Star Trek: The Next Generation's Data

Introducing the Character

Lieutenant Commander Data is the android character on the television series *Star Trek: The Next Generation,* which aired on CBS for 178 episodes between 1987 and 1994. The television series also was made into several full-length motion pictures, including *Star Trek: Generations* (Carson, 1994), produced by Paramount Pictures. *Star Trek* was originally created by visionary Gene Roddenberry and ran for 78 episodes on television in the early 1960s. Although the original show (*Star Trek: TOS*—The Original Series) was short-lived, its legacy has endured to include numerous successful spinoff television series, movies, television cartoons, and books. In the original series, Leonard Nimoy played the half-human, half-Vulcan Mr. Spock, who was forever at odds due to his hybrid origins. In that tradition, in *The Next Generation* series, Lieutenant Commander Data functioned as a powerful vehicle for the discourse surrounding what it takes to be truly human. Lieutenant Commander Data is continually presented with challenges that lead him and his crewmates to question the meaning of "being real." In the following basic case summary and diagnostic impressions, we picture Data's depressed mood, the effects of a medical procedure on his memory, and his pressing concerns about identity and faith.

Basic Case Summary

Identifying Information. Data is an android who identifies himself as biracial with both machine and human ethnicities. He is the science officer aboard the U.S.S. *Enterprise* space vessel with the rank of lieutenant commander. He and his ship have been assigned to a mission exploring deep space for the past 5 years. Data's appearance features pale skin, golden eyes, and ship officer's uniform.

Presenting Concern. Data was referred to the ship's counselor, Deanna Troi, on the recommendation of Captain Jean-Luc Picard, who reported that "Data has been acting very sluggish lately and I've grown concerned about

his ability to function effectively at his post." The Captain reported that for about the past 2 or 3 weeks, Data appears to "feel empty" much of time; no longer seems very interested in intellectual jousting or visiting the holodeck for virtual recreation in his off hours; seems to move slowly about his everyday tasks; and has mentioned several times that he has mused about "just shutting off." In addition, the captain noted that Data has had large gaps in memory ever since a neural-network procedure was performed on him in the year 2324.

Background, Family Information, and Relevant History. Lieutenant Commander Data's origins were quite different from those of his crewmates as he was created rather than born. In telling his story, Data spoke with affection of Dr. Noonien Soong, a brilliant cybernetic evolutionist with a specialty in the creation of sentient androids. Data was created in the year 2314 A.D. on the planet Omicron Theta by Dr. Soong, who had been performing cutting-edge experiments with the "positronic neural-network"—which was a near perfect duplicate of the human brain and nervous system. Dr. Soong's achievement, the creation of Data along with his brother Lore, brought Dr. Soong much adulation but also raised concerns that, according to the Star Fleet panel of ethics, "He was trifling in the shadow of God."

According to health and mental health records, because Data was created, rather than born, he did not have a childhood in the conventional sense of the word. Available files show that during that early period, his favorite story, one read to him by Dr. Soong's wife Dr. Juliana Tanna, was *Pinocchio*. Data was particularly enamored with *Pinocchio* because, like the mythical wooden puppet, he too wanted to be real. Data recalled believing that "As long as I could store the entire compendium of human knowledge and observe humans in all facets of their existence, I too could become real." In the year 2336, Data was deactivated by Dr. Soong because he had broken into the laboratory to steal an "emotion chip," a complex, highly unstable microchip capable of processing complex human emotions. Disappointed in his "son," Dr. Soong stripped clean Data's neural network so that he would forget his act of defiance and shipped him anew to Star Fleet Academy to be reprogrammed as a science officer. Data appears to have lost all previously remembered knowledge regarding his earlier existence, previously learned information about the pursuit of the human experience, and learned material about his identity formation.

At Star Fleet, Data rose quickly through the ranks by virtue of his vast intellect, ability to translate any language, his fearlessness, and great strength. He won the admiration and respect of his fellow cadets and became fast friends with Geordi La Forge, who would later be assigned with him to his first commission aboard the U.S.S. *Enterprise*, Star Fleet's flagship. Data enjoyed the camaraderie aboard the *Enterprise*, embraced each opportunity to visit new planets and new people in hopes that he could somehow learn what it meant to be truly alive. Although all traces of the earlier theft and reprogramming were taken from Data's memory, he had "neural flashbacks" and dislocated fragments of memories of the story of Pinocchio. During such moments, Lieutenant Commander Data sought out the company of his friend, La Forge, and the two would have long conversations about the differences between man and machine. He often asked his friend if he thought that "I would ever be real?"

On the 15th anniversary of Data's successful reprogramming, Captain Picard received an order from Star Fleet to return his science officer for reprogramming and redeployment on a deep space science lab. In a bold act of defiance, Captain Picard argued that Data was not real and, instead a machine, the property of the U.S.S. *Enterprise*. This came as a surprise to Data who always considered the captain to be his friend; however, Data had failed to realize that the captain's efforts to dehumanize him were really designed to keep him aboard the *Enterprise*. In a court trial aboard the ship's holodeck, a virtual platform, Data's Star Fleet attorney argued that by virtue of having earned the Star Fleet Command Decoration for Gallantry, a Medal of Honor with Clusters, the Legend of Honor, and the Star of Cross, as well as by virtue of befriending the crew of the *Enterprise*, he was as much human as anyone else. Data lost the battle, but won the war, and he was declared human by the virtual tribunal and given his choice of where to serve. He chose to remain aboard the *Enterprise* as a member of its crew. Although Data initially thought that this was the best decision, he was not convinced by the tribunal's ruling that he was indeed human and began to experience difficulty carrying out his daily functions without feeling what crewmate Geordi La Forge later noted to be "sadness." Unfamiliar with this strange emotional experience, Data welcomed the visit with Counselor Troi.

