with only chronic depression, as many as 70% of these patients will respond when both medication and psychotherapy are provided.

In what order should medication or psychotherapy be added to either ongoing monotherapy is an important treatment issue. Sequential therapy refers to this clinical decision as to when to augment psychotherapy with medication or when to add psychotherapy to a pharmacotherapy. In the treatment of recurrent major depression it was found that in women who did not fully recover with IPT, the addition of an antidepressant was more effective than treating participants from the outset with combined treatment. Although this study was not a randomized controlled one, it did examine participants from a single patient population treated at one center. This treatment sequence may have particular appeal to women who are against taking medication during pregnancy or lactation.

The data from combined treatment in patients with dysthymia is inconclusive, but this is not the case in the treatment of bipolar disorder. Patients with bipolar and schizoaffective disorders are treated more effectively when they receive family therapy with medication as opposed to psychotherapy alone. Those in combined treatment had fewer relapses and hospitalizations, and researchers were able to demonstrate that family members viewed their affected relatives in a much more positive light.

B. Schizophrenia

There is a wealth of studies going back more than 20 years that has demonstrated the efficacy and effectiveness of treating schizophrenia with psychotherapy and medication. Contrary to some views, families and patients affected by this disorder value psychotherapy greatly. Early studies have demonstrated that patients living in families characterized as having high expressed emotion are more vulnerable to relapses. Such families are characterized by intense affect, frequent criticism, and intrusiveness which have been associated with noncompliance. One randomized controlled study of first-episode patients found only a 10% hospital readmission rate with participants who received both family therapy and medication. This figure compared to a 75% readmission rate in those patients who received no treatment. In addition to family therapy, individual psychotherapy has shown substantial promise. A recent 3-year randomized controlled trial of patients with schizophrenia who received medication and a type of individual treatment called personal therapy that addressed stress management, education about illness, and interpersonal relationship issues was found to be superior to medication and supportive measures. It also promoted enhanced social adjustment throughout the entire study period.

Patients in a British study whose illness did not respond to medication were helped with the addition of 9 months of CBT. Improvement persisted after the completion of formal therapy that was not the case for those patients receiving medication and a nonspecific befriending relationship. This study also noted that rational discussion of hallucinations and delusions when included as a formal component of the psychotherapy accounted for 50% less symptomatology. Another randomized controlled study of patients treated with 20 individual sessions of CBT showed significant improvement compared to groups who either received only medication or supportive psychotherapy plus medication.

Two other studies have demonstrated that CBT is helpful in the treatment of patients with schizophrenia. Treatment refractory patients started on an atypical antipsychotic medication and provided with CBT and social skills training showed greater improvement that a comparison group treated with supportive psychotherapy and medication. Another randomized controlled trial where CBT and medication were compared to medication plus routine care demonstrated nearly four times the improvement in the former group.

C. Anxiety Disorders

Compared to schizophrenia and affective disorders, there are considerably fewer studies of integrative and combined treatment in panic, generalized anxiety, and obsessive–compulsive disorders. In the case of panic disorder, a recent randomized controlled trial of approximately 300 patients receiving CBT and the tricyclic antidepressant imipramine demonstrated greater improvement at the end of the maintenance phase of treatment than those patients with panic disorder who were treated with either monotherapy. One report examined combined treatment of panic disorder with clomipramine and 15 sessions of brief psychodynamic psychotherapy. Patients who received both components showed greater improvement 9 months after the discontinuation of medication compared to those who were treated only with clomipramine. The efficacy of psychodynamic psychotherapy as a monotherapy in the treatment of panic disorder is currently under study, and preliminary reports are very promising.

In the 1980s there were numerous publications that supported the superiority of tricyclic antidepressants and behavioral therapy in combination for the treat-

ment of panic disorder and agoraphobia with single interventions. However, there is considerable controversy regarding the advantage of using combined treatment compared to medication or psychotherapy alone in large part due to the high rate of relapse after medication is discontinued. The integrative treatment of social and specific phobias may be more helpful than is the case with panic disorder. It appears that the same may also be true for combined treatment of generalized anxiety disorder with CBT and medication. However the literature is very limited in this area. The clinician must remember that the vast majority of early studies in combined treatment of anxiety disorders employed older tricyclic antidepressants that often cause considerably more side effects than newer-generation medications. Therefore, studies using selective serotonin reuptake inhibitors may clarify the usefulness of these agents with psychotherapy.

Some practice guidelines support the use of medication and behavioral therapy in treating obsessive–compulsive disorder. Clinical consensus is that exposure and response prevention psychotherapy coupled with selective serotonin reuptake inhibitors is the treatment of choice. The superiority of behavioral therapy over medication alone is well established, but there are few substantive studies of combined treatments.

D. Substance Abuse

There are a number of reports that have noted the superiority of combined treatment with the opiate dependent. A randomized controlled trial assigned 84 opiate-dependent patients to either 4 months of counseling and supplemental drug counselling or counseling with supportive-expressive psychotherapy. At 6 months after treatment, those participants receiving the psychodynamic psychotherapy could be maintained on lower doses of methadone and also were less likely to test positive for cocaine. Another randomized controlled study of the same population found that those provided with psychiatric and vocational counseling services as well as family therapy were less likely to be hospitalized, experience job instability, and to be on welfare than patients who were assigned to medication or medication and counseling groups.

With regards to the treatment of alcoholism, two medications have been used traditionally and are FDA approved: disulfiram and naltrexone. The effectiveness of psychotherapy has been studied in a multisite effort called Project MATCH (Matching Alcoholism Treatment to Client Heterogeneity). This study of more than 1,700 patients, compared three forms of manualized treatment (CBT, motivational enhancement therapy, and 12-step facilitation) and found that all three treatments were effective in treating alcohol dependence with the last proving the most effective at 3-year follow-up.

E. Eating Disorders

At present there is only one randomized control trial addressing the treatment of women with bulimia nervosa. This study of 120 participants examined groups that were treated with CBT, supportive dynamic psychotherapy, and medication. Results indicated that CBT plus antidepressants was more effective than the psychotherapy by itself. Also patients given either CBT or supportive psychotherapy with medication experienced less depression and binge eating. The medication component of the study permitted the prescription of new-generation antidepressants if an older medication was unhelpful. This sequential treatment provided only modest improvement compared to the effectiveness of the CBT or supportive treatment.

F. Personality Disorders

There exists one randomized controlled trial of combined treatment for personality disorders, and therefore many clinicians follow consensus treatment guidelines. In this recent study of patients with borderline personality disorder treated with psychoanalytic psychotherapy and medication compared to patients receiving only standard care without psychotherapy, the former group showed decreased suicidal attempts, self-mutilating behavior, number and duration of hospital admissions, and the use of other psychiatric services. This group also demonstrated symptomatic improvement in anxiety, depression, and general symptom distress. There were also gains in interpersonal functioning and social adjustment.

The use of medications in the psychotherapeutic treatment of borderline personality disorder has been associated with a decreased treatment drop-out rate and fewer severely disruptive regressions. Some have cited a positive effect of medication in decreasing intense feelings of aloneness, a common characteristic of many patients with borderline personality disorder. Many clinicians use split treatment arrangements that augment the psychotherapy with medication for reducing target symptoms of aggression, impulsivity, affective lability, and behavioral dyscontrol.

From the review of the literature it is clear that many questions must be answered about the combined use of psychotherapy and pharmacotherapy. Which disorders

are best treated with an integrative approach? What are the indications for sequential treatment, that is, when should treatment begin with psychotherapy and then be followed by the introduction of medication? For which patients and when in the treatment should psychotherapy be added to a pharmacological approach? Which psychotherapies are more advantageous for which disorders in a combined treatment? For which disorders is split treatment cost effective? Many mental health professionals work under significant fiscal pressure to be accountable to payors for the services they provide. Some of these constraints are not based on scientific support and require substantial investigation.

VI. CASE ILLUSTRATION

Ms. Jensen is a 27-year-old unmarried accountant who was referred by a recently relocated family physician to a social worker for assistance in managing the patient's depression and anxiety. According to her physician, the patient has not responded within the last 6 months to any of the various medications he has prescribed. She has a long-standing history of depressive episodes beginning as grade schooler and a well-established pattern of self-defeating behavior since her high school days. The patient has been difficult for the physician as she frequently calls for appointments because of a multiplicity of symptoms and complaints. He is unable to ascertain any significant illness in his patient, and all diagnostic tests have proven normal. Because the psychotherapist has not worked previously with the referring doctor, she recommends that they meet to discuss the patient before an evaluation for treatment is started. The doctor puts off the therapist saying he is pressed for time in his new practice and would prefer to send a summary of the patient's history. The social worker, not willing to disappoint a new referral source, agrees reluctantly to see Ms. Jensen.

The patient tells the therapist that her doctor seemed disinterested in her and stated that she was instructed to visit with a mental health professional for counseling. She describes her physician as very controlling and insisting that she take medication. The history indicated that the patient grew up in a household where both her mother and father were very demanding and rigid, always insisting that there was only one way to view life. This had major consequences for the patient particularly in her adolescence.

Ms. Jensen acknowledged that she had stopped taking the medications prescribed for her because of side effects despite the fact that her doctor had reassured her that they would pass after the first week of treatment. She felt he had been dishonest because some side effects, like her sexual dysfunction, did not improve. The patient was effusive in her praise for the psychotherapist who clearly was interested in her plight and gave her sufficient time to talk. This was not the case with her family doctor whom she experienced as somewhat rigid.

At the completion of the assessment, the social worker summarized her thoughts about the possible ways in which to proceed. She mentioned that the patient should discuss her side effects with her physician and that perhaps there might be another medication that would be less problematic for her. She instructed Ms. Jensen to return to her primary care doctor and share with him that psychotherapy would be helpful as well and that therapist was available to meet with this patient on a regular basis.

After trying to contact the referring physician without success, 4 days later the psychotherapist received a discouraging phone call from Ms. Jensen's doctor who felt he was undercut in his treatment decisions because the patient refused to take any of the medications he wished to prescribe and had nothing but glowing words about her interaction with the therapist. According to the physician, Ms. Jensen explained that she was instructed to tell him that psychotherapy was indicated and not medication treatment.

A. Discussion

This vignette illustrates the complications that can arise in a collaborative treatment when the expectations of both collaborators are never fully presented. First, even prior to the referral, the meaning of medication to this patient was never appreciated. She experienced her physician much like her parents who insisted they were correct at all times and that everything she did should conform to their wishes. In addition, there was a failure to explore side effects that resulted from the medication. This referral was made after the physician became frustrated with the patient and began to experience her as a difficult or problem patient. However, the psychotherapist should not have agreed to evaluate this patient because the necessary guidelines for the referral were never clear. Because the respective roles of the professionals were not delineated, the patient began even within the diagnostic sessions to polarize her treatment relationships with her physician and therapist. She also misconstrued what was recommended by the mental health professional, but this remained unclear because the physician had not returned the consultant's call in a timely manner. In short, this collaborative effort was doomed from the first.

It would have been helpful if the professionals had agreed to meet in person as this was their initial referral experience. At the very least, an in-depth phone conversation should have detailed the physician's concerns and expectations about the referral, and the social worker could also explain her requirements to evaluate and treat the referred patient. If treatment were indicated, the physician would be aware of the central need for communication and in what form and how frequently it should occur. There was no opportunity to discuss any of the groundwork either clinical or legal for this type of treatment relationship, and it was apparent from the outset that the physician did not respect or value the potential assistance from the mental health professional.

VII. SUMMARY

Integrated and combined treatment is the provision of both psychotherapy and pharmacotherapy to a patient. In the case of the former, therapy is most often administered by a psychiatrist. Combined, split, or collaborative treatment is administered jointly by a psychiatrist, other physician, or nurse practitioner with another mental health professional psychotherapist. Although collaborative or split treatment lacks scientific support for its effectiveness or cost effectiveness, it nevertheless is widely used. Mental health care financing has undoubtedly played a major role in the acceptance of split treatment. The psychiatrist who treats the patient with medication and psychotherapy must be hypervigilant to the meaning of medication for each patient and how it is reflected in the treatment relationship. Those clinicians working in collaborative treatment relationships must above all develop concise and consistent plans for professional communication about their patient's experiences if the treatment is to succeed.

