders. Past-month marijuana usage was 8.0% and 21.4% for 8th and 12th graders, respectively, and 1.2% of 8th graders and 6.1% of 12th graders report using marijuana daily (Johnston et al.).

Alcohol remains an even larger problem among teenagers than illicit drugs, with 5% of 8th graders and 26.8% of 12th graders report having been drunk during the previous 30 days. Alcohol usage during the previous month was 13.8% for 8th graders and 41.2% for 12th graders, and 7.2% of 8th graders and 23.2% of 12th graders reported having had five or more drinks in a row during the previous two weeks (Johnston et al., 2011).

Chapter 2 of the *Provider's Guide*, Causes, Correlates, and Consequences of Teenage Substance Abuse, presents detailed analyses of teenage drug use patterns.

ANTECEDENTS AND CORRELATES OF ADOLESCENT DRUG ABUSE

Hart, Ray, and Ksir (2009) assert that individuals who are at risk for drug abuse are also at risk for other deviant behaviors; fighting, stealing, vandalism, and early sexual activity are correlated with drug use and heavier alcohol use. Therefore, the pattern of deviance-prone activity might have both a variety of causes and a variety of behavioral expressions, one of which is drug use. Other indicators of deviant behavior generally appear before drug use. Children often achieve poor grades or get into trouble for fighting or stealing before they first experiment with alcohol, cigarettes, or other substances. In most cases, the conduct problems and grade problems are not caused by drug use.

Delinquency and Crime

According to Puzanchera (2009), with the Office of Juvenile Justice and Delinquency Prevention, there are about 32.5 million youth in the United States between the ages of 10 and 17. The estimated number of juvenile arrests in 2008 was 2.1 million. About 1 in 7 juvenile arrests were for a crime involving violence or the threat of violence. In 2009, 6% of high school

students had carried a weapon on school property within the past month (Robers, Zhang, Truman, & Snyder, 2010). Consistently from 1993 through 2009, about 1 in 12 high school students were threatened or injured with a weapon at school (Robers et al.). As shown in the Centers for Disease Control and Prevention (CDC) report (2010) on youth risk behavior, in 2009, 25% of 12th graders were reported to have taken part in a physical fight.

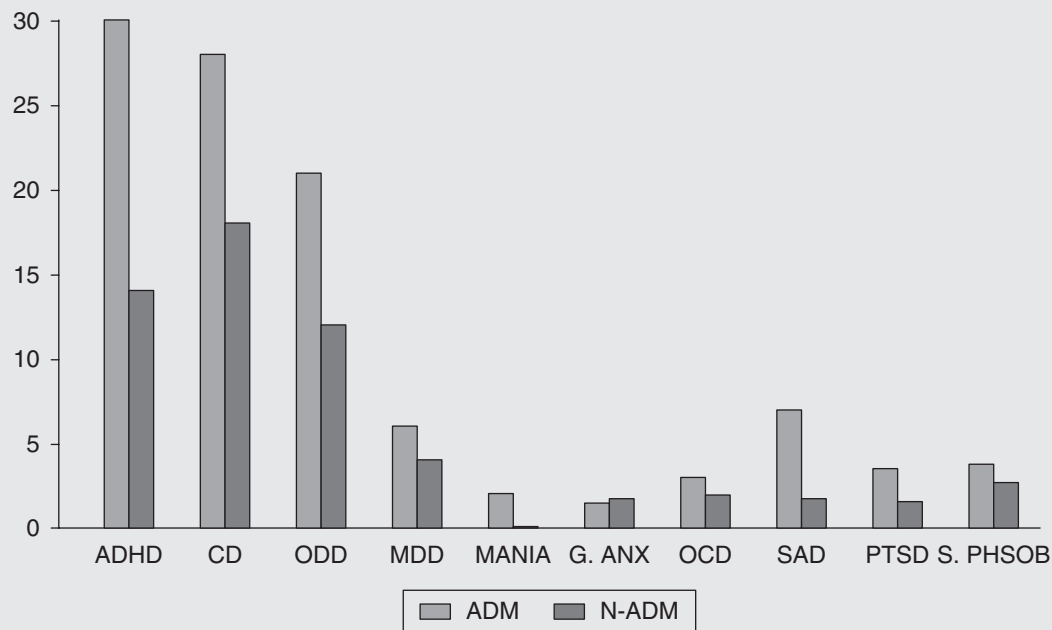
Mental Disorder

The Diagnostic Interview Schedule for Children (Garland et al., 2001) was administered between October 1997 and January 1999 to 1,618 randomly selected youths aged 6 to 18 years who were participants in at least one of the following five public sectors of care: alcohol and drug services, child welfare, juvenile justice, mental health, and public school services for youth with serious emotional disturbances. Of the participants in this study, 54% met the criteria for at least one disorder, and 50% met the criteria for attention deficit/hyperactivity disorder (ADHD) and other disruptive behavior disorders (conduct disorder and oppositional defiant disorder). Considering that

only one of the five sectors of care was mental health, this represents a high percent for youth across these public sectors of care. Rates were generally higher in sectors that were designated to serve mental health needs, but the prevalence of mental health disorders was also high in sectors not specifically designed to meet these needs (e.g., child welfare and juvenile justice). While no significant differences in the rates of “any study disorder” were associated with age group or gender, there were significant differences for specific diagnoses. The rates of ADHD decline by age, while the rates of conduct disorder are higher among adolescents than in younger children. The rate of post-traumatic stress disorder (PTSD) is higher among older teenagers, and the rate of major depression also increases with age. Rates of ADHD and conduct disorder were significantly higher among males; rates of PTSD, separation anxiety, and major depression were significantly higher among females.

Figure 1.3 shows the prevalence rates for each of the most common diagnostic categories for youth who were identified as being “active” in at least one of the alcohol, drug, or mental health (ADM) settings compared to youth who were “active” in non-ADM settings (child welfare, public school, or juvenile justice settings).

Figure 1.3 Diagnostic Prevalence Rates for the 10 Most Common Disorders for ADM and Non-ADM Service Sectors



Note: Attention deficit/hyperactivity disorder (ADHD), conduct disorder (CD), oppositional-defiant disorder (ODD), manic-depressive disorder (MDD), manic disorder (MANIA), general anxiety (G.ANX), obsessive-compulsive disorder (OCD), substance abuse disorder (SAD), post-traumatic stress disorder (PTSD), school phobia (S. PHOBS)

SUMMARY OF RISK AND PROTECTIVE FACTORS FOR DELINQUENCY AND SUBSTANCE ABUSE IN ADOLESCENTS

Individual Risk Factors

Biological

Sensation Seeking (SS). Jessor, Turbin, and Costa (1998) contend that SS behavior can interfere with healthy adolescent development, and Spence (1998) finds sensation seeking to be one of the most important risk factors for engagement in problem behavior. For many teenagers, the surrounding social environment serves to inhibit recklessness. For some, however, the social environment promotes risk taking and thrill seeking. A thrill-oriented environment, when combined with personal characteristics such as egocentrism, may exacerbate the tendency to engage in rash and radical behaviors. This orientation toward risk may propel the adolescent into delinquent activity for the thrill of it. An orientation toward sensation seeking in tandem with the behavior of reckless peers predicts irresponsible and dangerous adolescent behavior (Arnett, 1992; Lynam & Miller, 2004). Epstein, Griffin, and Botvin (2001) found risk taking to be an important predictor of alcohol use among inner-city minority adolescents; MacPherson, Magidson, Reynolds, Kahler, and Lejuez (2010) found the same relation in a wider population of early adolescents. Curran, Fuertes, Alfonso, and Hennessy (2010) as well as Arnett (1990) found a correlation between the inclination to drive while under the influence of alcohol and the impetus toward sensation seeking. Drunk driving was strongly correlated with subscales designed to measure thrill and adventure seeking, disinhibition, and boredom susceptibility.

