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Psychotherapy for Psychological Injury: A Biopsychosocial and Forensic Perspective

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Abstract This article reviews the predominant psychological approaches to therapy and other treatments in the field of psychological injury. Mostly, they concern cognitive behavior therapy and its variants. However, because of the simultaneous physical injuries or physiological effects that accompany these types of injury, practitioners should adopt an integrated biopsychosocial approach in treatment (Sperry, L., *Treatment of chronic medical conditions: Cognitive-behavioral therapy strategies and integrative treatment protocols*. Washington, DC: American Psychological Association, 2006; *Treatment of chronic medical conditions: Cognitive-behavioral therapy strategies and integrative treatment protocols*. Washington, DC: American Psychological Association, 2009). The paper presents a componential model of therapy that integrates the cognitive-behavioral, biopsychosocial, and forensic approaches. More research needs to be undertaken that takes into account the difficulties of conducting therapy with individuals who are expressing psychological injury. This will help in the quest to formulate evidence-based but flexible practice guidelines. The paper concludes with a model that may serve to scaffold the numerous psychotherapies that are available into a more coherent framework.

Keywords Psychotherapy · Psychological injury · Biopsychosocial · Forensic evidence-based

The goal of the present article is to provide an educative frame about psychotherapy for students and young professionals entering the field of psychological injury and law. The article emphasizes the utility of understanding treatment through understanding the person. It underscores the componential approach to psychotherapy, in which the major aspects of a person's functioning in context are considered from the perspective of the underlying psychological operations and mechanisms needed for successful psychological adaptation, how that adaptation can emerge disturbed, and how therapy can help when this happens. Also, it considers therapy from the point of view of major schools of thought, especially the cognitive behavioral one. The biopsychosocial approach, which is consistent with the cognitive behavioral one, appears to be quite applicable to cases of psychological injury, especially when forensic considerations are added to it.

In the present componential approach, there are ten major components of the person to consider in psychotherapy. These ten components are represented by the following headings, which are explained in depth below: Psychoeducational, instructional; Physiological; Behavioral; Action tendencies, inhibitory control; Cognitive; Affective, emotional, intrapersonal; Social, relational, interpersonal; Self esteem, motivational; Coping, problem solving; and Broader cognitive constructions. There are also therapeutic areas involving the family and other extra-person aspects.

There are five major ways that different psychotherapies can be organized. First, a school approach lists the predominant ones in an area of practice. Second, psychotherapies can be organized according to their role in helping individuals with particular disorders, for example, what works for depression. Third, they can be presented within the integrated, eclectic approach. Fourth, they can be placed within an overarching model, such as the biopsychosocial model. Fifth, a componential approach to psychotherapy could be used, where the schools are considered in terms of how they can help clients in each of the major domains of behavior, affect,

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and cognition. The present paper argues that the latter approach is appropriate in the area of psychological injury, and should be emphasized in the teaching and training of students and young professionals.

This article reviews the major psychological approaches to therapy and other treatments used in cases of psychological injury. It discusses the controversy over the extent to which psychological therapy should be strictly evidence-based. This has import for the field because both the law and empirically focused mental health practitioners could argue that only evidence-based treatment and practice meet admissibility requirements of evidence proffered to court. In this regard, cognitive-behavioral therapy has accumulated the most evidence in its favor. However, the research on evidence-based treatment and practice has limitations and inconsistencies that prevent unique usage of the types of therapies that it upholds as the most rigorous. Moreover, there is insufficient accommodation of the data in support of evidence-based treatment and practice to the particular needs of the area of psychological injury and law, limiting its generalizability. For example, because of the simultaneous physical injuries or physiological effects that often accompany psychological injuries, the functional effects on the individual may be far-ranging. In such cases, practitioners should adopt an integrated biopsychosocial approach in treatment (Sperry 2006, 2009). However, research into evidence-based treatment and practice has not especially considered biophysical and psychosocial interactions. This being said, the article reviews the requirements for rigorous research on the efficacy of psychotherapy and it indicates how this agenda can be applied and modified in the area of psychological injury and law.

Psychology has a surfeit of therapies that have been formulated, with estimates that about 1,000 have been developed (Lebow 2008). The danger with so many therapies is that it becomes impossible to test them all in a rigorous, scientific manner. There are just a handful of psychotherapies that have weathered the test of time in terms of their reputation (Lebow 2008) and that have active empirical programs aimed at establishing their validity. Moreover, they evolve with time, integrating ideas from other therapies and theories, so that there is much overlap among them in their contemporary forms. It has reached the point where there are integrative/eclectic approaches to therapy that do not limit themselves to one school of thought. Moreover, most mental health professionals are not strict adherents to one school of thought or another. Rather, they use what they perceive as needed to help their clients with their unique constellation of difficulties and unique configuration of personhood in context.

In this regard, in their eclectic approach to psychotherapy, most practitioners mount individually tailored interventions for each client that they treat, but predominant ones, such as the cognitive behavioral one, form an axis. This is especially true in the area of psychological injury, which concerns sequelae of events at claim, such as chronic pain, posttraumatic stress disorder, and traumatic brain injury. The physical and physiological effects that accompany such injuries complicate the psychotherapeutic undertaking.

Another danger with so many psychotherapies to choose from is that the individually tailored treatment that mental health professionals structure for any one client may end up a hodge-podge of borrowed techniques without a unifying purpose or goal. Or, the treatment approach may be without the full battery needed to treat the whole person in context. This is especially important to consider in cases of psychological injury because of the probable physical/ physiological component. Given the latter complications, therapists treating the psychologically injured client may gravitate to a standard school of thought and not address any concomitant biological factors that may be present.

The advantage of a structured program of procedures that any one particular school of therapy may offer is that the procedures are well thought out, they are organized to reflect underlying foundations of the therapy, and they are meant to cover a broad range of possible difficulties that clients may confront. However, this coherence within each school represents another danger in treating the client with psychological injuries. By mixing and matching techniques, therapists may miss crucial theoretical distinctions and practical applications.

How can one best advise the young professional starting her or his career in treating psychological injury? Given that there are numerous psychotherapies and none has met the gold standard of being unequivocally better than the others for all circumstances, should the advice be that the young professional should learn them all and take what is best from each of them as they formulate their treatment plan with each client? Because of the overwhelming nature of such an enterprise, evidently this approach cannot work, so that young professionals need a more practical plan.

Perhaps students and young professionals should only learn the predominant models of therapy and leave most of the others aside. However, this begs the question of why so many psychotherapies have emerged, and like in any field, there is always need for the process of innovation in psychology so that it can move forward. By encouraging professionally informed innovation, a field accumulates, on the one hand, not only continual, gradual improvements but also major changes that mark grand phase shifts that may noticeably improve the field. Psychology needs the continued improvements that the exposure to multiple therapies can bring, through the critical evaluation that this will encourage.

Perhaps as educators of students and young professionals, we need to take a step back and ask what are the goals of psychotherapy and how might one achieve the goals in

the best way, thereby helping the client. Should education in psychotherapy center upon the predominant therapeutic schools? To what extent do particular therapeutic approaches straightjacket practitioners into rigid molds, even if the practitioners try to be eclectic? Should the goal be to learn the most currently supported school of thought in therapy and know how to apply it or to learn multiple therapies and know how to integrate them?

Rather than training students and young professionals from the viewpoint of predominant schools of thought, another approach would be to encourage students to understand the person and his or her problems without reference to psychotherapeutic schools. Should the goal in psychotherapeutic training be to work toward helping to resolve or contain client difficulties or having them learn how to do so, rendering psychotherapy not school-focused but client-focused? If one were to adopt this approach to psychotherapy, the therapist would need to be able to assess well the difficulties facing their clients and to work from there. It is not that we have to learn a whole school of thought and use it well but that we have to learn the whole person well and borrow what we need from all relevant schools of thought to accomplish the psychotherapeutic goals constructed together with our clients from the perspective of their wholeness.

As much as this goal makes sense, the manner of implementing it is far from clear. In psychotherapy, there are so many schools of thought and procedures available that the task remains overwhelming. One way of proceeding is to break down the task of assessing the person into manageable parts and teaching the student and young professional to deal with each part, as needed, without losing perspective of the whole. In this regard, later in the article, I present the notion of a componential approach to psychotherapy. Moreover, the article shows how such an approach especially is conducive to the area of psychological injury because of its concomitant physical and physiological injuries or effects. However, before describing this componential approach to psychotherapy, the paper reviews the biopsychosocial approach to psychotherapy, forensic considerations, and evidence-based practice.

The Biopsychosocial Approach to Therapy

In working in the area of psychological injury, the predominant theoretical approach is biopsychosocial. Psychological injury concerns conditions such as chronic pain and traumatic brain injury that occur after events at claim. These two examples indicate that there are pathophysiological effects in tissue damage and central nervous system neuropathology that may arise and be a major source of continued psychological effects subsequent to the event. However, other psychological conditions that may be involved may have more covert physiological expressions. Nevertheless, they are amenable to biopsychosocial treatment, as with posttraumatic stress disorder, in which hyperarousal may be an important component. Moreover, other conditions that may arise after traumatic events, such as depression and anxiety, affect physiological activity and add to the stress experienced. Finally, in psychological injury, often there are stress reactions, which in and of itself is sufficient to alter physiology.

Stress

Kendall-Tackett (2008) reviewed the manner in which humans respond to perceived or actual threat through their stress response. Essentially, the stress response consists of three major components: the catecholamine, the hypothalamic–pituitary–adrenal (HPA) axis, and the immune system response. When we are subjected to a stressor, in the classic fight or flight response, catecholamines (adrenaline, noradrenaline, dopamine) are released through sympathetic nervous system activity. [Note that current conceptualization of the flight or fight response include other components, such as freezing]. The HPA axis releases a cascade of biochemicals, from corticotrophin-releasing hormone, to adrenocorticotrophin hormone (from the pituitary gland), to cortisol (a glucocortcoid released by the adrenal cortex). Cortisol is advantageous in the short term, augmenting energy supply, but is deleterious in the long term; for example, it interferes with tissue damage recovery and rehabilitation effort in physiotherapy, exacerbating pain experience (Melzack 1999). As for the immune system, it releases inflammation-promoting proteins and other factors as stimulants to help heal any wounds and to ward off infections. These inflammatory products released in the stress response include proinflammatory cytokines, C-reactive protein, and fibrinogen.

When the various biochemicals described in the three areas of the stress response are released chronically because of ongoing stress experience, they create wear and tear on the system and subsequent homeostatic imbalance or allostatic load (McEwen 2003). The conditions for secondary deleterious health effects are put in place. Damage to tissues and organs, such as the heart, might result. The brain is affected, for example, in the hippocampus and prefrontal cortex, areas important for cognition and emotion. Sleep is disrupted and mood is altered, further aggravating the stress response in a vicious circle. For example, Kendall-Tackett (2008) reported that posttraumatic stress disorder (PTSD) might increase biochemical markers of hypercoagulability, increasing the possibility of cardiovascular disease.

