
Understanding Treatment: Principles and Approaches

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In order to understand adolescent treatment, service providers should understand a developmental psychopathology perspective, risk factors associated with problem behavior, aspects of attachment that influence presenting problems and interventions, and diversity issues. Treatment providers should also be able to identify evidence-based treatments (i.e., treatments that have been empirically tested and found to be efficacious and/or effective in ameliorating the mental health issues of adolescents). The present chapter introduces material to provide a context for understanding adolescent treatment.

Developmental Psychopathology Framework

Understanding the relationship between individual and family assets/liabilities, emotions, electrical brain activity, and positive youth development has significant implications for

lifelong health and well-being. For example, adolescence is a time of strength and resilience but morbidity and mortality rates increase by 200 % during the second decade of life (Dahl, 2004). It is particularly alarming that “the major sources of death and disability in adolescence are related to difficulties in the control of behavior and emotion” (Dahl, 2004, p. 3; emphasis in original). Dahl continues: “I wish to underscore how a set of neurobehavioral changes at puberty represents *part* of a much larger set of maturational changes in adolescence, and how these require an approach that focuses on brain/behavior/social-context *interaction* during this important maturational period” (2004, p. 3; emphasis in original).

In their critical review of treatments for children and adolescents, Fonagy, Target, Cottrell, Phillips, and Kurtz (2002) noted that attention to developmental themes is an emerging trend in youth treatment. Attention to developmental themes is represented by the developmental psychopathology framework that has begun to dominate clinical work with children and adolescents. This approach suggests that psychiatric disorders are “part of a transactional causal chain” that includes “a series of interactions of biological, social, and psychological characteristics across time” (Fonagy et al., 2002, p. 5).

The U.S. Surgeon General’s report on mental illness identified five principles associated with a developmental psychopathology perspective.

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First, it is important to understand the particular history and past experience of youth clients:

psychopathology in childhood arises from the complex, multilayered interactions of specific characteristics of the child (including biological, psychological, and genetic factors), his or her environment (including parent, sibling, and family relations, peer and neighborhood factors, school and community factors, and the larger social-cultural context), and the specific manner in which these factors interact with and shape each other over the course of development (U.S. Department of Health and Human Services, 1999, p. 127).

Second, the U.S. Surgeon General's report suggests that children and adolescents have innate tendencies to adapt to their environment so "some (but not all) 'pathologic' behavioral syndromes might be best characterized as adaptive responses when the child or adolescent encounters difficulty or adverse circumstances" (U.S. Department of Health and Human Services, 1999, p. 128). Third, age and timing factors are associated with problems (e.g., behavior that is considered normal for a 2-year-old could be considered immature for an adolescent). Fourth, it is important to understand a child's context, especially the caretaking environment. Finally, normal and abnormal developmental processes "are often separated only by degrees of difference" (U.S. Department of Health and Human Services, 1999, p. 128).

The U.S. Surgeon General's report identified four "virtues" of a developmental perspective (U.S. Department of Health and Human Services, 1999):

1. A developmental perspective provides a broader, "more informed" perspective to understand factors associated with development, maintenance, and recovery from disorders (p. 128).
2. A developmental perspective guards against oversimplified, diagnostic terms.
3. A developmental perspective identifies additional targets (e.g., environmental or contextual factors) for intervention.
4. A developmental perspective identifies "windows of opportunity during a child's development when preventive or treatment interventions may be especially effective" (p. 128).

The remainder of the present section describes four critical influences associated with adolescent

development, including (a) positive youth development; (b) social psychophysiological and social/affective neuroscience perspectives; (c) influence of social interaction on brain activity; and (d) neuroanatomy of emotion.

Positive Youth Development

Positive youth development philosophy is characterized by "a positive, asset-building orientation that builds on strengths rather than categorizing youth according to their deficits" (Small & Memmo, 2004, p. 7). This approach emphasizes individual strengths, such as problem-solving abilities and interpersonal skills, and how these normative qualities can be fostered in the context of caring and supportive relationships with adults and within communities (Bogenschneider & Gross, 2004; Small & Memmo, 2004). There are differences in conceptualizations of positive youth development. For example, Roth (2000) identified five aspects of positive youth development: (1) competence in academic, social, and vocational areas; (2) confidence; (3) connection to family, community, and peers; (4) character; and (5) caring and compassion. These are referred to as the five C's of positive attributes for youth: competence, confidence, connection, character, and caring (Roth & Brooks-Gunn, 2000). Larson's (2000) conceptualization includes creativity, leadership, altruism, and civic engagement. Scales, Benson, Leffert, and Blyth (2000) emphasized accomplishments of characteristics rather than qualities, suggesting that healthy development reflects some of the developmental tasks of adolescence indicated by school success, leadership, helping others, maintenance of physical health, delay of gratification, valuing diversity, and overcoming adversity.

Social Psychophysiological and Social/Affective Neuroscience Perspectives

There has been recent clinical interest in the influence of adolescent brain development, so it is important to incorporate a social neuroscience (also called affective neuroscience or interpersonal neu-

robiology) perspective which refers to “an integrative field that examines how nervous (central and peripheral), endocrine, and immune systems are involved in sociocultural processes” (Harmon-Jones & Winkielman, 2007, p. 4). It seems clear that positive youth development is a sociocultural process that is likely to be influenced by brain activity. This approach “emphasizes the relationships among different levels of organization—from the molecule to the cell to the organ, system, personal, interpersonal, social group, and societal levels” (Harmon-Jones & Beer, 2009, p. 2). Social neuroscience continues to recognize that measures of autonomic nervous system activity are important.

Emotional regulation is a common focus in social neuroscience. Emotional intelligence is the ability to perceive others’ emotions, to understand emotions and emotional knowledge, and to reflectively regulate emotions to promote emotional and intellectual growth. It is an asset that seems to influence factors associated with positive youth development. For example, emotional intelligence is correlated highly with altruism, and civic virtue for both genders (Charbonneau & Nicol, 2002). Furthermore, adolescents who scored higher in emotional intelligence were rated by their peers as being more altruistic (Charbonneau & Nicol, 2002).

Influence of Social Interaction on Brain Activity

There is growing consensus that adolescent brain development is influenced by social interactions, especially interactions between adolescents and parents (Cozolino, 2006; Dahl, 2004; Spear, 2010). For clinicians, this emerging consensus in the social neuroscience literature suggests the need to recognize the relationship between individual characteristics, relational variables, interactional patterns, and brain activity on positive youth development.

Neuroanatomy of Emotion

Given the importance of emotional intelligence and emotional involvement, it seems important to

briefly review brain functioning associated with emotions. Identifying neural circuits associated with emotion is difficult because “control systems occur at every level of the central nervous system: from the spinal cord to the brain stem to sub-cortical and cortical structures” (Bradley & Lang, 2007, p. 596). Both the amygdala and prefrontal cortex (PFC) seem to exert significant influence on emotions (Bradley & Lang, 2007; Davidson, 2002, 2003). Although the PFC is usually associated with higher cognitive functions, it is also associated with emotion processing (Bradley & Lang, 2007; Davidson, 2002, 2003). There has been considerable research associated with differences between the left and right hemispheres of the PFC using electrical encephalographic (eeg) technology (Bradley & Lang, 2007; Davidson, 2002, 2003; Harmon-Jones & Peterson, 2009). It is noteworthy that the PFC develops later during adolescence (Giedd, 2008; Spear, 2010). This seems to influence emotion processing during adolescence. For example, an fMRI study of adolescents’ identification of emotions suggested that younger adolescents are more likely to demonstrate activity in the amygdala than frontal lobes (Baird et al., 1999).

Risk Factors

Risk factors refer to biological influences, stressful events, or psychosocial risk factors (especially family characteristics) that increase an adolescent’s vulnerability to experiencing hardship: “There is now good evidence that *both* biological factors and adverse psychosocial experiences during childhood influence—but not necessarily ‘cause’—the mental disorders of childhood” (U.S. Department of Health and Human Services, 1999, p. 129). The U.S. Surgeon General’s report on mental health identified the following risk factors (U.S. Department of Health and Human Services, 1999):

- *Biological influence on mental disorders:* intrauterine exposure to alcohol or cigarettes, parental trauma, environmental exposure to lead, malnutrition of pregnancy, traumatic brain injury, specific chromosomal syndromes (p. 130).

- *Stressful life events*: parental death or divorce, economic hardship (p. 132).
- *Psychosocial risk factors*: parental discord, parent psychopathology, large family size, quality of relationship (especially attachment) between children and primary caregiver, child maltreatment, maladaptive peers and siblings (pp. 130–132).