Depression. Some forms of depression that are attributed to biological underpinnings (endogenous) are related to substance abuse and criminal conduct (Scheier, Botvin, Diaz, & Ifill-Williams, 1997).

Head Trauma. In some instances, head trauma (or exposure to environmental pollutants) has been implicated in abrupt and atypical explosions of rage (Fox & Levin, 2001).

Psychological

Self-Concept. Several researchers site low self-esteem (unfavorable self-view) as a major risk factor for

problem behavior (R. Bartlett, Holditch-Davis, Belyea, Halpern, & Beeber, 2006; Jessor et al., 1998; Scheier et al., 1997). In a study spanning 7th through 10th grades, correlations among alcohol, personal competence, and self-esteem were investigated, with particular focus on change in these dimensions over time. Increasing levels of alcohol use were associated with decreases in perceived personal self-competence over time (Scheier, Botvin, Griffin, & Diaz, 2000).

Self-Concept and Juvenile Delinquency. Findings regarding the enhanced self-image of some adolescents who are involved in juvenile crime (E. Anderson, 1999; Bynum & Weiner, 2002) suggest that issues regarding self-concept and delinquency are complex. These findings contradict previous suggestions such as these:

- **Containment theory.** Positive self-image will buffer an adolescent against peer associations that lead to delinquency and crime (Reckless, 1967).
- **Negative self-image.** A negative self-image is at the root of delinquency, with delinquency serving as some sort of compensatory mechanism for self-perceived deficits (Kaplan, 1980).
- **Sense of a central self.** Delinquents “cannot or have not gained the sense of a central self” that affirms their personal uniqueness or value (Levy, 1997, p. 684).

The discovery of enhanced self-image in delinquent teens (E. Anderson, 1999; Bynum & Weiner, 2002) suggests that violence and criminal conduct may serve as a psychological mechanism for coping with poverty, a harsh environment at home, or the threat of family or neighborhood violence (Feigelman, Howard, Xiaoming, & Cross, 2000; Prothrow-Stith, 1995; Rosario, Salzinger, Feldman, & Ng-Mak, 2003). In E. Anderson’s (1994, 1999) research with a sample of inner-city African American youth, he notes that violence was used as a defensive posture to gain respect and avoid victimization (i.e., the “code of the streets”). Violence can also be seen as a social obligation to one’s in-group (Lim & Chang, 2009). J. Fagan & Wilkinson (1998) observe that frequent experiences with violence may impel youth to assimilate more deeply such a “street code” for self-protection. Bynum & Weiner found statistical correlations between high scores on the Tennessee Self-Concept Scale and violent delinquency.

Cognitive Deficits. Cognitive ability was found to predict criminal involvement (S. D. Levitt & Lochner,

2001). The correlation between cognitive deficits and antisocial behavior holds across social class, race, and academic level (Lynam, Moffitt, & Stouthamer-Loeber, 1993). Self-defeating thought patterns often contribute to elevated risk for problem behavior (Jessor et al., 1998). Among these are

- Low expectations of success.
- General sense of hopelessness.
- Positive expectancies for cigarette, alcohol, and drug use.

Low Levels of Personal Competence Skill. Poor communication skills, such as low levels of assertiveness and refusal skills, are among the most prominent of risk factors for early onset drug and alcohol abuse, as well as other problem behaviors (Scheier et al., 1997).

Social Orientation. Various directions of interpersonal focus may place adolescents at increased risk for problem behavior (Jessor et al., 1998). Among these are

- Greater orientation to friends than to parents.
- Greater orientation to friends as models for problem behavior.
- Disengagement from school.

Behavioral Problems. Early contact with the juvenile justice system is one of the strongest predictors of life-course persistent criminality and other adolescent adjustment difficulties (Danielson et al., 2006; Loeber & Farrington, 1998). Six percent of males experience their first arrest before adolescence. This may be the best predictor of long-term criminal conduct (Moffitt, Caspi, Harrington, & Milne, 2002).

Health Behavior. A study of 7th to 12th graders found that insufficient personal health behavior (self-care) was itself correlated with engagement in problem behavior (Jessor, Donovan, & Costa, 1996). Early sexual activity and/or promiscuity have also been associated with problem behavior (Jessor et al., 1998).

Familial Risk Factors

Maternal Age at Birth. Children born to a teenaged mother (who is likely to have a poor education), when themselves at the age of 18, are 1.5 to 8.9 times more likely to have lower levels of educational achievement, higher risk for substance abuse, juvenile crime, and mental health problems than those at age 18 who were

born to a mother over 30 years of age. These correlations may be related to the types of child-rearing environments and practices characteristic of younger maternal age. Generally, younger mothers provide environments that were less nurturing, less supportive, and more volatile than those of older mothers (Fergusson & Woodward, 1999). Similarly, maternal age is associated with higher risk for child abuse (Connelly & Straus, 1992), which itself is implicated in the development of adolescent problem behavior.

Insecure Attachment in Infancy. Childhood attachment problems are correlated with childhood onset of disruptive behavioral problems, as well as the development of later delinquent and aggressive activities and reduced development of empathy and connectedness to others (Fonagy, Target, Steele, & Steele, 1997a). Qualities of attachment and social bonds have been found significant in predicting behaviors and attitudes of offending versus nonoffending adolescents (Cota-Rambles & Gamble, 2006; Utting, 1996). Disorganized attachment patterns tend to be associated with aggressive behavioral development (Lyons-Ruth, 1996).

Parental Characteristics and Behaviors of Family Members. A mother with a psychiatric diagnosis places an individual at 4 times the risk of engaging in serious criminal behavior (Preski & Shelton, 2001). Parental substance abuse, criminal conduct, and incarceration are associated with early emergence of adolescent substance abuse (Sommers & Baskin, 1991). A 19-year study of 9- to 18-year-olds and their parents found that parental involvement in criminal activity tends to transfer across generations (Kandel & Wu, 1995). Parental use of cigarettes has also been shown to transmit across generations (Wu & Kandel, 1995).