Problem and Counseling History to Date. Data punctually presented himself to Counselor Troi. On arrival at the interview, Data did appear to be moving and thinking sluggishly; he agreed that lately he has been ruminating about shutting off but has resisted his temptation to act on these self-harming ideations. He expressed concern that "I've felt similarly slow before, but never like this, and it has been going on for almost 3 human weeks now." He expressed concern that his diminished ability to concentrate, think, and act decisively might harm his effectiveness in his assigned post. Further, because his energy levels seemed low, he was worried that La Forge and other crewmates would abandon him since he "just cannot drag myself to the holodeck or the recreation chamber to relax with them." Data said that if he knew what the experience of human crying was like, he might engage in it forthwith. On the topic of memory, Data candidly admitted that the neural procedure performed on him left him with the inability to recall previously available information. He believed this was "greatly interfering with my self-advancement and very worrisome." He added that he also was using excessive neural energy trying to "solve some important questions about who I am and what I believe about God and the universe." He expressed a desire to talk about these two issues in counseling but said, "I don't know if I have the energy or inner resources."

Goals for Counseling and Course of Therapy to Date. After consulting with Captain Picard, Counselor Troi determined that Lieutenant Commander Data was not malfunctioning in any mechanical way but was simply "acting outside of the parameters of his programming." Upon further consultation with the ship's memory banks and a virtual conversation with Dr. Soong, it was decided that rather than once again neutralizing and reprogramming Data, an attempt would be made to provide him with a course of traditional counseling, as would be done with any other (human) member of the crew. The primary goal is to resolve mood-related symptoms in order to assist Data in returning to his previous level of effective functioning. Secondary goals are to assist Data to better adapt to his loss of memory and, ideally, resolve his identity- and faith-based questions.

Diagnostic Impressions

296.22 (F32.1) Major Depressive Disorder, Single Episode, Moderate; Neural

Network Trauma; 331.83 (G31.84) Mild Neurocognitive Disorder Due to Neural Network Trauma.

Other factors: V62.4 (Z60.3) Acculturation Difficulty; V62.89 (Z65.8) Religious or Spiritual Problem.

Discussion of Diagnostic Impressions

Lieutenant Commander Data was referred to the ship's counselor by his captain, who was worried about several domains of Data's functioning. The captain was concerned that Data was experiencing difficulties found in each of these areas: mood; neurocognitive functioning; and problems with identity and spirituality.

Each section of the *DSM-5* classification system contains a group of diagnoses that share qualitatively similar symptoms or features. For instance, the Depressive Disorders section contains all of the diagnosable disorders that feature "the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function" (APA, 2013, p. 155); and the Neurocognitive Disorders section contains a variety of mental disorders all featuring significant deficits in cognitive functioning. The ship's counselor explored concerns in each of these areas.

First, the counselor explored Data's depressive symptoms. Data reported diminished interest in his usual activities and loss of pleasure from formerly enjoyable recreational and other interests. He described feeling "empty" and having thoughts about "shutting off." In the interview he appeared fatigued and sluggish, and he admitted having difficulty concentrating and thinking effectively. He has experienced these symptoms for more than 2 weeks, and they are interfering with his ability to function at his post and elsewhere. Data's presentation meets the criteria of a major depressive episode.

Lieutenant Commander Data has experienced no Manic or Hypomanic Episodes; and therefore, the diagnosis is Major Depressive Disorder. The current episode is the first that he has experienced. In turn, the course is specified as Single Episode. Finally, his current episode is described: He is experiencing distress along with more than minor impairment in occupational functioning. Conversely, his symptoms are not substantially

beyond those needed for the diagnosis and are not causing severe problems with work or social functioning. Therefore, the severity specifier, Moderate, is the best fit.

One differential consideration might be Adjustment Disorder With Depressed Mood. Adjustment Disorders With Depressed Mood are negative affective reactions to life stressors in the absence of another diagnosable mental health disorder. In this case, Data's symptoms conform to the specific criteria for a Major Depressive Disorder, which go beyond the general criteria set for Adjustment Disorder.

Next, the counselor explored Data's memory loss. He described memory impairment whereby he was unable to recall information that he previously knew and could recall (including previously remembered knowledge about his earlier existence, the pursuit of the human experience, and his identity formation). This memory impairment was the direct result of a medical procedure causing trauma to his neural network (a human client might have experienced head trauma with associated brain damage). Data reports clinically significant distress associated with his loss of memory. This kind of amnesia indicates a diagnosis of Neurocognitive Disorder Due to Another Medical Condition. The specific medical condition is listed so that the specific diagnosis is Mild Neurocognitive Disorder Due to Neural Network Trauma.

There are various differential diagnoses when considering a disorder centering on memory loss. Delirium and neurocognitive disorder due to various medical etiologies, substance use, or other causes may involve memory impairment combined with impaired consciousness (delirium) or multiple cognitive deficits (neurocognitive disorder). Likewise, disruptions in thinking can occur with a Major Depressive Disorder or an Anxiety Disorder. However, Data's symptoms are characterized only by memory loss without any other cognitive disturbances or deficits, and a specific medical etiology has been identified.

Finally, the counselor explored the questions about identity, possibly related to spiritual dilemmas over which Data was concerned. These client concerns were not diagnosable mental disorders according to the *DSM* classification system; instead, they are client problems or issues that are a focus of treatment. We decided to list Religious or Spiritual Problem. Spiritual and religious identity questions can overlap with other aspects of mental health (Elkins, 1995) and may warrant evaluation during clinical assessment with some clients (Griffith

& Griggs, 2001). Although Data's identity and spiritual concerns were associated with his diagnosable depressive mood and memory loss, we believed they were of enough clinical importance, and might warrant sufficient clinical attention during counseling, to merit inclusion with his primary mental health diagnoses.

To complete the diagnosis, Data's Neural Network Trauma is listed alongside his primary diagnoses, and his relevant psychosocial stressors are emphasized in the "Other factors" section. The information presented here is consistent with the primary diagnoses describing Lieutenant Commander Data's reasons for referral.