In his book *Raising Children in a Socially Toxic Environment*, James Garbarino describes risk factors affecting youth. “Their risk factors are the stuff of talk shows and headlines and policy seminars: absent fathers, poverty and other economic pressure, racism, addiction, educational failure, poor physical health, family violence, and adult emotional problems that impair parenting” (1995, p. 6). Garbarino suggests that the accumulation of risk factors is a significant predictor of problems:

The presence of one or two risk factors does not developmentally disable children, but the accumulation of three, four, or more can overwhelm a child ... Once overwhelmed, children are likely to be highly sensitive to the socially toxic influences surrounding them (1995, p. 151).

Treatment providers should make efforts to screen for the presence of risk factors in adolescent clients. If more than three risk factors are present, treatment planning should incorporate strategies for ameliorating them. The presence of some risk factors will require partnering with social service agencies.

Parent Influence

The parent–child relationship has important implications for treatment, which is why family therapy by itself or in conjunction with other therapies is recommended for treatment of several severe mental health disorders. Attachment is an aspect of the parent–child relationship that should be assessed and, when necessary, the target of intervention because “Attachments lie at the heart of family life. They create bonds that can provide care and protection across the life cycle (Ainsworth, 1991), and can evoke the most intense emotions—joy in the making, anguish in

the breaking—or create problems if they become insecure” (Byng-Hall, 1995, p. 45). A critical review of attachment research suggests attachment relationships are complex due to three factors: (a) relationships are multi-influential, (b) outcomes are multi-determined, and (c) continuity is complex and multifaceted (Thompson, 1999). For those interested in learning more about attachment, the following edited volume is an excellent resource: *Handbook of Attachment: Theory, Research, and Clinical Applications* (Cassidy & Shaver, 1999). Another resource is *Developmental-Systemic Family Therapy with Adolescents* (Werner-Wilson, 2001), which includes a discussion of different aspects of attachment, assessment recommendations, and treatment implications.

Key Parenting Factors Associated with Psychopathology

It is presumed colloquially and professionally that parents influence psychopathology in children (Cusinato, 1998). Parent influence, according to a review of research, seems to be related to three specific aspects of the parent–child relationship: (a) parental warmth, (b) parental control, and (c) parental consistency (Cusinato, 1998). *Warmth* refers to the balance of supportive (e.g., praise, approval, encouragement, cooperation, expression and demonstration of affection) versus non-supportive (e.g., blame, criticism, punishment, threats, neglect, negative evaluations) behaviors toward the child (Cusinato, 1998). Parental warmth seems to consistently influence self-esteem of children. Parental warmth should be routinely evaluated by helping professionals and a target of intervention if it is lacking in the parent–child relationship.

The *control* factor includes style of parent influence (coercive, democratic, permissive) and frequency of control. Although control is related to warmth (e.g., coercive control is associated with limited parental warmth), it seems to have an independent impact: “when the father’s and mother’s negative or abusive behaviors add up, the connection to dysfunctional outcomes in offspring becomes stronger and more crucial”

(Cusinato, 1998). This conclusion suggests that professionals should assess style and frequency of parental control.

Consistency is the final factor associated with outcomes—especially delinquent behavior. It refers to continuity between parental demands, expectations, and evaluations of children. Agreement on values and expectations between parents seems to be particularly important. As with warmth and control, treatment should include careful assessment of consistency between caregivers in the family.

Now that factors associated with the individuals or families being treated have been described, we review factors associated with therapeutic relationship since it seems to be a significant predictor of client outcomes.

Therapeutic Relationship

Bordin (1979, 1994) suggested that the therapeutic relationship was influenced by an alliance between therapist and client that transcended theoretical orientation (he referred to it as a “pan-theoretical” perspective). According to Bordin, both the therapist and the client play active roles in therapy. This conceptualization of alliance featured three dimensions: *goals*, *tasks*, and *bond* (Bordin, 1979, 1994). Therapeutic goals are the negotiated outcomes for therapy; tasks are the behaviors and cognitions which occur during therapeutic process; and bond refers to the quality of attachment between the therapist and client (Bordin, 1979, 1994).

Empirical research seems to support Bordin’s (1979, 1994) propositions because therapeutic alliance is associated with positive outcomes in therapy. For example, results from a meta-analysis of 24 studies that evaluated various measures of working alliance to treatment outcome suggested that quality of the working alliance predicted positive therapy outcome (Horvath & Symonds, 1991). Although much of the research on therapeutic alliance has been with adult clients, it seems to be relevant for clinical work with adolescents. For example, adolescents and their families are more likely to drop out of treatment if

there is an imbalance (e.g., higher for parent than adolescent) in therapy alliance (Robbins, Turner, Alexander, & Perez, 2003).

Influences on Therapeutic Relationship

Carl Rogers was one of the first therapists to formally hypothesize that the degree of client change in therapy was closely related to the client’s relationship with the therapist. His call for research in this area began in 1957 and was summarized in his 1965 review of studies of the necessary and sufficient conditions needed for the therapeutic relationship. Rogers (1965) reported that a relationship perceived by the client as having a high degree of genuineness from the therapist with sensitive and accurate empathy on the part of the therapist was related to effective therapeutic bonds and increased growth. Additionally, when clients perceived themselves as unconditionally cared about and respected, they were more likely to rate the therapeutic bond as high. Similar results are found today with clients rating therapists as “most effective” when they are perceived to be more warm, affirming, understanding and helpful (Najavits & Strupp, 1994). Therapists with these qualities are also seen as approachable. The following therapist characteristics continue to be identified by clients as helpful: therapist moderates and controls discussion, therapist provides a safe environment, therapist encourages participation, and therapist helps in resolving problems (Estrada & Holmes, 1999). Gurman (2001) suggested that increased therapist activity in family therapy significantly influenced therapeutic relationship.

Diversity Issues in Assessment and Treatment

Treating clients from different backgrounds requires careful assessment, cultivation of cultural sensitivity, and understanding of acculturation factors. We will review each of these issues in the present section.

Gender Issues

In a classic study published in the *American Psychologist*, Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1974) demonstrated that clinicians diagnosed women and men differently. Moreover, they noted that standards for health were based on those consistent with masculine characteristics. They conclude: “The cause of mental health may be better served if both men and women are encouraged toward maximum realization of individual potential, rather than to an adjustment to existing restrictive sex roles” (Broverman et al., 1974, p. 52). Women are also more likely than men to be blamed for their own problems and those of family members (Anderson & Holder, 1989). This has been referred to as mother blaming. “[C]hild guidance clinics have emphasized the involvement of mothers—not fathers—in the child’s treatment” (Anderson & Holder, 1989, p. 384).

These expectations about gender roles may influence treatment in three ways: “(1) they limit what we see, (2) they shape how we interpret behaviors, and (3) they influence what we define as important” (Knudson-Martin, 2001, p. 338). This research on differential diagnoses, evaluating clients based on masculine standards, mother-blaming, and expectations about gender have the following implications for adolescents treatment:

- Treatment providers should be especially careful when assessing adolescent girls so that girls are not identified as pathological because they violate gender expectations.
- Since family therapy is a recommended form of treatment for some problems, treatment providers should ensure that fathers are equally engaged in therapy process.
- Assessment of family should include attention to family expectations about gender roles and father involvement.
- Treatment providers should avoid “mother blaming.”

Treatment providers should pay attention to difficulties experienced by gay, lesbian, and bisexual youth because their sexuality may be a

reason for the families to initiate therapy. Until relatively recently, homosexuality was diagnosed as a disorder and reparative therapy was recommended to treat this diagnoses. Additionally, youth who come out of the closet face a variety of stressors:

[These youth] face tremendous challenges to growing up physically and mentally healthy in a culture that is almost uniformly anti-homosexual. ... [They] face rejection, isolation, verbal harassment and physical violence at home, in school and in religious organizations. Responding to these pressures, many lesbian, gay and bisexual young people engage in an array of risky behaviors (Center for Population Options, 1992, p. 1).

Gay, lesbian, and bisexual youth may experience any of the following outcomes: (a) school-related problems, (b) running away, (c) conflict with the law, (d) substance abuse, (e) prostitution, and (f) suicide. If adolescents or their families seek treatment for any of these problems, treatment providers should be sensitive to harassment (including internalized homophobia) of gay, lesbian, and bisexual youth (Savin-Williams, 1994).