Degree of Parental Supervision. Low levels of parental monitoring are associated with the emergence of adolescent substance abuse (Sommers & Baskin, 1991). Higher levels of parental monitoring are associated with lower levels of delinquency (K. W. Griffin, Botvin, Scheier, Diaz, & Miller, 2000; J. S. Parker & Benson, 2004). Higher levels of parental monitoring were associated with less drinking in males. Spending time at home alone predicted more cigarette smoking in females only (K. W. Griffin, Botvin, Epstein, Doyle, & Diaz, 2000). Lack of parental *support* has also been identified as an important link with delinquent behavior (R. Bartlett et al., 2006).

Experiences With Trauma and Abuse and Domestic Violence in the Home. Family distress tends to predict

adolescent delinquent behavior (Kim, 2008), difficulty in anger management (Thornberry, Smith, Rivera, Huizinga, & Strouthamer-Loeber, 1999), as well as adolescents' use of violence toward their parents as an "adaptation to family strain" (Brezina, 1999). Trauma experienced within the family of origin is implicated in the development of adolescent problem behavior in several ways. A major class of problem behavior—the so-called "status offenses"—are strongly linked to the adolescent's experience of abuse in one form or another within the context of home and family. Covington (1998a) defines *status offenses* as acts that would not be offenses if committed by adults, such as promiscuity, truancy, or running away. There are few alternatives in society for a child who is escaping physical abuse, sexual assault, or other forms of psychological trauma that may occur in the contexts of home and family. A huge percentage of "runaways" are fleeing from such abuse. Most runaways are teenage girls (58%); of these, most are between 16 and 17 years old (68%), and of all these girls, 29% did not find a safe place to stay (Covington). Yet the act of "running away" alone is grounds for the charge of status offense.

Another reason youth may be found on the streets is a phenomenon known as *throwaways*, that is, "a child who was told to leave home, or whose caretaker refused to let come home . . . or whose caretaker made no effort to recover the child when the child ran away, or who was abandoned" (Snyder & Sickmund, 1999, p. 38). Though clearly engaging in self-defensive action by trying to survive on the streets, and frequently committing an act of health in trying to escape from a destructive situation, the child or adolescent gets in trouble and is often returned to the abusive home without redress. Family abuse or neglect is also associated with early emergence of adolescent substance abuse (Sommers & Baskin, 1991).

Corporal Punishment and Child Abuse. In *Beating the Devil out of Them*, Straus (2001) discusses the normative use of corporal punishment (such as spanking and slapping) and its effect on families and children. He documents common norms and social myths regarding spanking that portray it as a "minor," even "virtuous," form of aggression. Straus addresses the consensual validation for hitting children that stems from common parental beliefs (such as "everybody does it," "spare the rod, spoil the child," etc.), as well as supporting structures for the use of corporal punishment stemming from religious institutions, such as Protestant fundamentalism (Ellison & Sherkat, 1993; Grasmick, Bursik, & Kimpel, 1991; Greven, 1990). Others have investigated the role that experiences

with corporal punishment in their own childhood histories has played in parents' attitudes toward corporal punishment of their own children (Stattin, Janson, Klackenber-Larsson, & Magnusson, 1995).

Although Straus (2001) documents that today parents are generally using less corporal punishment, hitting of children and adolescents is still widespread (Straus & Donnelly, 1993; Stattin et al., 1995) and is hidden by a "conspiracy of silence" (Straus, 1991, 2001). Straus asserts that the price of such disciplinary "virtue" includes adolescent depression and suicide, generalized alienation, as well as the fusion of sex and violence. Drawing from decades of research considering the effects of child maltreatment, Straus (2001) concludes that this type of discipline in families contributes to the development of aggressiveness, delinquency, and criminal conduct (conclusions also supported by the American Psychiatric Association, 1991; Baumrind, 1991; L. Berkowitz, 1993; Unnever, Cullen, & Agnew, 2006).

Supportive evidence for Straus's conclusions is strong. Several studies explore the connection between coercive punishment and adolescent aggressiveness; these effects have been observed to emerge as aggression toward peers as early as kindergarten (Strassberg, Dodge, Pettit, & Bates, 1994). Punitive discipline was also associated with the development of delinquent and criminal behavior in a 28-year longitudinal study by Laub & Sampson (1995/1998). Further evidence of the relationship between family violence and the development of problem behavior has been documented by Kashani & Allan (1998). Other investigations focus on the relationship between spanking and lifetime psychiatric disorder (MacMillan et al., 1999), as well as the relationship between childhood spanking and depression, hopelessness, and reduced purpose in life among adolescents (DuRant, Getts, Cadenhead, Emans, & Wood, 1995; Seeds, Harkness, & Quilty, 2010). P. Cohen and Brook (1995) found evidence that correlations between corporal punishment and adolescent problems may be influenced by both the gender and the age (i.e., childhood; early or late adolescence) of the child who is being disciplined.

Although the appropriateness of corporal punishment in child discipline is still being debated (Donnelly & Straus, 2005; Larzelere, 1994), Straus (1991) presents convincing evidence regarding the negative effects of corporal punishment (i.e., delinquency and criminal conduct) by comparing these outcomes to those for teenagers who grow up without aggressive coercion. Further evidence comes from the social outcomes observed in Sweden after the 1979 ban on corporal punishment in that country (Haeuser, 1990).

Longitudinal studies have determined that since the ban was put in place, adolescent involvement in criminal conduct, drug and alcohol use, sexual assault, and suicide has diminished among teens aged 13 to 17 years (Durrant, 1999, 2000).

Psychosocial Risk Factors

School Difficulties. Being suspended, expelled or held back in school are all associated with increased probability of being detained in a juvenile facility (Rodney & Mupier, 2000). Assessment of a national longitudinal study found that adolescents with attention and/or other learning problems were at risk for the most deviant behavior problems (Bartlett et al., 2006). School discipline referrals have also been found useful in identifying teens who are at risk for delinquency (Sprague et al., 2001). In a study designed to explore the relationship between negative school behaviors (measured by number of school discipline referrals and teacher nominations) and later referrals to juvenile authorities for illegal activities, Sprague and colleagues were able to identify youth who may have a propensity toward antisocial/violent behavior.

Peer Associations and Teen Culture. Several aspects of teen culture provide a powerful socializing influence. Using explanations of differential association, Erickson, Crosnoe, and Dornbusch (2000) found that peer relationships were key to explaining a significant portion of adolescent problem behavior. Similar links were also found by other researchers (Allen, Porter, McFarland, Marsh, & McElhaney, 2005; Monahan, Steinberg, & Cauffman, 2009). Exposure to deviant peers was strongly correlated with the development of problem behavior, while ties to conventional peers instead showed potential buffering against this development. The behavior of deviant peers was correlated with both adolescent substance use and delinquency, especially among males.