Last, despite early efficacy initiatives, the clinician is in the best position to discover the benefits and challenges of treating clients or patients with multiple approaches. For the near future, the naturalistic setting is likely to provide the exciting findings and suggest new areas of inquiry. Mental health professionals will undoubtedly become more sophisticated in their ability to provide integrative and combined treatment.

See Also the Following Articles

Adjunctive/Conjoint Therapies ■ Eating Disorders ■ Integrative Approaches to Psychotherapy ■ Mood Disorders ■ Neurobiology ■ Schizophrenia and Other Psychotic Disorders ■ Sleep Disorders ■ Substance Dependence: Psychotherapy

Further Reading

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Race and Human Diversity

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GLOSSARY

culturation The process by which a peson learns, integrates and assumes the characteristics of a culture different from the person's original culture.
culture The sum total of human social organization, socialization, and learning.
ethnic group A group of people who share cultural norms and values and who identify with each other as a reference group different from other groups.
multiculturalism A branch of psychology that is based on the theoretical orientation that cultures are determining factors in the practice of psychology.
race A sociopolitical concept that describes a group of people who predominantly interbreed with one another and, therefore, share certain salient physical characteristics.

I. THE RISE OF MULTICULTURALISM

The field of psychology has evolved over time to include the dimension of race/cultural diversity as an area of professional competency. The American Psychological Association, the American Psychiatric Association, and the National Council of Schools of Professional Psychology have included guidelines for cultural competencies in their written policies for practice and training. It was not always so. A recent survey of the PscyhLit files showed a total of 19,418 references under the key term "cross-cultural." For the period between 1872 and 1950 there were 14 references cited, and most of these were rooted in anthropological origins. Then starting in the 1950s and 1960s the number of citations jumped to 863, and the numbers have continued to climb since then. This "burst" of interest coincides with the social reform movements during these periods, that is, the Civil Rights movement in the 1950s and 1960s and the women's and gay rights movements of the 1970s onwards. Clearly psychology as a field has responded to the forces of social change in the larger society.

There is no scientific evidence to support the existence of racial subgroups in the *homo sapiens sapiens* species. Physical anthropologists and geneticists have argued the point for over a century. Both definitions and typographies of racial groups have been difficult to establish. The reasons have to do with the distribution of genes in the human gene pool. No genes of significance are found in any human subgroup that are not found in all others. It seems certain that, after much scientific analysis, there are no human races, and yet the concept has had enormous social, economic, and political impact.

Since the beginning days of psychotherapy, problems have persisted when the client is an ethnic minority and

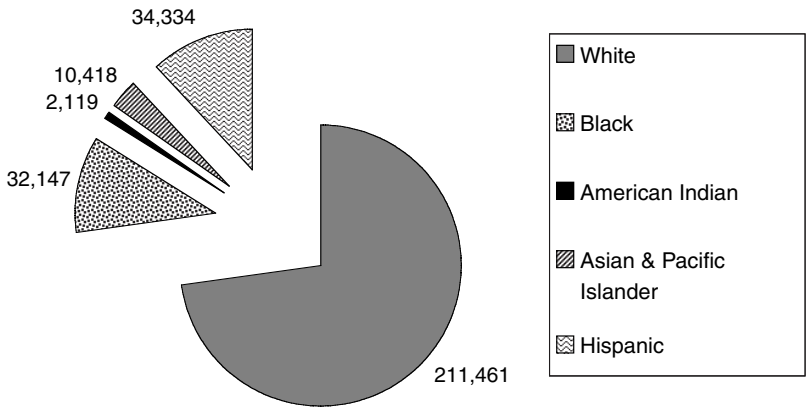

FIGURE 1 2000 population in thousands (U.S. Census Bureau).

the therapist is White. Eurocentric practitioners were prone to constructing improper judgments in diagnosis and treatment. For many years many minority clients were either misdiagnosed or treated with medications and hospitalizations in greater numbers than White clients with similar diagnoses. Many minority clients were denied psychotherapy because it was believed that they were either not verbally skilled or not intellectually capable of achieving insight into their psychological problems. Other studies have shown that minority clients do not present themselves for treatment as often, or drop out of treatment earlier than White clients. In many situations minority clients have been subjected to racial bigotry. Such bigotry is rarely intentional. Most therapists have been unaware of harboring racist attitudes and beliefs. Overall, the experiences of many ethnic minorities has been that psychotherapy has served as a means for furthering and promoting the "status quo" of the dominant White society. The prevailing dilemma is, despite the good intentions in the professional community, psychotherapy with ethnic minorities has frequently failed.

Efforts to solve the problem of ethnocentrist psychology practices have been organized under the general category of the "multiculturalism" movement in psychiatry and psychology. Other terms have been used previously. "Cross-cultural," "culture centered," "intercultural," "transcultural," and "culturally sensitive" have also been used as terms to define the struggle to expand the awareness and skills of practitioners working with clients from different cultural backgrounds.

The multicultural approach grows out of the debates in anthropology, which saw the concept of "races" give way to the concept of "cultures." From a "race" perspective it is clear that not all human groups are equal to each other and that some groups are subject to domination, extermination, and exploitation by other groups. When people are grouped in terms of "cultures," the possibility emerges for equality and relativism. That is, each group can be seen as equally valuable and equally deserving of respect and dignity as any other group. Proponents of multiculturalism have been acutely aware that the population "complexion" of the United States is rapidly changing. The changing demographics, with increasing numbers of non-White groups leads away from previous "assimilationists" thinking toward "cultural pluralism." (Figure 1 shows recent ethnic group figures for the 2000 census. Figures 2 and 3 are projections based on the 1990 census.)

The emphasis remains on ethnic minority clients, but the concept has also been extended to include many circumstances that place a person in a "minority position" in society. Clients who may be disadvantaged by their social position include persons from low socioeconomic backgrounds, women, gays and lesbians, disabled and elderly persons, certain religious groups, and immigrant/refugee clients. In other words, the multiculturalism movement potentially encompasses any clients who are not White, middle class, heterosexual, and mainstream in their social rank and values.

Multiculturalism addresses the failures of psychology to adequately treat diverse peoples, by positing that the cause of failure is the failure to fully realize existence of determining cultural factors. When client populations are viewed from a perspective of cultural/social determinism, a necessary set of questions arises. How does culture affect identity formation and pertinent social roles? What are the cultural factors that influence mental disorders? Are there culturally different norms for healthy or developmentally appropriate behavior? How does culture affect interpersonal behavior? Especially, how does culture influence the client–therapist relationship? How does

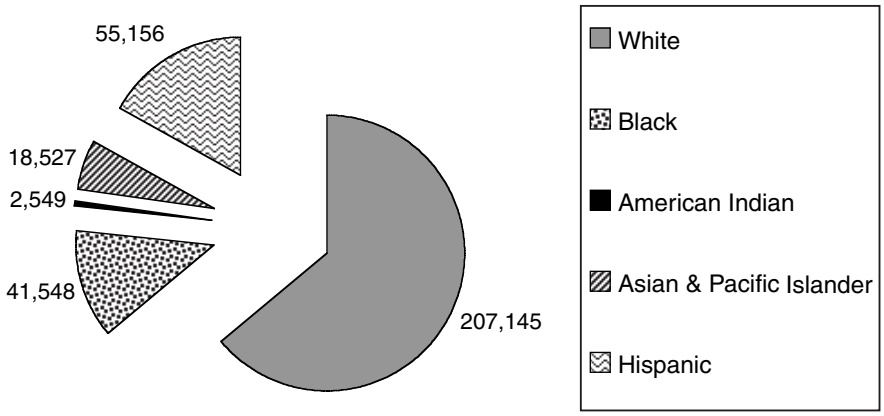

FIGURE 2 2020 projected population in thousands (U.S. Census Bureau).

culture affect help-seeking behavior? What are the implications for treatment and assessment?

Extending "culture" to include "diversity" means extending the concepts to include any significant social or environmental determinants that distinguish between dominant versus subordinate people. This means extending the same questions to incorporate variables, such as gender, age, socioeconomic status, and sexual orientation, and so on. How does a history of experiencing social oppression, discrimination, racism, sexism, and homophobia affect mental health and the development of healthy functioning? Again, what are the implications for assessment and treatment?

As the limits of ethnocentric practices became better understood, the multicultural thrust began to include development of cultural competence requirements for practitioners. In attempting to summarize various authors, a basic doctrine emerges throughout the literature. The multicultural position maintains that for therapists to be competent and successful:

1. Therapists must be knowledgeable about the history, beliefs, values, and norms of the client's reference group. They must also be knowledgeable about each group's status in relation to the dominant society.
2. The therapist must be mindful of the effects of social oppression and be willing to actively combat oppressive social forces.
3. To avoid pitfalls of bigotry and "cultural mismatches" the therapist must also be aware of their own cultural norms, beliefs, and values. They must be mindful of how their implicit cultural beliefs enter into and affect the therapy process.
4. The therapist must be aware of the ways in which their own worldview and the worldview of the client may be similar or different and accommodate the therapy to the client's worldview as much as possible.
5. The therapist must have the skills to respond appropriately to the client's verbal, non-verbal, affective, and cognitive cultural norms. This includes knowing and responding to culturally acceptable

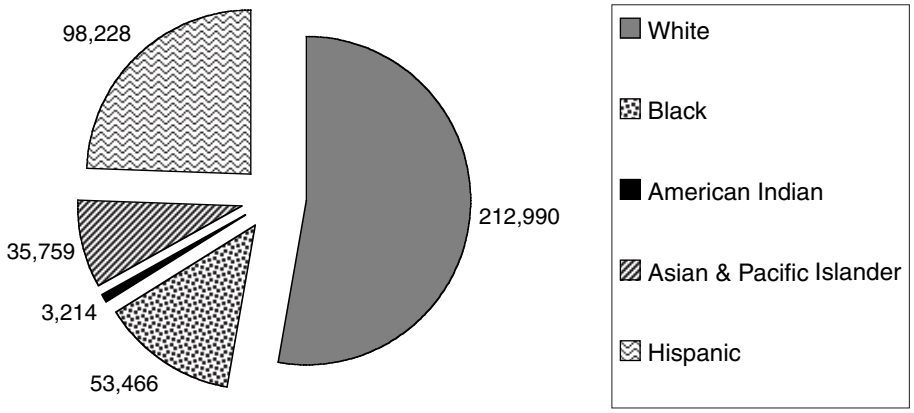

FIGURE 3 2050 projected population in thousands (U.S. Census Bureau).

norms for interacting with authority figures, non-family members, and strangers.

6. The therapist must possess knowledge of the cultural norms that govern asking for help and establishing a relationship.

7. The therapist must know the culturally prescribed expressions of different symptoms and must know how to accurately interpret and respond to the meaning of different affective and cognitive concepts.

8. The therapist must know the different cultural criteria for mental illness, as well as the criteria for healthy individual and social functioning.

9. Therapists must be knowledgeable of how cultural variables affect results of psychometric tests and measures. They must know which test instruments are suitable for use with which ethnic groups. They must be able to accurately interpret test results of various ethnic minorities.

10. Therapists must maintain an attitude of respect and valuing of each group, no matter how much that group differs from their own group. When therapists are able to maintain this attitude of "intercultural" valuing, both the therapist and the client can grow as human beings, developing from ethnocentric beings to a higher maturity of intercultural identities.

Based on a foundation of cultural relativism and pluralism, multiculturalists have attempted to establish new directions for psychology therapy practice, assessment, research, and training. To make psychotherapy culture sensitive, psychologists are encouraged to study the cultural norms of different groups, study specific personality traits relevant to each group, and explore developmental issues for each group. Culture-centered psychotherapies are also being developed. Assessment issues include test content, examiner bias, and culturally-competent test administration. A main focus of assessment is the degree of acculturation of the ethnic minority person being assessed. Identity development issues also play a strong part. The identity models that have been developed are generally consistent with one another. These models posit that ethnic minority identity develops along a series of cognitive stages. The stages begin with naive precontact with members of the dominant society and then some conflictual encounter leads to a rejection of the dominant society and an immersion into the ethnic group of reference. This stage eventually gives way to an autonomous/independence stage that eventually matures into a humanitarian/universal self. Research issues include problems with assessment, that is, reliability and validity studies of newly developed tests. Other important questions being studied are questions of operationalizing cultural competencies and evaluation of culture-sensitive therapies. Training issues concern development of training models and evaluation of effectiveness of training programs. There are two problems that persist in making these efforts difficult. One is the fact that there is more within-group than between-group variance, and another is that the process of acculturation is a fluid and changing, not static phenomenon.