Multicultural Issues

Factors associated with multicultural treatment are identified in the present section because “[m] any diagnostic formulations tend to reify normative aspects of culture, race, ethnicity, gender, and class membership as forms of psychopathology” (Comas-Díaz, 1996, p. 153).

In the book *Assessing and Treating Culturally Diverse Clients*, Paniagua (1998) suggests that clients from multicultural groups may be overdiagnosed which is referred to as cultivating “false conclusions regarding ‘pathology’ or mental problems” (p. 14). There seem to be two reasons for overdiagnosing. First, many assessment instruments have not been normed for clients from different groups. Second, misunderstandings about culture can lead treatment providers to diagnose behaviors that are normal for a particular group as pathological (Paniagua, 1998).

We return to the issue of therapeutic relationship—which we noted earlier in the chapter is

one of the best predictors of psychotherapeutic outcome—because it seems to be influenced by race and ethnicity. Paniagua (1998) suggests that therapeutic relationship is enhanced if treatment providers demonstrate both *cultural sensitivity* and *cultural competence*. Cultural sensitivity is defined as “awareness of cultural variables that may affect assessment and treatment” (Paniagua, 1998, p. 8). Therapists should be very careful that efforts to be culturally sensitive are not influenced by stereotypes because this would represent racism rather than sensitivity. Cultural competence is defined as “translation of this awareness into behaviors leading to effective assessment and treatment of the particular multicultural group” (Paniagua, 1998, p. 8).

Paniagua also suggests that therapist *credibility* influences treatment. Credibility refers to “the client’s perception that the therapist is effective and trustworthy” (Paniagua, 1998, p. 8). A treatment provider who operates from stereotyped notions about a particular race/ethnic group toward an individual client will undermine her/his credibility. Dilworth-Anderson, Burton, and Johnson (1993) distinguish between *race* (cultural construction of identity based on social description); *ethnicity* (an experientially based identity that is part of an ongoing process), and *culture* (a subjective and objective expression of self, which includes race and ethnicity, that represents the encompassing aspects of a person’s life). Tentative, collaborative questions designed to assess culture increases credibility.

Credibility is also affected if therapists make assumptions about extended family membership. “What is an extended family? The answer should be provided by the client and not by the therapist” (Paniagua, 1998, p. 9). Since family therapy is the recommended treatment for some problems, it seems important to include significant others—even if there is not a biological relationship—identified by clients.

Acculturation should also be considered during assessment and treatment. It refers to “the degree of integration of new cultural patterns into the original cultural patterns” (Paniagua, 1998, p. 8). Acculturation is often used to refer to immigrants from other countries but Paniagua (1998)

suggests that this is only one form of acculturation, which he refers to as external. There is also an internal form of acculturation that refers to someone who moves from one part of a country to another where cultural patterns are different. “For example, when American Indians living in Arizona or New Mexico (or other states with a large number of reservations) move from their reservation to cities, they experience the impact of societal lifestyle quite different from their societal lifestyle experienced on the reservation” (Paniagua, 1998, p. 9). Continuing in the example of American Indians moving from the reservation to a different environment, Paniagua writes: “Competition and individualism are two values with little relevance among American Indians who reside on reservations. These values, however, are extremely important for anyone who resides outside a reservation” (1998, p. 9).

In both forms of acculturation, there may be tension between the original culture and the new culture relative to values, beliefs, and behaviors. This tension between original and new culture could contribute to psychosocial and behavioral problems in adolescents. It could also lead to family systems changes because younger children typically assimilate new cultural behaviors before their elders. This can create tension in the family if elders are threatened by the changes. The family system can also be affected if elders, who are slower to learn new languages or customs (Paniagua, 1998), become dependant on adolescents. Given that family relationships influence adolescents, treatment providers should assess for recent geographic transitions.

Now that conceptual material associated with treating adolescents has been introduced, the next section will review factors associated with providing mental health services to youth.

Perspectives on Therapy Effectiveness

Those who pay for clinical services (e.g., consumers and insurance providers) have demanded better value for their investment, which has resulted in increased attention to the issue of ther-

apy effectiveness (Fonagy et al., 2002). This increased attention to accountability in the form of therapy effectiveness has revived a longstanding tension between academics who research therapy effectiveness and clinicians who provide treatment (Glenn, 2003). Richard M. McFall (1991), in his "Manifesto for a Science of Clinical Psychology," suggested that all forms of psychotherapy treatment should be empirically investigated. "Well-intentioned clinicians may not be using the most effective approach with their clients, or in some cases may be doing harm" (Ringeisen & Hoagwood, 2002, p. 44). Many interventions are designed through the process of common sense and good intention (Petrosino, Turpin-Petrosino, & Finckenhauer, 2000) or by myths and heroic efforts (Bogenschneider, 1996). While these treatments can be popular among service providers, there has been minimal research on the majority of them (Henggler & Sheidow, 2003).

Treatment providers, on the other hand, often complain that clinical research lacks "real-world" relevance since it is conducted in carefully controlled conditions that are difficult or impossible to match under normal treatment conditions (Fonagy et al., 2002; Glenn, 2003). Practicing clinicians worry that insurance companies will mandate specific treatments that underestimate critical aspects of therapy such as therapeutic relationship (Glenn, 2003) which seems to be one of the best predictors of therapeutic outcome (Hanson, Curry, & Bandalos, 2002; Horvath, 1994; Horvath & Symonds, 1991). There is also concern that insurance companies will be more likely to pay for psychopharmacological intervention rather than psychotherapies because the former have been investigated more frequently in clinical trials (Glenn, 2003).

The Researcher-Practitioner Model

If these two perspectives remain polarized, clients suffer. If clinicians ignore research, the services they provide could lead to harmful and even fatal outcomes (see section "Holding Therapy").

In some states, licensed therapists are required to obtain continuing education credits that, in theory, are supposed to help therapists remain current about effective treatments. In practice, though, therapists may obtain these credits by attending workshops about treatment that has not been empirically evaluated. Researchers also have responsibilities in this model. In addition to disseminating research regarding therapies to the practitioners using them, they must also take into account the concerns of therapists when both designing treatments and reporting results. The researcher-practitioner model also requires that researchers reach out to clinicians by consulting with practicing therapists on treatment protocols to ensure that treatment procedures have validity. A more recent trend of conducting efficacy studies on therapies (in addition to traditional efficacy studies on pharmacological treatments) is a move toward bridging the researcher-practitioner gap. Studies of treatment should use experimental designs (treatment and control groups), valid and reliable measures, and be replicated by numerous investigators prior to being reported as efficacious. The transformation of efficacy studies conducted in a lab setting to effectiveness studies conducted in community mental health settings aid in the successful treatment of adolescents.

Additionally, the researcher-practitioner model suggests that practicing therapists should be in a position to understand and contribute to the research literature. From this perspective, therapists' have a responsibility to remain current about effective therapies from the clinical literature. For those who are working with adolescents, that responsibility includes staying current on basic research associated with adolescent development. In addition to remaining current on the literature, therapists should begin to collect their own outcome research by measuring client progress. It would also seem reasonable for researchers to partner with therapists to conduct more research in the field. This type of research could include process research in which self-report or observational data are collected from therapists and their clients in practice. As part of this field research, investigators should

begin to study differences in therapy outcomes across therapy settings (e.g., nonprofit service agency versus private practice) while also controlling for community variables in order to provide a more contextual understanding about therapy outcomes.

Measuring therapy outcomes has at least three practical benefits. First, therapists who measure client progress are in a stronger position to negotiate with insurance providers. For example, a therapist could negotiate for more sessions by showing that a client was below a particular threshold (e.g., two standard deviations) for a normal range of behavior. Second, data from systematic measurement can be used to provide information to clients about progress. Finally, therapists could make a contribution to the clinical literature by publishing these findings. There are numerous measures relevant to adolescent outcomes that are easy to obtain and administer for a variety of possible outcomes, including self-esteem, attachment, alcohol and substance abuse, to name just a few (see Werner-Wilson, 2001 for these and other measures). Therapists could also look for opportunities to contribute to the research literature by publishing about interventions.

Evidence-Based Treatment

The American Psychological Association defines efficacious or “well-established” interventions as those that have either (a) two or more well-conducted group-design studies completed by several different researchers or (b) several well-conducted single-case study designs completed by independent investigators showing treatment to be at least as good as if not superior to placebo (Lonigan, Elbert, & Johnson, 1998). In keeping with both the APA and the researcher-practitioner model, we define evidence-based treatments as those that have been shown to be at least efficacious and at best both efficacious and effective. We summarized empirical support for a number of therapies and treatment models for adolescents associated with Attention-Deficit Hyperactivity Disorder (ADHD) in Table 2.1, Anorexia and Bulimia in Table 2.2, Anxiety Disorders in Table 2.3, Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) in Table 2.4, Depression in Table 2.5, and Substance Abuse in Table 2.6. The remainder of this chapter will review literature associated with evidence-based treatments for adolescents.