Socioeconomic Disadvantage. Poverty has multiple effects, both direct and indirect, that may add to overall risk for problem behavior. The isolation of the urban setting from outside cultural influences may restrict an individual's access to alternative modes of behavior, as well as to alternative means of coping. Poor schools and few employment opportunities result in economic and social deprivations that may serve to justify or even "necessitate" (in the eyes of a juvenile) participation in gangs and crime (Glicker & Sechrest, 2003). Poverty in family of origin predicts early emergence of adolescent substance abuse (Sommers & Baskin, 1991; Wadsworth et al., 2008)

and is found to have a major influence on criminal involvement among adolescents (age 13 to 17 years; S. D. Levitt & Lochner, 2001). Socioeconomic disadvantage was found to correlate with lower levels of school engagement, higher levels of problem behavior, and lower probability of successful adaptation to adolescence (Jessor et al., 1998). Other mechanisms for the effects of poverty may be the following:

- Overly stressed parents experiencing extreme financial strain (possibly working multiple jobs) may be unable to provide adequate nurturance of teens or monitoring of adolescent behavior.
- Poverty may upset the fabric that holds communities together, leading to fragmented institutions and services and denying adolescents venues where their behavior will be supervised and guided.
- Unemployment of males is often associated with the use of compensatory aggression to display competence, status, and power, all of which may act as models for (especially male) adolescent behavior.
- Neighborhood violence often associated with impoverished environments breeds further violence as vendetta and revenge become increasingly cited as motivations for conflict (Steinberg, 2011).

Neighborhood. Exposure to community violence places an individual at 4 times the risk of engaging in serious criminal behavior (Preski & Shelton, 2001).

Ethnicity, Race, and Culture. An exploration of the relationships between acculturative stress and adolescent problem behavior among Latino youth (Cabrera Strait, 2001) found that juveniles who reported greater stress from acculturation engaged in higher levels of substance use, maladjusted behavior, and criminal conduct.

Gang Membership. An analysis of an ethnically diverse sample of adolescents that used self-report data (Walker-Barnes, 2000) found the following correlates of youth gang involvement:

- Neighborhood crime and danger.
- Parent-adolescent conflict.
- Parental behavioral control.

Table 1.3 summarizes risk factors that may be associated with various problem behaviors.

Table 1.3 Summary of Risk Factors for the Development of Problem Behavior

Mental health problems (including suicide):

- Young maternal age.
- Parental use of corporal punishment.

Runaway:

- Parental use of corporal punishment.
- Sexual trauma.
- Other forms of family trauma.
- Being “thrown away” by parents.

Substance abuse:

- Low levels of parental monitoring.
- Parental use of corporal punishment.
- Sexual trauma.
- Witnessing violence between parents.
- Parental substance abuse, criminal conduct, or incarceration.
- Young maternal age.
- Acculturative stress.
- Sensation seeking (risk factor for DUI).
- Exposure to deviant peers (especially among males).

Conduct problems or conduct disorder, insecure attachment in infancy:

- Hyperactivity and/or attention deficit disorders.
- Reduced development of empathy.
- Lack of social bonding.
- Young maternal age.
- Cognitive deficits.
- Cruelty to animals.

Delinquency:

- Young maternal age.
- Insecure attachment in infancy.
- Lack of social bonding.
- Low levels of parental monitoring.
- Parental use of corporal punishment.
- Exposure to deviant peers.
- Few or poor quality social ties.
- School difficulties.
- Sensation seeking.

Gang involvement:

- Neighborhood crime and violence.

- Feelings of vulnerability to violence.
- Victimization.
- Poverty.
- Parent adolescent conflict.
- Low levels of parental monitoring.
- School dropout.
- Criminal conduct.

Criminal conduct:

- Early contact with the juvenile justice system.*
- Insecure attachment in infancy.
- Mother with a psychiatric diagnosis.
- Parental use of corporal punishment.
- Parental involvement in criminal activity.
- Low social bonding.
- Cognitive deficits.
- Exposure to community violence.
- Poverty.
- Acculturative stress.

Adolescent aggressiveness (mild):

- Disorganized attachment patterns.
- Parental use of corporal punishment.
- Family stress/conflict.
- Multiple exposures to risk.

Violence (severe):

- Early contact with the juvenile justice system (between ages 6 and 11).*
- Lack of social ties or involvement with antisocial peers.
- Physical trauma during childhood, child abuse.
- Substance abuse.
- School failure.
- Community violence.
- Racial prejudice.
- Multiple exposures to risk (especially frequent experiences with violence).*
- Head trauma—sometimes implicated in abrupt and atypical eruption of homicidal rage.

Sexual assault:

- Parental use of corporal punishment.
- Sexual trauma in childhood.

*Denotes best predictor for this type of problem behavior.

Core Risk Factors Germane to Assessment

The risk factors outlined above can be categorized into seven broad and inclusive risk categories. Multivariate and factor analytic studies have provided good empirical support for these factors (Milkman, Wanberg, & Robinson, 1996; Wanberg, 1992, 1998, 2011):

- Family disruption and problems.
- Poor school adjustment—behavior and performance.
- Mood and psychological adjustment problems.
- Involvement in negative peer associations and relationships.
- Substance use and abuse involvement.
- Delinquent and deviant behavior, including criminal conduct.
- Health and physical problems.

These broad risk factor categories provide the basis for comprehensive and differential assessment of high-risk and juvenile justice youth.

Models for Understanding the Sequence and Interplay of Risk Factors

There are several models for understanding the interaction and interplay of risk factors (Milkman & Wanberg, 2005). The most common approach is to see the relationship between problem behavior and risk factors as *causative* (i.e., A causes B causes C, etc.). With this model, we look for one risk factor that causes another, for example, for substance use involvement to lead to school failure. However, the interaction and causative connections among factors are often more complicated.

It is more helpful to visualize the relationship of risk factors to each other and to problem behavior in a multidimensional and multivariate perspective. We summarize the different ways to conceptualize risk factors and their interactions.

Alternative Sequences

Whereas one risk factor can lead to another, the opposite can also occur. For instance, while substance use involvement can lead to school failure, school failure can lead to substance use involvement (or greater involvement).

Risk Factors May Be Reciprocal

When substance use involvement leads to school failure, school failure can exacerbate substance abuse.

Co-occurring Relationships

Two risk factors may “move together” to determine another risk factor outcome (Winters, 2001). Both substance use involvement and school failure may set the stage for involvement in criminal conduct.

Equifinality

Several types of risk factors can lead to the same outcome (Cicchetti & Rogosch, 1996; Fanti & Henrich, 2010; Gjerde, 1995).

Multifinality

Certain risk factors can actually work as protective factors (Cicchetti & Rogosch, 1996; Gjerde, 1995; Fanti & Henrich, 2010). For example, having a father with a severe alcohol problem may serve to protect a youth from developing such a problem or even to cause the youth to abstain from alcohol.

Finally, it is important to understand that risk factors and problem behaviors are often interchangeable. Substance abuse is a risk factor, but it is also a problem behavior. Thus, problem behaviors can lead to other problem behaviors.