These examples illustrate the importance of the biological aspects of psychological injury, given that stress is a

common experience resulting from an event at claim or the injuries sustained because of it. Therefore, any approach in treating psychological injury that includes the biological component is welcome. The biopsychosocial approach is gaining wider currency in psychology, in general, reflecting an increased appreciation of the mind–body integration, and reaction against the reductionistic medical model. When the developmental, evolutionary, and ecological approaches are married to the biopsychosocial approach, it becomes a powerful, integrative one.

Biopsychosocial Therapy

For Sperry (2006, 2009), the best manner of treating chronic illness is with a biopsychosocial approach. In this approach, undertaking a comprehensive assessment is critical for case formulation. The mental health practitioner needs to understand not only the psychosocial components of the illness in question but also the state of disease progression, the level of impairment, the symptoms and their triggers, how the client perceives the illness or its meaning, causal attributions about the illness, and so on. These biological factors cannot be separated from the psychosocial ones because they exist in a web of systemic interactions. According to Sperry, all components of the biopsychosocial model need to be treated together in order for the client to make progress.

Biological functioning involves the peripheral organ systems as well as all autonomic, neuroendocrine, and central nervous system activities. Traditionally, it emphasizes subcortical activities, consistent with the approach that biological functioning refers to processes that are automatic and not within conscious awareness [Sperry does not specify where higher-order cortical activities are placed in his model but, presumably, they lay at the intersection of (and help foster the interaction of) the biological and psychosocial components].

Sperry used rheumatoid arthritis (RA) as an example of a chronic illness that can be explained better by the biopsychosocial model compared to the biomedical or psychosocial models alone. The biomedical model seeks biological causes and cures of disease and the disability that disease brings. RA involves chronic inflammation of the synovial lining of sheaths around joints, bursae, and tendons. It results in erosion of cartilage and of bone, eventually greatly damaging joints. RA is multifactorial in origin, and there are genetic predispositions, environmental factors, and personal factors involved (immune system and neuroendocrine functions). RA can result in illness behavior, for example, adoption of the sick role and lapse into a disability that does not reflect the severity of the physical symptoms. The medical model adheres to a dose–response relationship across pathophysiology, disease progression, and resultant disability. However, this linear conceptualization does not account for factors such as stress, personality, appraisal, coping, affect, and psychosocial functioning.

In the biopsychosocial approach to chronic illness presented by Sperry, coping capacity stands as the mediator between the effects of stress on the neuroendocrine system of the individual and disease exacerbation. Coping refers to the personal and social resources that one brings to bear on events that are perceived as taxing, threatening, or harmful to physical or psychological well-being, for example, by reducing one's sense of external control or internal self worth (Folkman and Greer 2000; Lazarus and Folkman 1984). Primary appraisal concerns evaluation of, perception of, or belief about actual or threatened change in the environment that could be stressful or harmful or that constitutes loss. Secondary appraisal relates to evaluation of options in coping. Therefore, appraisals act as filters and are individual in type and scope. If the appraisal is that a diagnosis of a disease cannot lead to improvement and that control of events lies outside the self, and so on, feelings of helplessness will persist, and deployment of advantageous coping mechanisms will be minimized. As for secondary appraisals, if the perception is that the individual does not have the resources to enable change in the condition involved in order to get a desired outcome, one's sense of self-efficacy is diminished, further affecting use of adequate coping.

Personality can affect appraisal for better or for worse. Examples include one's differing degrees of optimism, neuroticism, and hardiness. Along with the original primary and secondary appraisals, personality influences the degree to which daily hassles are magnified or minimized, the type of distressed affect, and the extent of illness behaviors, such as the impact of disease on pain levels, perception of disability, and medication use.

Minor stressors that are chronically present can exact effects on the person with RA to the point that it facilitates negative progression of the disease (Walker et al. 2004). This happens through cycles and feedback loops in a complex, dynamic, nonlinear process over time.

As for therapy in the biopsychosocial perspective (Sperry 2006, 2009), after a comprehensive assessment is undertaken and a case formulation constructed, treatment begins. Case formulation is based on the range of symptom expression and the hypothesized underlying causes. It is both a reflection of nomothetic or population-level knowledge derived from the scientific literature and of idiographic or individual specific knowledge derived from a comprehensive clinical assessment of the individual. Case formulation does not include a componential analysis of the type that I am advocating, but it is implicit in its intent. That is, to best articulate the individual's symptoms and their presumed causes, the therapist needs to canvass a broad array of categories of possible symptoms, ones that are aligned with a

range of potential therapeutic methods from which to choose. By emphasizing that a componential approach should be integrated into biopsychosocial psychotherapy, I am arguing that it becomes easier to grasp all the nuances of the person, including those of the biological component and how it interacts with the psychosocial one.

As described by Sperry, for the biological component of therapy in the biopsychosocial approach, the therapist ensures that the client is receiving appropriate medical and physical care, including counseling on education and management of the condition involved, the correct diet, exercise regime, medications, and so on. This may be undertaken directly by the mental health professional, the physician involved may be consulted, or appropriate referrals can be made.

In terms of the psychological component of the therapy, the therapist uses appropriate cognitive behavioral, psychodynamic, and constructivist approaches, others as needed, and so on. Sperry describes these interventions, but I deal with them in depth later on in the article.

The social component of the therapy includes family, couple, and worksite interventions, as needed. This reflects an understanding of the interaction of the person with the whole ecological context in cases involving biopsychosocial conditions, such as chronic illness.

The therapist works with the results of the comprehensive assessment, which includes acquiring information about progression of the condition, its impact, illness representation, causal attribution, other relevant schemas, both personal and in the family narrative, and treatment expectations. Developmental history requires careful assessment, for example, of attachment history. To evaluate clients for treatment planning purposes, the clinician determines the client's presentation, pattern of response, for example, to stress, predisposing vulnerabilities, perpetuants of the condition, and degree of readiness for change. In Sperry's account of biopsychosocial therapy, precipitating factors are also mentioned as well as treatment adherence. Process goals in therapy relate to engagement, pattern recognition and analysis, pattern change, and maintenance/termination.

In a similar integrated approach to psychotherapy for physically related conditions, Woolfolk and Allen (2007) described using an affective cognitive behavior therapy for somatization. They described behavioral interventions, including relaxation training, improving activities through behavior management, and addressing illness behavior and sleep difficulties. They suggested working with cognitions and emotions by helping to identify maladaptive patterns and teach distraction and cognitive restructuring. As for interpersonal methods, they promoted dealing with the sick role, assertiveness, partner/family aspects, such as communication, and so on. Similarly, Johnson (2008) described a biopsychosocial approach to medically unexplained symptoms, an approach that integrates psychological treatment with medical care.

Conclusion

Sperry (2006, 2009) has indicated that, in cases of chronic illness, a biopsychosocial approach to therapy is the best one. Given that there are multiple similarities in chronic illness and chronic psychological injury, in working with cases of psychological injury, it makes sense that this approach should be the guiding one in psychotherapy. How does this suggestion square with the presented notion that schools of thought should subserve the psychotherapeutic enterprise, with the client being the focus of therapy, as against the opposite modality, in which schools of thought predominate and where clients fit into the scheme of the therapy?

There is no contradiction in emphasizing the biopsychosocial approach to therapy and the idea that therapy should address the components of the whole person that are relevant to client difficulties. That is, the suggested major components of the whole person that need to be addressed in therapy, which are described below, cover the full range of biological, psychological, and social needs. Is there a contradiction in arguing that therapy should be biopsychosocial but also cognitive behavioral? Not at all, because a fully integrated biopsychosocial account of human behavior, how it can become disturbed, and how it can be treated best, inevitably should borrow techniques that are considered most effective and valid, and the cognitive behavioral approach possesses these characteristics. I return to the issue of cognitive behavioral and other therapies and the componential approach in sections that follow the next one on forensic psychology considerations.

Therapy and Court

Introduction

If students and young professionals learn an integrated approach to therapy, one that emphasizes a componential approach but that respects the biopsychosocial and cognitive behavioral approaches, would this be sufficient for court purposes? By focusing on the client's componential difficulties and formulating treatment plans from this perspective, having predominant schools of thought subordinated to the components needing work, the young professional, whether in the area of psychological injury or in other areas, will be served well for preparation for court. Granted, they would be studying and passing rigorous examinations at school, but in court, the questions

are of a different order, relating to the scientific admissibility of the approach taken, whether they concern assessment or therapy. For therapy, they can expect questions related to rigorous scientific standards in formulating their approach to treatment for the case at hand and knowledge of the scientific literature underlying their clinical decisions in treating clients.

The whole-person componential approach to therapy that I am advocating, especially when considered from the perspective of integrating into it an advanced understanding of the biopsychosocial approach and the cognitive behavioral approach, is advantageous for (preparation of) testimony in court for the following reasons. First, instead of fixating on one psychotherapeutic approach, such as the biopsychosocial or the cognitive behavioral, an umbrella is provided that allows integration of multiple approaches in psychotherapy toward the goal of reinstating client well-being and functionality or the goal of encouraging acceptance of diminished psychological well-being and functionality when full return cannot be achieved. Second, because it incorporates predominant schools of thought in therapy, the approach meets legal scientific standards (Daubert 1993) of (a) being acceptable to the scientific community, (b) being peer-reviewed, (c) being testable, and, (d) through its evidence-based research, having a known success (base) rate compared control conditions. Through these scientific supports to its approach, the componential approach to therapy that I am advocating avoids the prospect of losing challenges to admissibility of evidence in court.

Another approach to training students and young professionals about therapy is to consider the best available approaches for particular disorders one at a time. For example, for each particular disorder that can be diagnosed from the perspective of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR, American Psychiatric Association 2000), what are the best evidence-based techniques or techniques otherwise determined to be the most appropriate that can be used to deal with the disorder? There are several difficulties in adopting this approach for training and practice in dealing with psychological difficulties experienced by clients. First, the DSM approach to psychological disorder has been criticized on various grounds; it changes with each edition, and it consists of categories of which many are questioned for their validity. Second, for similar disorders in the DSM, often, the various techniques that are used vary little from one disorder to the next, and moreover, the same lack of differentiation in treatment is evident even across dissimilar disorders. That is, various therapies present common frameworks for use across different disorders, and there is little variation in substance in how they are applied from one disorder to the next. Therefore, it may be too much to focus on a disorder-first approach to learning psychotherapy.

Most important, as psychotherapists, we are not trained to treat disorders but to treat people. Just as we are trained not to label people by their disorders, so we should not treat people by their disorders. People are wholes who function in context. The labels or disorders that we ascribe to them are convenient short-hands that are meant to help us deal with them by summarizing their diagnostic information. However, labels or disorders cannot capture the individuality of the whole person, their positives and strengths, and the implications of their condition on their functionality. By having a disorder-centered approach to treatment, the whole person is ignored, the positives and resiliencies are set aside, and the daily life of the individual in functional and relational roles at work, school, or home is not considered.