Table 2.1 Therapy outcomes associated with ADHD (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Horn et al. (1991)	Efficacy study using a double-blind, placebo design to compare parent training and self-control therapy to stimulant medication	Parent training and self-control therapy combined with low dosage of methylphenidate was as effective as a high dosage of methylphenidate alone
Pelham, Wheeler, and Chronis (1998)	Review of 47 efficacy studies (parent training, behavioral training, and cognitive interventions)	Behavioral parent training and behavioral interventions with the adolescent are efficacious; cognitive interventions are not efficacious
Smith, Waschbusch, Willoughby, and Evans (2000)	Review of 29 efficacy studies (stimulants, psychosocial treatments, and other medications)	Methylphenidate has well-established efficacy but some problems with inconvenience and noncompliance; the psychotherapeutic interventions of family therapy and classroom interventions are efficacious and practical; treatment with other types of medications shows promise but is not yet supported empirically; cognitive interventions are neither efficacious nor effective
Cantwell (1995)	Review of books, articles, and chapters published from 1985 to 1995 on the effectiveness of interventions	Multi-modal interventions that combine psychosocial treatments with medication are most effective. Interventions must focus on family, school, and child

Table 2.2 Therapy outcomes associated with anorexia and bulimia (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Fairburn, Jones, Peveler, Hope, and O'Connor (1993)	Efficacy study using random assignment to compare CBT, IPT, and Behavioral Therapy (BT) for the treatment of bulimia	CBT and IPT made superior changes in binge eating and purging to BT, although IPT took longer to achieve its effects. Changes produced were maintained at follow-up for both IPT and CBT
Robin et al. (1999)	Efficacy study using random assignment comparing behavioral family systems therapy (BFST) with ego-oriented individual therapy (EOIT) for the treatment of adolescents with anorexia nervosa	While both treatments produced improvements in eating attitudes, depression, and eating-related family conflict, BFST produced greater weight gain and higher rates of resumption of menstruation than EOIT

Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT) seems to be an effective treatment for attention-deficit/hyperactivity disorder, depression and suicide, and anxiety disorders. Hart and Morgan (1993, p. 6) identified six general considerations associated with CBT:

1. CBT integrates constructs and interventions from cognitive therapies with behavior therapies.
2. Cognitions, which are private events, mediate behavior and learning.
3. Cognitions are a primary focus for intervention.
4. Target behaviors and cognitions should be clearly defined.
5. Cognitions and behaviors are reciprocally related: changes in one are associated with changes in the other.
6. Learning-based techniques are used as interventions for cognitions and behaviors.

Table 2.3 Therapy outcomes associated with anxiety disorders (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Ollendick (1995)	Controlled study of the efficacy of cognitive behavior therapy (after intervention and at 6 month follow-up)	The treatment eliminated panic attacks, reduced agoraphobic avoidance and negative mood states, and increased self-efficacy for coping at both waves
Ollendick and King (1998)	Review of 23 efficacy studies	Behavioral treatments such as imaginal desensitization, in vivo desensitization, modeling, and self-instruction training are all superior to waitlist control and as effective or superior to medication; cognitive-behavioral therapy is superior to wait-list control and as effective to medication; cognitive-behavioral therapy plus family anxiety training increases the effects of traditional CBT
Kendall (1994)	Effectiveness study of a 16 week cognitive-behavioral treatment using waitlist control	Cognitive-behavioral intervention was found to be effective in the treatment of anxiety disorder in children with clinical significance continuing at 1 year follow-up
Kendall et al. (1997)	Replication of the Kendall (1994) effectiveness study	Cognitive-behavioral intervention was found to be effective in the treatment of anxiety disorder in children with clinical significance continuing at 1 year follow-up
Barrett, Dadds, and Rapee (1996)	Efficacy study of cognitive-behavioral therapy (CBT) and CBT plus family therapy using waitlist control with random assignment	Both treatment conditions were superior to the waitlist control group in the amelioration of anxiety directly after the interventions and at 12-month follow-up. The CBT plus family therapy treatment was more effective than CBT alone at both end of treatment and 12 month follow-up

Table 2.4 Therapy outcomes associated with CD and ODD (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Kazdin, Esveltd-Dawson, French, and Unis (1987)	Efficacy study examining the effects of a combined parent management training and a cognitive-behavioral problem-solving skills training (PMT-PSST) versus traditional psychotherapy	Children in the PMT-PSST treatment showed significantly less aggression and externalizing behaviors at home and school as well as significantly greater pro-social behavior and overall adjustment. Results were maintained at 1 year follow-up
Alexander, Holtzworth-Monroe, and Jameson (1994)	Reviewed several efficacy studies of Functional Family Therapy (FFT)	Changes in conduct-disordered adolescents were significantly greater for those treated with FFT than changes produced by psychodynamically oriented therapies or client-centered therapies. Improved family functioning and communication as well as lower rates of court involvement were maintained at 2 and 3 year follow-ups
Borduin et al. (1995)	Efficacy study comparing Multisystemic Family Therapy (MST) to individual therapy	MST was more effective than individual therapy in improving key family correlates of antisocial behavior, preventing future criminal behavior, and in ameliorating adjustment problems in individual family members
Gordon, Graves, and Arbuthnot (1995)	Followed delinquent youth treated with FFT compared to a traditional probation services control group into adulthood	Youth receiving traditional probation services were five times more likely to be arrested as adults than those treated with FFT
Snyder, Kymissis, and Kessler (1999)	Efficacy study of brief group therapy for anger control with random assignment	Treatment group participants scores on the MMPI (Anger Index) were significantly reduced following the treatment intervention while the control groups' scores increased
Borduin, Schaeffer, and Ronis (2003)	book chapter reporting on several efficacy studies of MST with adolescents	MST is more effective than both usual services and individual therapy in decreasing behavior problems, antisocial peer associations, and arrests, while increasing family communication, positive family relationships, and pro-social peer relationships. Follow-up to 4 years showed continued results
Santisteban et al. (2003)	Efficacy study using random design comparing Behavioral Systems Family Therapy (BSFT) to a group treatment control (in a Hispanic sample)	BSFT participants showed significantly greater improvement in adolescent conduct problems, delinquency, marijuana use, and family functioning

CBT Treatment for Depression and Suicide. CBT interventions that address coping skills and self-control (also referred to as behavioral problem-solving therapy) have been shown to be effective in the reduction of depression. Multiple studies of the efficacy of CBT as a treatment for depression have found both individual and group CBT to be superior to waitlist control, nondirective supportive therapy, and some forms of family therapy (Brent et al., 1998; Clarke et al., 2003; Reynolds & Coats, 1986; Stark et al., 1987). CBT also seems to be effective in treating depressive symptoms associated with suicidal

ideation (U.S. Department of Health and Human Services, 1999).

CBT Treatment for Anxiety Disorders. Kendall and colleagues (Kendall, 1994; Kendall et al., 1992) developed a CBT treatment for anxiety that includes four factors: (a) recognition of anxious feelings, (b) clarification of cognitions during anxiety-provoking situations, (c) development of a coping plan, and (d) evaluation of the coping strategy. Efficacy studies of Kendall's CBT program have shown the intervention to be both clinically and statistically significant in the