Case Conceptualization

When Lieutenant Commander Data reported to the ship's counselor, she conducted a detailed intake interview, collecting as much information as possible about the symptoms and situations leading to Data's arrival at counseling. Based on the intake, the ship's counselor developed diagnostic impressions, describing Data's presenting concerns a single episode of Major Depressive Disorder, Neurocognitive Disorder, and identity issues related to spiritual problems. Next, a case conceptualization was developed. Whereas the purpose of diagnostic impressions is to *describe* the client's concerns, the goal of case conceptualization is to better *understand* and clinically *explain* the person's experiences (Neukrug & Schwitzer, 2006). It helps the counselor understand the etiology leading to Data's depressive and neurocognitive disorders and other counseling interests and the factors maintaining these concerns. In turn, case conceptualization sets the stage for treatment planning. Treatment planning then provides a road map that plots out how the counselor and client expect to move from presenting concerns to positive outcomes (Seligman, 1993, p. 157)—helping Lieutenant Commander Data improve his low mood and related symptoms, resolve his questions identity related to spirituality, and better manage the effects of the memory loss he developed as a result of a medical procedure.

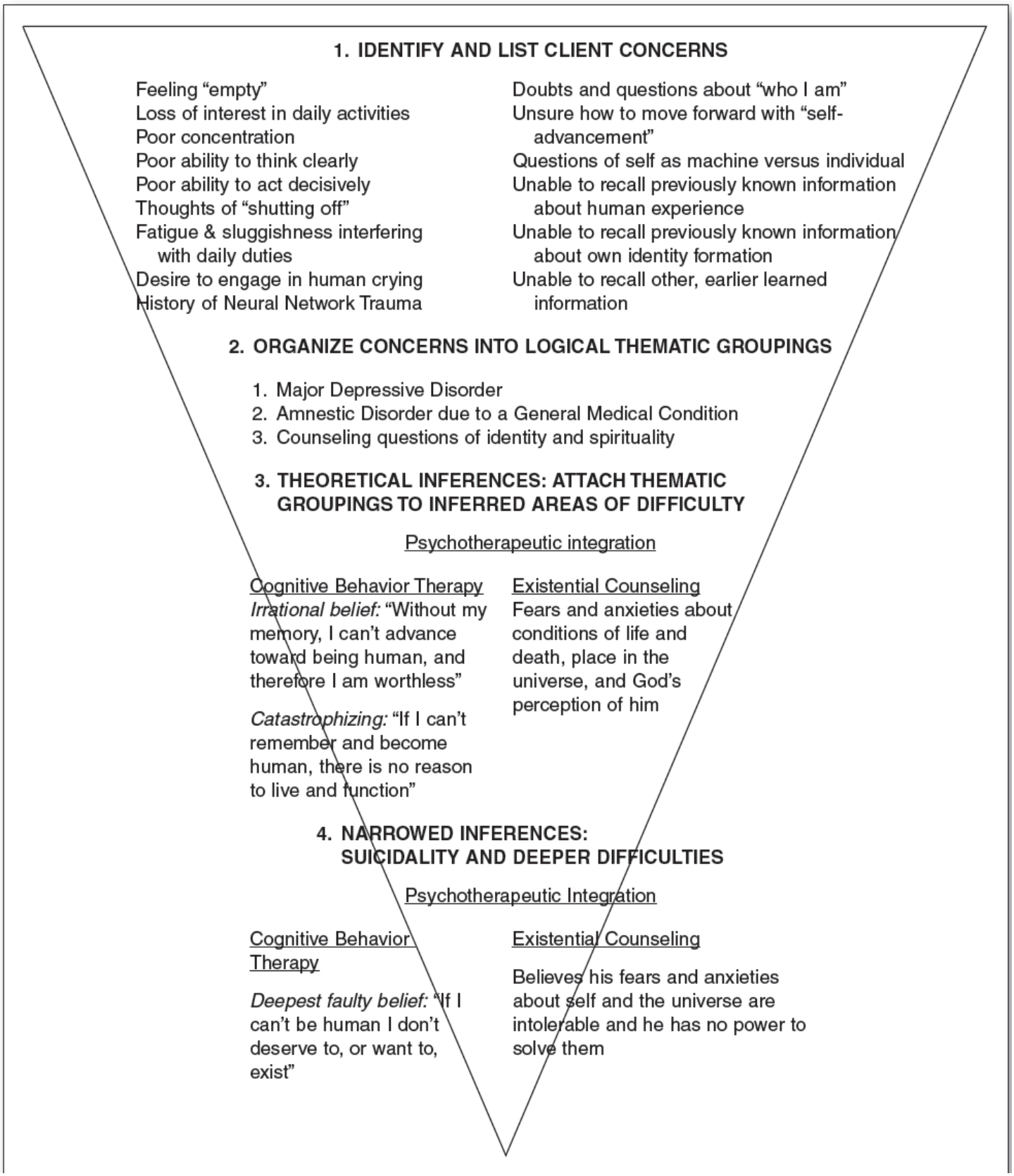
When forming a case conceptualization, the clinician applies a purist counseling theory, an integration of two or more theories, an eclectic mix of theories, or a solution-focused combination of tactics to his or her understanding of the client. In this case, the ship's counselor based her conceptualization on psychotherapeutic integration of two theories (Corey, 2009). Psychotherapists very commonly integrate more than one theoretical approach in order to form a conceptualization and treatment plan that will be as efficient and effective as

possible for meeting the client's needs (Dattilo & Norcross, 2006; Norcross & Beutler, 2008). In other words, counselors using the psychotherapeutic integration method attempt to flexibly tailor their clinical efforts to "the unique needs and contexts of the individual client" (Norcross & Beutler, 2008, p. 485). Like other counselors using integration, Data's counselor chose this method because she had not found one individual theory that was comprehensive enough, by itself, to address all of the "complexities," "range of client types," and "specific problems" seen among her everyday caseload (Corey, 2009, p. 450).