The componential-whole person approach to psychotherapy asks that the psychologist undertake a comprehensive assessment of the person in context, including impacts on functional and relational roles, and address therapy towards helping with the components compromised in this regard. That is, the componential approach to assessment and therapy has the potential to meet well the full range of therapeutic needs of the client, including in functional and relational roles. This is important in the area of psychological injury and law because the court is especially interested in how the therapist worked toward re-establishing functionality or showing why this could not have been accomplished despite optimal therapeutic knowledge and application and optimal client receptivity and participation.

Therefore, we arrive at the same conclusion that has been given previously. It is not so much that mental health professionals have to function from the point of view of a predominant psychological school or, in the present argument, from the point of view of a predominant psychological disorder, as a starting point in treating clients. Rather, they have to function from the perspective of the symptoms being presented by the clients, as ascertained in a comprehensive and functionally oriented approach, and their treatment by effective means aimed at optimally treating the whole person, independent of outcome. The DSM may help affix one or more labels to the individual's array of psychological difficulties, but it should not be used as a substitute for understanding and dealing with the full array of symptoms and the particular goals of treatment, which, in the end, should be functional. Therefore, to better grasp the individual's full array of symptoms and functional impacts that are of concern, the proposed componential approach has the advantages of being comprehensive and oriented to the needs of individuals who have sustained psychological injury, and therefore, it should meet all court requirements of admissibility. Psychotherapists should prepare well to defend whatever psychotherapeutic approach that they use with their clients and should examine

carefully those that they are using that have lacunae relative to court admissibility requirements.

Forensics

Cases of psychological injury are challenging ones not only because of the need for an integrated componential, cognitive-behavioral, biopsychosocial, and functional perspective, but also because of the difficulties presented by the additional strains that accompany the forensic, insurance, and legal aspects. The forensic/insurance/legal strains in such cases of individuals experiencing psychological injuries may need supplementary treatment, for example, to deal with (a) the anger toward the insurance process, with its unending paperwork; (b) the anxiety generated by participating in medical examinations, such as getting a magnetic resonance imaging, which can be quite anxiety-provoking for some; or (c) participation in insurance examinations, which can be quite overwhelming for others; (d) the stress of cross-examinations, which can produce upset and irritability in many; (e) the losses generated by an inability to work for reasons not due to any fault of their own but due to the actions of a third party, e.g., the negligent driver in a motor vehicle accident at issue; and (f) prolongation of deficits in cognition occasioned by mild traumatic brain injury incurred in an event at claim due to associated pain, headaches, sleep deprivation, depression, stress, and so on.

Other issues particular to cases of psychological injury that may need supplementary therapy include the following. Clients may keep saying, “if only I had taken another route,” and, because they did not, assume that it is their fault. Or, they may tell themselves that they are not getting better because their physical therapies were terminated prematurely, even though there is evidence of their having received sufficient treatment. In such circumstances, stress and psychological factors may be keeping processes in play that serve to aggravate their injuries. Therapists working with such cases need specialized training on how to handle matters such as these—often, in cases of psychological injury, there are exacerbatory stresses that aggravate event-derived injuries, whether physical, psychological, or both, and therefore deserve therapeutic attention. The therapist may need to intervene with procedures such as cognitive behavioral techniques tailored to the difficulties being experienced, for example, by training use of appropriate self-statements, as in the following—to deal with your anger at the insurance company, use distraction techniques; when you get panic attacks thinking of cross-examination in discovery, do your deep breathing exercises.

In another example, benefits paid by third-party insurers for lost wages may not match pre-event income, creating economic hardship and cutbacks for the family involved. Worse, benefits may be unjustly terminated. At its worst, a downward spiral in personal and family functioning may obtain through collusion amongst the insurer, the defense team, and medicolegal assessors, including mental health ones. The psychotherapist may have to help the client and her or his family with their adjustments, find public resources to help them, document the losses and stresses engendered in her or his reports and testimony, and so on.

At the other extreme, the psychotherapist may have to deal with clients lapsing into a sense of entitlement that far outweighs what seems merited by the case. Similarly, clients may inappropriately wallow in their symptoms and mark their effort at mitigating their losses by lethargy or avoidance in adhering to treatment. They may do so for either conscious or subconscious reasons, in the hope of prolonging symptom presence and disability, thereby raising monetary compensation in upcoming decisions to be arrived at in court or related venues. At its worst, a downward spiral in personal and family functioning results from collusion amongst the (putatively) injured party, the individual’s legal representatives, and significant others in the individual’s personal life, work situation, or both.

Whatever the financial and related predicaments facing clients, psychotherapists need to be attuned to their impacts and the causes, where possible, tailoring their treatments accordingly. Given the forensic and legal aspects of such cases, these examples underscore that the psychotherapist should remain constantly vigilant of the full range of stressors impacting their clients having psychological injuries and the range of motivations underlying their apparent effort in therapy.

Functionality

Although the forensic aspect of psychotherapy in cases of psychological injury makes it distinct, another major difference that characterizes such cases is its rehabilitation component. A broad definition of rehabilitation, such as the following, indicates that the psychotherapy in the rehabilitative context requires both an integrated biopsychosocial approach and a teamwork approach with other professionals and institutions.

Definition of Rehabilitation The goal of rehabilitation is to optimize the clients’ recovery to the fullest degree possible from the psychological effects of an injury or of a chronic illness. Rehabilitation therapists attempt to coordinate with other professionals involved, in efforts to ensure return to prior levels of independence, functionality, and well-being, for example, in personal care, mobility, education, work, home-care, or caregiving or, should full recovery be impossible, to ensure adjustment to any permanent impairments, disabilities, losses, and so on. Rehabilitation includes efforts to advocate for the client, or facilitate self-advocacy, when essential

services are not forthcoming but are required (Young and Shore 2007).

Moreover, the definition of rehabilitation offered indicates that the primary focus in rehabilitation from a psychological point of view is to support the client in all efforts to return to prior levels of functioning or to support accommodation and adjustment when this cannot be obtained. In the latter case, often, there are debilitating physical consequences of injury or disease that permanently impede return to pre-onset adaptive functioning. There may be chronic pain that sets in, complicating mood and traumatic reactions, such as depression, anxiety, or posttraumatic stress disorder. Further, the shock of the event at claim may set off psychotic or addictive reactions, in efforts at self-medication, in those vulnerable to such expression.

When the injury or disease involved impacts the brain or any central nervous system component to a moderate or serious degree, the task of the rehabilitation therapist becomes especially complicated. Also, being wheelchair-bound or having to go through extensive periods of loss of locomotor capacity and mobility or loss of other basic physical abilities, strength, and conditioning, places an increased burden on the client and, therefore, on the therapist. When basic self-care capacities are compromised, the client may become especially upset and feel humiliated because of the help needed. When hospitalization or extensive attendant care is needed for extended periods of time, the same emotions are more likely. Self identity, or self-esteem, is placed continually at risk as time since onset increases. In these circumstances, vicious circles set in, such as in social withdrawal and loss of hope.

When return to prior activities of daily living and essential life roles becomes delayed or impossible, the rehabilitation psychologist faces further challenges. Perhaps in the long term, the client is incapable of even the most basic movements, self-care, regard of health and safety issues, social interaction with others, community participation, self-direction, self-regulation, coping, leisure, and so on. Or, the person is otherwise living in a state of permanent dependence, which is lamented as a terrible loss of her or his independence. The client may have been working hard to meet family and financial responsibilities before the event at claim and was already having a hard time in making ends meet. When the devastation of a serious injury, either physical or psychological, leads to a vocational disability, the ingredients for catastrophic psychological reactions are set in place. Equally devastating are long-term situations of child care being affected or of children being hurt. The injured person may have been a full-time caregiver to children or a senior in the family needing help. Or, rehabilitation is needed for a child, teenager, or adult who had been in school or training, and compensatory home studies, tutoring, and so on, need to be arranged.

For return-to-work attempts, if this is a viable option, the rehabilitation psychologist undertakes a psychovocational assessment, establishing the residual and transferable skills in the physical-motoric, social-emotional, and communicative-cognitive areas. The psychologist coordinates with other professionals on the team to ensure that all needed assisted and accommodative technologies and devices are in place at the work site, the work schedule has been modified, as needed the job has been lightened or altered as needed, the employer is cooperative and understanding, and so on. At the same time, the realities of the employment environment may present barriers, such as resistance in or refusal to deal with injured workers. The same barriers may be encountered in the search for new training and job opportunities on the open marketplace, once the client is ready to return to work and a return to the prior position held is not an option.

In the end, the rehabilitation psychologist is faced with improving the quality of life of the injured or ill individual. Psychotherapy should aim toward improving a sense of wellness and positive growth, as much as addressing physical and psychological impairments and deficits. Even in cases of permanent loss of functionality, the psychologist can act to promote acceptance or adjustment and the value of alternative activities and lifestyles.

The rehabilitation psychologist may have to work with a team that does not appreciate the biopsychosocial perspective and have to inform them of the approach as much as the client and her or his family. Some specialists may believe that once technical, prosthetic, and assistive devices are put in place to accommodate to physical losses, their work is accomplished; however, the psychosocial component of treatment should be respected by all team members. Therefore, the rehabilitation psychologist may find it necessary to advocate with medical specialists, insurers, and various institutions on behalf of their clients, within the bounds of their professional guidelines.

Ultimately, the rehabilitation psychologist works with the team to optimize community re-integration to the degree possible, fostering in the client both a personal and external adaptation and a personal and external sense of control. The psychotherapist may need to address the client's existential schemata and, if applicable, the spiritual one, no matter what the past or ongoing rehabilitation status.

Often, psychotherapy requires a familial or couple component because injuries and disease rarely affect just the individual. In short, the rehabilitation psychologist needs to see the whole system involved in the life of the client and work at all components of the system that have been impacted by the injury or disease.

To conclude, in their work with clients, rehabilitation psychologists distinguish themselves from other psycholo-

gists by a holistic approach, both in terms of understanding and helping the person in her or his sense of well-being and functionality and in understanding and helping the person deal with the surrounding environment, both personal and extra-personal. Psychologists in rehabilitation address functionality and life roles in terms of (a) activities of daily living and (b) work, school, and home roles. They also consider the wider picture in terms of (c) quality of life and wellness, (d) adaptation to and acceptance of disability, and (e) advocacy and community re-integration.

Conclusions

The present overview of the role of rehabilitation psychologists in treating their clients has been undertaken to underscore that psychotherapy, as traditionally defined, does not readily apply to the area of psychological injury and law. In this type of practice, aside from standard therapeutic focus on addressing emotional, social, behavioral, and cognitive presenting problems and their ramifications in the individual and, perhaps, for significant others, the psychologist needs to address, if any, the associated physical impairments, pain, and (patho)physiological impacts. In addition, the rehabilitation psychologist addresses effects on functionality and role functioning, which may mean working directly with work environments, training facilities, schools, other agencies and institutions, and so on. Communication and coordination with other team professionals, the insurer, the legal representative, and so on, may be involved as well. Therefore, even though the cognitive behavioral approach to therapy is a predominant one in treating cases of psychological injury, the work of psychologists dealing with such cases, inevitably, is much broader and cannot be reduced to it. Rehabilitation psychologists use psychotherapy only as part of their overall intervention strategies and use the cognitive behavioral approach only as part of their overall psychotherapy, functioning from a more holistic, biopsychosocial and forensic perspective.