Table 2.5 Therapy outcomes associated with depression (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Reynolds and Coats (1986)	Efficacy study with random assignment comparing group CBT, group relaxation training, and waitlist control	Both treatments produced statistically and clinically significant changes in depression; neither treatment was superior to the other. Additionally, both active group treatments produced improvements in anxiety and school functioning. Results were maintained at 5 week follow-up
Stark, Reynolds, and Kaslow (1987)	Efficacy study with random assignment comparing self-control therapy, behavioral problem-solving therapy, and waitlist control	Both treatment conditions produced significantly and clinically significant changes in depression; results were similar for both treatments with neither being superior to the other
Brent et al. (1998)	Efficacy study with random assignment comparing cognitive-behavioral therapy (CBT), systemic-behavioral family therapy (SBFT), and nondirective supportive therapy (NST)	CBT was superior (“more efficacious”) to SBFT and NST. SBFT was effective in reducing major depressive disorder and was superior to CBT and NST when mother also had a diagnosis of depression. NST was not effective in any circumstance
Clarke, Rohde, Lewinsohn, Hops, and Seeley (1999)	Efficacy study with random assignment comparing adolescent group CBT, group CBT with parent group, and waitlist control	Group CBT delivered in 16 2-h sessions over the span of 8 weeks yielded higher depression recovery rates than the waitlist. Group CBT plus parent group was not significantly different in results from CBT alone
Diamond, Reis, Diamond, Siqueland, and Isaacs (2002)	Efficacy study with random assignment comparing Attachment-Based Family Therapy (ABFT) to waitlist control	ABFT was superior to the control with participants showing significantly greater reduction in both depression and anxiety symptoms as well as family conflict. At post-treatment, 81 % of participants in treatment no longer met criteria for MDD; treatment effects remained at 6 month follow-up
Mellin and Beamish (2002)	Reports on the outcomes of several efficacy studies comparing Interpersonal Therapy for adolescents (IPT-A), CBT, and waitlist control	IPT-A significantly reduced depressive symptomology and increased global functioning; IPT-A yielded more clinically significant results than CBT
Clarke, DeBar, and Lewinsohn (2003)	Reports on the outcomes of four efficacy studies of a specific group CBT for adolescents called “Adolescent Coping with Depression” (CWDA)	Three of the studies showed statistically and clinically significant depression recovery over waitlist control with results maintained at follow-up to 2 years. The final study did not show a significant difference in outcome between CWDA and traditional psychotherapy

treatment of anxiety disorder. Reductions in anxiety continued at 12-month follow-up in both studies (Kendall, 1994; Kendall et al., 1997). Another controlled study of the efficacy of CBT for the treatment of anxiety found similar results with the treatment condition eliminating panic attacks, reducing agoraphobic avoidance and negative mood states, and increasing self-efficacy for coping (Ollendick, 1995). Barrett et al. (1996) also found CBT to be efficacious in the amelioration of anxiety compared to a waitlist control at both post-intervention and 12-month follow-up. Systematic desensitization, modeling, and other CBT approaches are also “probably efficacious”

(U.S. Department of Health and Human Services, 1999, p. 162; emphasis in original). Research on effectiveness of CBT treatment for obsessive-compulsive disorder (OCD), which is classified by *DSM-IV* as an anxiety disorder, is inconclusive (U.S. Department of Health and Human Services, 1999).

Parent Skills Training

Parent skills training is often based on principles from CBT. The goal of these psychoeducational programs is to teach effective parenting strategies

Table 2.6 Therapy outcomes associated with substance abuse (adapted by author Werner-Wilson & Morrissey, 2005)

Study	Research design	Outcomes
Stanton and Shadish (1997)	Meta-Analysis of 15 controlled, comparative studies of family and couples treatment for drug abuse	Family therapy showed superior results when compared to individual therapy and peer group therapy; family therapy showed superior results compared to parent education or family psycho-education; family therapies were likely to have fewer drop-outs when compared to other types of therapies; no one model of family therapy appears superior to any others
Liddle et al. (2001)	Efficacy study comparing multidimensional family therapy (MDFT), adolescent group therapy (AGT), and multifamily education (MEI)	There was statistically significant improvement across all three treatments; MDFT showed superior improvement overall with clinical significance in the areas of substance use, academic performance, and family functioning. Improvements for the MDFT were maintained at 1 year follow-up with academic performance and family functioning increasing at follow-up
Kaminer, Burleson, and Goldberger (2002)	Efficacy study comparing CBT to psychoeducational therapy (PT)	Both therapies produced a reduction in substance abuse at post-treatment, 3 month follow-up, and 9 month follow-up; CBT was more effective than PT for older youth and males
Curry, Wells, Lochman, Craighead, and Nagy (2003)	Efficacy study on the efficacy of an integrated group CBT with family therapy for adolescents with comorbid diagnoses of depression and substance abuse dependency	Significant improvements were obtained in both depression and substance abuse; there was higher retention in the combined intervention than in CBT only group
Latimer, Winters, D'Zurilla, and Nichols (2003)	Efficacy study comparing an integrated group CBT with family therapy (IFCBT) with a psychoeducational drug curriculum (DHPE)	IFCBT produced superior results in drug and alcohol use at post-treatment and 6 month follow-up. Additionally, IFCBT produced superior results for adolescents in the pro-social areas of problem-solving and learning strategy skills, and problem avoidance; improvements in parental communication and norm/value setting were also superior to the DHPE group

for behavioral problems. Parent skills training seems to be effective for treating attention-deficit/hyperactivity disorders and disruptive disorders.

Parent Skills Training for Treatment for Attention-Deficit/Hyperactivity Disorder (ADHD). Parents are taught behavioral techniques such as time out, point systems, and contingent attention. These interventions are associated with improvement in “targeted behaviors or skills but are not as helpful in reducing the core symptoms of inattention, hyperactivity, or impulsivity” (U.S. Department of Health and Human Services, 1999, p. 148). Parent skills training combined with self-control therapy for the adolescent was found to be efficacious when combined with a low dose of methylphenidate in a study by Horn et al. (1991). A review of 47 studies of the efficacy of interventions

with ADHD disordered youth also found parent training combined with services to the adolescent to be efficacious, and a similar review by Smith et al. (2000) found parent training not only efficacious but practical and safe. Parent training combined with medication is more effective than medication alone.

Parent Skills Treatment for Disruptive Disorders. Parent management training combined with a CBT problem-solving skills training for adolescents decreased aggression and externalizing behaviors at school and home in a study by Kazdin et al. (1987). This treatment also increased the adolescents’ pro-social behaviors. Two specific parent skills programs that are “considered ‘well-established’ as treatment for disruptive disorders include *Living With Children* (Bernal,

Klennert, & Schulz, 1980) and a videotape modeling parent training (Spaccarelli, Cotler, & Penman, 1992)” (U.S. Department of Health and Human Services, 1999, p. 166).

Family/Systemic Therapies

Family/systemic therapies seem to effective treatments for depression and suicide (Brent et al., 1998; Diamond et al., 2002; Mellin & Beamish, 2002; Pinsof & Wynne, 1995; U.S. Department of Health and Human Services, 1999), alcohol and substance abuse (Liddle et al., 2001; Pinsof & Wynne, 1995; Stanton & Shadish, 1997; U.S. Department of Health and Human Services, 1999), and behavioral problems associated with Conduct Disorder and Oppositional Defiance Disorder (Alexander et al., 1994; Borduin et al., 1995, 2003; Gordon et al., 1995; Santisteban et al., 2003; Snyder et al., 1999). There is less empirical support, yet some evidence, that family/systemic therapies can be efficacious in the treatment of ADHD (Cantwell, 1995; Smith et al., 2000), anxiety (Barrett et al., 1996; Ollendick & King, 1998), and anorexia nervosa/bulimia nervosa (Fairburn et al., 1993; Robin et al., 1999). In a special edition of the *Journal of Marital and Family Therapy* devoted to effectiveness of family intervention, family therapy was defined as “any psychotherapy that directly involves family members in addition to an index patient and/or explicitly attends to the interaction among family members” (Pinsof & Wynne, 1995, p. 586).

Family/Systemic Treatment for Depression. The U.S. Surgeon Generals’ report on mental illness suggests that systemic family therapy shows “promise” but has not been investigated adequately to assess effectiveness (U.S. Department of Health and Human Services, 1999, p. 155). Comparisons of family therapy with CBT therapies have shown family therapy based treatments to be less effective than CBT but superior to waitlist control groups at post-treatment in the treatment of depression (Clarke et al., 1999; Pinsof & Wynne, 1995). There are several notable exceptions, however. Family-based therapy was more effective than

CBT when there was parental depression in a study by Brent et al. (1998). A study comparing Attachment-Based Family Therapy (ABFT) with waitlist control found ABFT resulted in significant reductions in depression, anxiety, and family conflict with results sustained at 2-year follow-up (Diamond et al., 2002). A recent review of the research on family therapy for depression found the effects of family therapy were more likely to be maintained at follow-up than other therapies, with longer term changes in adolescent depression, parental functioning, and behavioral control (Cottrell, 2003). Additionally, family-based therapies were more likely to show specific effects on parent-adolescent relationships/interactions and reduced relapse (Curry, 2001) and were more likely to be effective for youth dealing with comorbid disorders (Curry et al., 2003).