Specifically, the ship's counselor selected an integration of (a) Cognitive Behavior Therapy and (b) Existential Counseling. She selected this approach based on Lieutenant Commander Data's presentation of depressive mood concerns along with unresolved issues pertaining to identity and spirituality and her knowledge of current outcome research with clients experiencing these types of concerns (Critchfield & Smith-Benjamin, 2006; Fotchmann & Gelenberg, 2005; Hollon, Thase, & Markowitz, 2002; Livesley, 2007; Russell, 2007; Westen & Morrison, 2001). According to the research, Cognitive Behavior Therapy is one treatment approach indicated when assisting clients with depressive disorders (Fotchmann & Gelenberg, 2005; Hollon et al., 2002; Westen & Morrison, 2001), whereas an integrated approach emphasizing existential counseling is one treatment of choice for addressing questions of identity, search for meaning, and anxieties about the conditions of living and death (Russell, 2007; Van Deurzen, 1991; Yalom, 1980, 2003). Data's counselor is comfortable theoretically integrating these approaches.

The counselor used the Inverted Pyramid Method of case conceptualization because this method is especially designed to help clinicians more easily form their conceptual pictures of their clients' needs (Neukrug & Schwitzer, 2006; Schwitzer, 1996, 1997). The method has four steps: Problem Identification, Thematic Groupings, Theoretical Inferences, and Narrowed Inferences. The counselor's clinical thinking can be seen in the figure that follows.

Lieutenant Commander Data's Inverted Pyramid Case Conceptualization: Psychotherapeutic Integration of Cognitive Behavior Therapy and Existential Counseling



Step 1: Problem Identification. The first step is Problem Identification. Aspects of the presenting problem (thoughts, feelings, behaviors, physiological features), additional areas of concern besides the presenting concern, family and developmental history, in-session observations, clinical inquiries (medical problems, medications, past counseling, substance use, suicidality), and psychological assessments (problem checklists, personality inventories, mental status exam, specific clinical measures) all may contribute information at Step 1. The counselor "casts a wide net" in order to build step 1 as exhaustively as possible (Neukrug & Schwitzer, 2006, p. 202). As can be seen in the figure, the ship's counselor identified Lieutenant Commander Data's primary concerns (major depression and related behavioral and cognitive symptoms); secondary concerns (pertaining to memory losses due to a medical procedure); and additional counseling issues (identity and spiritual questions). She attempted to go beyond just the depressive observations that led to his referral, in order to be descriptive as she could.

Step 2: Thematic Groupings. The second step is Thematic Groupings. The clinician organizes all of the exhaustive client information found in Step 1 into just a few intuitive-logical clinical groups, categories, or themes, on the basis of sensible common denominators (Neukrug & Schwitzer, 2006). Four different ways of forming the Step 2 theme groups can be used: Descriptive-Diagnosis Approach, Clinical Targets Approach, Areas of Dysfunction Approach, and Intrapsychic Approach. As can be seen in Figure 10.4, Lieutenant Commander Data's counselor selected the Descriptive-Diagnosis Approach. This approach sorts together all of the various Step 1 information about the client's adjustment, development, distress, or dysfunction "to show larger clinical problems as reflected through a diagnosis" (Neukrug & Schwitzer, 2006, p. 205).

The ship's counselor grouped together all of Data's various affective, cognitive, behavioral, and physiological symptoms of a single depressive disorder into the overarching descriptive-diagnostic theme, Major Depressive Disorder. Similarly, she grouped Data's memory symptoms into a single theme pertaining to Neurocognitive Disorder Due to Another Medical Condition. Finally, she grouped together Data's persistent issues of self into the theme "Counseling Questions of Identity and Spirituality." The counselor's conceptual

work at Step 2 gave her a way to think about Lieutenant Commander Data's functioning and concerns more insightfully.

Step 3: Theoretical Inferences. At Step 3, concepts from the counselor's theoretical integration of two approaches—Cognitive Behavior Therapy and Existential Counseling—are applied to explain the experiences causing, and the mechanisms maintaining, Lieutenant Commander Data's problematic thoughts, feelings, and behaviors. The counselor tentatively matches the theme groups in Step 2 with this theoretical approach. In other words, the symptom constellations in Step 2, which were distilled from the symptoms in Step 1, now are combined using theory to show what are believed to be the underlying causes or psychological etiology of Data's current needs (Neukrug & Schwitzer, 2006; Schwitzer, 2006, 2007).

First, Cognitive Behavior Therapy was applied primarily to Data's depressive needs. According to Cognitive Behavior Therapy (Beck, 1995, 2005; Ellis, 1994; Ellis & MacLaren, 2005), irrational thinking, faulty beliefs, or other forms of cognitive errors lead individuals to engage in problematic behaviors and to experience negative moods and attitudes. As can be seen in Figure 10.4, when the counselor applied these Cognitive Behavior Therapy concepts, she explained at Step 3 that the various depressive symptoms noted in Step 1 (feeling empty, poor thinking and actions, etc.), which can be understood in Step 2 to be a theme of a major depressive disorder, are rooted in or caused by: (a) the irrational belief that "Without my memory, I can't advance toward being human, and therefore I am worthless" and (b) catastrophizing in the form of the belief that "If I can't remember and become human, there is no reason to live and function."

Second, Existential Counseling was applied primarily to Data's counseling questions of self, identity, spirituality, and meaning. According to the theory, Existential Counseling is appropriate for clients addressing problems about living, dealing with feelings of alienation, and experiencing developmental crisis pertaining to death and meaning (Van Deurzen, 2002). The approach assists such clients to confront their questions of self; widen their perspectives of themselves, the universe, and their roles; and clarify what provides their current and future life with meaning (Van Deurzen, 2002). Existential counselors conceptualize client needs from the viewpoint of increasing clients' self-determination (Van Deurzen, 2002; Vontress, Johnson, & Epp, 1999). As

also can be seen in the figure, when the ship's counselor applied these existential counseling concepts, she additionally explained at Step 3 that the various Step 1 issues (doubts and questions about "who I am," etc.), which can be understood in Step 2 to be a theme of counseling questions of identity and spirituality, are rooted in or caused by Data's fears and anxieties about conditions of life and death, place in the universe, and God's perceptions of him.