Keeping with the theme of the article, it is not that a whole new therapeutic approach is needed in these modifications or refinements of existing therapies so that they can be applied effectively to the supplementary difficulties presented by cases of psychological injury. Rather, the adjustments in psychotherapy to the recommended biopsychosocial approach need to appreciate the contextual and systemic particularities in such cases. I suggest that the best way of accomplishing this objective is to adopt the componential approach to therapy being advocated, given its integration of the biopsychosocial and cognitive behavioral approaches, and consider how each component needs to be adjusted for cases of psychological injury, including from the forensic perspective. An approach such as this will provide the psychotherapist dealing with cases of psychological injury sufficient means to describe and justify in court and related venues all relevant levels of the therapy implemented—biopsychosocial, cognitive behavioral, functional, forensic, componential, and so on. For example, in court or related venues, one can expect to face examination not only of one's assessment of an individual but also of the appropriateness of one's approach to therapy and related interventions and how the therapist had dealt with difficulties in the process. Moreover, psychological reports on clients are subject to review by insurance examiner and psycholegal assessors, and these may concentrate on the therapies used as much as the clinical formulation constructed to justify them.

Further, with respect to the therapeutic approach adopted in treating cases of psychological injury, the additional strains that accompany the forensic, insurance, and legal components of such cases may need supplementary treatment demands, and these should be documented. Moreover, because they may be called to court or related venues, given the forensic and legal aspects of such cases, the practitioner should remain vigilant to the apparent effort manifested by their clients in therapy and should be prepared to describe and justify the therapeutic approach used in these regards. That is, psychotherapists dealing with cases of psychological injury should judiciously describe the clients' apparent effort, motivation, openness and adherence to treatment, cooperation in completing homework assignments, and, in general, attempt to mitigate losses. It would be beneficial to document client progress over sessions using rating scales. For example, does improvement flag with upcoming insurance examinations or court dates, or is improvement augmented with some aspect of the case bringing in unanticipated financial benefit? In this regard, the field needs to develop reliable and standardized instruments of rehabilitative recovery or its lack that are not compromised by practice effects or the effects of time, per se, or that take them into account.

Evidence-Based Therapy in Psychological Injury

Introduction

In this article, I have mapped out best therapeutic practices for functioning in the milieu of psychological injury and law. However, due to the young nature of the field, which is just getting its own identity after being more a mixture of different strands within the field of psychology than an integrated area having clear concepts, definitions, and treatment protocols, there has not been sufficient empirical investigation devoted directly to its needs. In terms of the focus of the present article, more programmatic research needs to be undertaken that takes into account the difficulties of conducting therapy with

individuals who are expressing psychological injury in order to develop evidence-based practice guidelines that are both formulaic but flexible.

Psychologists respect the need for evidence-based practice and engage in research on the efficacy of treatments. New treatments are proposed in the field, and they need to be subject to careful empirical scrutiny. Work in the area of posttraumatic stress disorder provides a good model of the nature of research on the efficacy of therapy in mental health. Resick et al. (2007) described studies in the area that constitute randomized clinical trials (RCTs). RCTs, for example, compare application of a target treatment to the treatment that is considered the treatment of choice in the field at the time. Typically, in this type of research, (a) the target treatment is manualized in order to permit uniform training, so that it is applied in a standard fashion by different therapists; (b) participants are assigned to treatment or control groups in a random, unbiased fashion; and (c) outcome is evaluated by determining changes over phase of the study, as shown by reliable and valid measures examined by trained assessors blind to the condition to which the participants had been assigned. It is helpful to ascertain treatment compliance on the part of the participants and any deviations from the manual on the part of the therapists. This type of research is labeled stage 2 in the evolution of mental health therapy research (Rounsaville et al. 2001). Drop-out of participants and related matters represent a methodological issue that threatens the external validity in RCTs; therefore, appropriate measurement and statistical controls have to be instituted for these contaminants in any research undertaken.

Prior to stage 2 RCT research, in stage 1, pilot testing is conducted, treatment manuals developed, and so on, typically leading to empirical research in which the target treatment is applied and is compared to application of an existing treatment or to a wait list condition. Once RCTs have been undertaken and have demonstrated the efficacy of a target treatment, in stage 3 research, issues such as generalizability in application are addressed. Research proceeds to stage 3 only after the initial demonstration of the efficacy of a target treatment has been replicated independently at least once.

Resick et al. (2007) indicated that controlled research supports exposure therapy as an effective means of improving some aspects of trauma reactions, including the development of posttraumatic stress disorder. However, there is no gold standard therapy for PTSD, and in head-to-head trials, none stand out. At the same time, there is increasing evidence that combinations of therapy, such as exposure and cognitive interventions, may be more efficacious [see Wolitzky-Taylor et al. (2008) for similar conclusions].

Resick et al. (2007) described a study relevant to the area of psychological injury and law. Taylor et al. (2001) examined partial and full responders to treatment. The groups did not differ in terms of demographics, pending litigation, or disability payments. However, there were some pretreatment differences: the partial responders scored worse in global functioning, degree of pain experience, interference from pain in activities of daily living, depression and anger, and use of psychotropic medication. This study illustrates that the presence of comorbidities in cases of psychological injury, especially in terms of pain and its effects, complicates treatment. This appears to be another reason why the structuring of best therapeutic practices for the area of psychological injury should not focus on the psychotherapeutic schools, per se, or the disorders that typically manifest but the components of the person that may be affected in a whole-person approach.

Resick et al. (2007) described the work of Foa and Meadows (1997), who determined the gold standard criteria needed in research conducted on the efficacy of treatments for PTSD. There must be (a) operationalized target symptoms with clear definitions and reliable and valid measures used, (b) provision of therapy by trained clinicians using manualized and specific treatment protocols that are subject to replicability, (c) comparison of the target treatment with control groups after unbiased assignment to condition and verification of treatment adherence, and (d) use of blind evaluators, for example, of condition when assessing participants before treatment and for outcome. Harvey et al. (2003) added that such research should control for observer drift, assurance of blind rating, control of random assignment, compliance with assigned homework, and so on. Resick et al. (2007) advised that this type of research should examine, among other things, the effect of drop-out (intention to treat principles), small sample size and low power, the important factors that make a therapy effective (dismantling) or that can be added to increase effectiveness, adaptations to different trauma populations and comorbidities with PTSD, and the generalizability of research findings.

The Issues

The research on the effectiveness of different therapeutic approaches to PTSD illustrates the complexities in undertaking this type of research in areas of psychological injury. Moreover, the whole enterprise of research on empirical or evidence-based practices is subject to contention and controversy (Norcross et al. 2006a), as shall be shown. In the medical field, it may be easier to undertake RCTs of one pharmacological agent compared to another, but the task is complicated by the influence of the pharmaceutical companies on the research. In the psychological realm, not only is it harder to undertake clear RCT trials using the full range of required research criteria; there are influences from

researchers having vested interests in one predominant approach or another (Greenberg and Watson 2006a, b).

Evidence-based practice in psychology is defined in a manner similar to the medical approach (Reed 2006a). It involves, in making clinical decisions, integrating the best available research evidence with clinical expertise and client values. The research should be clinically centered. Clinical experience covers appropriate use of clinical skills and relevant experience. Client values concern their preferences, concerns, and expectations. Although camps in psychology describe difficulties in conducting RCTs, health care policy makers and the medical profession expect them, and evidence-based practice is here to stay. Reed (2006a) pointed out that it is difficult to standardize psychotherapy because, in its practice, it is self-corrective, fluid, and individualized. Moreover, the standardized manual approach is difficult to apply to all but the simpler psychotherapies. Also, even rigorous research is subject to different interpretations and biases. Clinical expertise should not be devalued because of a lack of controlled research or clear evidence. In addition, beyond treatment procedures unique to a particular manualized approach, therapy may work through nonspecific factors, such as ones related to the client, the clinician, their relationship, the culture and other contextual factors, and the match between the treatment and the client.

Kihlstrom (2006a) responded to Reed by arguing that scientific research is the sole mechanism that clinicians should use in determining the evidence that should guide their evidence-based practices (EBP). Messer (2006a) countered that the EBP research does not take into account the individual differences that clients bring to therapy, which go well beyond their diagnoses. Reed (2006b) asked what the clinician should do when research has not yet been conducted that is needed in treating a particular client. Kihlstrom (2006b) re-iterated the pro-EBP view and added that even clinical expertise and client values can be accommodated within evidence-based research. Messer (2006b) replied that the client's subjectivity must be kept in mind and that therapy is not based on science alone, and he even referred to the "art" involved. Greenberg and Watson (2006a, b) emphasized that RCTs may tell us what works but not how. They examined the processes within sessions that mark change and emphasized arousal, emotions, experience, and so on. Ollendick and King (2006a, b) and Wampold (2006a, b) engaged in a spirited debate about whether the research even supports empirically supported treatments over others. Norcross et al. (2006b) concluded that, although we need rigorous research, there is no conclusive evidence that manuals improve treatment outcome or that controlled research generalizes to the clinic. However, evidence-based practice is here to stay, and vigilance is needed to ensure that clinical practice in our increasing third-party payor environment does not become dominated by a selected, cost-saving application.

Glancy (2008) added that in making clinical decisions, when there is insufficient research evidence to consult, the clinician should be transparent, the lack of evidence should be articulated, and the decisions arrived at should be justified on other bases, with clinical experience and expertise as relevant sources. Moreover, the evidence that has been elaborated by research may be contradictory, so that, in the end, the individual clinician is responsible for interpreting the evidence in a manner that is judicious and conscientious. This is consistent with research that is emphasizing the importance of nonspecific factors in determining therapy outcome.

Barlow (2007) echoed Glancy's placement of responsibility for effective treatment and use of evidence-based research on the shoulders of psychotherapists. He emphasized that evidence-based clinical practice always should center on the individual being treated. Evidence-based practice and treatment findings provide material for strategic interventions tailored to the individual rather than a list of techniques to be applied blindly. He explained that evidence-based guidelines focus on treating specific disorders rather than supporting specific procedures. Beyond this, Barlow argued that they should focus on the individual (or on groups of individuals), so that psychotherapists use the best available evidence to treat their clients as individuals. Should the therapeutic methods described in the available research on the specific disorder(s) involved not match the needs of the individual(s), therapists may need to use a different approach, not respecting the empirically supported treatment. Only by a comprehensive assessment of the full set of symptoms/disorders and the relevant characteristics and preferences of the individual(s) can therapists structure a treatment approach that has an optimal chance of success. Or, therapists might start with an empirically supported approach and then have to adjust it because it is not being as successful as expected. To conclude, Barlow expressed that evidence-based practice "requires that clinicians be accountable to themselves, to their clients, to insurance providers, and to society at large by making their clinical judgment explicit and providing data and outcomes supporting the decisions they make. This is a far cry from the rigid predetermined approach to intervention that has become the caricature of EBP" (p. xi).