Family/Systemic Treatment for Suicide “Interpersonal conflicts are important stresses related to the risk of ... potentially suicidal children and adolescents. Treatment of interpersonal strife may significantly reduce suicidal risk” (U.S. Department of Health and Human Services, 1999, p. 157). The following factors, which can be effectively treated with family therapy, are associated with suicide: (a) experiencing isolation within the family, (b) demonstrating problems associated with independence, and (c) viewing self as expendable in the family (U.S. Department of Health and Human Services, 1999). Empirical investigation of family therapy in the reduction of adolescent suicidal ideation is ongoing, although research to date has shown decreases in suicidal ideation compared to “usual care” (Harrington et al., 1998). Additionally, family therapy appears to have less attrition and increased satisfaction during treatment and at follow-up. Analysis of healthcare costs show increased participation in family therapy is associated with decreased placements in foster care or residential care resulting in substantial savings (Cottrell, 2003).

Family/Systemic Treatment for Substance Abuse Disorders. Family therapy by itself or in conjunction with other approaches seems to be the most effective treatment for alcohol and substance

abuse. A meta-analysis of 15 controlled, comparative studies of family treatment for drug/alcohol abuse concluded that family therapies were superior to other treatment approaches, enhanced the effectiveness of other treatments, and had fewer drop-outs than other treatment approaches (Stanton & Shadish, 1997). Recent studies continue to show both statistical and clinical significance in the reduction of substance abuse and the improvement of academic performance and family functioning with results maintained at follow-ups (Curry et al., 2003; Liddle et al., 2001).

Family/Systemic Treatment for Externalizing Disorders such as ODD, CD, and aggression. Numerous studies have reported the demonstrated efficacy of family therapies for externalizing disorders. Borduin et al. (1995) compared Multisystemic Family Therapy (MST) with individual therapy and found MST to be more effective in improving key family correlates of antisocial behavior, preventing future criminal behavior, and reducing adjustment problems. Further research on MST has continued to find this family therapy to be more effective than both usual services and individual therapy at decreasing behavior problems, criminal behavior, and association with antisocial peers. MST has also shown success in increasing family communication, positive family relationships, and pro-social peer relationships. These improvements are maintained at follow-ups as long as 4 years (Borduin et al., 2003). Family therapy, either alone or combined with CBT, has been shown to be effective at decreasing behavioral problems, increasing school performance, and improving family functioning at post-treatment, follow-up, and into adulthood for a number of ethnicities (Alexander et al., 1994; Gordon et al., 1995; and Santisteban et al., 2003).

Potentially Ineffective Treatments

Treatments reported on in this section have been found to be ineffective in randomized, controlled studies, have not been found to be efficacious, or lack empirical support.

CBT Treatment for Attention-Deficit/Hyperactivity Disorder (ADHD)

A review of the literature by Pelham et al. (1998) found that cognitive interventions for the treatment of ADHD are not efficacious. A similar review by Smith et al. (2000) reported cognitive interventions to be neither efficacious nor effective. Although interventions to improve problem-solving and social skills do not seem to improve behavior or academic performance, CBT may help treat symptoms of accompanying disorders such as ODD, depression, or anxiety disorders (U.S. Department of Health and Human Services, 1999).

CBT Treatment for Substance Abuse Disorders

Several recent studies have examined CBT treatment for substance abuse disorders. While several of these studies found CBT to be superior to waitlist controls and psychoeducational therapy, they were not as effective as family therapies (Curry et al., 2003; Kaminer et al., 2002; Liddle et al., 2001). CBT combined with family therapy did show some promise (Curry et al., 2003; Latimer et al., 2003) with the combined treatment showing decreases in substance usage as well as improvements in problem-solving skills, family communication and functioning, and school performance.

Inpatient Hospitalization

Inpatient hospitalization—which is the most restrictive form of mental health care provided—is used to treat youth with the most severe disorders. This form of treatment is the most expensive: half of the money paid for treating youth mental health problems is spent on inpatient hospitalizations which have the weakest empirical support (U.S. Department of Health and Human Services, 1999).

Residential Treatment Centers

Residential treatment is less restrictive than inpatient hospitalization and is used by only about

8 % of children who are treated, but a significant amount of money is spent for this form of treatment: “nearly one-fourth of the national outlay on child mental health is spent on care in these settings” (U.S. Department of Health and Human Services, 1999, p. 169). Residential treatment centers (RTC)—which must be licensed—provide 24 h mental health services.

There are concerns about inconsistent admission standards, cost of services, risks associated with treatment, trauma associated with family separation, difficulty returning to family and community, victimization by staff, and learning antisocial behavior because of intensive exposure to other children (U.S. Department of Health and Human Services, 1999). The Surgeon General’s report on mental health concludes that “Given the limitations of current research, it is premature to endorse the effectiveness of residential treatment for adolescents. Moreover, research is needed to identify those groups of children and adolescents for whom the benefits of residential care outweigh the potential risks” (U.S. Department of Health and Human Services, 1999, p. 171).

Day Treatment

Day treatment refers to “a specialized and intensive form of treatment that is less restrictive than inpatient care but is more intensive than the usual types of outpatient care (i.e., individual, family, or group treatment)” (U.S. Department of Health and Human Services, 1999, p. 169). This form of treatment typically integrates education, counseling, and family interventions. Family participation during and following treatment is considered “essential” (U.S. Department of Health and Human Services, 1999, p. 169).

Research on day treatment programs suggests that they have a positive influence, but most studies have not included a comparison group. Results from 20 uncontrolled studies suggest that day treatment is associated with improved functioning for youth (and family), three-fourths of the youth are successfully reintegrated into regular school, and treatment prevents youth from entering residential

treatment which is more costly (U.S. Department of Health and Human Services, 1999). Research from one controlled study that included 6-month follow-up also suggested that day treatment was associated with “reducing behavior problems, decreasing symptoms, and improving family functioning” (U.S. Department of Health and Human Services, 1999, p. 169).

Community-Based Treatment

Since the 1980s, services for youth mental health have shifted from institutional to community-based services. Community-based services (sometimes referred to as a “wraparound approach”) include “case management, home-based services, therapeutic foster care, therapeutic group home, and crisis services” (U.S. Department of Health and Human Services, 1999, p. 172). Research “evidence for the benefits of some of these services is uneven at best” (U.S. Department of Health and Human Services, 1999, p. 172). Providing integrated treatment across multiple settings—an emerging trend in youth treatment (Fonagy et al., 2002)—is a common thread in these forms of community-based treatments (Grundle, 2002).

Potentially Harmful Treatments

While the lack of evidence regarding certain treatments can and should give therapists pause before using them, there are some treatments that not only lack empirical support, they have been shown to be dangerous to the adolescents experiencing them.

Holding Therapy

Holding therapy, which is sometimes referred to as attachment therapy, was developed to treat for Reactive Attachment Disorder (RAD). Those who practice holding therapy borrow some ideas from research on attachment, but their interventions

contradict fundamental concepts from that empirical literature (Werner-Wilson & Davenport, 2003). For example, proponents of holding therapy, who overstate the incidence of RAD, suggest that some children are incapable of forming attachments. This contradicts research which suggests that all children from some type of attachment with their caregiver. Further, those practicing holding therapy use interventions that would undermine development of a secure base. These practices “include three primary treatment components that are directed toward the child: (a) prolonged restraint for purpose other than protection; (b) prolonged noxious stimulation (e.g., tickling, poking ribs); and (c) interference with bodily functions” (Werner-Wilson & Davenport, 2003, p. 182). Holding therapy has been associated with at least two fatalities and lacks empirical support (Hanson & Spratt, 2000; Werner-Wilson & Davenport, 2003). For example, 10-year-old Candace Newmaker died as the result of a treatment referred to as holding therapy (Glenn, 2003). Hanson and Spratt (2000) suggest that “[t]he fact remains that there is simply no empirical evidence at present to support the assertion that attachment therapy is more effective, or even as effective, compared to accepted and conventional approaches” (p. 142).

Conclusion

Professionals who provide services to adolescents have a responsibility to remain current about effective treatments and basic research on adolescent development. At minimum, those providing treatment to adolescents should understand aspects of adolescent development that influence presenting problems and interventions. In particular, treatment providers should strongly advocate for psychotherapy, recognize which therapies are effective for particular problems, and coordinate closely with other professionals, especially if clients are prescribed medications. Professionals should also cultivate sensitivity to diversity.