II. MULTICULTURAL APPROACHES TO PSYCHOTHERAPY

A. Ethnographies

Ethnography has flourished in anthropology as a research method. Anthropological data are collected in the field when the anthropologist spends long periods living within the cultural community being studied. By using native informants to describe, translate, and clarify cultural beliefs, rituals, practices, values and norms, the anthropologist strives to understand unique and universal cultural realities. Two kinds of ethnographic data are used. Emic data are gathered directly from informants and are particular to the culture being studied. Etic data are the translation of emic data to universal cultural principles.

Various authors have presented ethnographic-based studies as one approach to culturally-sensitive psychotherapy. By adapting ethnographic descriptions of different ethnic groups, psychologists have utilized what might be called applied ethnography. The groups most represented in the literature are groups with the greatest increases in numbers in the U.S. population. Many applied ethnographic studies encompass African Americans, Asian Americans, Hispanic Americans and Native Americans. Other groups include immigrants from Eastern Europe and the Middle East.

When applied ethnographies are used for formulating treatment approaches three caveats are repeatedly emphasized:

1. Within-group variables are often larger than between-group variables.
2. The therapist must determine the extent to which cultural norms apply to the individual client.
3. Individual clients depict different social adaptations, identity formation stages, and acculturation issues.

1. Applied Ethnographies

a. African Americans. When working with African American clients the therapist must be knowledgeable

about the impact of history. African Americans have had to struggle through slavery, in all of its brutal aspects, and racist attitudes toward Blacks continue in the larger society. Although there has been improvement, there are still crucial links between racism and poverty that affect large numbers of Blacks. Poverty rates are higher for Blacks than for Whites. Among lower-class Blacks, 70% of households are headed by single females. Black teens face an unemployment rate of 50%, and many are subjected to violence, including homicides. Black teen suicide rates are increasing.

African Americans often live in poor neighborhoods where substandard housing, crime, and violence are prevalent. Schools located in impoverished neighborhoods can be poor environments for learning. This combination of social problems leads to high levels of stress and higher incidence of both physical and mental illnesses associated with stress. Many lower-class Blacks, especially teenagers, feel that there is not much hope for a better future.

Since slavery, European physical characteristics have been preferred among many African Americans. Caucasian features such as light skin color, straight hair, thin lips, and light eye-color have been symbolic of higher status and greater attractiveness than African Americans with more African physical features. These preferences can cause social, economic, and interpersonal conflicts among African Americans. Although there were significant changes in these attitudes during the 1960s and the Black power movement, residual physical characteristics issues can cause additional stress and self-esteem problems.

Basic values present in Black culture include sharing responsibilities, respect for parents, pride in heritage, spirituality, and strong family ties. Many single women raise children with the help of extended family, boyfriends, and family friends. There is no empirical evidence that Black children raised in fatherless homes suffer from lower self-esteem than children raised in two-parent homes. Black churches have been a central source of community support since the days of slavery. In many Black families, whether headed by one parent or two, children often take on adult-level responsibilities at an earlier age than White children. African American men and women have traditionally shared domestic duties, with women working outside the home and men participating in child care and household tasks.

(1) Within-Group Differences. There are approximately 32,147 million African Americans in the United States. The majorities of Blacks are actually bicultural and have been able to adapt to living in a generally hostile dominant society. One third of Black Americans are middle class or higher. Most of these African Americans live in two-parent families and are pursuing lifestyles similar to European Americans. Yet, certain stressors are associated with the Black middle class. Job stress can come in the form of feeling that one has to compromise one's Black values to fit into work settings that are dominated by White values. Some middle-class Blacks must cope with racist attitudes at work, such as less chance for promotion or lower salaries than their White counterparts. There is some evidence that marital stress and alcohol abuse are often factors related to job stress. Middle-class Blacks do embrace White middle-class values to a larger extent than poor Blacks, but they are often victims of the stressors inherent in a bicultural lifestyle. Many middle-class Blacks live in predominantly White suburban neighborhoods and send their children to mostly White public and private schools. Yet, many of these African Americans seek out activities within the Black community to instill pride in heritage in their children.

(2) Treatment Approaches. Due to a history of racism many Blacks, especially Black families, are reluctant to seek outpatient mental health services. Despite such reluctance some studies show that people in Black communities do have knowledge of what is involved and expected in mental health centers and do believe that therapy can be helpful. Reluctance to seek services is usually based on the fear that White therapists will not understand the realities of African American racial oppression. Others have difficulties with transportation or child care arrangements. Many Blacks, especially those who have assumed adult responsibilities at an early age, are taught that they should take care of their own problems and are reluctant to ask for help.

Establishing trust is the most crucial aspect of forming a therapeutic alliance. There is no research support for matching Black clients with Black therapists as a therapeutic necessity. Trust is best established when the therapist behaves in a way that conveys honesty and sincerity and when differences in education and social status are not flaunted. It is important to provide straightforward answers to questions. The therapist should be easy to talk to but should avoid the pitfalls of "color blindness" and "paternalism" or feel that it is necessary to "buy into" a victim's stance. It is sometimes necessary to confront and challenge the client's thinking and beliefs if they are self-defeating or maladaptive.

In most therapy situations the Black client's attitudes and behavior in therapy are more likely to be determined by social class, personal experiences, and education status than by racial concerns. When a Black client

behaves in a manner that is hostile, apprehensive or nonengaging it should not be assumed that the problem behaviors are racially motivated. To discover the basis of the problem it is necessary to distinguish between racial hostilities and fears versus the manner in which the therapy is being conducted.

Most authors agree that the White therapist must be open to initiating a conversation about racial differences within the beginning sessions. A frank, non-defensive discussion about the client's feelings and concerns, if there are any, suggests to the client that candid talk about racial matters is an acceptable part of the therapeutic process. Others suggest that it would be more prudent for the therapist to wait for the client to bring up the subject. In any case, the therapist must be prepared to discuss racial difficulties as openly as possible with Black clients.

It is also important for the therapist to pay attention to the possibility of practical problems. Black clients may need help with survival skills: finding employment, seeking further education, coping with crime and poor housing in their neighborhoods, and so on. The therapist may have to accommodate the therapy process to transportation and child care problems. It is best to be flexible and willing to negotiate scheduling, and fee arrangements that allow the client to attend sessions and pay for sessions in a way that works best with their job and family situations.

The client's family life should be explored and evaluated as part of the therapy process. It should be noted, however, that the Black family should not be evaluated in terms of healthy or desirable White family values. Healthy Black families have adapted to very different circumstances, and the healthy functioning of the Black family should be evaluated in terms of those norms. Family therapy work, including parenting training, can be constructive. It is also advisable to include the client's spiritual community.

Therapy should include exploration of the client's personal experiences with racism and the ways in which they have attempted to cope with it. Including extended family members and community and church resources can also augment therapy. There is evidence that African American clients, overall, respond best to a problem-focused, brief, cognitive-behavioral treatment approach. There is also evidence that African American clients respond favorably to a directive and educative approach to problem solving.

b. American Indians. The cultures of the American Indians were transformed dramatically with the arrival of Europeans. From 1492 until 1790 a series of disease epidemics greatly reduced their numbers. During the period from 1829 until 1890, a series of wars, White settlers claiming American Indian lands, and relocation of American Indians onto reservations were sources of further population devastation. It has been estimated that by the turn of the 20th century that the American Indian population had been reduced by over 90%.

The policy of the U.S. government has been to think of American Indians as a group to be "managed." Thus, the plight of American Indian cultural life has been governed by a series of treaties and laws, with the federal government. Until 1887 laws were designed to force American Indians onto reservations, prevent the practicing of their cultural traditions, and force a policy of assimilation into European culture. Thousands of American Indian children were routinely taken from their families and placed into boarding schools or adopted by White families. The subsequent loss of American Indian children from tribal communities is estimated at 25% to 55%. Traditional cultural practices, including religious ceremonies, were discouraged or forbidden. The policy of seizing American Indian lands continued into the 1920s, and the practice of placing American Indian children into boarding schools and other institutions continued until the 1970s.

American Indians were not granted U.S. citizenship until 1924, however, at this point racist policies gradually began to change. The 1934 Indian Reorganization Act terminated much of the federal controls over American Indian life, but many American Indians were relocated to urban centers where they were beset with expanding unemployment, welfare, and alcoholism. In 1955 the Indian Health Service was formed and established the Mental Health Services in 1969. In 1978 the Indian Child Welfare Act became the means to halt the seizing of children from American Indian families. The American Indian Religious Freedom Act of 1978 protected religious practices. With these recent legal freedoms has come a resurgence of interest in reclaiming cultural roots, with increasing numbers of American Indian peoples attending powwows and other cultural heritage events and ceremonies.

Depending on the political perspective, different terminology can be used when addressing this group of Americans. The term "Indian" began when European explorers thought they were in the Asian country of India and named the Caribbean tribes "Indians." Correcting this problem the term Native American became preferred. Native American, however, also has the problem of not distinguishing between native peoples

and those Europeans whose ancestors settled in America before the 1700s. Generally, the term American Indian is used, despite its negative political connotations. In Alaska, the term Alaska Native is preferred. Really correct, is to address an American Indian person by his or her tribal or clan name, because personal identity usually acquires from the tribal affiliation, then extends to include the entire group of American Indian nations and finally extends to the larger U.S. citizenship.

In traditional American Indian society bonds within the tribal group and harmony with nature and others in the group are primary values. Giving and sharing with others is a major source of status in the group. One strives to maintain balance between the natural, human, and spiritual worlds. American Indian values predispose American Indians to have difficulty in situations that reward individualism, control over others, competition, verbal aggressiveness, and talking openly about personal problems with strangers. Prolonged eye contact can be interpreted as aggressive, but prolonged silence is tolerated. Shaking hands should be slight contact, not a firm grasp.

American Indians have the highest high school dropout rate of any ethnic group. Basic problems for many American Indian clients are problems with the loss of the family, isolation from the tribal group, poor education, depression, alcoholism, and underemployment.

(1) Within-Group Differences. Today there are approximately 2,119 million American Indians living within the United States. Estimates of the number of federally recognized "entities" range from 505 to 517; the number of state-recognized tribes is cited as between 304 to 365. There are approximately 200 to 250 tribal languages still being spoken. Yet, the definition of who is an American Indian is somewhat problematic. The U.S. Census Bureau figures are based on self-report, and the numbers of people reporting American Indian ancestry is increasing at a rapid rate. The Bureau of Indian Affairs and different tribal organizations have different systems based on percentages of blood ancestors; therefore, it is difficult to get a firm fix on the actual group numbers.

Vast differences exist within American Indian groups, including regional differences. It is important to remember that American Indian tribes populated the entire American continent. Tribal customs and languages varied considerably between in the eastern, southern, western plains, and northwestern regions of the country. Cultural worldviews vary from ethnocentrically isolated families who live mainly on reservations, to bicultural families who reside predominantly in urban areas, to acculturated families who may never have set foot on a reservation and have few connections to other American Indians in their daily lives.

Problems can occur with bicultural lifestyles. Many American Indians seeking work and education leave the reservations to live in urban areas. They may feel isolated from their families and cultures. Additional problems exist between generations as younger American Indians acculturate to European lifestyles and values. Younger generations may feel that they have little in common with older, more traditionally oriented parents and grandparents, thus causing further deterioration in family bonds.