Step 4: Narrowed Inferences. At Step 4, the clinician's selected theory continues to be used to address still-deeper issues when they exist (Schwitzer, 2006, 2007). At this step, "still-deeper, more encompassing, or more central, causal themes" are formed (Neukrug & Schwitzer, 2006, p. 207). Lieutenant Commander Data's counselor continued to use a psychotherapeutic integration of two approaches.

First, continuing to apply Cognitive Behavior Therapy concepts at Step 4, Data's counselor presented a single, deepest, most-fundamental faulty belief that she believed to be most explanatory and causal regarding Data's primary reasons for referral: the deepest irrational self-statement that "if I can't be human I don't deserve to, or want to, exist." Second, continuing to apply Existential Counseling, the ship's counselor presented a single, most deeply rooted explanation, as follows. Data believes his fears and anxieties about self and the universe are intolerable and he has no power to solve them. This deepest theme is consistent with Existential Counseling, which aims to assist clients to become more present in their self-exploration, support clients in confronting their existential anxieties, and facilitate clients' redefining of self (Bugental, 1990). These two narrowed inferences, together, form the basis for understanding the etiology and maintenance of Lieutenant Commander Data's difficulties.

When all four steps are completed, the client information in Step 1 leads to logical-intuitive groupings on the basis of common denominators in Step 2, the groupings then are explained using theory at Step 3, and then, finally, at Step 4, further deeper explanations are made. From start to finish, the thoughts, feelings, behaviors, and physiological features in the topmost portions are connected on down the pyramid into deepest dynamics.

Treatment Planning

At this point, Data's clinician at the U.S.S. *Enterprise*'s Counseling Bay has collected all available information about the problems that have been of concern to him and his captain. Based upon this information, the counselor developed a *DSM-5* diagnosis and then, using the "inverted pyramid" (Neukrug & Schwitzer, 2006; Schwitzer, 1996, 1997), formulated a working clinical *explanation* of Data's difficulties and their etiology that we called the *case conceptualization*. This, in turn, guides us to the next critical step in our clinical work, called the *treatment plan*, the primary purpose of which is to map out a logical and goal-oriented strategy for making positive changes in the client's life. In essence, the treatment plan is a road map "for reducing or eliminating disruptive symptoms that are impeding the client's ability to reach positive mental health outcomes" (Neukrug & Schwitzer, 2006, p. 225). As such, it is the cornerstone of our work with not only Data, but with all clients who present with disturbing and disruptive symptoms and/or personality patterns (Jongsma & Peterson, 2006; Jongsma et al., 2003a, 2003b; Seligman, 1993, 1998, 2004).

A comprehensive treatment plan must integrate all of the information from the biopsychosocial interview, diagnosis, and case conceptualization into a coherent plan of action. This *plan* comprises four main components, which include (1) a behavioral definition of the problem(s), (2) the selection of achievable goals, (3) the determination of treatment modes, and (4) the documentation of how change will be measured. The *behavioral definition of the problem(s)* consolidates the results of the case conceptualization into a concise hierarchical list of problems and concerns that will be the focus of treatment. The *selection of achievable goals* refers to assessing and prioritizing the client's concerns into a *hierarchy of urgency* that also takes into account the client's motivation for change, level of dysfunction, and real-world influences on his or her problems. The *determination of treatment modes* refers to selection of the specific interventions, which are matched to the uniqueness of the client and to his or her goals and clearly tied to a particular theoretical orientation (Neukrug & Schwitzer, 2006). Finally, the clinician must establish how change will be measured, based upon a number of factors including client records and self-report of change, in-session observations by the clinician, clinician

ratings, results of standardized evaluations such as the Beck Anxiety Inventory (Beck & Steer, 1990) or a family functioning questionnaire, pre-post treatment comparisons, and reports by other treating professionals.

The four-step method discussed above can be seen in the text and is outlined below for the case of Data, followed by his specific treatment plan.

Step 1: Behavioral Definition of Problems. The first step in treatment planning is to carefully review the case conceptualization, paying particular attention to the results of Step 2 (Thematic Groupings), Step 3 (Theoretical Inferences), and Step 4 (Narrowed Inferences). The identified clinical themes reflect the core areas of concern and distress for the client, while the theoretical and narrowed inferences offer clinical speculation as to their origins. In the case of Data, there are three primary areas of concern. The first, "major depressive disorder," refers to his feelings of emptiness, fatigue, and sluggishness; loss of interest in daily activities; poor concentration; inability to think clearly and act decisively; and desire to engage in human crying. The second, "neurocognitive disorder due to another medical condition," refers to his inability to recall previously known information about human experience, his own identity formation, and earlier learned information. The third, "counseling questions of identity and spirituality," refers to his doubts and questions about who he is, what he believes about God and the universe and about himself as machine as opposed to being real. These symptoms and stresses are consistent with the diagnosis of Major Depressive Disorder, Single Episode, Moderate; Neurocognitive Disorder Due to Neural Network Trauma; Religious or Spiritual Problem (Andrews, Slade, Sunderland, & Anderson, 2007; APA, 2013, 2000b; Erikson, 1950; Hollon et al., 2002; Livesley, 2007; Tsai, 2008; Yudofsky & Hales, 2007).