Kazdin (2008) made recommendations for research in evidence-based treatment and practice that incorporates clinical practitioner concerns with those of researchers. The recommendations emanating from the research must not only be adequate and sufficient but also generalizable to the practice context, being flexible rather than prescriptive. However, the best manner of individualizing psychotherapy and demonstrating that such individualization of therapy

helps its efficacy are topics that researchers in the area have yet to help elaborate, and moreover, they are "difficult to defend." Kazdin called for research on the clinical decision-making process, emphasizing that psychological practice with individuals is moderated by their individual differences. As for research related to the rehabilitation context, Tate et al. (2008) arrived at similar conclusions, pointing out that the field needs practical or pragmatic clinical trials aimed at helping clinicians with decision making in real-world clinical practice.

Conclusion

I concur with this conclusion—evidence-based treatment and practice should be subject to careful empirical research documenting the best way to deal with the moderating variables that render each individual unique in the clinical practice setting. At the same time, the research should consider more standardized ways of assessing, diagnosing, and treating individuals. However, I query whether this can be done from within the standard evidence-based practice approach, which begins with a population having similar diagnoses, usually based on the DSM approach to diagnosis. I have argued that psychotherapy may best be classified not in terms of the disorders typically of focus in treatment and in evidence-based practice research, nor of the predominant models of psychotherapy, but from the componential approach.

That is, of the major classes, categories, or components of behavior and functionality considered in the psychology of the individual, we should ask, what are the particular problems being expressed and their impacts, and what procedures and techniques should be used in an individualized manner to help deal with them? The approach lends itself well to the individual person in context approach that seems needed in order to address Kazdin's concerns about the direction that research in evidence-based treatment and practice should be heading. Moreover, it will be especially important in investigation of best empirically supported practices and treatment in cases of psychological injury, in which often there are concomitant physical and physiological effects, such as in chronic pain, traumatic brain injury, and the hyper-arousal component of posttraumatic stress disorder.

This type of research on individualized evidence-based psychological treatment and practice may have import for understanding better the process of psychiatric/psychological diagnosis and how it could improve later editions of the DSM (the DSM VI; this research will not be done in time to affect the revision of the DSM IV that has begun for the DSM V). That is, a sanctioned taxonomy of diagnostic categories serves multiple goals, but one essential one is that it guides therapy by listing categories that do not only have particular etiologies but also are open to particular treatments that fit their symptom and causal profiles. However, if it is too difficult to work with particular diagnoses in research on evidence-based treatment and practice, working groups modifying future editions of the DSM would have further reason to examine more closely the rationale for keeping the suggested componential, whole-person approach to understanding the person in context. That is, perhaps the componential approach to understanding and treating the person that is being advocated in the present paper speaks to adopting a diagnostic approach that is more consistent with it.

Major Schools of Practice of Psychotherapy

Introduction

Schools of thought in psychotherapy thrive when they address deep understanding of human action, emotion, social behavior, and thought, both in the normal and the abnormal case or, rather, along the continuum from normality to abnormality. They address what constitutes disturbances or deviations in behavior and enunciate principles of change, specifying procedures and techniques that can be used to implement them. They address "the what" or the description of normal behavior and what it looks like when it is psychologically abnormal and "the why" both in the sense of how it emerged from a normal potential to an aberrant expression and how it can be altered, improved, controlled, resolved, or otherwise contained and ameliorated in therapy.

To arrive at these constructive end-points, schools of thought in therapy need to understand both the universal, generalized therapeutic processes that govern good practice and how to individualize or tailor the available procedures and techniques to the particular problems at hand. At the same time, they need to be aware of the limits of what the latter techniques and procedures can do and appreciate that general therapeutic considerations, such as the degree of warmth and sensitivity of therapists, good rapport created with clients, the receptivity to therapy on the part of clients, and the nature of the therapeutic relationship, influence therapeutic outcome beyond any influence of a particular technique or school-derived procedure.

A time-honored approach to describing psychotherapy to students is to focus on the major schools of thought in the field. For example, Lebow (2008) reviewed the areas of behavior therapy, cognitive therapy, experiential therapy, mindfulness- and acceptance-based therapy, postmodern and poststructuralist therapies, psychoanalytic therapy, and existential therapy. He included chapters on feminist, couple/family, and group therapy. The book concluded with broader approaches, such as integrative and eclectic therapy, and it ended with a discussion of common factors

in psychotherapy. The book mentioned interpersonal approaches within some of the chapters but should have had a separate chapter on this approach.

Another way of training students in therapy is to consider the disorders that are of issue. Barlow (2008) adopted a step-by-step approach to therapy for the major clinical disorders. Rather than focusing on schools of thought, the book described therapy for various anxiety disorders and depression, borderline personality disorder, substance abuse, schizophrenia/psychosis, eating disorder, sexual dysfunction, and couple distress. However, there is some confusion in this organization of the book. Although most chapters deal directly with specific disorders, there are three devoted to depression, and in each, a different treatment is described in depth (cognitive, interpersonal, behavioral). There are two chapters on integrated approaches to treatment, for emotional disorders and for eating disorders.

In describing contemporary approaches to psychotherapy, it is possible to deal with only a handful of psychotherapies because there are so many of them. Similarly, in a disorder-focused approach, there are so many disorders of clinical concern in the DSM that it would be impossible to survey the empirically supported treatments that apply to all of them. Moreover, there are many commonalities across them. For example, the cognitive behavioral approach predominates for many of them. Therefore, in the following, I emphasize uniquely the major schools of psychotherapy, as presented by Lebow (2008). However, I do not deal with feminist, couple, and group work. Moreover, I do not deal with special populations or issues such as children, the elderly, and culture/minorities.

Major Psychotherapy Schools

Zinbarg and Griffith (2008) described the details of behavior therapy. The founders of this approach are well known names in psychology. Watson introduced the school of behaviorism, which concerned itself with stimulus–response connections and their modification through learning. Pavlov and Skinner described classical and instrumental or operant conditioning procedures, with the latter allowing learning of new stimuli or elicitors of reactions by association and the former allowing expansion of the behavior repertoire by reinforcement and other contingencies. The main focus of behavior therapy is on applying the laws of learning theory toward modifying problems in behavior. Key ways of learning include classical conditioning, instrumental conditioning, generalization, habituation, extinction, response prevention, stimulus control/discrimination (functional assessment), behavior activation/pleasant event scheduling, contingency management, shaping, and skill training/acquisition. The theory has evolved to include social learning, especially modeling, and self-efficacy (Bandura 1977). In presenting the componential approach in the following section, I describe in more depth important behavioral techniques that the authors enumerate, such as systematic desensitization, exposure therapy or flooding, and interoceptive exposure.

Kellogg and Young (2008) described cognitive therapy as dealing with the way individuals interpret events. Problematic emotions derive from maladaptive and/or unrealistic interpretation or processing of information. People think irrationally and need to be challenged (Ellis), or they develop specific maladaptive cognitions that need to be prodded for their full implications in the life of the client, leading toward cognitive restructuring (Beck). The therapy grew to include narrative therapy/constructivism, dialectical behavior therapy, acceptance and commitment therapy, schema therapy, and cognitive techniques that include mindfulness.

In cognitive therapy, maladaptive schemas are altered by work with the client in a collaborative empiricism. The client and therapist work together at exploring the ramifications of the client's belief system, for example, through Socratic dialogue, guided discovery, and keeping a daily thought record, thereby discerning unhealthy automatic thoughts.

Cognitive therapy constitutes one half of perhaps the predominant psychotherapeutic approach in psychology—the cognitive behavioral one. In its most integrative form, it has incorporated other approaches, such as the narrative one.

Kellogg and Young (2008) pay special attention to Young's work on schema theory. "*Schemas* are psychological information-processing and behavior-guiding structures that develop during childhood and adolescence" (p. 46). Schemas concern cognitive, affective, motivational, instrumental, and control processes. In schema therapy, the therapist addresses early-formed maladaptive schemas, such as those for disconnection and rejection (e.g., abandonment, mistrust, abuse, emotional deprivation, defectiveness, shame, social isolation, and alienation), impaired autonomy and performance (dependence, incompetence, vulnerability, enmeshment, undeveloped self, and failure), impaired limits (entitlement, grandiosity, and insufficient self-control/self-discipline), other-directedness (subjugation, self-sacrifice, and approval/recognition seeking), and overvigilance/inhibition (negativity, pessimism, emotional inhibition, unrelenting standards/being hypercritical, and punitiveness).

According to Pos et al. (2008), experiential therapy is grounded in humanistic, phenomenological, and existential traditions. It considers clients to be aware, self-reflecting, creative, and to have a subjective sense of being that can lead to dynamic reconstruction of lived realities. The client's in-the-moment subjective experience can be an important source of information leading to change. Direct, embodied experience and how it is perceived creates the sense of self. Symbols can represent these experiences in consciousness and can be changed toward the creation of new meanings

that facilitate living more in participation and in agency. The experiential approach began as the humanistic third force and also was gestalt and person-centered. These traditions are not environment-centered or unconscious-centered, as in behaviorism and psychoanalytic thinking, respectively.

The existential approach now includes neohumanistic offshoots, such as emotion-focused/process experiential therapy (EFT). In EFT, emotions are considered cardinal to the experience of the self, and in monitoring them as well as the meanings that accompany them, clients are facilitated in the change process. Emotion schemes underlie felt experience, and in therapy, by activating and reflecting on them, experience is made available to consciousness for symbolization, narrative construction, and therapeutic work. Process markers, such as quality and degree of emotional arousal, indicate breakthroughs taking place right in session.

Baer and Huss (2008) presented the fast-growing approach of mindfulness- and acceptance-based psychotherapy. In mindfulness, one focuses intentionally in a nonjudgmental way on ongoing experiences. Acceptance concerns the willingness to experience even unwanted unpleasant internal phenomena without trying to avoid, escape, or end them. Because they are part of life, skillful acceptance of these experiences may be necessary. It may be counterproductive to do otherwise.

The origins of the mindfulness/acceptance approach to psychotherapy lay in the Buddhist tradition. Contemporary approaches include acceptance and commitment therapy (Hayes et al. 1999), dialectical behavior therapy (Linehan 1993), mindfulness-based cognitive therapy (Segal et al. 2002), and mindfulness-based stress reduction therapy (Kabat-Zinn 1990). The former three are considered part of innovations in cognitive behavior therapy. In these three approaches, instead of addressing the cognition behind the problem, the therapist addresses the ongoing emotion in an accepting fashion. However, in dialectical behavior therapy, a more directive approach is used for more severe conditions, such as borderline personality disorder. In one way or another, all the approaches emphasize the need for acceptance, that change may be needed, that excessive experiential avoidance may be harmful, and that the process of decentering or defusing may create sufficient distance from internal events so that change can take place.