(2) Treatment Approaches. It is a well-known fact that American Indians underutilize mental health services. This is true for three reasons. Many American Indians do not know about the existing services, there are few existing services and many distrust the reception and responses they will receive when they seek services. Several studies show that, on the whole, American Indians came to one therapy appointment and did not return for a second. Many American Indians fear that they will encounter a power difference that will amount to more forced assimilationism of European values. Many American Indians prefer to seek the services of traditional American Indian healers because, aside from the fact that they are probably effective, they are seen as the "keepers" of their cultural heritage.

When treating an American Indian client it is important for the therapist to understand the crucial necessity to spend sufficient time getting to know the client. It is important to establish a bond based on the degree of acculturation of the client. The therapist should take the lead to establish the structure and then proceed toward gathering personal history information. Questions about family relationships, education, employment, and where the client usually resides help to gauge the extent of acculturation. On the other hand, it is important to avoid prying too deeply at first, and avoid lengthy personal questions as well as lengthy questionnaires and agency forms. The therapist can encourage trust building by being willing to disclose information about themselves, as long as it is not too personal in nature. In American Indian culture words are considered important and lulls in conversation are not only acceptable, but also preferable to banter. The therapist should not expect the client to engage in emotional demonstrativeness, introspection, or self-examination. The therapist should take a directive but slow approach, allowing the client to pace the interview.

It is best to build a positive social support relationship. This can include family and friends who are available for participating in the therapy process. It is also advisable to inquire about use of traditional healers and to include those resources where appropriate.

The therapist should be willing to arrange flexible appointment times and be available for crisis interventions. American Indian clients might present a concrete problem at first to gauge the degree of social support and interpersonal bonding. When working with American Indians the therapist should be willing to bond with clients and their families. Connecting to clients outside the therapy structure is more important with this group than with any other.

Therapy approaches that appear to get the best results consist of social learning, behavioral, and family systems orientations. Teaching social skills, assertiveness skills, alcohol and drug education, suicide prevention, and parenting skills are effective and desirable treatment methods for American Indian clients. A homogeneous (only American Indians, separated by gender) group therapy can be especially helpful. The group should include pleasant and traditional activities. In a group approach elder American Indians can provide wisdom and guidance.

c. Asian Americans. Asian Americans are the fastest growing minority group and have the largest within-group variance. The Chinese began arriving in the 1840s to work on the railroads and gold mines. The Japenese began coming to the United States in the 1890s to work in the agrarian economies. Both groups soon encountered racist attitudes and were the victims of violent assaults, especially when work was scarce for White workers. The Federal Chinese Exclusion Act of 1882 banned immigration of Chinese. The Act was not repealed until WWII. In 1941, shortly after Pearl Harbor was bombed, Executive Order 9066 made Japanese Americans political prisoners. Japanese citizens were ordered into internment camps with no evidence of espionage or subversive activities. The Immigration Act of 1965 lifted restrictions on Asian immigration, and in 1988 The Civil Liberties Act offered reparations and apologies to Japanese Americans.

South East Asians have been arriving in large numbers since the mid-1970s. Many of the earlier 1970s immigrants were middle-class, educated Vietnamese, many of whom had worked for the U.S. government. Later South East Asian immigrants were poorer, and many were refugees escaping oppression after the fall of Saigon and the rise of the Cambodian Pol Pot regime. Many of these refugees have been victimized by pirates and subjected to brutal rapes, murders, and robberies. Many refugees have spent months and sometimes years, in refugee camps before arriving in the United States.

Ancient values based on Confucian and Buddhist thought are predominate moral and social codes in the cultures from Asia. Strong emphasis is placed on filial piety (respect, obedience, and loyalty for parents and other authority figures), emotional reserve, harmony with others, hard work, self-sacrifice, and endurance. Fathers are the respected heads of the family and mothers provide domestic nurturance. Fathers are to be obeyed by the children, including adult children, and mothers have a more supportive role. Interpersonal harmony is maintained by speaking indirectly around the point, rather than direct confrontation. Because expression of intense feelings in considered inappropriate, it has been theorized that Asian Americans tend to present with somatic symptoms, rather than emotional concerns.

Proper individual behavior and personal shortcomings are regulated by shame and guilt. Conformity to the group is valued and is also a way of avoiding being shamed or "losing face." Personal problems are kept in the family, because to reveal them to the community places people at risk for feeling shamed. There is strong parental pressure exerted on children to be successful. A poor work or achievement performance can result in intense feelings of shame and guilt.

(1) Within-Group Differences. There are approximately 10,418 million Asian Americans. The subgroups are numerous with large variations in history, culture, and languages. The largest subgroups are Chinese, Filipinos, Japanese, Koreans, Vietnamese, and Cambodians. There are also substantial numbers of Hmomg and Laotian citizens. Percentage wise more Asian Americans have college degrees than any other minority group. The median income is the highest of any group, including Whites. Yet, one half of Asian Americans are poor and undereducated. Urban ghettos, such as "Chinatowns" are often filled with poverty.

Some Japanese adults whose parents or grandparents were interned are often coping with the shame that the family experienced. Family members often refuse to talk about their internment experiences because of the shame and because talking about intense feelings is not culturally appropriate. Such suppression of feelings can lead to symptoms of anxiety and depression.

Many immigrants and refugees face problems with language barriers and with learning to fit in socially.

Pressure to acculturate is always in conflict with loyalty to family and cultural values. Recent immigrant children can face difficulties at school. They are sometimes subjected to racist attacks and ostracization. Children typically acculturate faster than adults, thus, Asian American children are often bicultural and speak native languages at home and speak English in school. This leads to intergenerational stress problems, which are difficult to deal with, especially when the children speak English and the parents do not. As children become acculturated they are often in conflict with values of strict obedience to authoritative parents. Problems with anxiety, loneliness, depression, and a sense of "not belonging" are common mental health concerns.

Many recent immigrants and refugees practice traditional healing methods of Chinese medicine, herbalists, and cope with evil spirits with coin rubbing. It has happened that Vietnamese parents were accused of child abuse when their son appeared at school with bruises on his torso. The school officials did not realize that well-meaning parents had rubbed his body with coins to heal his troubled spirit.

(2) Treatment Approaches. There is some evidence that Asian Americans underutilize mental health services. The problem appears to be fear of stigma and conflicting cultural values. When working with an Asian American client the degree of acculturation is a crucial consideration. If the families are recent immigrants or refugees, care should be taken to not offened and to behave in ways that are considered respectful and proper. Respect for authority is important in Asian culture, so the therapist should take an active, directive, teaching role. The therapists must show themselves to be credible and trustworthy. Many South East Asian clients expect concrete problem solving and advice giving. The therapist should be aware, however, that though they may offer advice it may not be followed. The therapist should not expect clients to talk about personal problems and personal feelings in an open fashion, especially in the beginning stages of therapy. Asian American clients often experience feelings of shame for having personal difficulties that require professional help and for bringing problems to a non-family member.

Language difficulties must be considered as well. Much literature has focused on the need for interpreters, but the results are mixed. Use of interpreters is generally discouraged unless they have been extensively trained in the proper role of an interpreter in a therapy context. It is not wise to use children or relatives as interpreters. A bilingual therapist is best, if one is available.

Major immigrant therapy issues include feeling socially isolated, struggling with gender and intergenerational adjustments in a new culture, and learning to adapt to new ways. Recent immigrants are often lonely and have lost loved ones or have lost social status by having to flee oppression. Japanese Americans may need encouragement to talk about the family internment history. South East Asian immigrants may need to talk about the traumas of refugee camps and victimizations by pirates.

Family therapy is advisable to deal with intergenerational problems if acculturated adolescents and traditional parents are not getting along. It is wise to show deference to the father, at least in the first session. It is never wise to insist that Asian adolescents, or adults, defy their parents openly. Acculturation takes time, and families can be helped to adjust if they are given hope for the future and a realistic sense of the amount of time it takes to adjust. Where possible, normalize problems to reduce feelings of shame.

d. Hispanic Americans. Hispanic Americans are growing rapidly in numbers. Due to high birth rates and a flow of immigrants, these Americans are the second largest minority group. The term Hispanic applies to all persons of Spanish-speaking descent. Other terms are in current usage including Latinos. Mexican American and Chicanos, are also common terms. Hispanic applies to a diverse group of peoples originally from Mexico, Puerto Rico, Cuba, and a number of Latin American countries, including Guatemala, El Salvador, the Dominican Republic, Honduras, and Nicaragua. The largest subgroups are Mexicans, many of whom have resided in parts of the southwest before the area became part of the United States in 1848, Puerto Ricans, who have been U.S. citizens since 1917, and Cubans many of whom have fled the Castro regime since the 1950s.

The history of Hispanics is filled with colonization and religious conversions. Many Mexican Americans have been victimized by racist policies, especially in the southwest. Many Hispanics are poor, with a median income below the national average. Migrant worker children drop out of high school at a rate of 50%, the second highest dropout rate.

Hispanics place great importance on the extended family and most live in two-parent families. Males are expected to value machismo, which has come to have many negative connotations, but has many positive ones as well, such being chivalrous, courageous, respectful, and protective. Men are heads of the household and are

expected to be responsible providers. Women are taught to value marianismo, which means high moral virtue. Indeed, women are expected to set the moral standards for men. Boys are expected to be independent, but girls are often restricted by the close supervision of their families. Children assume adult responsibilities at an early age, for working and helping to raise younger children. The influence of the Catholic church is strong. It has been theorized that part of the church influence is that many Hispanics believe in the inevitability of fate and may display resignation during hard times or when faced with personal problems.

(1) Within-Group Differences. There are approximately 34,334 million Hispanic Americans in the United States today. Hispanic Americans live in diverse places. Most Mexican Americans live in the southwest, Puerto Rican Americans reside mainly in urban areas of the east and Cubans tend to reside in the south, especially Florida. Cuban Americans have the highest incomes, and Puerto Rican Americans the lowest. Rates of acculturation vary greatly. Some Hispanics are monolingual for English, some are monolingual for Spanish, and many are bilingual. Recent immigrants may have little knowledge of English. Intergenerational problems, including conflicts about gender roles, are family problems associated with acculturation. These problems appear less often if the family is middle class or not Catholic. Less acculturated Hispanic families also experience adjustment and educational problems with children in schools, especially where English is the dominant language.

After centuries of intermarriage with American Indians, Blacks, Europeans, and Asians, Hispanics show a wide variety or skin colors. Each skin shade has its own term and relative status. Since the Spanish colonizations, lighter-skinned children are preferred in some groups. Such preferences, however, are not a given.

(2) Treatment Approaches. Hispanics historically underutilize mental health services. The reasons appear to have to do with language barriers, seeking help inside the extended family and concerns about conflicting values. Many Hispanics first seek folk healers—the *curandera.* Many may use folk healers and professional healers simultaneously. Common mental health concerns include acculturation adjustments, alcoholism, drug use, and intergeneration family conflicts. Poverty is also a concern that should be considered.

The therapist should assess the degree of acculturation as a first step in the therapy process. The therapist should learn how to properly pronounce Spanish names and address people using their last names, at least in the first sessions. A therapist should also offer non-intimate self-disclosure to establish trust and to forming a working alliance. If the client offers a gift it is rude to not accept it.

Many Hispanic clients expect the therapist to offer suggestions that are practical and problem-solving oriented. Hispanics may think that therapy will be brief or perhaps only one session, so it is good to offer suggestions by the end of the first session. Problems with racism and identity formation should be explored and discussed. It is also advisable to address practical problems with jobs, food, clothing, and housing. The therapist should make flexible arrangements for session times, and be flexible if the client is late, misses appointments, or needs transportation.

Because of the importance of family ties, a family systems approach can be effective with Hispanic clients. Because of the emphasis on family cohesion and hierarchies, Structural family therapy is preferable to other approaches. It is important that the therapist show the family proper respect. Address the father first in the initial sessions.

Language problems must be dealt with. The literature is mixed concerning the use of interpreters. Some Hispanic clients resent the intrusion of a third party, whereas others feel that providing an interpreter is sign of caring about and respect for the cultural differences. A bilingual, bicultural therapist is preferable, if one is available.