References

- Ainsworth, M. D. S. (1991). Attachments and other affectional bonds across the life cycle. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 33–51). New York: Routledge.
- Alexander, J., Holtzworth-Monroe, A., & Jameson, P. (1994). The process and outcome of marital and family therapy research: Review and evaluation. In A. Bergin & S. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 595–630). New York, NY: Wiley.
- Anderson, C. M., & Holder, D. P. (1989). Women and serious mental disorders. In M. McGoldrick, C. M. Anderson, & F. Walsh (Eds.), *Women in families: A framework for family therapy* (pp. 381–405). New York: Norton.
- Baird, A. A., Gruber, S. A., Fein, D. A., Mass, L. C., Steingard, R. J., Renshaw, P. F., et al. (1999). Functional magnetic resonance imaging of facial affect recognition in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(2), 195–199.
- Barrett, P., Dadds, M., & Rapee, R. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64, 333–342.
- Bernal, M. E., Klinnert, M. D., & Schulz, L. A. (1980). Outcome evaluation of behavioral parent training and child-centered parent counseling for children with conduct problems. *Journal of Applied Behavior Analysis*, 13, 677–691.
- Bogenschneider, K. (1996). Family related prevention programs: An ecological risk/protective theory for building prevention programs, policies, and community capacity to support youth. *Family Relations*, 45, 127–138.
- Bogenschneider, K., & Gross, E. (2004). From ivory tower to state house: How youth theory can inform youth policymaking. Comments on S. Small & M. Memmo’s paper, Contemporary models of youth development and problem prevention: Toward an integration of terms, concepts, and models. *Family Relations*, 53, 21–26.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, research, and practice*, 16, 252–260.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 13–37). New York: Wiley.
- Borduin, C., Mann, B., Cone, L., Henggeler, S., Fucci, B., Blaske, D., et al. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569–578.

- Borduin, C., Schaeffer, C., & Ronis, S. (2003). Multisystemic treatment of serious antisocial behavior in adolescents. In C. Essau (Ed.), *Conduct and oppositional defiant disorders* (pp. 299–318). Mahwah, NJ: Lawrence Erlbaum.
- Bradley, M. M., & Lang, P. L. (2007). Emotion and motivation. In J. T. Cacioppo, L. G. Tassinary, & G. G. Berntson (Eds.), *Handbook of psychophysiology* (3rd ed., pp. 581–607). New York: Cambridge University Press.
- Brent, D., Kolko, D., Birmaher, B., Baugher, M., Bridge, J., Roth, C., et al. (1998). Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, *37*, 906–914.
- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1974). Sex-role stereotypes and clinical judgments. In J. M. Neale, G. C. Davison, & K. P. Price (Eds.), *Contemporary readings in psychopathology* (pp. 45–53). New York: Wiley.
- Byng-Hall, J. (1995). Creating a secure family base: Some implications of attachment theory for family therapy. *Family Process*, *34*, 45–58.
- Cantwell, D. (1995). Attention deficit disorder: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*, 978–987.
- Cassidy, J., & Shaver, P. R. (Eds.). (1999). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.
- Center for Population Options. (1992). *Lesbian, gay, and bisexual youth: At risk and underserved*. Washington, DC: Author.
- Charbonneau, D., & Nicol, A. (2002). Emotional intelligence and prosocial behaviors in adolescents. *Psychological Reports*, *90*, 361–370.
- Clarke, G., DeBar, L., & Lewinsohn, P. (2003). Cognitive-behavioral group treatment for adolescent depression. In A. Kazdin (Ed.), *Evidence-based psychotherapies for children and adolescents* (pp. 120–134). New York, NY: Guilford Press.
- Clarke, G., Rohde, P., Lewinsohn, P., Hops, H., & Seeley, J. (1999). Cognitive-behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. *Journal of the American Academy of Child and Adolescent Psychiatry*, *38*, 272–279.
- Comas-Díaz, L. (1996). Cultural considerations in diagnosis. In F. Kaslow (Ed.), *Handbook of relational diagnosis and dysfunctional family patterns* (pp. 152–168). New York: Wiley.
- Cottrell, D. (2003). Outcome studies of family therapy in child and adolescent depression. *Journal of Family Therapy*, *25*, 400–416.
- Cozolino, L. (2006). *The neuroscience of human relationships: Attachment and the developing brain*. New York: W.W. Norton.
- Curry, J. (2001). Specific psychotherapies for childhood and adolescent depression. *Biological Psychiatry*, *49*, 1091–1100.
- Curry, J., Wells, K., Lochman, J., Craighead, W., & Nagy, P. (2003). Cognitive-behavioral intervention for depressed, substance-abusing adolescents: Development and pilot testing. *Journal of the Academy of Child and Adolescent Psychiatry*, *42*, 656–665.
- Cusinato, M. (1998). Parenting styles and psychopathology. In L. L'Abate (Ed.), *Family psychopathology: The relational roots of dysfunctional behavior* (pp. 158–183). New York: Guilford Press.
- Dahl, R. E. (2004). Adolescent brain development: A period of vulnerabilities and opportunities. In R. E. Dahl & L. P. Spear (Eds.), *Adolescent brain development: Vulnerabilities and opportunities* (pp. 1–22). New York: The New York Academy of Sciences.
- Davidson, R. J. (2002). Anxiety and affective style: Role of prefrontal cortex and amygdala. *Biological Psychiatry*, *51*, 68–80.
- Davidson, R. J. (2003). Affective neuroscience and psychophysiology: Toward a synthesis. *Psychophysiology*, *40*, 655–665.
- Diamond, G., Reis, B., Diamond, G., Siqueland, L., & Isaacs, L. (2002). Attachment-based family therapy for depressed adolescents: A treatment development study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *41*, 1190–1196.
- Dilworth-Anderson, P., Burton, L. M., & Johnson, L. B. (1993). Reframing theories for understanding race, ethnicity, and families. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 627–649). New York: Plenum Press.
- Estrada, A. U., & Holmes, J. M. (1999). Couples perceptions of effective and ineffective ingredients of couple therapy. *Journal of Sex & Marital Therapy*, *25*, 151–162.
- Fairburn, C., Jones, R., Peveler, R., Hope, R., & O'Connor, M. (1993). Psychotherapy and bulimia nervosa: Longer-term effects of interpersonal psychotherapy, behavior therapy, and cognitive behavior therapy. *Archives of General Psychiatry*, *30*, 419–428.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2002). *What works for whom? A critical review of treatments for children and adolescents*. New York: Guilford Press.
- Garbarino, J. (1995). *Raising children in a socially toxic environment*. San Francisco, CA: Jossey-Bass.
- Giedd, J. N. (2008). The teen brain: Insights from neuroimaging. *Journal of Adolescent Health*, *42*, 335–343.
- Glenn, D. (2003). Nightmare scenarios. *The Chronicle of Higher Education*, *50*(9), A14.
- Gordon, D., Graves, K., & Arbuthnot, J. (1995). The effect of functional family therapy for delinquents on adult criminal behavior. *Criminal Justice and Behavior*, *22*, 60–73.
- Grundle, T. J. (2002). Wraparound care. In D. T. Marsh & M. A. Fristad (Eds.), *Handbook of serious emotional disturbance in children and adolescence* (pp. 323–333). New York: Wiley.
- Gurman, A. S. (2001). Brief therapy and family/couple therapy: An essential redundancy. *Clinical Psychology: Science and Practice*, *8*, 51–65.