Step 2: Identify and Articulate Goals for Change. The second step is the selection of achievable goals, which is based upon a number of factors, including the most pressing or urgent behavioral, emotional, and interpersonal concerns and symptoms as identified by the client and clinician, the willingness and ability of the client to work on those particular goals, and the realistic (real-world) achievability of those goals (Neukrug & Schwitzer, 2006). At this stage of treatment planning, it is important to recognize that not all of the client's problems can be addressed at once, so we focus initially on those that cause the greatest distress and impairment. New goals

can be created as old ones are achieved. In the case of Data, the goals are divided into three prominent areas. The first, "major depressive disorder," requires that we help Data to understand the basis for his depression, identify its triggers, replace negative with positive self-talk, use behavioral strategies to overcome depression, learn and implement problem-solving strategies to avoid depressive outcome, learn and implement relapse prevention strategies, and develop positive, life-affirming activities and a supportive social network. The second, "Neurocognitive Disorder Due to Another Medical Condition," requires that we help Data complete neuropsychiatric and neuropsychological evaluations, understand the dysfunctional neural network basis of his memory problems, develop alternate cognitive strategies to compensate for his memory impairment, explore feelings related to his impairment, and identify and refute irrational thinking that contributes to his guilt and shame over cognitive inefficiency. The third, "counseling questions about identity and spirituality," requires that we help Data clarify his spiritual concepts by describing elements of his spiritual quest, explore his concept of and relationship with a higher power, and resolve issues that prevent faith or belief from developing and growing; and with regard to identity, explore and resolve anxieties that flow from realization of aloneness, meaninglessness, and inevitable nonbeing, identify maladaptive coping mechanisms such as losing control, avoiding autonomy and playing the victim, take responsibility for his life so that he may live authentically, and develop a will to meaning.

Step 3: Describe Therapeutic Intervention. This is perhaps the most critical step in the treatment-planning process because the clinician must now integrate information from a number of sources, including the case conceptualization, the delineation of the client's problems and goals, and the treatment literature, paying particular attention to *empirically supported treatment* (EST) and *evidence-based practice* (EBP). In essence, the clinician must align his or her treatment approach with scientific evidence from the fields of counseling and psychotherapy. Wampold (2001) identifies two types of evidence-based counseling research: studies that demonstrate "absolute efficacy," that is, the fact that counseling and psychotherapy work, and those that demonstrate "relative efficacy," that is, the fact that certain theoretical/technical approaches work best for certain clients with particular problems (Psychoanalysis, Gestalt Therapy, Cognitive Behavior Therapy, Brief

Solution-Focused Therapy, Cognitive Therapy, Dialectical Behavior Therapy, Person-Centered Therapy, Expressive/Creative Therapies, Interpersonal Therapy, and Feminist Therapy); and when delivered through specific treatment modalities (individual, group, and family counseling).

In the case of Data, we have decided to use a two-pronged integrated approach to therapy. This is comprised first of Cognitive Behavior Therapy (CBT) (Beck, 1995, 2005; Ellis, 1994; Ellis & MacLaren, 2005), which has been found to be highly effective in counseling and psychotherapy with adults who experience the symptoms of Major Depressive Disorder (Fochtmann & Gelenberg, 2005; Hollon et al., 2002; Westen & Morrison, 2001). CBT relies on a variety of cognitive techniques (reframing, challenging irrational thoughts, and cognitive restructuring) and behavioral techniques (reinforcement for and shaping of adaptive behavior, extinction of maladaptive behaviors, systematic desensitization, exposure with response). Specific techniques for Data include helping him express painful feelings and irrational thoughts regarding cognitive deficiencies related to his medical condition as well as to what it means to be truly human, identify triggers for depressive thoughts, feelings, and behaviors, replace negative with positive self-talk, use behavioral strategies to overcome depression including reinforcement for achievements and completed tasks, bibliotherapy and psychopharmacology, and assist him in developing and engaging in a regular schedule of vocational, relational, and avocational activities.

Existential Therapy (Bugental, 1990; Van Deurzen, 1991, 2002; Yalom, 1980, 2003) is predicated on the belief that "people are born into a world which likely has no inherent meaning or purpose" (Neukrug, 2011, p. 151) and that they struggle to find meaning by overcoming internal and external obstacles to feelings of authenticity or being fully alive. While we attempt to defend against inevitable feelings of loneliness, meaninglessness, and despair with maladaptive responses such as neurotic guilt and anxiety, it is tireless self-exploration and the relationship with a highly empathetic, existentially knowledgeable and directive therapist that can help clients move to a position of choice and the "will to meaning" (Frankl, 1968). It is only from this most advanced evolved place that clients can construct and live a lifestyle free of internal impediments to happiness and fulfillment. Existential Therapy has been found to be effective for clients struggling with

depression and medical issues as well as with deep and painful questions about religion, identity, and meaning (Goldenberg, Kosloff, & Greenberg, 2006; Keshen, 2006). Specific techniques for Data that are drawn from this approach include educating him in the philosophy of existentialism and Existential Therapy; using listening, empathy, and dialectical inquiry to explore his existential issues and defenses; using acceptance, confrontation, encouragement, and paradoxical intention to provoke deeper examination; and both dereflecting and refocusing him on possibilities rather than limitations.

Step 4: Provide Outcome Measures of Change. This last step in treatment planning requires that we specify how change will be measured and indicate the extent to which progress has been made toward realizing these goals (Neukrug & Schwitzer, 2006). The counselor has considerable flexibility in this phase and may choose from a number of objective domains (psychological tests and measures of self-esteem, depression, psychosis, interpersonal relationship, anxiety, etc.), quasi-objective measures (pre-post clinician, client, and psychiatric ratings), and subjective ratings (client self-report, clinician's in-session observations). In Data's case, we have implemented a number of these, including pre-post measures on the Beck Depression Inventory, clinician-observed and client-reported use of positive self-talk, client-reported increased self-reliance and reduced dependency, resolution of grief, and compliance with psychopharmacological treatment

The completed treatment plan is now developed through which the counselor and Data will begin their shared work of reducing his depression and dependency and building a healthy self-image and relationship style. Lieutenant Commander Data's treatment plan appears below, and a summary can be found in the table that follows.

TREATMENT PLAN

Client: Lieutenant Commander Data

Service Provider: U.S.S. *Enterprise* NCC-1701-D Counseling Bay

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BEHAVIORAL DEFINITION OF PROBLEMS:

1. Major depressive disorder—Feelings of emptiness, fatigue, and sluggishness, loss of interest in daily activities, poor concentration,

inability to think clearly and act decisively, and desire to engage in human crying.