Behavioral approaches tend to work best. Behavioral orientations have the cultural fit advantage of being goal oriented, action, rather than feeling oriented and here-now oriented, as well as brief. Social skills training and systematic desensitization are effective treatments for clients suffering from the stress and anxieties associated with making social adjustments. These are also methods associated with empowering clients and helping them to make changes in their adjustments to the new environment. Assertiveness training can be helpful for some clients, but with women clients the therapist should take care to not encourage role difficulties that make the client alienated from their families and cultures.

III. MULTICULTURAL ASSESSMENT

When assessing intelligence, achievement, and personality the psychologist is proceeding incompetently if certain culturally determined moderator variables are not taken into account. The major moderator variables that must be considered are acculturation, identity

development, values, and attitudes toward the larger society. Misdiagnosis and misguided treatment failures are common problems when working cross-culturally. For example, two of the most widely used personality tests—the MMPI–2 and Rorschach—were standardized using a majority of European participants. Subsequently, the tests are used as etic measures, when in fact they are emic measures. That is, they are culturally specific in their underlying constructs and test designs but are being applied throughout the world in mental health settings as if they are measuring universals.

Cross-cultural application of culture-specific tests is prone to errors in predictive validity and reliability. It has also been demonstrated that ethnic minorities as a group show more pathology and have lower performance scores on all known psychometric and intelligence tests. Generally, when persons are unacculturated and have been poorly educated, especially combined with low social economic status (SES), then test scores show more pathology or lower intelligence.

The problem of test bias has yet to be solved. Instrument bias occurs when the test is designed in a way that the task is unfamiliar to the test participants. For example, some cultures do not have familiarity with pictorial tests, such as the Rorschach. It is then difficult to know whether the Rorschach scores are a result of the internal processes of the participants or their lack of knowledge about the test stimuli. Construct bias is a problem when the test does not have equivalent constructs in the other culture. It may be impossible to create a "culture-free" test, but it is also very difficult to construct a "culture-fair" test. For example, the MMPI–2, does not measure constructs like "face" or "harmony," both of which are immensely important social variables in Asian cultures. Moreover, it is not clear if concepts such as "depression," "guilt," "aggression," and "filial piety" are equivalent across cultures.

Language barriers are also a source of bias. Translations of the MMPI-2 may not provide cross-cultural accuracy, especially if the test is translated directly, (i.e., with one interpreter of the second version). The only method that appears to have language accuracy is back translation, where two interpreters are used. One interpreter translates from the first language into the second language, and then a back interpreter translates back into the first language. When the third translation matches the first, then accuracy of the second language version can be assumed.

Examiner bias is also a concern. If the examiner harbors a preference for Eurocentric, assimilationist thinking, then test administration and interpretation may be biased. Eurocentric norms can be applied to clients, and the given assumption is that any deviance for European norms is pathological. For instance, the examiner commits the error of functional bias if aggression is given a pathologic score for peoples for whom aggressive behavior is the norm in certain situations. Another example is to assume that the client is being negative, noncooperative or inept if they do not self-disclose in the assessment interview. Such behavior may be determined by the client's culture, values conflicts, the situation or the examiner's behavior, or all of these.

Multicultural research with the existing tests has been conducted for many years. Results are mixed. Research has also mainly focused on comparisons of African American tests scores and has not progressed very far with other ethnic minority groups. Research on the MMPI–2, for instance, has shown mixed results. Some authors report group differences comparing *T* scores of African Americans and White participants. Other authors, matching and controlling for social class and education background, found no significant differences between the two groups.

Accuracy in assessment outcomes can only be accomplished by first, assuming that cultural moderator variables are present, unless it is possible to rule them out. Second, the examiner has been carefully trained in recognizing the impact of culture on the testing and interview situation. Third, the tests themselves must be either altered to become culture sensitive or the norms of each group must be known or calculated. Fourth, and probably most important, the degree of acculturation of the client must be determined and the assessment process should be guided by this variable. Finally, test selection, administration, and interpretation should proceed only after all of these considerations have been met.

Few culture-specific intelligence and personality tests have been constructed, but existing tests are being researched for cultural accuracy, and new tests are under construction. Some researchers are working on developing truly etic, (i.e., universal measures, but these are not well developed yet). A number of culture-specific tests do exist to measure acculturation. Of the tests surveyed all were found to have adequate reliability and validity. Despite advantages of using these measures, they are currently used mainly for research purposes and have not become widely used for clinical work.

A number of scales exist to measure the attitudes, values, identity formation and degree of acculturation for different groups. Others measure acculturation and identity formation across groups. The number of existing scales is too numerous to offer a complete review here. Some scales that are gaining in recognition are

measures specific to African Americans, and those have concentrated on developmental issues of identity and racial attitudes, rather than acculturation, because most African Americans are bicultural. The Racial Identity Attitude Scale (RIAS–B), the Black Identification Scale (BIS), and the Developmental Inventory of Black Consciousness (DIB-C) and the Black Personality Questionnaire (BPQ) are examples of measures currently available. Some measures of White identity have also been developed. The White Racial Identity Attitude Scale (WRIAS) and the White Racial Consciousness Development Scale (WRCDS) are currently in use.

Some measures are designed to measure degree of affiliation and the degree of acculturation with a specific group. Some examples include, the American Indian Self-Identification Scale, the Acculturation Rating Scale for Mexican Americans (ARSMA-II), the Measure of Acculturation for Mexican Americans, the Bicultural Involvement Questionnaire (for Cuban Americans), the Suinn-Lew Asian Self-Identity and Acculturation Scale (SL-ASIA), the Ko Mental Health Questionnaire (KMHQ), and the Chinese Personality Inventory (CPAI).

Other scales are designed for multiethnic use. These include, the Multigroup Ethnic Identity Measure (MEIM), the Bicultural Inventory (BI), the Acculturative Balance Scale (ASC), and the Scale of Effects of Ethnicity and Discrimination (SEED).

Some measures are being developed to assess the competencies of the mental health services and counselors. The Agency Cultural Competency Checklist, the Multicultural Environmental Inventory (MEI), and the Institutional Racism Scale (IRS) are available for agencies and degree programs. The Cross-Cultural Counseling Inventory–Revised (CCCI–R), the Multicultural Counseling Knowledge and Awareness Scale (MCKAS), and the Multicultural Awareness-Knowledge-and-Skills Survey (MAKSS) are measures of the cultural competency of the therapists.

It is still an important question, however, as to how to measure acculturation. Acculturation is not static, levels of acculturation change over time. Another problem is that there are such great variations within groups that the validity of any group measure can be questioned. There are also wide differences between different regions of the country, and between urban and rural residents. Persons may also be totally unacculturated (speaking little if any English and spending little, if any time in the larger society, bicultural (speaking both English and their native language or dialect and spending equal amounts of time in both cultures) or totally acculturated (speak only English and have little, if any contact with their native culture). How do these different levels, with many points in between, become accurately measured? Moreover, it is possible for an individual to have multiple identities, depending on the situation and the reference group. At present, until these problems are resolved, it is considered preferable to use available measures despite these difficulties.

IV. RESEARCH ISSUES

Research in multicultural assessment and practice has been moving along steadily, but much remains to be done. There are still at least five important problems to be addressed.

1. More information is needed on the epidemiology and prevalence of disorders in ethnic minority populations.
2. Further outcome data is needed to answer the questions as to whether or not alternative culture-sensitive therapies are actually more effective with minority clients.
3. Further research on usage patterns is needed to explain the mixed information existing in the literature.
4. More empirical studies are needed to evaluate ethnic-specific assessment instruments.
5. More work is needed on ethnic minority identity development and formation.

Not much is known on incidence and prevalence of various disorders. This is partly true because most studies have been carried out either in hospitals, where only limited diagnostic data is obtained, or in community mental health settings, with few minorities presenting for therapy. As has been pointed out, a lack of help seeking should not be equated with a lack of mental health problems. The research on usage is inconsistent. Many studies show that ethnic minorities tend to underutilize mental health services but other, more recent studies, show that some minority groups are utilizing services at a comparable rate to White clients.

Controlling for the different variables that affect mental disorders is not an easy task. In fact, it is very cumbersome. For instance, much has been written about the linkage between SES and mental illness. It is, therefore, important to have some consistency between studies as to how SES is determined. Should the criteria be the income of the head of the household, or occupation of the head of household or total extended family financial re-

sources? Studies are being conducted using different criteria. How do these inconsistencies between studies affect the research results and conclusions? It is also difficult to get broad research participation in some minority communities, due to a historically based lack of trust between minority peoples and the larger society.

Most of the ethnic-specific instruments have been developed using college students. Analogue methods for test construction and clinical training have been shown to have drawbacks. Again, under these circumstances there can be confounds between power-level discrepancies, SES, gender, the acculturation of the participants and the constructs being measured. Test instruments need further norming within client settings and among the general populations of ethnic minorities. Questions of equivalence must be addressed. Are the tests measuring the same constructs? The cross-cultural equivalence problems with existing instruments are well known, but construction of truly etic measures will be a daunting task. Large sample sizes are needed, and these are hard to acquire. It will also be necessary to compare across more than two cultures, as well as controlling for the usual variables of age, education, SES, and so on. A particularly difficult problem concerns different meanings attributed to words in different cultures. More rigorous control for use of language, especially in personality tests, is required.

If alternative methods are more effective, the question then is which particular methods and with which ethnic groups? If alternative methods are not more effective then why not? Treatment satisfaction results are mixed. Most studies reviewed here report that minority clients prefer a directive approach. However, some studies dispute this, showing a preference for non-directive approaches. More research is needed on insight-oriented therapies, especially those that are conducted with culture-sensitive modifications. Given the present state of the research it cannot be assumed that insight therapies are not effective with ethnic minority clients. Nor, for that matter, can it be assumed that only directive/behavioral therapies are preferred. More is needed on effectiveness of ethnic and gender matching. Again, studies are mixed in the results obtained. Some studies show that minority women and men differ in their preferences on this dimension.

Bicultural identity development research work is barely beginning. As the demographics of the U.S. population change, more people are self-reporting biethnic or mixed ethnic identities. Minority and White identity development models need further clarification and research on the connection between identity formation and the therapy process. Definitions of ethnic identity must be widened to include persons who claim multiethnic or multicultural backgrounds.

Possible explanations for research results discrepancies include the following:

1. The variables being tested are not specific enough. In particular, the linkages between SES, gender, and treatment satisfaction have not been consistently controlled.
2. The acculturation levels of clients is another crucial variable that has not been adequately controlled for.
3. Many studies have been based on an entire ethnic subgroup, (i.e., Asian American or African American, or Hispanics, or even non-White vs. White clients, etc.). Studies such as these are not conducted with sufficient regard for the enormous within group differences.
4. Cultures are not separate or static. Whenever different ethnic groups encounter each other a series of mutual cultural exchanges and influences begin that forever alter the participants. This cultural exchange variable, while always present, is difficult to isolate.

V. TRAINING ISSUES

Many psychologists feel reluctant and ambivalent about treating poor and minority clients. The essential questions for training programs are "What happens when a therapist encounters a client who is different?" "Is the therapist able and willing to engage in conversations that are meaningful to the client?" This would include participating in appropriate discussions about group inequalities and the painful experiences of people who have been subjected to oppressive social conditions. Given our nation's history, the very subject of racial and social class relations is loaded with conflictual, painful, and anxiety-provoking content. These subjects have been treated as taboo topics, with little substantive conversation in the media or in school settings. Most psychologists are from White and/or middle-class backgrounds. They have had little, if any, experience living or working among poor or ethnic minority peoples. Their own degree of unfamiliarity can be felt as a barrier to forming meaningful therapy relationships. Furthermore, the topic of multicultural practice is loaded with complex concepts, complex skills and a long list of behaviors that a psychologist is expected to master. The prospect of becoming multiculturally competent can feel overwhelming.

Given the difficulties inherent in the subject matter, combined with the rapidly changing demographics in

the country, it follows that graduate degree programs must step up their training efforts in multicultural practice. Up-to-date information on the curricula of degree program offerings in multicultural training is sketchy. What is apparent is that some programs offer specific courses, practica, and workshops, and so on, while other programs offer little, if anything, specifically designed to train graduates in this area. Some programs focus on specific cultural groups, that is, training in working with African Americans or working with American Indian clients, and so on. Others take a broad-based approach. In some programs multicultural training is a degree requirement, in others training is an elective.