Tarragona (2008) presented a review of postmodern and poststructuralist therapies. The therapies are also called narrative, discursive, conversational, collaborative, and social constructionist. Postmodernism questions the nature of knowledge and the process of its acquisition. In the understanding of reality, postmodernism respects perception and the meaning ascribed at the particular and local level rather than any absolute or universal and positivistic or empirical understanding. Knowledge thus consists of constructed meanings, multiple in perspective and voice, and derived in collaborative social contexts through relational and generative language, discourse, stories, narratives, and conversation (Anderson and Gehart 2006; Kim Berg and Steiner 2003; White 2004).

Therefore in therapy, the client and therapist co-construct new meanings or narratives through dialogue. The solution-focused approach maintains that the client has answers that may be hidden or that they can generate, and the therapist is just a guide. The therapist may ask for exceptions that do not fall into the category of failed solutions. Dominant stories are problem-saturated, and unique outcomes that do not fit them can be mapped. One way of encouraging exceptions and unique outcomes to transform into new narratives is to externalize the problem. That is, by giving the problem a name, the client can better distance from it, and this helps in re-authoring new stories, for example, about having control of the problem. Given the focus on the client and her or his problem-resolving capacities in this approach to therapy, the therapist must be humble in this process, adopting a stance of "not knowing."

Magnavita (2008) presented a nuanced account of psychoanalytic or psychodynamic psychotherapy, originally developed by Sigmund Freud, who is considered the patriarch of the mental health movement. This approach ascribes psychological problems to motivations largely hidden from consciousness. Powerful unconscious forces create internal conflicts by seeking expression, thereby needing constant monitoring. Wishes and impulses are defended against or altered. Inability to do so effectively may lead to unconscious influences either inappropriately governing behavior or causing psychological symptom formation in the intrapsychic effort to control them. A personality structure (id, ego, superego) helps give rise to psychosexual stages in development, where in the preschool stage, conflict between the desire for the other-sex parent and incorporation of prescriptions against violating this and other societal norms leads to repression into unconsciousness. Defenses include regression, reaction formation, introjection, identification, projection, and sublimation. Resistance may be at work in psychotherapy.

Variations of the Freudian approach have emphasized psychosocial rather than psychosexual stages (Erikson 1963; surprisingly, not mentioned by Magnavita), the ego and the self (Kohut 1977), the mother as predominant rather than sexuality (e.g., Anna Freud), and interpersonal relations. Sullivan (1953) pioneered this latter approach, and contemporary versions emphasize the attachment of the infant to the caregiver (Bowlby 1980). When caregiving is insensitive, the attachment style that develops in the infant is insecure rather than secure, and this can have lasting effects on the child through distorted representations of self and other.

Cooper (2008) described existential psychotherapy as concerned with being in the world (Heidegger, Buber) yet

being solitary (Kierkegaard, Sartre) and phenomenological (Laing 1965). The different existential approaches to therapy vary on the dimensions of: (a) bracketing/existential assumptions (see below), (b) directivity/nondirectivity, (c) description/analysis, (d) psychological orientation/-philosophical orientation, (e) individualizing/normalizing, (f) pathologizing/depathologizing, (g) intrapersonal focus/ interpersonal focus, (h) emphasizing the therapeutic relationship/not doing so, and (i) therapeutic spontaneity/use of therapeutic techniques. In the variant of this approach called logotherapy (Frankl 1984), clients are helped to find meaning in their lives. In May's existential-humanistic psychotherapy, the reality of existence replaces Freudian drive mechanisms in developing anxiety and defense (Yalom 1980). Spinelli (2001) has structured a phenomenologically informed psychotherapeutic practice based on therapists "bracketing off" themselves, which is akin to the not-knowing approach in postmodern therapy. Mearns and Cooper (2005) indicated that, in session, the client and therapist engage in a dialogic encounter, which resembles Buber's (1958) I–Thou relationship found in spiritual encounter.

Stricker and Gold (2008), Lazarus (2008), and Sparks et al. (2008) examined approaches to psychotherapy that are flexible in orientation, being integrated, eclectic, and multimodal and dealing with common factors that render therapy effective. In psychotherapeutic integrative approaches, therapists are concerned with effective systematic synthesis rather than just haphazard picking and choosing of methods. They are not concerned with undertaking one particular version of an integrated therapy, such as extended cognitive behavioral approaches. "Psychotherapy integration therefore refers to the search for novel and more effective ways of combining ideas and techniques" (p. 390). Some different approaches or modes of accomplishing this objective are called technical eclecticism, common factors integration, assimilative integration, and theoretical integration. For example, Beutler et al. (2006) developed prescriptive psychotherapy, a flexible approach considered technically eclectic. The therapist matches to client characteristics and focal problems the best available clinical procedures from any therapy based on clinical decisions derived from clinical knowledge and empirical research in the literature. In the common-factor approach, trans-theoretical variables, such as providing insight, new experience, and hope, are emphasized (Garfield 2000). Nonspecific factors such as these may be the critical variables in determining therapeutic outcome, being even more important than the particular therapeutic modality used. Wachtel (1977) described an elaborated psychodynamic theory that can be considered a theoretical integration. Stricker and Gold have developed an approach that emphasizes the assimilative integration of therapies, where one school is primary and others are used to add to this home one, as needed. Different versions of the approach use different home schools (e.g., psychodynamic, cognitive behavioral).

Conclusion

This review of major contemporary psychotherapies has covered a full range of schools of thought. However, positive psychology is making increasing inroads into the mainstream of psychology. It is being applied to the rehabilitative context. For example, Snyder et al. (2006) described how promoting an attitude of having hope can be important in rehabilitation. Engaging in catastrophizing is one of the worst reactions that a client with psychological injury can have, and psychotherapists need to work on this disheartening predilection when it is evident after an event at claim, fostering a more optimistic attitude. Frederickson (2001) has described a broaden-and-build model of positive actions and attitudes that can be especially useful in the rehabilitative context.

It is quite appropriate that the existentialist approach to psychotherapy is the one that has enumerated the various dimensions on which various types of practices differ. Unlike the other approaches that strive for coherence in theory and practice, the existential one admits to variations, presumably depending on the existentialist bent of its practitioners. Diversity makes for innovation, as mentioned previously. The stories that psychotherapy can tell about itself should include exceptions and unique outcomes where differing practices can broaden and build or take hold and flourish.

How different are the psychotherapies that we have considered? We know that there are commonalities in therapy, such as the value of therapeutic warmth, client openness to change, and the match among the therapist, client, and the methods used. Beyond this, the different therapies create theoretical edifices within complex terminology that may not be as different as they seem. Often, specialized terms and concepts that mark a particular psychotherapy can be translated from one theory into the next by seeking similar terms or conceptualizations. At the same time, we can ask, how different are the psychotherapies, despite these and other similarities? As a group, they do differ along many of the dimensions described in the existential approach and in other ways as well. I return to the question of how psychotherapies can be organized into a more coherent framework despite their differences in the conclusions to the article.

Componential Approach to Psychotherapy

Introduction

Through the various sections of the paper, it has been shown that there are five major ways to organize the different psychotherapies. First, they can be summarized

school by school, especially listing the predominant ones, such as cognitive behavior therapy. Second, they can be organized according to disorder, with the relevant techniques and procedures described for each, irrespective of school of origin. Third, the integrated approach is less school-focused and more individual and eclectic. Usually, this takes the form of an eclectic approach to extant therapies, where, for each client, the best available and most applicable techniques and procedures are put into place to best fit the presenting complaints of the whole person in context, irrespective of therapy of origin. Fourth, a different type of overarching psychotherapeutic umbrella may be used, such as the biopsychosocial model.

Fifth, there is the componential approach to psychotherapy in efforts to organize its presentation, teaching, and application. What are the critical components that comprise the person in context, and how can they go awry and be approached in therapy? This approach seems especially applicable to cases of psychological injury because of the associated physical and pain symptoms; the associated interventions needed at the level of the treating team, family, and the system involved; and the difficult forensic and functional issues that accompany such cases. Moreover, it is especially oriented to the individual client because of its use of a broad-ranging series of components to consider in assessment and treatment, where the combination of ways that individuals can differ across and within the components is extensive.

Note that the distinctions between the different manners of describing psychotherapy are not necessarily orthogonal. There is overlap. For example, much of the description of the procedures that one can use for the different components are cognitive behavioral in orientation, and the biopsychosocial approach integrates this approach, as well. Moreover, most of the examples that I used relate to particular DSM conditions and are similar from one to another.

The following account is based on recent texts on the topic pertaining to one type of psychological injury, posttraumatic stress disorder (Bourne 2005; Cash 2006; Taylor 2006; Zayfert and Becker 2006).

The ten major components of the person in psychotherapy:

1. *Psychoeducational, instructional*. After having completed the relevant paperwork, the assessment, and rapport building, the psychologist can help the therapeutic process by providing feedback on the nature of the client's symptoms, impairments, diagnoses, and so forth, the expected symptom course without treatment, the expected course with treatment, the prognosis, the therapeutic recommendations (treatment plan, number of sessions, etc.), and type of therapy to follow. Much of the feedback functions to alleviate incorrect knowledge about the client's condition and how therapy can help.
2. *Physiological*. Cognitive behavior therapy is the primary therapy used by psychologists, partly because of its evidence-based support. Its label indicates that it is multicomponential in nature. Much of the multidimensionality of cognitive behavior therapy lies in its behavioral aspect, where, aside from its traditional emphasis on learning, behavioral modification, and reinforcement contingencies, it describes relaxation techniques that are physiological in nature, describes social skills training and techniques of affective modification, and so on.

Relaxation techniques are mechanisms to reduce tension, moderate stress and anxiety, and create more positive thought processes, affect, and experiences. Moreover, when a client is reacting with excessive physiological distress, relaxation techniques may be used to control these reactions. The value of teaching clients how to control or re-equilibrate maladaptive physiological reactions cannot be underestimated. Physiological disruption accompanies stress responses to traumatic reactions and panic attacks, emotional responses, such as anxiety and depression, and so on. Long-term release of cortisol and other physiological mediators of continued stress and emotional reactions interfere with appropriate learning in therapy, given its state-dependent nature. By not being able to control stress responses, clients are at risk for poor motivation to participate and improve in therapy, and this might even compromise their physical recovery in rehabilitation. Relaxation techniques allow the individual to moderate initial reactions to stress and emotions, reduce long-term stress reactions, learn to maintain equilibrium when confronted with new stresses, and so on. Also, they help equilibrate other vegetative functions, such as by helping the client to relax enough to fall asleep and return to sleep after a nightmare.