2. Neurocognitive Disorder Due to Another Medical Condition. Inability to recall previously known information about human experience, his own identity formation, and earlier learned information
3. Counseling questions of identity and spirituality—Doubts and questions about who he is and what he believes about God and the universe and about himself as machine as opposed to being real

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GOALS FOR CHANGE:

1. Major Depressive Disorder

- Express painful feelings related to early life experiences that reinforce and maintain depression
- Identify triggers for depressive thoughts, feelings, and behaviors
- Replace negative with positive self-talk
- Use behavioral strategies to overcome depression
- Bibliotherapy for depression
- Psychopharmacology for depression
- Develop and engage in regular schedule of fulfilling vocational, interpersonal, and avocational activities

2. Neurocognitive Disorder Due to Another Medical Condition

- Complete neuropsychiatric and neuropsychological evaluations
- Understand the dysfunctional neural network basis of his memory problems
- Develop alternate cognitive strategies to compensate for his memory impairment
- Explore feelings related to his impairment
- Identify and refute irrational thinking that contributes to his guilt and shame over cognitive inefficiency
- Explore thoughts and feelings about possible neurosurgery

3. Counseling questions of identity and spirituality

- Clarify his spiritual concepts by describing elements of his spiritual quest

- Explore his concept of and relationship with a higher power
- Resolve issues that prevent faith or belief from developing and growing
- Explore and resolve anxieties that flow from realization of aloneness, meaninglessness, and inevitable nonbeing
- Identify maladaptive coping mechanisms such as losing control, avoiding autonomy, and playing the victim
- Acknowledge responsibility for his life and pursue authenticity
- Develop a will to meaning

THERAPEUTIC INTERVENTIONS:

A short- to moderate-term course of individual cognitive behavioral and existential counseling, supplemented with group support (6–9 months)

1. Major Depressive Disorder
    - Express painful feelings and irrational thoughts regarding cognitive deficiencies related to his medical condition as well as to what it means to be truly human
    - Identify triggers for depressive thoughts, feelings, and behaviors
    - Replace negative with positive self-talk
    - Use behavioral strategies to overcome depression, including reinforcement for achievements and completed tasks and mentoring new Star Fleet cadets
    - Developing and engaging in a regular schedule of vocational, relational, and avocational activities
    - Bibliotherapy and psychopharmacology
2. Neurocognitive Disorder Due to Another Medical Condition
    - Group support for cognitive impairment
    - Individual and group neurocognitive re-education
3. Counseling questions of identity and spirituality
    - Education in the philosophy of existentialism and Existential Therapy
    - Using listening, empathy, and dialectical inquiry to explore his

existential issues and defenses

- Using acceptance, confrontation, encouragement, and paradoxical intention to provoke deeper examination
- Reflecting and refocusing on possibilities rather than limitations

OUTCOME MEASURES OF CHANGE:

The elimination of depressive thoughts and feelings related to the medical problem, development of an existential awareness of self and will to meaning, and clarification of spirituality and identity issues as measured by:

- Pre-post measures on the Beck Depression Inventory
- Client self-reported increased in acceptance of medical condition and development of compensatory skill set
- Client-reported understanding and application of principles of Existential Therapy
- Clinician-observed and client-reported spiritual awareness and acceptance
- Client-reported overall life and self-satisfaction
- Optimal job performance

Lieutenant Commander Data Treatment Plan Summary: Psychotherapeutic Integration of Cognitive Behavior Therapy and Existential Counseling

Goals for Change	*Therapeutic Interventions*	*Outcome Measures of Change*

Major Depressive Disorder Express painful feelings related to early life experiences that reinforce and maintain depression Identify triggers for depressive thoughts, feelings, and behaviors Replace negative with positive self-talk Use behavioral strategies to overcome depression Bibliotherapy for depression Psychopharmacology for depression Develop and engage in regular schedule of fulfilling vocational, interpersonal, and avocational activities *Neurocognitive Disorder Due to Another Medical Condition* Complete neuropsychiatric and neuropsychological evaluations Understand the dysfunctional neural network basis of his memory problems Develop alternate cognitive strategies to compensate for his memory impairment Explore feelings related to his impairment Identify and refute irrational thinking that contributes to his guilt and shame over cognitive inefficiency Explore thoughts and feelings about possible neurosurgery *Counseling questions of identity and spirituality* Clarify his spiritual concepts by describing elements of his spiritual quest	**Major Depressive Disorder** Express painful feelings and irrational thoughts regarding cognitive deficiencies related to his medical condition as well as to what it means to be truly human Identify triggers for depressive thoughts, feelings, and behaviors Replace negative with positive self-talk Use behavioral strategies to overcome depression, including reinforcement for achievements and completed tasks and mentoring new Star Fleet cadets Developing and engaging in a regular schedule of vocational, relational, and avocational activities Bibliotherapy and psychopharmacology *Neurocognitive Disorder Due to Another Medical Condition* Group support for cognitive impairment Individual and group neurocognitive reeducation *Counseling questions of identity and spirituality* Education in the philosophy of existentialism and Existential Therapy Using listening, empathy, and dialectical inquiry to explore his existential issues and defenses Using acceptance, confrontation, encouragement, and paradoxical intention to provoke deeper examination Reflecting and refocusing on possibilities rather than limitations	**The elimination of depressive thoughts and feelings related to the medical problem, development of an existential awareness of self and will to meaning, and clarification of spirituality and identity issues as measured by:** Pre-post measures on the Beck Depression Inventory Client self-reported increase in acceptance of medical condition and development of compensatory skill set Client-reported understanding and application of principles of Existential Therapy Clinician-observed and client-reported spiritual awareness and acceptance Client-reported overall life and self-satisfaction Optimal job performance

Explore his concept of and relationship with a higher power Resolve issues that prevent faith or belief from developing and growing Explore and resolve anxieties that flow from realization of aloneness, meaninglessness, and inevitable nonbeing Identify maladaptive coping mechanisms such as losing control, avoiding autonomy, and playing the victim Acknowledge responsibility for his life and pursue authenticity Develop a will to meaning		

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Andrews, G., Slade, T., Sunderland, M., & Anderson, T. (2007). Issues for *DSM-V:* Simplifying *DSM-V* to enhance utility: The case of major depressive disorder. *The American Journal of Psychiatry, 164*(12), 1784–1785.