- Hanson, W. E., Curry, K. T., & Bandalos, D. L. (2002). Reliability generalization of working alliance inventory scale scores. *Educational and Psychological Measurement*, 62, 659–673.
- Hanson, R. F., & Spratt, E. G. (2000). Reactive attachment disorder: What we know about the disorder and implications for treatment. *Child Maltreatment*, 5(2), 137–145.
- Harmon-Jones, E., & Beer, J. S. (2009). Introduction to social and personality neuroscience methods. In E. Harmon-Jones & J. S. Beer (Eds.), *Methods in social neuroscience* (pp. 1–9). New York: Guilford Press.
- Harmon-Jones, E., & Peterson, C. K. (2009). Electroencephalographic methods in social and personality psychology. In E. Harmon-Jones & J. S. Beer (Eds.), *Methods in social neuroscience* (pp. 170–197). New York: Guilford.
- Harmon-Jones, E., & Winkielman, P. (2007). A brief overview of social neuroscience. In E. Harmon-Jones & P. Winkielman (Eds.), *Social neuroscience: Integrating biological and psychological explanations of social behavior* (pp. 3–11). New York: Guilford.
- Harrington, R., Kerfoot, M., Dyer, E., McNiven, F., Gill, J., & Harrington, V. (1998). Randomized trial of a home-based family intervention for children who have deliberately poisoned themselves. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 512–518.
- Hart, K. J., & Morgan, J. R. (1993). Cognitive-behavioral procedures with children: Historical context and current status. In A. J. Finch, W. M. Nelson III, & E. S. Ott (Eds.), *Cognitive-behavioral procedures with children and adolescents* (pp. 1–24). Boston, MA: Allyn & Bacon.
- Henggler, S., & Sheidow, A. (2003). Conduct disorder and delinquency. *Journal of Marital and Family Therapy*, 29, 505–522.
- Horn, W., Ialongo, N., Pascoe, J., Greenber, G., Packard, T., Lopez, M., et al. (1991). Additive effects of psychostimulants, parent training, and self-control therapy with ADHD children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 30, 233–240.
- Horvath, A. O. (1994). Empirical validation of Bordin's pan theoretical model of the alliance: The working alliance inventory perspective. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 109–128). New York: Wiley.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38, 139–149.
- Kaminer, Y., Burleson, J., & Goldberger, R. (2002). Cognitive-behavioral coping skills and psychoeducation therapies for adolescent substance abuse. *Journal of Nervous and Mental Disease*, 190, 737–745.
- Kazdin, A., Esveldt-Dawson, K., French, N., & Unis, A. (1987). Effects of parent management training and problem-solving skills training combined in the treatment of antisocial child behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 416–424.
- Kendall, P. C. (1994). Treating anxiety disorder in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 62, 100–110.
- Kendall, P. S., Chansky, T. E., Kane, M. T., Kim, R., Kortlander, E., Ronan, K. R., et al. (1992). *Anxiety disorders in youth: Cognitive-behavioral interventions*. Needham Heights, MA: Allyn & Bacon.
- Kendall, P., Flannery-Schroeder, E., Panichelli-Mindel, S., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 65, 366–380.
- Knudson-Martin, C. (2001). Women and mental health: A feminist family systems approach. In M. M. MacFarlane (Ed.), *Family therapy and mental health: Innovations in theory and practice* (pp. 331–359). New York: Haworth.
- Larson, R. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55, 170–183.
- Latimer, W., Winters, K., D'Zurilla, T., & Nichols, M. (2003). Integrated family and cognitive-behavioral therapy for adolescent substance abusers: A stage I efficacy study. *Drug and Alcohol Dependence*, 71, 303–317.
- Liddle, H., Dakof, G., Parker, K., Diamond, G., Barrett, K., & Tejeda, M. (2001). Multidimensional family therapy for adolescent drug abuse: Results of a randomized clinical trial. *American Journal of Drug and Alcohol Abuse*, 27, 651–688.
- Lonigan, C., Elbert, J., & Johnson, S. (1998). Empirically supported psychosocial interventions for children: An overview. *Journal of Clinical Child Psychology*, 27, 138–145.
- McFall, R. M. (1991). Manifesto for a science of clinical psychology. *The Clinical Psychologist*, 44, 75–88.
- Mellin, E., & Beamish, P. (2002). Interpersonal therapy and adolescents with depression: Clinical update. *Journal of Mental Health Counseling*, 24, 110–125.
- Najavits, L. M., & Strupp, H. H. (1994). Differences in the effectiveness of psychodynamic therapists: A process-outcome study. *Psychotherapy*, 31, 114–123.
- Ollendick, T. (1995). Cognitive behavioral treatment of panic disorder with agoraphobia in adolescents: A multiple baseline design analysis. *Behavior Therapy*, 26, 517–531.
- Ollendick, T., & King, N. (1998). Empirically supported treatments for children with phobic and anxiety disorders: Current status. *Journal of Clinical Child Psychology*, 27, 156–167.
- Paniagua, F. A. (1998). *Assessing and treating culturally diverse clients* (2nd ed.). Thousand Oaks, CA: Sage.
- Pelham, W., Jr., Wheeler, T., & Chronis, A. (1998). Empirically supported psychosocial treatment for attention deficit hyperactivity disorder. *Journal of Clinical Child Psychology*, 27, 190–205.
- Petrosino, A., Turpin-Petrosino, C., & Finckenhauer, J. O. (2000). Well meaning programs can have harmful

- effects! Lessons from experiments of programs such as Scared Straight. *Crime & Delinquency*, 46, 354–379.
- Pinsof, W. M., & Wynne, L. C. (1995). The efficacy of marital and family therapy: An empirical overview, conclusions, and recommendations. *Journal of Marital and Family Therapy*, 21, 585–613.
- Reynolds, W., & Coats, K. (1986). A comparison of cognitive-behavioral therapy and relaxation training for the treatment of depression in adolescents. *Journal of Consulting and Clinical Psychology*, 54, 653–660.
- Ringeisen, H., & Hoagwood, K. (2002). Clinical research directions for the treatment and delivery of children's mental health services. In D. T. Marsh & M. A. Fristad (Eds.), *Handbook of serious emotional disturbance in children and adolescents* (pp. 33–55). New York, NY: Wiley.
- Robbins, M. S., Turner, C. W., Alexander, J. F., & Perez, G. A. (2003). Alliance and dropout in family therapy for adolescents with behavior problems: Individual and systemic effects. *Journal of Family Psychology*, 17(4), 534–544.
- Robin, A., Siegel, P., Moye, A., Gilroy, M., Dennis, A., & Sikand, A. (1999). A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1482–1489.
- Rogers, C. (1965). The therapeutic relationship: Recent theory and research. *Australian Journal of Psychology*, 17, 95–108.
- Roth, J. (2000, March). *What we know and what we need to know about youth development programs*. Paper presented at the biannual meeting of the Society for Research on Adolescence, Chicago, IL.
- Roth, J., & Brooks-Gunn, J. (2000). What do adolescents need for healthy development? Implications for youth policy. *Social Policy Report*, 14(1), 1–19.
- Santisteban, D., Coatsworth, J., Perez-Vidal, A., Kurtines, W., Schwartz, S., LaPerriere, A., et al. (2003). Efficacy of brief strategic family therapy in modifying Hispanic adolescent behaviors and substance abuse. *Journal of Family Psychology*, 17, 121–133.
- Savin-Williams, R. C. (1994). Verbal and physical abuse as stressors in the lives of lesbian, gay male, and bisexual youths: Associations with school problems, running away, substance abuse, prostitution, and suicide. *Journal of Consulting and Clinical Psychology*, 62(2), 261–269.
- Scales, P., Benson, P., Leffert, N., & Blyth, D. (2000). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science*, 4(1), 27–46.
- Small, S., & Memmo, M. (2004). Contemporary models of youth development and problem prevention: Toward an integration of terms, concepts, and models. *Family Relations*, 34, 3–11.
- Smith, B., Waschbusch, D., Willoughby, M., & Evans, S. (2000). The efficacy, safety, and practicality of treatments for adolescents with attention-deficit/hyperactivity disorder (ADHD). *Clinical Child and Family Psychology Review*, 3, 243–267.
- Snyder, K., Kymissis, P., & Kessler, K. (1999). Anger management for adolescents: Efficacy of brief group therapy. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1409–1416.
- Spaccarelli, S., Cotler, S., & Penman, D. (1992). Problem-solving skills training as a supplement to behavioral parent training. *Cognitive Therapy and Research*, 27, 171–186.
- Spear, L. (2010). *The behavioral neuroscience of adolescence*. New York: W.W. Norton.
- Stanton, M., & Shadish, W. (1997). Outcome, attrition, and family-couples treatment for drug abuse: A meta-analysis and review of the controlled, comparative studies. *Psychological Bulletin*, 122, 170–191.
- Stark, K., Reynolds, W., & Kaslow, N. (1987). A comparison of the relative efficacy of self-control therapy and a behavioral problem-solving therapy for depression in children. *Journal of Abnormal Child Psychology*, 15, 91–113.
- Thompson, R. A. (1999). Early attachment and later development. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 265–286). New York: Guilford Press.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes for Health, National Institute of Mental Health.
- Werner-Wilson, R. J. (2001). *Developmental-systemic family therapy with adolescents*. Binghamton, NY: Haworth Press.
- Werner-Wilson, R. J., & Davenport, B. R. (2003). Distinguishing between conceptualizations of attachment: Clinical implications in marriage and family therapy. *Contemporary Family Therapy*, 25, 179–193.
- Werner-Wilson, R. J., & Morrissey, K. M. (2005). Understanding treatment – principles and approaches. In G. R. Adams & T. P. Gullotta (Eds.), *Handbook of adolescent behavioral problems: Evidence-based approaches to prevention and treatment* (pp. 79–100). NY: Springer.