The literature reviewed here is consistent on the viewpoint that effective training models should strive to integrate four major goals:

1. Increasing awareness of the student's own and other people's cultural norms.
2. Increasing specific cultural and clinical knowledge about different cultural groups.
3. Developing skills about how to interact effectively with peoples who are culturally different.
4. Consciousness raising about how cultural differences affect the therapy process and learning to become confortable with those differences.

Training should also be comprehensive enough to cover cognitive, behavioral, and affective learning.

Course work in a didactic format with lectures, discussions and term papers, and so on, is mainly viewed as a beginning platform to which other components are added. Specific knowledge about cultural groups, their histories, cultural norms, and so on, can be conveyed in this format. There are so many different groups, however, that programs should offer several subcourses that offer in-depth knowledge about different groups and the clinical issues associated with each. It is unlikely that a single comprehensive course can be designed to do justice to this entire topic.

Other goals intended to increase awareness and skills can only be achieved through combining multiple learning techniques. Increasing self-knowledge, including learning about one's own cultural norms and assumptions, is a crucial component. How to train students in this aspect is still being developed. The Pedersen Triad model is an example. In this model students role play working with a culturally different client while an "anticounselor" voices the negative thoughts of the client and the "procounselor" voices the positive thoughts of the client. This training technique is intended to bring to light the differences between the client and the counselor and to enhance the counselor's awareness of the impact of differences on the therapy process. Another model for increasing awareness is the Hines & Pedersen Cultural Grid, which offers comparisons of same versus different expectations, values, and behaviors. Another method is the use of "synthetic" cultures. Using IBM staff personnel from around the world, Hofstede identified four cultural dimensions: small versus large power distances, weak versus strong uncertainty avoidance, masculinity versus femininity, and collectivism versus individualism. From these dimensions synthetic cultures named Alpha (high power distance), Beta (strong uncertainty avoidance), Gama (high individualism), and Delta (high masculinity) were developed. The Leong and Kim Intercultural Sensitizer method presents students with a case story in which some culturally based misunderstanding occurs. After reading these short stories students choose from four possible explanations for the misunderstandings. Each possible choice is accompanied by a rationale for why each choice is correct or incorrect.

Using vignettes based on the Cultural Grid, synthetic cultures or Intercultural Sensitizer counselors can examine their assumptions, attitudes, and predispositions and how their cognitions affect the client case. Other methods for developing skills and awareness include role plays and real-life client–counselor sessions using videotapes and case studies. Students watch videotapes of cross-cultural interactions and then analyze the underlying cultural assumptions and their impact on the interactions.

To consolidate the learning process, it is important that training go beyond the classroom. A cultural immersion experience is suggested to complement academic and skills-building components. A number of immersion experiences are possible. In some cases the immersion experience is a placement in a community mental health center that serves ethnic minority clients. In other settings, especially where there are no suitable community placements, the immersion experience can be volunteer service work. Another approach is to use field trips to relevant ethnic communities, social programs, and agencies. Some schools have adopted a "buddies" system technique, in which students are paired with a foreign student and engage in social activities. After contact with peoples in the immersion experience it is advisable to provide debriefing sessions in which trainees can analyze their experiences.

It is important that graduate programs realize that multicultural training can be stressful. Training programs should be carefully planned to provide a format in which certain inevitable affective responses and reactions can be discussed and resolved. Students often

feel anxious when asked to engage in open, honest discussions with or about people who are different. Many are anxious when in contact with people who are different. Students are often anxious about revealing any "hidden" or unintentional racism, sexism or homophobia, and so on. Students may experience feelings of guilt or shame. The training format should help students cope with these emotions. Students should learn to become comfortable with differences and the unavoidable interpersonal and intergroup conflicts that will arise. Trainees need a format that allows for the emergence of intergroup conflicts and that also allows for the resolution of conflicts. Trainees need to be trained in the appropriate, that is, therapeutic methods for establishing rapport with clients who may be identified with being social victims. Training needs to be conducted over a sufficient period of time, utilizing a stage model with increasing degrees of difficulty of course material, personal awareness, and interpersonal skills development as the training progresses.

As of yet, there is little information on the frequency of use of these models in training programs. There are few studies on the evaluation of training models. Little is known about the effectiveness of different models. For instance, there is little information on pre- and posttests to demonstrate effectiveness of graduate student training. More work is needed to examine the effectiveness of existing training models and to develop additional models. Degree-granting programs in psychology will eventually be pressured by the rapidly changing population demographics to provide sufficient training in working with ethnic minority and bicultural clients. For the first time the U.S. Census Bureau included a multiracial category in the 2000 census. 6,826,228 million (or 2.4 percent) respondents checked two or more races. The future arrives sooner than we think.

See Also the Following Articles

Addictions in Special Populations: Treatment ■ Cultural Issues ■ Economic and Policy Issues ■ Education: Curriculum for Psychotherapy ■ Modeling ■ Multicultural Therapy ■ Objective Assessment ■ Transcultural Psychotherapy

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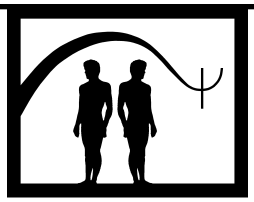

Rational Emotive Behavior Therapy

Albert Ellis

Albert Ellis Institute

GLOSSARY

desensitization The gradual overcoming of a symptom or behavior by the presence of a counter behavior or idea in the presence of the provoking stimulus, usually in a graduated degree of intensity.

exposure Behavioral technique that involves confrontation with the symptom provoking stimulus.

multimodal Refers to different modes of therapy that involve social, cognitive, emotional, behavioral, and biological dimensions of the individual's life. Also refers to different ways of doing therapy based on these different issues, such as family therapy, medications, psychotherapy, etc.

mustabatory An Ellis term referring to the set of ideas formed by the individual's sense of social necessity or the requirements of other important people. Frequently, these ideas have a rigid and premptory quality.

Rational emotive behavior therapy (REBT) was originated in January 1955 as a pioneering cognitive–experiential–behavioral system of psychotherapy. It is heavily cognitive and philosophical, and specifically uncovers clients' irrational or dysfunctional beliefs and actively and directively disputes them. But it also sees people's self-defeating cognitions, emotions, and behaviors as intrinsically and holistically connected, not disparate. It holds that they disturb themselves with disordered thoughts, feelings, and actions, all of which importantly interact with each other and with the difficulties they encounter in their environment. Therefore, with emotionally and behaviorally disturbed people, REBT employs a number of thinking, feel, and action techniques that are designed to help them change their self-defeating and socially sabotaging conduct to self-helping and socially effective ways.

REBT theorizes that virtually all humans consciously and unconsciously train themselves to be to some degree emotionally disturbed. Therefore, with the help of an effective therapist and/or with self-help materials, they can teach themselves to lead more satisfying lives—if they choose to do so and work hard at modifying their thinking, feeling, and behaving.

Albert Ellis, the originator of REBT, was trained in Rogerian person-centered therapy in graduate school in clinical psychology (1942–1947), found it too passive and abandoned it for psychoanalytic training and practice (1947–1953). But psychoanalysis, too, he found ineffective because it was too much insight-oriented and too little action-oriented. His clients often saw how they originally became disturbed—supposedly because of their family history. But when he stayed

with typical psychoanalytic methods, he failed to specifically show them how to think and act differently and to thus make themselves more functional.

So Ellis went back to philosophy, which had been his hobby since the age of 16, and re-read the ancient philosophers (especially Epicurus, Epictetus, Marcus Aurelius, and Gautama Buddha) and some of the moderns (especially John Dewey, Bertrand Russell, and Paul Tillich) and found that they were largely constructivists rather than excavationists. They held that people do not merely get upset by adverse life conditions, but instead often choose to disturb themselves about these adversities. A number of philosophers also said that people could choose to unupset themselves about minor and major difficulties; if they made themselves anxious and depressed, they could reduce their dysfunctional feelings and behaviors by acquiring a core philosophy that was realistic, logical, and practical.

Following these philosophers, Ellis started to teach his clients that they had a choice of experiencing healthy negative emotions about the misfortunes they encountered—such as feelings of sorrow, disappointment, and frustration; or they could choose to experience unhealthy negative reactions—such as panic, depression, rage, and self-pity. By using rational philosophy with troubled clients, he saw that when they faced adversities with self-helping attitudes they made themselves feel better and functioned more productively. But when they faced similar adversities with irrational (self-defeating) philosophies they made themselves miserable and acted ineffectively. When he convinced them that they almost always had the choice of helping or hindering themselves, even when their desires and goals were seriously blocked, they often were able to make that choice.

I. THE ABCs OF RATIONAL EMOTIVE BEHAVIOR THERAPY

During the 1950s, Ellis put this constructivist theory into the now well-known ABCs of REBT. This theory states that almost all people try to remain alive and achieve basic Goals (G) of being reasonably content by themselves, with other people, productively working, and enjoying recreational pursuits. When their Goals are thwarted and they encounter Adversities (A) they are then able to construct Consequences (C)—mainly feelings and actions—that either help or hinder them satisfy these Goals. They largely (although not completely) do this by choosing to follow rational, useful Beliefs (B) or to follow irrational, dysfunctional Beliefs. Therefore, although the Adversities (A) they experience are important contributors to their emotional and behavioral Consequences (C), they do not directly or solely cause these Consequences. When at C, people feel and act dysfunctionally or self-defeatingly, their irrational Beliefs (B) and their experienced Adversities (A) bring on their disturbed reactions. So A does not by itself lead to C. A interacts with B to produce C; or $A \times B = C$. However, people tend to be aware that C follows A, but not that B is also included in the process. They therefore think that adverse A's automatically lead to disturbed C's—that their internal reactions are controlled by external events.

Ellis noted in his first paper on REBT at the Annual Convention of the American Psychological Association in Chicago in August 1956, that when people feel and act disturbedly (C), they have 12 common irrational or dysfunctional Beliefs (B) about the undesirable things that happen to them (A). When they change these to rational or functional Beliefs (in therapy or on their own) they become significantly less disturbed. Both these hypotheses have been supported by many empirically based studies, first by followers of REBT and then by other cognitive behavior therapists who largely follow and have tested the ABC theory of REBT. Hundreds of published studies have given much support to this theory.

After using REBT for a few years in the 1950s, Ellis came up with clinical evidence for Karen Horney's hypothesis about the "tyranny of the shoulds." He realized that the many irrational Beliefs with which people often disturb themselves can practically always be put under three major headings, all of which include absolutistic shoulds, oughts, and musts. With these three core dysfunctional ideas, people take their strong preferences for success, approval, power, freedom, and pleasure, and elevate them to dogmatic, absolutistic demands or commands.

The imperatives that frequently accompany dysfunctional feelings and behaviors seem to be (1) "I absolutely must perform well at important tasks and be approved by significant others—or else I am an inadequate person!" (2) "Other people absolutely must treat me kindly, considerately, and fairly—or else they are bad individuals!" (3) "Conditions under which I live absolutely must provide me with what I really want—or else my life is horrible, I can't stand it, and the world's a rotten place!"

These three common irrationalities lead to innumerable derivative irrational Beliefs and frequently are accompanied by disturbed emotional and behavioral Consequences. In fact, REBT hypothesizes that people would find it difficult to make themselves disturbed without taking one or more of their major preferences and transforming them into absolutistic demands. Individuals with severe personality disorders and psychosis

also disturb themselves by turning their healthy preferences into unhealthy musturbating, but they often have other biochemical and neurological characteristics that help make them disturbed.

REBT also theorizes that the tendency to elevate healthy preferences to insistent demands, and thereby to think, feel, and act unrealistically and illogically, is innate in humans. People naturally and easily take some of their strong goals and desires and often view them as necessities. This self-defeating propensity is then exacerbated by familial and cultural upbringing, and is solidified by constant practice by those who victimize themselves with it. Therefore, especially with seriously disturbed people, psychotherapy and self-help procedures can, but often only with difficulty, change their dysfunctioning.