EMPIRICAL STUDIES OF RESILIENCY: BUFFERS AGAINST ADOLESCENT PROBLEM BEHAVIOR

Resiliency factors fall into the same general categories as those used to assess risk, namely, protection within the individual (including biological and cognitive), family, and psychosocial (including educational, school, community, and socioeconomic) domains.

Individual Protective Factors

Health-Positive Cognition and Behavior

Engagement in healthy behaviors such as eating a nutritious diet, getting adequate sleep, doing physical exercise, attending to personal hygiene, and using seatbelts is negatively correlated with engagement in problem behavior (Jessor et al., 1998). Protective factors in the cognitive domain center on placing

positive value on health and perceiving the negative consequences of health-negative behaviors. Another important protective factor is having parents who model health-positive behaviors (Jessor et al.). Belief in self-determination of health status has been found to mitigate the relationship between neighborhood stress and adolescent alcohol use and abuse (Scheier, Botvin, & Miller, 1999). This is generally accompanied by a positive orientation to health (Jessor et al.) and increased likelihood of engaging in healthy behaviors.

Personal Competence Skills

Many studies have found an inverse relation between a variety of healthy self-management skills (such as assertiveness and refusal skills, boundary setting, self-efficacy, etc.) and severity of problem behavior (e.g., Griffin, Scheier, Botvin, & Diaz, 2001). These associations were observed to have a variety of effects, including lower rates of early onset substance use and delinquency. Intelligence (high IQ) has also been identified as a protective factor associated with positive social adjustment in early adolescence, one that works similarly across levels of socioeconomic status (Vanderbilt-Adriance & Shaw, 2008). Because personal competence skills provide protection against risk by enhancing well-being, Griffin et al. suggest that intervention should include competence-enhancing components in order to promote overall resilience.

Social Orientation

Several elements of social activity may serve to buffer adolescents from engagement in problem behavior (Jessor et al., 1998). Among these are positive relations with adults, involvement in pro-social activities (such as those involving family and community), persistence in and commitment to school, and volunteer employment.

Cognitive Focus

Various directions of cognitive focus may buffer adolescents from engagement in problem behavior (Jessor et al., 1998). Among these are greater orientation to family than to friends and greater orientation to friends who model conventional behavior than to friends who model deviant behavior. An intolerance of deviance is likely to orient adolescents toward positive peer associations, and the perception of severe consequences for violation of

conventional norms generally inhibits their expression (Jessor et al.).

Empathy, Moral Reasoning, and Internal Locus of Control

The ability to make decisions based upon an internalized system of moral and ethical principles, including the capacity to feel the suffering of others, is an important element of protection. Internal locus of control—that is, the ability to rely on internal mental structures (e.g., values, ethical principles, and perceptual cues)—has been found to mitigate the relationship between neighborhood stress and adolescent alcohol use and abuse (Scheier, Botvin, Diaz, & Griffin, 1999).

Empathy deficits and participation in delinquent behaviors are generally correlated (Cohen & Strayer, 1996; Marcus & Gray, 1998). Empathy levels of adolescents involved in antisocial and/or criminal behaviors (identified using the Interpersonal Reactivity Index—IRI) tend to be below the norm for adolescent counterparts who are not engaging in such behaviors (Broom, 2000; P. L. Ellis, 1982). This appears to be true at all ages through the age of 18. What's more, empathy level appears to predict the type of offense committed. Broom shows the effectiveness of empathy training with juveniles engaged in problem behavior.

Familial Protective Factors

Family Protective Factor and Security of Attachment

Secure attachment in infancy and in the developmental years may protect an individual from developing problem behavior in adolescence. Positive outcomes may occur through several distinct mechanisms. First, security of attachment appears to be negatively associated with exposure to high-risk environments. Second, secure attachment appears to foster the development of mental capacities such as empathy and a sense of connectedness to others, which may reduce the motivation to engage in antisocial or criminal activity. Third, by supplying the individual with positive relational abilities, secure attachment may provide necessary skills for obtaining need satisfaction, which may render antisocial or criminal acts unnecessary for goal attainment (Fonagy et al., 1997).

Positive Family Interaction and the Quality of Social Ties

Utting (1996) draws attention to the quality of social ties in the lives of children and adolescents and utilizes

attachment theories to elucidate the developmental processes that foster an individual's capability to form healthy human bonds. Vanderbilt-Adriance and Shaw (2008) also found evidence of the relationship between parental nurturance and adolescents' positive social adjustment. Extent of mother-child interaction has been shown to reduce the probability of an adolescent serving time in juvenile detention (Rodney & Mupier, 2000).

Scheier, Botvin, Diaz, et al. (1999) consistently found family communication to be an important factor in mitigating the effects of neighborhood stress (such as gang presence and perceived neighborhood toughness) among urban minority youth. Frequently, juveniles engaged in problem behavior have not developed this capacity for relationships and are found to be lacking in the healthy social ties that might afford them some protection. Sharing family dinners was strongly associated with lower levels of aggressiveness (in males and females) as well as lower levels of delinquency in youth from single-parent families (Griffin, Botvin, Scheier, et al., 2000). The quality of the parents' marriage, measured as parental romantic partner relationship quality (RPRQ), has also been identified as correlating with positive social adjustment (Vanderbilt-Adriance & Shaw, 2008).

Psychosocial Protective Factors

Attachments to Conventional Individuals

Strong and healthy social ties have been found to provide a major source of protection against the development of problem behavior, particularly violence and aggression (Fox & Levin, 2001). Interpersonal commitments and attachments to conventional individuals may provide the nonoffending adolescent with a link to mainstream beliefs and values. Attachment to teachers, coaches, club leaders, and other adults may provide the adolescent with opportunities to participate in supportive social activities, which may contribute to the development of empathy (Fox & Levin). Teenagers may avoid criminal and violent behavior in order to maintain important social connections (Gottfredson & Hirschi, 1990).

Social ties to conventional peers may reduce adolescent substance use and delinquency by reducing the extent of exposure to maladaptive cognitions and deviant peer norms. They also prevent exposure to the destructive behavioral patterns that develop in the deviant subculture. Social ties to conventional peers are inversely related to adolescent substance use (Erickson et al., 2000). Whatever the exact mechanism, a lack of

social bonding is generally associated with higher rates of violent crime and pathology (Fox & Levin, 2001). This correlation may provide some explanation for high rates of violence, suicide, and murder in cities—areas that tend to attract people with few social ties (Gottfredson & Hirschi, 1990). Sampson and Laub (1993) also found that the ability to bond with others, a job, or some other social institution protects adolescents against developing a criminal lifestyle.