Beck, A. T., & Steer, R. A. (1990). *Beck Anxiety Inventory manual*. San Antonio, TX: Psychological Corporation.

Beck, J. (1995). *Cognitive therapy: Basics and beyond.* New York, NY: Guilford Press.

Beck, J. (2005). *Cognitive therapy for challenging problems.* New York, NY: Guilford Press.

Bugental, J. F. T. (1990). Existential-humanistic psychotherapy. In J. K. Zeig & W. M. Munion (Eds.), *What is psychotherapy? Contemporary perspectives* (pp. 189–193). San Francisco, CA: Jossey-Bass.

Carson, D. (Director). (1994). *Star trek: Generations* [Motion Picture]. United States: Paramount Pictures.

Corey, G. (2009). *Theory and practice of counseling and psychotherapy* (8th ed.). Belmont, CA: Brooks/Cole Cengage Learning.

Critchfield, K., & Smith-Benjamin, L. (2006). Principles for psychosocial treatment of personality disorder: Summary of the APA Division 12 Task Force/NASPR Review. *Journal of Clinical Psychology*, *62*(6), 661–674.

Dattilo, F. M., & Norcross, J. C. (2006). Psychotherapy integration and the emergence of instinctual territoriality. *Archives of Psychiatry and Psychotherapy*, *8*(1), 5–6.

Elkins, D. H. (1995). Psychotherapy and spirituality: Toward a theory of the soul. *Journal of Humanistic Psychology*, *35*, 78–99.

Ellis, A. (1994). *Reason and emotion in psychotherapy* (Rev.). New York, NY: Kensington.

Ellis, A., & MacLaren, C. (2005). *Rational emotive therapy: A therapist's guide* (2nd ed.). Atascadero, CA: Impact Publishers.

Erikson, E. (1950). *Childhood and society.* New York, NY: Norton.

Fochtmann, L., & Gelenberg, A. (2005). *Guideline watch: Practice guidelines for the treatment of patients with major depressive disorder.* Arlington, VA: American Psychiatric Association.

Frankl, V. E. (1968). *Psychotherapy and existentialism.* New York, NY: Simon & Schuster.

Goldenberg, J., Kosloff, S., & Greenberg, J. (2006). Existential underpinnings of approach and avoidance of the physical body. *Motivation and Emotion, 30,* 127–134.

Griffith, B. A., & Griggs, J. C. (2001). Religious identity status as a model to understand, assess, and interact with client spirituality. *Counseling and Values, 46,* 14–25.

Hollon, S., Thase, M., & Markowitz, J. (2002). Treatment and prevention of depression. *Psychological Science in the Public Interest, 3*(2), 39–77.

Jongsma, A., & Peterson. (2006). *The complete adult psychotherapy treatment planner.* New York, NY: Wiley.

Jongsma, A., Peterson, L. M., & McInnis, W. (2003a). *The adolescent psychotherapy treatment planner.* New York, NY: Wiley.

Jongsma, A., Peterson, L. M., & McInnis, W. (2003b). *The child psychotherapy treatment planner.* New York, NY: Wiley.

Keshen, A. (2006). A new look at existential psychotherapy. *American Journal of Psychotherapy, 60*(3), 285–298.

Livesley, W. (2007). An integrated approach to the treatment of personality disorder. *Journal of Mental Health, 16*(1), 131–148.

Neukrug, E. S., & Schwitzer, A. M. (2006). *Skills and tools for today's counselors and psychotherapists: From natural helping to professional helping.* Belmont, CA: Wadsworth/Thomson Brooks/Cole.

Norcross, J. C., & Beutler, L. E. (2008). Integrative psychotherapies. In R. J. Corsini & D. Wedding (Eds.), *Current psychotherapies* (8th ed., pp. 481–511). Belmont, CA: Brooks/Cole.

Russell, J. M. (2007). Existential psychotherapy. In A. B. Rochlen (Ed.), *Applying counseling theories: An online case-based approach* (pp. 107–125). Upper Saddle River, NJ: Pearson Prentice Hall.

Seligman, L. (1993). Teaching treatment planning. *Counselor Education and Supervision*, 33, 287–297.

Seligman, L. (1998). *Selecting effective treatments: A comprehensive systematic guide to treating mental disorders*. Upper Saddle River, NJ: Merrill/Prentice Hall.

Seligman, L. (2004). *Diagnosis and treatment planning* (3rd ed.). New York, NY: Plenum Press.

Tsai, J. (2008). *Leading edge cognitive disorders research.* Hauppauge, NY: Nova.

Van Deurzen, E. (1991). Ontological insecurity revisited. *Journal of the Society for Existential Analysis, 2*, 38–48.

Vontress, C. E., Johnson, J. A., & Epp, L. R. (1999). *Cross-cultural counseling: A casebook.* Alexandria, VA: American Counseling Association.

Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings.* Mahwah, NJ: Erlbaum.

Westen, D., & Morrison, K. (2001). A multidimensional meta-analysis of treatments for depression, panic, and generalized anxiety disorder: An empirical examination of the status of empirically supported therapies. *Journal of Consulting and Clinical Psychology, 69*(6), 875–899.

Yalom, I. D. (1980). *Existential psychotherapy.* New York, NY: Basic Books.

Yalom, I. D. (2003). *The gift of therapy: An open letter to a new generation of therapists and their patients.* New York, NY: HarperCollins (Perennial).

Yudofsky, S., & Hales, R. (2007). *The American Psychiatric Publishing textbook of neuropsychiatry and behavioral neuroscience.* Arlington, VA: American Psychiatric Publishing.