Many therapy techniques—such as meditation, relaxation, a close and trusting relationship with a therapist, and distraction with various absorbing activities—can be used to interrupt clients' musturbatory tendencies and help them feel better. But in order for them to get and stay better, REBT holds, they usually have to consciously realize that they are destructively escalating their healthy desires into self-sabotaging demands and then proceed to D—to actively and forcefully Dispute the irrational Beliefs that are involved in their disturbances. By vigorously and persistently Disputing these Beliefs—cognitively, emotively, and behaviorally—they can change their self-destructive shoulds and musts into flexible, realistic, and logical preferences. They thereby can make themselves significantly less disturbed.

II. RATIONAL EMOTIVE BEHAVIOR THERAPY TECHNIQUES

To help people specifically achieve and maintain a thoroughgoing antimusturbatory basic outlook, REBT teaches them to use a number of cognitive, emotive, and behavioral methods. It helps them gain many insights into their disturbances, but emphasizes three present-oriented ones:

Insight No. 1: People are innate constructivists and by nature, teaching, and, especially, self-training they contribute to their own psychological dysfunctioning. They create as well as acquire their emotional disabilities—as the ABC theory of REBT notes.

Insight No. 2: People usually, with the "help" and connivance of their family members, first make themselves disturbed when they are young and relatively foolish. But then they actively, although often unconsciously, work hard after their childhood and adolescence is over to habituate themselves to dysfunctional thinking, feeling, and acting. That is mainly why they stay disturbed today. They continue to construct dysfunctional Beliefs.

Insight No. 3: Because of their natural and acquired propensities to strongly choose major goals and values and to insist, as well as to prefer, that they must achieve them, and because they hold these self-defeating beliefs and feelings for many years, people firmly retain and often resist changing them. Therefore, there usually is no way for them to change but work and practice—yes, work; yes, practice—for a period of time. Heavy work and practice for short periods of time will help; so brief rational emotive behavior therapy can be useful. But for long-range gain, and for clients to get better rather than to feel better, they require considerable effort to make cognitive, emotive, and behavioral changes.

REBT clients are usually shown how to use these three insights in the first few sessions of psychotherapy. Thus if they are quite depressed (at point C) about, say, being rejected (at point A) for a very desirable job, they are shown that this rejection by itself did not lead to their depression (C). Instead they mainly upset themselves with their musturbatory Beliefs (B) about the Adversity (A). The therapist explores the hypothesis that they probably took their desire to get accepted and elevated it into a demand—for example, "I must not be rejected! This rejection makes me an inadequate person who will continually lose out on fine jobs!"

Second, clients are shown—using REBT Insight No. 2—that their remembering past Adversities (A), such as past rejections and failures, does not really make them depressed today (C). Again, it is largely their Beliefs (B) about these Adversities that now make them prone to depression.

Third, clients are shown that if they work hard and persistently at changing their dysfunctional Beliefs (B), their dire needs for success and approval, and return to mere preferences, they can now minimize their depressed feelings—and, better yet, keep warding them off and rarely falling back to them in the future. REBT enables them to make themselves less disturbed and less disturbable.

III. MULTIMODAL ASPECTS OF RATIONAL EMOTIVE BEHAVIOR THERAPY

To help clients change their basic self-defeating philosophies, feelings, and behaviors, REBT practitioners actively and directively teach and encourage them to use a good many cognitive, experiential, and behavioral

techniques, which interact with and reinforce each other. It is one of the pioneering integrative therapies. Cognitive methods are particularly emphasized, and often include (1) Active disputing of clients' irrational beliefs by both the therapists and the client; (2) rational coping self-statements or effective philosophies of living; (3) modeling after people who coped well with Adversities similar to, or even worse than, those of the clients; (4) cost-benefit analyses to reveal how some pleasurable substances and behaviors (e.g., smoking and compulsive gambling) are self-sabotaging and that some onerous tasks (e.g., getting up early to go to work) are unpleasant in the short term but beneficial in the long run; (5) REBT cognitive homework forms to practice the uncovering and disputing of dysfunctional Beliefs; (6) psychoeducational materials, such as books and audio-visual cassettes, to promote self-helping behaviors; (7) positive visualizations to practice self-efficacious feelings and actions; (8) reframing of Adversities so that clients can realize that they are not catastrophic and see that they sometimes have advantages; (9) practice in resisting overgeneralized, black and white, either/or thinking; (10) practical and efficient problem-solving techniques.

REBT uses many emotive–experiential methods and materials to help clients vigorously, forcefully, and affectively Dispute their irrational demands and replace them with healthy preferences. Some of its main emotive–expressive techniques include the following: (1) Forceful and persistent disputing of clients' irrational Beliefs, done *in vivo* or on a tape recorder; (2) experiencing a close, trusting, and collaborative relationship with a therapist and/or therapy group; (3) steady work at achieving unconditional other-acceptance (UOA), the full acceptance of other people with their failings and misbehaviors; (4) using visualizations or live experiences to get in touch with intense unhealthy negative feelings—and to train oneself to feel, instead, healthy negative feelings; (5) role-playing difficult emotional situations and practicing how to handle them; (6) using REBT's shame-attacking exercises by doing "embarrassing" acts in public and working on not denigrating oneself when encountering disapproval; (7) engaging in experiential and encounter exercises that produce feelings of discomfort and learning how to deal with these feelings.

REBT uses many activity-oriented behavioral methods with clients, such as (1) Exposure or *in vivo* desensitization of dysfunctional phobias and compulsions; (2) taking deliberate risks of failing at important projects and refusing to upset oneself about failing; (3) staying in uncomfortable situations and with disturbed feelings until one has mastered them; (4) reinforcing oneself to encourage self-helping behaviors and penalizing oneself to discourage self-defeating behaviors; (5) stimulus control to discourage harmful addictions and compulsions; (6) relapse prevention to stop oneself from sliding back to harmful feelings and behaviors; (7) skill training to overcome inadequacies in assertion, communication, public speaking, sports, and other desired actions that one is inhibited about.

These are some of the cognitive, emotive, and behavioral techniques that are frequently employed in rational emotive behavior therapy. Many other possible methods are individually tailored and used with individual clients.

The main therapeutic procedure of REBT is to discover how clients think, feel, and act to block their own main desires and goals, and to figure out and experiment with ways of helping them get more of what they desire and less of what they abhor. As they make themselves less disturbed and dysfunctional, they are helped to actualize themselves more—that is, to provide themselves, idiosyncratically, with greater satisfactions. At the same time, clients are helped to stubbornly refuse to define their preferences as dire necessities and thereby tend to reinstitute their disturbances.

IV. REVIEW OF THE LITERATURE

When Ellis originated it in 1955, rational emotive therapy was unique. It was followed by somewhat similar forms of cognitive behavior therapy (CBT) in the 1960s and 1970s, particularly cognitive therapy of Aaron Beck, rational behavior therapy of Maxie Maultsby, Jr., cognitive behavior modification of Donald Meilchenbaum, and Multimodal Therapy of Arnold Lazarus. REBT was soon supported by about 300 published studies that showed its effectiveness with many different types of clients.

Many of these have been surveyed in comprehensive reviews by R. DiGiuseppe, N. J. Miller, and L. D. Trexler, by T. E. McGovern and M. S. Silverman, by D. Hajzler and M. E. Bernard, by L. C. Lyons and P. J. Woods, and by M. S. Silverman, M. McCarthy, and T. E. McGovern.

As a result of its many successful outcome studies, REBT has become one of the most practiced psychotherapies. It is widely used with children, adolescents, couples, families, people with sex problems, and in other forms of counseling and psychotherapy. In ad-

dition, it is often used in business and industry, in education, in sports, in assertion training, in stress management, in parenting, and in many other fields.

Finally, REBT has revolutionized the self-help industry and has been widely adapted in scores of best-selling books, workbooks, and audio-visual cassettes, such as Wayne Dyer's *Your Erroneous Zones,* Albert Ellis' *A Guide to Rational Living,* and David Burns' *Feeling Good.*

The Albert Ellis Institute in New York, and in its many American and foreign branches, trains therapists and counselors in REBT and certifies them in its practice. To date, it and its affiliates have certified well over 5000 therapists.

V. SUMMARY

Rational emotive behavior therapy (REBT) was originated in 1955 as the first of the major cognitive behavior therapies. It has been shown to have effective outcomes in hundreds of published studies and has become one of the most popular psychotherapies. It looks like it, as well as cognitive behavior therapy, will continue to thrive in the 21st century.

See Also the Following Articles

Beck Therapy Approach ■ Behavior Therapy: Historical Perspective and Overview ■ Cognitive Appraisal Therapy ■ Cognitive Behavior Therapy ■ History of Psychotherapy ■ Humanistic Psychotherapy ■ Multimodal Behavior Therapy

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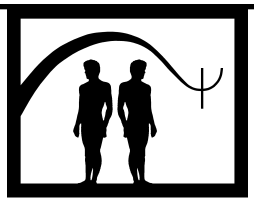

Reality Therapy

Robert E. Wubbolding

Center for Reality Therapy

GLOSSARY

choice theory The underlying principles of reality therapy that emphasize behavior as chosen for the purpose of satisfying inner genetic instructions or needs.

environment The therapeutic atmosphere or climate that serves as the basis for specific interventions.

WDEP The delivery system of reality therapy, signifying wants, direction and doing, self-evaluation, and planning.

Founded by William Glasser reality therapy has its roots in the work of Alfred Adler, who emphasized that human beings are social in nature and that behavior is goal centered. Glasser extended his early ideas to include genetic instructions or human needs as sources of human behavior. Accordingly, human beings originate their own behavior. It is not thrust on them by their families, their environment, or their early childhood conflicts. Rather, behavior is seen as chosen. In the early stages of its evolution, the formula for reality therapy was described as involving eight steps. Used widely in therapy, counseling, corrections, as well as in education, reality therapy attempted to avoid coercion and punishment and teach inner responsibility. Its current formulation as a delivery system, developed by Robert E. Wubbolding in his books *Using Reality Therapy* and *Reality Therapy for the 21st Century,* is summarized with the letters WDEP. Its use now extends to self-help, as well as management, supervision, and coaching employees.

Describing the root of human strife as flawed relationships, Glasser has provided a theoretical and conceptual blueprint for addressing human conflict. Wherever human relationships are improved, productivity increases in the workplace, families remain intact, students achieve, and organizations achieve their goals and function more humanely.

I. DESCRIPTION OF TREATMENT: ENVIRONMENT AND PROCEDURES

Figure 1 presents an outline of the delivery system for reality therapy. Establishing a safe atmosphere or environment provides the basis for the more specific interventions known as procedures. As in any therapy the therapist listens to clients' stories presented in their own words and seeks to become part of their inner discourse. In the language of choice theory the therapist becomes part of the clients' quality world (i.e., someone who is capable of providing needed help). The procedures are the specific tools for helping clients clarify and prioritize their wants, evaluate their actions and self-talk, and finally, make plans for effective change. The "Cycle of