Community Infrastructure

Based on studies by the Search Institute of 460 urban, suburban, and rural communities, including data collected from a sample of 254,634 school-aged children in the United States (most surveyed between 1992 and 1995), Benson (1997) developed a community-focused model for strengthening resiliency: "A community that truly meets the needs of its youngest generation complements its strong economic infrastructure with a vibrant developmental infrastructure—that is, with community commitments and strategies that accentuate the positive building blocks of human development" (p. 1). Aisenberg and Herrenkohl (2008) also highlight the importance of neighborhood-level resiliency factors.

Forming this foundation is the result of collaborative effort among all the community's residents and institutions. Healthy communities focus on the development of a normative culture in which adults, organizations, and community institutions take pride in their commitments to nurturing caring and competent youth, who will in turn become responsible neighbors, citizens, parents, and workers. Resilient, healthy children and adolescents experience positive building blocks of human development, as shown in Table 1.4.

THE OFFSET OF RISK AND RESILIENCY IN ADOLESCENT ADJUSTMENT

In this discussion, we treat resiliency and protective factors as being the same and refer to both as *resiliency factors*. However, we recognize that resiliency factors are often reserved for identifying strengths within individuals and protective factors are often seen as more environmentally based.

One common perspective is to view risk and resiliency factors as being at opposite ends of a continuum (Fergusson, Beautrais, & Horwood, 2003; Wanberg, 1998, 2008; Winters, 2001). From a measurement standpoint, a high score on a scale that measures family

Table 1.4 Positive Building Blocks of Human Development

- Daily support and care provided by one or more involved, loving parents or other caregivers.
- Sustained relationships with several nonparent adults in the community.
- A neighborhood where everyone knows, protects, listens to, and gets involved with the young.
- Opportunities to participate in developmentally responsive and enticing clubs, teams, and organizations led by principled, responsible, and trained adults.
- Access to child-friendly public places.
- Daily affirmation and encouragement.
- Intergenerational relationships in which children and teenagers bond with adults of many ages and in which teenagers bond with younger children.
- A stake in community life made concrete through useful roles and opportunities for involvement.
- Boundaries, values, and high expectations consistently articulated, modeled, and reinforced across multiple socializing systems.
- Peer groups motivated to achieve and contribute.
- Caring schools, congregations, youth-serving organizations, and other institutions.
- Opportunities for frequent acts of service to others.

Source: Adapted from Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children*. San Francisco, CA: Jossey Bass.

problems would indicate a risk factor for a particular youth. However, a low score on that factor would indicate the absence of family problems and strengths or resiliency in this area. According to Winters, this framework fits nicely into statistical models that assume linear relationships among variables.

Another approach is to look at resiliency factors as being operationally independent of risk factors. Thus, the measurement of positive family involvement would be a separate factor from a measurement of family disruption. The problem with this model is that the two measuring factors within the same domain (e.g., *family*) end up being highly correlated, both essentially measuring the same construct. This is essentially the same as having one construct with family disruption at the high end and family strengths at the low end. Two independent constructs with one measuring risk and the other measuring strengths are highly correlated, and this poses significant problems with respect to simple linear and multivariate statistical analyses. One way to resolve this is to have one construct with a set of items that measure strengths and a set of items that measure disruption and then reverse the scoring for one set so that the construct

measures strengths at the low end and disruption at the high end. This model is used in some scales in the Adolescent Self-Assessment Profile (ASAP II; Wanberg, 1998, 2008, 2011).

Another approach is to view risk and resiliency factors as interactive. In this model, a resiliency-protective factor may attenuate a risk factor. This model would hold that a resiliency-protective factor would be relevant only in the presence of a risk factor upon which it has an influence (Fergus & Zimmerman, 2005; Garmezy, Masten, & Tellegen, 1984; Hawkins, Catalano, & Miller, 1992; Rutter, 1990).

Still another approach is the traditional method of using individual constructs to measure risk across the core risk areas (e.g., family, mental health, negative peer influence) and then to have a single strengths scale that is comprised of individual measures of perceived strengths. The individual items in the scale would measure strengths representing the specific risk domains. Thus, individual items would measure strengths that we would like to see treatment develop or enhance: positive self-view, identifying strong and positive relationships in friends, family, the community, and so forth (Wanberg, 1998, 2008).

Finally, we can view risk and resiliency factors as organized into several types (Fergus & Zimmerman, 2005; Winters, 2001). Some are termed *robust* in that they predict both current and future problem behavior; others might be classified as *emergent* in that they predict future outcomes but not current conditions or levels of problem behaviors. As well, some risk-resiliency factors might be seen as *concurrent* in that they predict current levels of problem behavior but not changes in problem behaviors.

Understanding the various factors that place youth at risk for developing problem behavior is an essential first step toward effective intervention. In particular, recognition of the early signs of disruptive problem behaviors (e.g., attention deficit hyperactivity, oppositional defiant, or conduct disorder) is of vital importance, as timely intervention may stem long-term progression from aggressive and noncompliant behavior into more severe behavioral and social problems during late adolescence and into adulthood (Holmes, Slaughter, & Kashani, 2001; Simonoff et al., 2004).

Risk and Resiliency Defined

Research with large and distinct populations (both within and outside of the United States) reveals a relatively consistent set of risk factors for adolescent problem behavior (Scheier et al., 1997; Vazsonyi et al., 2010). Jessor et al. (1998) identify some of the mechanisms that may be involved in the development of risk for or protection from problem behavior.

Risk is defined as any characteristic that

- Evokes or encourages problem behavior.
- Elicits behavior that is incompatible with staying in school.
- Produces circumstances that compromise school engagement.

Protection is defined in direct opposition, referring to any factor that

- Promotes development of individual constraints on problem behavior.
- Supplies social controls against the development of problem behavior.
- Focuses the adolescent on alternative activities.
- Elicits activities that are incompatible with problem behavior.
- Promotes and reinforces orientation toward conventional institutions and codes of behavior (Jessor et al., 1998).

Identification of High-Risk Youth

Kashani, Jones, Bumby, and Thomas (2001) reviewed relevant psychosocial risk factors for the development of youth violence and concluded that theoretical approaches reliant on single dimensions of prediction are insufficient to encompass or explain this phenomenon. They suggest use of a multidimensional psychosocial framework, with factors ranging from the individual and family levels to the school, peer, community, and cultural levels. Utting (1996) encompasses this range within four general areas of risk: individual, familial, educational, and socio-economic/community. In accordance with these formulations, Table 1.5 presents a four-tiered summary of risk and protection for adolescent problem behavior.

Multiple Exposures to Risk

Fox and Levin (2001) summarize the many factors that may separate some adolescents from more prosocial alternatives and styles of responding.

- Behavioral interference and frustration.
- Relative deprivation and economic need associated with poverty.
- Minimal levels of social bonding to conventional individuals, attitudes, and institutions.
- Repeated head trauma.
- Various types of personality disorder (e.g., a lack of moral restraint and empathy).
- Poor skills for everyday social functioning.
- Growing up in a subculture of violence.