Breathing techniques constitute a primary relaxation technique that allows for stress reduction and physiological control. The therapist guides the client in regular rhythmic breathing. In my approach, I indicate that any breathing technique itself is secondary to focusing on the rhythms of the breathing and on the expanding lungs, a technique that serves as a distraction technique from stress and, at the same time, calms the body, preparatory to more positive thoughts and visualizations.

The clients learn to breathe diaphragmatically or, if this does not help, in any fashion comfortable to them, reaching a rate of about eight breaths (±2) per minute (e.g., start by breathing in for 2 s, holding the breath for 1 s, breathing out for 2 s). By combining breathing exercises with visualizations, positive thoughts, and so forth, one is approaching meditative and self-hypnotic strategies.

Another common relaxation technique concerns progressive muscle relaxation. Essentially, the client is asked to

contract or flex and then stretch or extend zones of the body in a sequential manner. The client should engage in periods of muscle tension and release lasting 5 s or more each, in focused muscle groups, with enough repetitions to last up to about 10 min. Woolfolk and Allen (2007) described an abbreviated progressive muscle relaxation technique. The tense–release procedure moves from the arms, to the legs and buttocks, to the stomach, chest, and upper back, to the shoulders and neck, and finally, to the mouth and jaw, eye area, and forehead. In my variation of this procedure, I place the step with the arms between the stomach and shoulder steps.

Biofeedback is another technique that functions to reduce physiological reactivity. There are many ways of teaching biofeedback. However, at the core, the person learns to control physiological activity by receiving signals from apparatuses that represent that activity, such as when electrical conductance responses of the skin due to stress reactions are amplified and modulated into sound signals of varying intensity. The person then uses relaxation techniques to alter the nonrelaxed state toward the relaxed state and, in so doing, the signal moves toward levels indicative of relaxation.

3. *Behavioral*.

   (a) General. The behavioral level of therapy concerns several different interrelated strategies. Children/individuals enter therapy with histories of reinforcement, punishment, and learning that have shaped their behavior repertoire. Reinforcements are administered after a desired behavior so that the frequency of its emission is increased. Positive reinforcements are rewards (stimulus, circumstance) that are provided after a desired behavior (dependent on it, contingent with it) in order to increase the frequency of the desired behavior. Negative reinforcements involve removing, stopping, or delaying an aversive or unwanted stimulus or circumstance in order to increase a desired behavior. Punishment is aimed at decreasing an unwanted behavior. Behavior modification concerns the awarding of positive rewards or the removal of negatives in order to alter unwanted behavior, including the awarding of tokens, such as points, that can be used to acquire rewards later on if a certain threshold in behavior or desired outcome is reached. Shaping involves serial goals in behavior modification that come to increasingly approximate the threshold behavior or desired outcome. Praise constitutes the optimal positive reinforcement.

In therapy with children, often, the family has to learn different, more constructive ways of reinforcing the child and ways to stop using punishment and coercive strategies that produce negative outcomes. Parents can learn to use a program of positive reinforcement and set up a reward system of tokens/points; for example, if the child earns 100 points for having engaged in desired behavior and/or controlled unwanted behavior, she/he gains a reward, such as getting more access to a video game, or the child can play outside more with friends. One procedure involves positive events scheduling, which is consistent with the principle of positive psychology, that we should be promoting well-being, broadening and building appropriate behavior repertoires, and so on.

Finally, much behavior is acquired through observational learning, and imitation. This is especially important with children. We may coach families appropriately concerning a desired behavior or show videos to children of children reacting well in situations of concern, for example, to presurgery anxiety-provoking painful situations. We may encourage them with developmentally appropriate techniques, such as using the label of well known superheroes to describe them. For individual adult clients, the therapist may role model desired behavior, for example, in anger management.

   (b) Additional behavioral techniques for anxiety

   Systematic desensitization—Systematic desensitization is a classic behavioral technique. It involves exposing the individual to the problematic emotional, arousing, or feared stimulus or situation. However, the exposure is undertaken in a safe manner because the exposure is graduated and the arousal is dampened by simultaneous relaxation exercises. In administering the therapy, first, the psychologist elaborates with the help of the client an exposure, anxiety, or fear hierarchy and also teaches relaxation strategies. The hierarchy consists of stimuli or situations that elicit increasing emotional reactions because they increasingly approximate the most emotional anxious or feared stimuli or situations (e.g., for travel phobia with an adult, the hierarchy may proceed from imagining a quiet drive to imagining busy highway driving in a storm with many trucks). Then, the psychologist has the client relax before experiencing each step in the hierarchy. This elicits an incompatible and more relaxing emotional response that reciprocally interferes with and eventually fully helps control the typical emotion, arousal, or fear elicited by exposure to the step in the hierarchy.
   Systematic desensitization may be administered either in vivo or imaginally. In vivo systematic desensitization refers to dealing with fears live, in a real-life setting. Imaginal systematic desensitization involves visualization of steps in a fear hierarchy in the therapist's office, or at home, but not live (as with the imagined driving hierarchy given above).

Reducing anxiety at each of the lower levels of the hierarchy leads to a reduction in overall anxiety, so that it becomes easier to go from level to level. The therapist asks the clients to report their level of relaxation/anxiety on a scale of 1–10, in terms of their subjective units of distress (SUDS), where 10 represents the worst degree of anxiety possible, 2–3 represents a quite relaxed state, and 5–6 is a degree of anxiety that is moderate or that is elevated but bearable.

Exposure therapy—In exposure therapy, clients safely confront their fears in a systematic way, gaining better control and learning new ways of dealing with and processing their trauma by habituating or getting used to memories of them. Psychoeducation functions as a first step to prepare the terrain. Relaxation techniques are learned so that the client can deal with increased arousal responses to the memories and emotions evoked. The techniques employed are repeated and prolonged; for example, the trauma is relived on a daily basis until there is lessened arousal to the desired level. The reliving techniques may take place for as long as it took the trauma in question to have happened, even if it had lasted 20 min or more. Imaginal exposure involves reliving the trauma in question by means of offering a verbal report, of writing a narrative report, or by using associated means, such as examining relevant photographs and articles. To better deal with their fear, clients are asked to describe exactly the trauma experienced and to listen to or otherwise perceive the description repeatedly, for example, by listening repeatedly to a tape recording of their own report of the incident in question. For children, drawing techniques are appropriate.

In dealing with traumas that are deeply engrained, clients will attempt to suppress the memories. However, the memories may manifest as flashbacks and ruminations, avoidance behavior, intense physiological disruption/hyper-arousal, numbing to the event/dissociation, and numbing to interpersonal relationships. Nevertheless, by working through trauma, no matter how uncomfortable it may seem at first, clients can recover equilibrium. The goal is to have them be able to relive an approximation of what they experienced in the past at a level of distress that is manageable, for example, at a level of about 50% of the degree of distress that recall of the trauma keeps evoking. In the case of a maximum rating of 10 out of 10 on a subjective scale of distress (SUDS scale), this translates into being able to relive the full trauma through imaginal exposure at a level of 5 out of 10, or perhaps 6 at most. By being able to relive the trauma at this level or less, clients are being primed not to keep being upset at flashbacks, to respond effectively to reminders in a hyper-aroused mode, and so on; the goal is at least a reduced intensity and duration of these symptoms.

In situational or in vivo exposure, clients are exposed to harmless but also distressing reminders of the trauma that they encounter in real-life settings. The therapist may decide that an exposure hierarchy needs to be constructed for work in vivo, and a gradual approach is adopted, facilitating symptom management during the exposure.

Interoceptive awareness/sensitization/exposure—In this technique, the goal is to have clients gain mastery, in a safe environment, of neurovegetative reactions that mimic the ones that they may have experienced during episodes of psychological trauma/distress. For example, in panic reactions, clients may be breathing heavily, experiencing a rapid heart beat, getting dizzy, sweating, and so on, and agonize that they are having a heart attack or other health problem, thereby promoting a vicious circle.

In order to learn that these arousal-related physiological sensations/responses are controllable when they do occur, clients are asked to induce them in a safe manner in the presence of the therapist. For example, they may be asked to run on the spot, climb stairs, or otherwise get out of breath. Next, they are asked to use a relaxation technique simultaneously as their body recovers from the exercise, pretending that the recovery is from acquiring control of a panic attack through learning appropriate procedures.

4. *Action tendencies, inhibitory control*. Another behavioral level in therapy concerns the control of maladaptive action tendencies. Behavior is not always expressed because we have regulation mechanisms that act to contain maladaptive responses, at least for the most part. However, adult clients/children may need to learn to better redirect, moderate, inhibit, or otherwise control bad habits that are interfering, disruptive, and so on. Or, they may need to better learn to displace/sublimate/canalize their frustrations/irritability/explosiveness when their action tendencies include an anger that needs to be managed. This is facilitated by techniques that inhibit negative activity, such as using breathing techniques at the first sign of inappropriate or exaggerated emotional upset.
5. *Cognitive*. Cognitive therapy is a restructuration process that helps clients alter unhelpful, unrealistic, impairing, irrational, dysfunctional, or otherwise inappropriate thoughts. Our thinking is complicated, existing at several interacting levels, from cognitive contents and products (ideas, structures, etc.) to underlying processes, from basic schemas that one may have to powerful underlying beliefs. Briefly, the therapist helps the client alter maladaptive thoughts that channel behavior in maladaptive directions. Clients may engage in cognitive distortions, such as attributing hostility to nonhostile activities, looks, or comments by others. In terms of anxiety, this may refer to children catastroph-

izing, anticipating the worst, feeling helpless, and so on. The therapist challenges the person's cognitions, asks for evidence, requests that the client track the situations and thoughts that precede maladaptive behaviors, and so on. The goal is to replace automatic, narrow, habitual cognitive filters elicited in antecedent situations with more balanced, realistic, and accurate constructive perceptions and meanings, so that adaptive behavior and emotion result. When children are involved, the therapist must tailor the cognitive approach to the developmental level of the child.

Ultimately, the therapist is promoting self-confidence in the client so that he or she can deal with the sequence of situation–thought–maladaptive behavior. The therapist promotes interruption strategies to the sequence, including self-questioning and constructive self-talk. The client learns simple statements to use in situations of concern, such as: "She did not mean it that way," "I do not have to react that way," "I can do it a different way," "Who is in control? I am." The goal is to have clients internalize such statements as part of their thought mechanisms when situations of concern arise, teaching themselves that they have control, that having control is now part of their self-concept, and that cognitive reformulation/restructuration has taken place.

It is important to note that cognitive therapy concerns affect and emotion as much as thought. It is based on a particular model of antecedents, beliefs, and consequences, which the client must learn to dispute (A, B, C, D model). At the same time, the schemas that we create and which serve as filters directing our behavior are cognitive-emotional schemas that involve both components of the term (in this regard, one branch of cognitive therapy is called rational-emotive). Moreover, we must keep in mind that our schemas are dynamically reworked by ongoing experiences, by alterations of the hold that past memories have on us, and so on, for example, through psychotherapy. In this sense, schemas are flexible constructions more than fixed structures.