In a meta-analysis of 66 longitudinal studies of non-incarcerated adolescents, Hawkins et al. (2000) reported that the more individual risk factors to which an individual is exposed, the greater the probability of becoming involved in violent conduct. Regarding criminal involvement, by comparing aggressive to nonaggressive adolescent offenders, Venezia (2001) found that while no one factor carries enough variance to provide for good prediction in itself, a combination of the total number of risk factors to which an adolescent is exposed is more strongly correlated with criminal involvement. From this, a “total risk variable” was proposed, which simply sums the presence of individual risk factors.

Mitigating Risk by Focusing on Resiliency

K. W. Griffin, Scheier, Botvin, and Diaz (2000) emphasize the importance of targeting both risk and

Table 1.5 Risk and Resiliency Factors for Adolescent Problem Behaviors

Individual

- Biological (e.g., age, sex, learning disability, hyperactivity, attention deficits).
- Psychological (e.g., self-concept, relevant personality factors, mood and emotional adjustment).
- Cognitive (e.g., locus of control, alcohol expectancies).
- Behavioral (e.g., early onset of aggressiveness, noncompliance, substance use).
- Life experience (e.g., early contact with the juvenile justice system).

Psychosocial

- Familial (e.g., quality of attachment and social bonds, parental control).
- Educational (e.g., academic failure, school discipline referrals and truancy).
- Peer (e.g., delinquent vs. conventional peer associations).

Community

- Socioeconomic status and poverty.
- Neighborhood (e.g., neighborhood stress, community violence).
- Gang activity.

Demographic

- Various aspects of teen culture (e.g., subculture of violence) that may provide access to delinquent peers and role models.
- Ethnic norms and values that can provide protective buffering against these influences.

resiliency in attempting to deter adolescent problem behavior. Psychosocial factors that confer social competence, self-esteem, and adaptive cognition as well as factors that provide for job or other organizational attachment (Sampson & Laub, 1993) may serve to buffer adolescents from the negative effects of risk. Donnon and Hammond (2007) identify

two broad sets of factors related to a general framework for understanding the development of resiliency: (1) intrinsic strengths or personality characteristics or attributes of the individual, e.g., empathy, self-efficacy, and (2) extrinsic strengths or interpersonal settings or environments, e.g., supportive family, positive peer influence, caring school and community environments. (p. 964)

Such protective factors have been associated with lower levels of problem behavior, as well as with positive treatment outcomes (Jessor, VandenBos,

Vanderryn, Costa, & Turbin, 1997). These empirical findings have been interpreted as the mitigating effects of protective factors to promote resiliency. This moderation of risk by protection is found to hold across gender, race, and ethnicity (Jessor et al.).

A study that probed the relationship between cognitive protective factors and outcomes with regard to problem behavior (Jessor et al., 1998) found a correlation between adaptive (constructive) cognition and lower levels of problem behavior involvement. In a longitudinal study involving high school students in an urban school district, Jessor and colleagues analyzed both risk and protective factors for interactions with student outcome. Negative outcomes correlated with socioeconomic disadvantage and with low self-esteem, low expectations for success, a sense of hopelessness, and association with delinquent peers, while positive effects were found for protective factors. Other studies have investigated the influence of protective factors among first-time adolescent offenders (aged 13 to 17 years). The strategic inclusion of protective factors

(family involvement) along with risk factors during the treatment process allowed for better rates of program completion, lower recidivism, and later reductions of serious crime (Pobanz, 2001). These findings further support the interpretation that *identifiable protective factors* may play a significant role in producing resilience against problem behavior in adolescence.

Treatment Implications

In order to deliver comprehensive and effective services, intervention that helps an adolescent develop both psychosocial and cognitive protective factors should be used alongside treatment that attempts to reduce risk directly (Jessor et al., 1998). These efforts should be geared toward both the individual and contextual levels, providing the adolescent with an environment that not only helps to develop patterns of protective cognition and behavior but also fosters and sustains their use. In this regard, commitment of social resources along such avenues as increasing school engagement and connectedness, providing opportunities for pro-social activities (such as community volunteer opportunities), as well as providing instruction geared toward enhancing cognitive and psychosocial development may be well worth their return in reduced adolescent involvement in problem behavior (Jessor et al.). This public health strategy may be especially effective in social contexts of high socioeconomic disadvantage, as moderation of risk has more vivid effects among economically disadvantaged adolescents (Jessor et al.). Therefore, targeting both risk and protection may be even more important when working with teens who lack other types of protection (e.g., those living in poverty or lacking social ties and family bonds—precisely those adolescents who are at highest risk). A first step in designing an effective treatment regimen for substance abusing and/or delinquent adolescents is comprehensive evaluation of the factors that increase vulnerability balanced with assessment of individual, family, and community assets that can reduce the effects of deprivation and negative influences.

Risk and Resiliency Assessment

Apparent differences in developmental trajectories of criminal behavior suggest the existence of two distinct groups of adolescent offenders:

- **Teen culture.** Those who seem to be experimenting with delinquency as a mechanism of separation from home and family (i.e., “experimenters,”

Pobanz, 2001). This is also known as the “adolescence-limited” trajectory of development (Moffitt, 1993).

- **Criminal career.** Those whose delinquent behavior develops into a lifetime of criminal offense (i.e., “chronic offenders,” Pobanz, 2001). This is also known as the “life-course-persistent” pathway of development (Moffitt, 1993; Patterson & Yoerger, 1993a).

This distinction in the pathways of adolescent development necessitates that risk assessment be done on at least two levels. An adolescent who has become eligible for social services must be screened for the following:

- The probability of worsening of problem behaviors (such as alcohol use escalating into alcoholism, drunk driving or drug abuse, or drug use escalating into drug sales).
- The likelihood of escalation of problem behavior into criminal behavior and serious violence.

Jessor et al. (1998) as well as Donnon and Hammond (2007) hypothesize that risk and protection are likely to exert reciprocal influence upon each other in the progression toward adolescent lifestyles and behavior. For this reason, protective factors are an important component of risk assessment as well as in treatment.

Risk assessment procedures may be enhanced by adding analysis of protective factors to those of risk in order to develop a composite profile to predict whether an adolescent is merely experimenting or is embarking on a lifetime career of criminal conduct (Pobanz, 2001). The section below summarizes evidence for specific individual, family, and psychosocial risk factors, combinations of which exponentially increase the probability of delinquency and/or substance abuse within the adolescent population.

A STRENGTHS-BASED APPROACH TO JUVENILE JUSTICE AND TREATMENT SERVICES

Uncovering the multiple factors that place a teenager at risk for a broad spectrum of personal and social problems calls for development of adolescent-focused treatment aimed at improving the ratio of protective elements relative to the negative factors that can segue into drug use or criminal activity. It is essential that

assessment identify the individual's risks across the major risk areas and the specific problem areas. Treatment then provides clients with the concepts and skills to address these problem areas and to utilize skills and concepts to prevent recurrence of these problems.