Examples of maladaptive cognitions that can be replaced in cognitive psychotherapy include: all or nothing thinking ("I must end up having no pain"), overly negative thinking, catastrophizing ("I'll never get better"), minimization of positives ("Who cares if I am half-way there"), jumping to conclusions ("The physiotherapy hurts; it is not helping"), overgeneralizing ("That headache lasted too long; I will always have bad headaches"), emotional reasoning ("If I feel it, it must be true"), should statements ("I should have been better by now"), and self-blaming ("If only I did not drive that day, the drunk would not have hit me").

6. *Affective, emotional, intrapersonal*. At the emotional level, a common technique is to encourage clients to try to find the meaning behind the emotion being expressed and to work toward solving the issues raised in this exploration and insight. By modulating emotional, affective, and other intrapersonal characteristics, therapists help channel the clients' behavior to more constructive, problem-resolving, self-controlled activities, thought processes, physiological reactivity, and other components.

A typical example involves asking clients what underlies their anger, what are the frustrations and problems, what options have they considered to resolve them, can they think of others, is anger the only option, what are the negative consequences of the anger in terms of their goals, and how are the other options that may be available better for the resolution of the frustrating situation. At the same time, the therapist needs to invoke other techniques, such as techniques that help control physiological reactivity, allow calming down, encourage constructive problem solving and deployment of coping mechanisms that have been learned or are being learned, procure social support, and so on. For example, in terms of anxiety, the meaning behind the emotion may concern dread at the anticipation of what may happen, fearing the worst, catastrophizing, or pessimism. The therapist should deal with the underlying issues, have the client reframe the possibilities, and perhaps lead the client to acceptance if planning appropriately cannot help at all.

Constructive affective self-statements include: "Some worry is motivating; too much is not"; "I'm worried because I want to change." "Anger is telling me to solve that problem in other ways." "I'm in control; I can control my feelings of being down by relaxing, doing something positive for me, and then getting on with it." "My confidence is high; I can do it, maybe I won't do as well as I would like, but I will do my best."

One quite maladaptive thought–emotion complex concerns pessimism, self-doubt, and insecurity. In this regard, for example, students may revise their emotions of self-doubt as follows: "I can't do it; I always procrastinate. But this is how I always used to feel; I just have to start breathing exercises, calm down, and then open the book. Success is more likely this way."

7. *Social, relational, interpersonal*. Cognitions and emotions express fundamental internal psychological processes that we harbor, but they function to help us adapt successfully to our external contexts. They serve social, relational, and interpersonal ends. We need contextually attuned social and relational skills in interacting with others. Our emotional intelligence, social cognition, capacity to take the perspective of others, communication skills, and so forth enable us to

balance well the perspectives of others with our own in negotiations of adaptation. The therapist uses the necessary techniques in working with clients to optimize this area of functioning. Assertiveness training is typically used. Social skills are enhanced through training. The client may have maladaptive schemas or representations of the relationship with the other, related to insecurity and derived from early attachment experiences. Interpersonal therapy focuses on these issues, in particular. Even basic learning, modeling, and coaching techniques provide a good starting point with clients in these regards, including with children.

8. *Self esteem, motivational*. A major issue confronting many clients concerns their self-confidence, self-esteem, self-worth, or self-image, which may broaden to wider issues, such as their personal identity, their perceptions of who they are, or what others think of them. The therapist may work directly on this aspect of a client's psychology. Or, it may be strengthened as a secondary effect of successes in other areas. Ultimately, the therapist helps the client construct a new, more positive story about the self relative to past stories that have been learned. Reciprocally, when the sense of self is elevated, motivation to succeed increases, more successes are obtained, and others become more appreciative in a growing circle of confidence.

Often, motivation is a prime issue in therapy. This is especially true with respect to treatment adherence, engagement in the therapeutic process, positive effort, and avoiding self-sabotage. Motivation affords the critical component of appropriate therapeutic learning. The difficulty is that it is hard to measure motivation objectively, it is very complex conceptually, and, in the rehabilitation context, there are extraneous factors to consider.

9. *Coping, problem solving*. Optimal coping with problems or stress of any kind is partly cognitive and partly strategic. First, clients need to learn to evaluate adequately the difficulties that they are facing and the resources available to them in dealing with the difficulties. Appraisals are cognitive activities oriented to analyzing problems/stressors, and, more often than not, the objective facts about the situation are not overwhelming but are perceived that way. Moreover, the individual feels helpless, and does not know what to do. By learning to assess well the parameters of the difficult situation/problem/stressor and the coping mechanisms available to deal with it, the individual in therapy already is making progress. Moreover, the therapist guides the client in learning different ways to cope and, depending on context, ones that are more problem-focused than emotion-focused.

10. *Broader cognitive constructions*. Cognitive therapy deals with thoughts and beliefs that influence ongoing actions and emotions, but the therapist needs to consider broader cognitive constructions that may not be readily apparent at the more micro level. Although cognitive therapy concerns itself with beliefs that reflect wider concerns in terms of self-confidence, attributions of intentions of others, and so on, there are also broader or macro level cognitions that one should consider, such as narratives, life stories, scripts, and existential schemas. Examples include general statements about locus of control, one's sense of agency, how one's family or marriage functions, what the future holds, and does fate determine the life course. For children, one should query beliefs about family, school, if effort is worth it, and so on. The issues may be similar to some at the micro level, for example, having a sense of control, but the issue will be about control, in general, rather than control of the particular difficulty or problem at hand.

Conclusion

The ten basic components of the individual that need to be understood well in order to arrive at success in psychotherapy with clients manifesting psychological injury have been explained. By incorporating them into a complete therapy, the rehabilitation therapist can better arrive at an integrated perspective. They need to be complemented by work on functionality, for example, with respect to return to vocational or child care functions. In addition, the rehabilitation psychologist coordinates with the full team treating the client.

Overall, the biopsychosocial approach and the cognitive behavioral approach have much to offer the psychotherapist dealing with psychological injury, especially when forensic and functional considerations are included. A componential approach can integrate these perspectives and afford the flexibility to adapt to individual needs in therapy without compromising the admissibility of evidence that one would seek in court for the approach.

Framework for Organizing Different Psychotherapies

Psychology does not have a unifying framework that can integrate the different major therapies under one umbrella. There are so many of them, and they are vastly different in emphasis and scope. For example, some deny that mind is relevant, but some consider the mind as primary. Some emphasize that the client is essentially passive and needs

direction, whereas others emphasize that the client is active, and the best role for the therapist is to be nondirective. Some believe that presenting problems reflect deep-seated problems that need intensive therapy concerning underlying issues, whereas others deal with problems with an in-the-present/solution-focused, short-term approach. Some deal with problems in a straightforward manner, and others are more paradoxical in orientation. Some emphasize facilitating positive emotions and actions, whereas others underscore that suffering is part of the human condition and emphasize acceptance. Some focus on the individual client, whereas others deal with the individual in relational context, considering family, partner, work, community, and the wider ecology, to the point of fostering activism where needed, and even having the therapist become activist. There are many more distinctions that one can raise that differentiate extant therapies.

It would seem impossible to organize into an effective framework the differences in the dimensions that characterize the multiple psychotherapies, let alone the therapies themselves. However, I propose one manner of viewing the different therapies from a more organized rather than a haphazard perspective of random lists. In this regard, one could argue that the different therapies reflect different developmental levels of dealing with the person. On the one hand, some are especially developmental, such as therapies stemming from the attachment perspective of Bowlby and the Freudian or Eriksonian stage perspective. On the other hand, it could be argued that the various therapies focus on earlier or later developmental acquisitions, even if they concentrate on adult manifestations of these problems in therapy. For example, the behavioral approach to therapy is concerned with changing behavior through different reinforcement contingencies, modeling, and so on, but the origins of the symptom presentations seen in the adult in the course of therapy often reflect learned habits that have their roots in childhood. Nevertheless, it is granted that not all therapies are aimed at the same developmental levels, in that some are more attuned to earlier rather than later developmental passages (see Table 1).

The advantage of a developmental approach to organizing the multiple psychotherapies is that it enables the combination of the componential and the school approaches to understanding psychotherapy. For each of the ten major constituents of the person that has been enumerated, one could ask if it is possible to determine at which developmental level the particular presenting problems plaguing the client arose and how the problems initiated at that developmental level influenced that person as he or she continued to grow. Also, one could ask, given the information gathered, whether the developmental knowledge gained would help further specify which particular school of thought or combination of schools and techniques would best help a client to deal with the problem being presented. Finally, it could be that the presenting problems in an adult reflect adult-stage acquisitions but that the psychotherapies available that seem to correspond to earlier stages appear the best to use because of factors of simplicity, appropriate match, efficacy, etc. In this regard, although I specify in Table 1 that behavioral therapy is among the least complex of the therapies, for the reasons mentioned, it is used in a widespread fashion for people at all ages and for a full array of problems.

Table 1 Correspondence between target level in different therapies and Young's model of developmental stages

Therapy	Developmental stage
Behavioral, psychopharmacology	Physical (reflexive)
Interpersonal/emotional regulation	Emotional (sensorimotor)
Cognitive	Cognitive (perioperational)
Narrative	Conscious (abstract)
Acceptance/community re-integration	Spiritual (collective intelligence)

In the table, I indicate that one simplified way of appreciating the developmental pathway is according to a stage sequence that moves through the physical, emotional, cognitive, conscious (abstract), and adult spiritual (more advanced, collective intellectual) levels (see Young 2008). Therefore, in aligning the various major psychotherapies that one could use in cases of psychological injury, the behavioral and cognitive approaches would seem to parallel the earlier phases (first, third, respectively; with psychopharmacological approaches aiming at the first level as well). The various therapies that appear to be more concerned with emotional regulation appear associated with the second level (e.g., attachment, interpersonal). More complex cognitive approaches, such as the narrative one, seem to coordinate with the more cognitively complex abstract developmental level. Finally, therapies that attempt to instill acceptance by individuals, such as in paradoxical, dialectical therapy, or that work at the level of community re-integration because there are permanent impairments aim toward either higher-order cognitive levels involving personal acceptance or wider ecological issues involving acceptance of an injured individual's status.

Therapists who are more eclectic in orientation may find that they are helping clients with several approaches and are using techniques that address different developmental levels in one way or another. Or, they may use approaches that, by definition, may work at several levels, depending on the problem. These include solution-focused, strategic, and other systemic approaches.

To conclude, the psychotherapist must be attuned not only to the client and the best approaches to adopt in treatment but also to the system in which the client and therapist are functioning and all the extraneous factors

impinging on them. This includes all biasing ones and stress-related ones from either of the adversarial sides of the legal context. Moreover, these are systematic pressures to cut back on psychological services, minimize payment for them, and otherwise deny injured individuals their rights to efficacious psychological treatment. The psychologist who can navigate well these considerations will function well as an expert not only with the client but also in court.

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