However, effective treatment of delinquency and youth drug abuse goes beyond a harm-avoidance approach and strives to generate positive outcomes. It recognizes that youth with multiple problems and their families have considerable resources that can positively change their lives. A strength-based perspective not only addresses vulnerabilities and weaknesses but also recognizes youth as potential contributors to the community (Milkman, 2001; Milkman et al., 1996; Nissen, 2006).

Effective teen and family advocates use the techniques of motivational interviewing to elicit information about what parents and teenagers have done well, both in family and individual contexts. In developing a comprehensive plan for each youth, assessment is geared not only to identifying and resolving problems that require remediation but also to evaluating his or her talents that need to be nurtured. Youth and families are consulted regarding every treatment decision; they are considered as experts on their own case. When adolescents and their families are praised and acknowledged for their accomplishments and abilities, the treatment alliance becomes strengthened; they become less resistant and increasingly motivated to participate actively in the treatment program. A focus on the young person's future, rather than on his or her past, nurtures hope and the possibility for change. When youth and their families are helped to clarify their goals and, whenever possible, the principles of restorative justice (rectifying the effects of past actions) are used, youth internalize the message that not only can they look to the future with optimism but they can be responsible, make reparations for past misdeeds, and make positive contributions to the community. Restorative justice not only fosters teen offenders' accountability to the community but also leads to a sense of increased competence while they develop personal responsibility for their behavior and its consequences.

Adolescent problem behaviors such as drug abuse, mental disorder, and criminal conduct are associated with multiple childhood antecedents, including low motivation toward success and achievement, minimal attachment to positive role models or institutions, and normalized images of crime and violence. The lives of youth offenders have been impacted by their more general experiences as children and teens (such as

negative peer influence, poor parental role models, low academic achievement, traumatic violence), and these experiences require specific focus on the development of effective programming for large numbers of teenagers who manifest multiple problem behaviors. While these experiences may be associated with vulnerability to antisocial behavior, criminal conduct, and substance abuse, they may also provide the adolescent with a reservoir of survival skills that can be modified using cognitive-behavioral interventions into a strengths-based orientation for building a better life. Helping adolescents understand and recognize their own strengths and abilities can contribute toward improving self-esteem, self-awareness, and recognition of personal rights and responsibilities. These, in turn, can propel them out of high-risk situations (such as deviant peer associations and the subculture of violence) and into those that facilitate reaching their goals.

Effective treatment also evaluates and assesses ongoing progress and change in resolving the core problem areas and in measuring the acquired skills and strengths that lead to positive outcomes. This assessment should be done around the skills and concepts that are addressed in each treatment session and in a more general way on a periodic basis. *Pathways to Self-Discovery and Change* (PSDC) has built-in procedures to accomplish strength assessments within each session and over the continuum of treatment.

A major tenet of PSDC is that across the entire continuum of substance abuse and criminal conduct, from minimal rule breaking to violent crime, positive change is, first and foremost, tied to recognizing that we are *personally responsible* for our actions. We can become healthy and productive community members by learning to control our thoughts, feelings, and behavior.

CHAPTER REVIEW

Adolescent personalities emerge from an amalgam of individual, family, peer, and community factors of risk and resiliency. Owing to the unique confluence of biological, psychological, and social forces, adolescence is often a stressful period of life (i.e., *Sturm und Drang*). Although epidemiological studies reveal that only about 10% to 20% of teenagers exhibit some type of severe mental disorder, high prevalence rates for substance abuse and delinquent activities have powerful effects on individuals, families, communities, and the society at large.

The chapter began by considering the unfolding of adolescence in the context of physical, social,

emotional, cognitive, and moral domains of development. Following presentation of a framework for understanding the overarching problem of forming a deviant identity, eight models were used to explain pathways into adolescent substance abuse and criminal conduct.

Teenagers who abuse drugs show a pattern of being involved in other deviations from social norms (e.g., fighting, stealing, vandalism, low school achievement, and early sexual activity). For the vast majority of adolescents who abuse drugs, alcohol and tobacco have been implicated as “gateway substances.” For example, those who report having tried cigarettes are about 10 times more likely to have also tried marijuana (Hart et al., 2009). Relative to long-term goals, teenagers are more influenced by their parents; however, peers have significantly greater influence regarding immediate lifestyle and day-to-day activities. Having peers with antisocial attitudes is the best predictor of drug abuse.

In the domain of juvenile delinquency and criminal activity, the estimated number of juvenile arrests (under 18 years of age) in 2008 was upward of 2.11 million (Puzzanchera, 2009) with fewer than 5% for violent crimes. Although the rate of arrest for adolescent involvement in violence appears to have declined during the past decade, the OJJDP report on Juvenile Offenders and Victims (Snyder & Sickmund, 2006) shows that among all youth, 27% were reported to have committed an assault with intent to seriously hurt by age 17, and 16% reported carrying a handgun by the same age.

In the sphere of mental disorder, 50% of youth who participate in one of five sectors of public care (alcohol and drug services, child welfare, juvenile justice, mental health, and public school services for severe emotional disturbance) meet criteria for ADHD or other disruptive behavior disorders (conduct disorder and oppositional defiant disorder). The rate of PTSD is higher among older teenagers, while the rate of ADHD tends to decline with age.

Jessor (1998) describes teenage problem behavior as being derived from three interactive systems of psychosocial influence: the behavior system, the personality system, and the perceived environment. Since problem behaviors are related, isolating drug abuse or

juvenile delinquency as independent targets for intervention, without considering the behavior system along with associated personality and perceived environment, would be counterproductive to any attempts at treatment or rehabilitation.

An array of protective elements (e.g., positive relationships with adults, conventional friends, good school attitudes and results, involvement in pro-social activities, religious faith, intolerance to deviance) is shown to mitigate factors that put an adolescent at risk (e.g., low self-esteem, personality disorder, low success expectations, alienation, negative peers, disconnection with conventional institutions, growing up in a subculture of violence, relative economic deprivation, and lack of school success). Empirical study of risk and protective factors provides the platform for developing appropriate targets for treatment and other social services interventions. Research findings support the moderating function of protective factors to offset risk.

Studies show the importance of strengthening resiliency and protective factors for improved treatment outcomes. Significant and positive effects have been documented for improving health-positive cognition and behavior; increasing self-management skills (e.g., assertiveness, refusal, boundary setting, self-efficacy); developing empathy and an internalized system of moral and ethical principles; improving family communication; and the development of a normative culture in which adults, organizations, and community institutions take pride in their commitments to nurturing competent and responsible youth. Based on data collected by the Search Institute from a sample of more than 250,000 U.S. school children, this chapter delineates individual, family, and community elements that are viewed as positive building blocks of human development.

The final segment presents the case for integrating a strength-based focus in the treatment of high-risk youth, utilizing the principles of motivational interviewing and restorative justice. It also stresses the importance of evaluating the progress and change of problem behaviors as they are resolved and learning concepts and skills for improving positive outcomes, both at the individual session level and throughout the continuum of treatment.