CYCLE OF MANAGING, SUPERVISING, COUNSELING AND COACHING

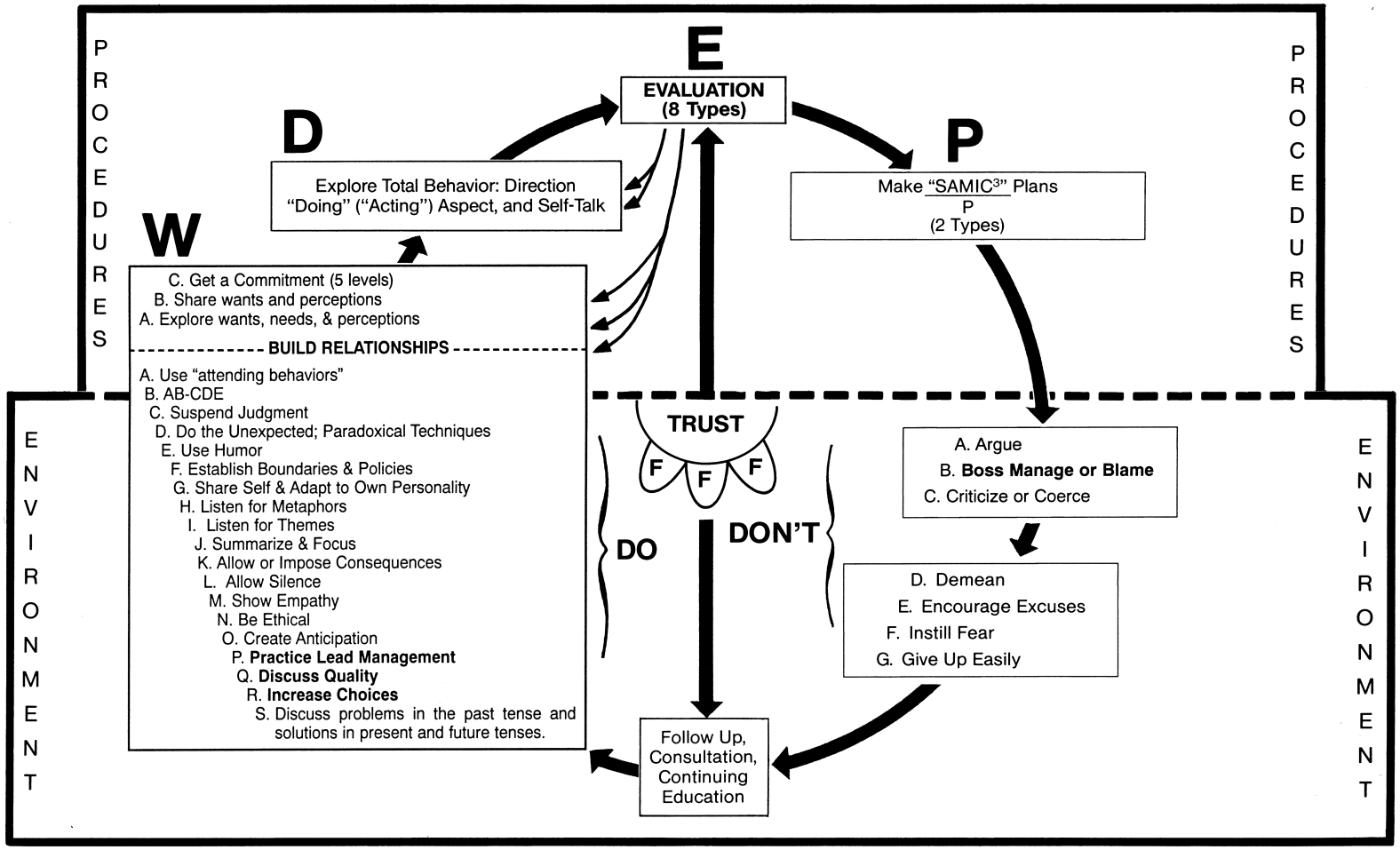

FIGURE 1 Outline of the delivery system for reality therapy. Adapted from the works of William Glasser. Copyright 1986 Robert E. Wubbolding. Reproduced with permission.

Summary Description of the Cycle of Managing, Supervising, Counseling and Coaching

Introduction:

The Cycle consists of two general concepts: Environment conducive to change and Procedures more explicitly designed to facilitate change. This chart is intended to be a brief summary. The ideas are designed to be used with employees, students, clients as well as in other human relationships.

Relationship between Environment & Procedures:

1. As indicated in the chart, the Environment is the foundation upon which the effective use of Procedures is based.
2. Though it is usually necessary to establish a safe, friendly Environment before change can occur, the "Cycle" can be entered at any point. Thus, the use of the cycle does not occur in lock step fashion.
3. Building a relationship implies establishing and maintaining a professional relationship. Methods for accomplishing this comprise some efforts on the part of the helper that are Environmental and others that are Procedural.

Environment:

DO: Build Relationship: a close relationship is built on TRUST through friendliness, firmness, and fairness.

A. Using Attending Behaviors: Eye contact, posture, effective listening skills.
B. AB = "Always Be…" Consistent, Courteous & Calm, Determined that there is hope for improvement, Enthusiastic (Think Positively).
C. Suspend Judgment: View behaviors from a low level of perception, i.e., acceptance is crucial.
D. Do the Unexpected: Use paradoxical techniques as appropriate; Reframing and Prescribing.
E. Use Humor: Help them fulfill need for fun within reasonable boundaries.
F. Establish boundaries: the relationship is professional.
G. Share Self: Self-disclosure within limits is helpful; adapt to own personal style.
H. Listen for Metaphors: Use their figures of speech and provide other ones.
I. Listen to Themes: Listen for behaviors that have helped, value judgements, etc.
J. Summarize & Focus: Tie together what they say and focus on them rather than on "Real World."
K. Allow or Impose Consequences: Within reason, they should be responsible for their own behavior.
L. Allow Silence: This allows them to think, as well as to take responsibility.
M. Show Empathy: Perceive as does the person being helped.
N. Be Ethical: Study Codes of Ethics and their applications, e.g., how to handle suicide threats or violent tendencies.
O. Create anticipation and communicate hope. People should be taught that something good will happen if they are willing to work.
P. Practice lead management, e.g., democracy in determining rules.
Q. Discuss quality.
R. Increase choices.
S. Discuss problems in the past tense, solutions in present and future tenses.

DON'T:

Argue, Boss Manage, or Blame, Criticize or Coerce, Demean, Encourage Excuses, Instill Fear, or Give up easily.
Rather, stress what they can control, accept them as they are, and keep the confidence that they can develop more effective behaviors. Also, continue to use "WDEP" system without giving up.

Follow Up, Consult, and Continue Education:

Determine a way for them to report back, talk to another professional person when necessary, and maintain ongoing program of professional growth.

Procedures:

Build Relationships:

A. Explore Wants, Needs & Perceptions: Discuss picture album or quality world, i.e., set goals, fulfilled & unfulfilled pictures, needs, viewpoints and "locus of control."
B. Share Wants & Perceptions: Tell what you want from them and how you view their situations, behaviors, wants, etc. This procedure is secondary to A above.
C. Get a Commitment: Help them solidify their desire to find more effective behaviors.

Explore Total Behavior:

Help them examine the Direction of their lives, as well as specifics of how they spend their time. Discuss ineffective & effective self talk.

Evaluation - The Cornerstone of Procedures:

Help them evaluate their behavioral direction, specific behaviors as well as wants, perceptions and commitments. Evaluate own behavior through follow-up, consultation and continued education.

Make **P**lans: Help them change direction of their lives.

Effective plans are **S**imple, **A**ttainable, **M**easurable, **I**mmediate, **C**onsistent, **C**ontrolled by the planner, and **C**ommitted to. The helper is **P**ersistent. Plans can be linear or paradoxical.

Note: The "Cycle" describes specific guidelines and skills. Effective implementation requires the artful integration of the guidelines and skills contained under Environment and Procedures in a spontaneous and natural manner geared to the personality of the helper. This requires training, practice and supervision. Also, the word "client" is used for anyone receiving help: student, employee, family member, etc.

FIGURE 1 *(Continued).*

Managing, Supervising, Counseling, and Coaching" is applicable to many relationships and is used in many settings where human relationships are paramount: teaching, therapy and counseling, consultation, management, and supervision. Moreover, reality therapy employs several strategies common to all counseling theories.

Also, although the environment is the foundation upon which the procedures are built, there is no absolute line of demarcation between them. Thus "Build Relationships" is both environmental and procedural. Nor is the "Cycle" a simplistic lock-step method to be entered unwaveringly at the same place with every patient. People using reality therapy in their human interactions, enter the "Cycle" at various points. Although a therapist generally establishes a friendly, warm relationship before employing procedures that lead to change, helping clients evaluate their own behavior and making plans often occurs early in the therapy process.

Finally, because reality therapy is used in corrections, in classrooms, and in many relationships besides therapy, specific helpful and hurtful and behaviors as well as attitudes are described under environment such as "don't criticize" and "don't encourage excuses."

A. Environment

The word "environment" implies an effort on the part of the therapist to establish an atmosphere in which the patient can feel safe, secure, and motivated. As shown in Figure 1, hindrances to establishing a trusting, helpful, safe environment include arguing, bossing, blaming, criticizing, demeaning, colluding with excuses, instilling fear, and giving up easily. In consulting with parents, educators, managers, and others, therapists often teach the ineffectiveness of such choices.

Opposite the ineffective environmental behaviors is a wide range of helpful, effective, and facilitative suggestions leading to a trusting atmosphere. These include attending behaviors, use of paradoxical techniques and metaphors, listening for themes related to procedures, skill in demonstrating accurate empathy, and helping clients find choices even amid their feelings of depression, perceptions of oppression, and lack of opportunities to fulfill their own needs.

B. Procedures: The WDEP System

The environment serves as a foundation for the effective use of procedures that lead to change. They are not a series of recipes used mechanically. Rather they are a network or a system defined by the acronym WDEP. Therefore, depending on the presenting and underlying problem, the therapist extracts from the system appropriate components for application.

W: Explore Wants, Needs, and Perceptions

Essential to the process of change, as well as facilitating the relationship, is a clear determination and definition of clients' wants or desires. They are asked to describe current pictures or to insert firmly in their "quality worlds," exactly what they want. Using the analogy of wants as pictures, it is evident that clients often have blurred wants. They are unclear about what they want, so when they are asked, "What do you want from your job, from your spouse, from your parents, from your children?" the answer is, "I don't know" or "I'm not sure." An adolescent often wants "my parents off my back" or "to be left alone" but is unable to provide a detailed and unambiguous description of this desire. Consequently, the reality therapist helps clients clarify and define wants, which is the process for the beginning of effective action on the part of clients.

Another part of the W is the exploration of clients' perception or viewpoint. The therapist asks the parent of a child, "How do you see your son or daughter?" In the case of a severely upset child, the parent might answer, "I see a lazy, rebellious, surly, uncooperative, and ungrateful child." Of course, such questioning is combined with an exploration of wants, for example, "What do you want from him or her?"

To the workaholic parent of a child, the therapist could say, "I see your 18 hour days not as a 'rendezvous with destiny' but as a collision course for you and your children." To the parent of the teenager, the counselor might say, "I see your son or daughter as a person who needs a compliment for even a minor success or change." In the practice of reality therapy, therapists take an active but nonauthoritarian role, and see themselves as a partners in the process of change.

D: Doing (Total Behavior)

Behavior is composed of four aspects: doing, thinking, feeling, and physiology. A popular misconception is that reality therapy neither deals with nor allows for a discussion of feelings and emotions. This erroneous perception is perhaps derived from the accurate statement that in reality therapy the action aspect of the behavioral system is emphasized (although not to the exclusion of the other components). Still, there are two important aspects to this procedure: exploration of overall behavioral direction and specific actions or choices.

The therapist encourages clients to be specific in the discussion of behaviors, such as exploring a specific segment of time: a day, a morning, an hour, an incident, or an event. Although it is important to examine the

overall direction of total behavior, direction will change only with small measurable changes made one at a time. Thus, therapists help clients become a television camera describing specific rather than typical events.

E: Self-Evaluation

If the entire process of environment and procedures is a cycle, the procedures appear as an arch with its keystone self-evaluation. This component is a prerequisite for change in human behavior. No one chooses a more effective life direction or changes a specific behavior without making at least a minimal self-evaluation that the current course of action is not advantageous. Effective change rests on judgments related to total behavior, wants, perceptions, and other aspects of the client's life.

The term "Evaluation" has a meaning in reality therapy that is different from its meaning in other theories. In reality therapy, the procedure described here is not an assessment evaluation or "clinical diagnosis." Rather, it is a series of value judgments, decisions, and changes in thought made by the client. In the restructuring of thought, clients come to the conclusion that their life direction is not where they want to go, that a certain exact and specific current behavior is not useful or not helpful, that what they want is not attainable or helpful, that a perception is not effective, and that a future plan of action represents a more need-fulfilling behavior.

In the "Cycle" evaluation comprises an axis that closely connects procedures and environment. Reality therapists help clients evaluate their own choice systems (wants, behavior, perceptions) as well as devote considerable effort toward the evaluation of their own specific professional behaviors and generalized competencies.

P: Planning

If evaluation is the keystone of the procedures, planning is the superstructure or the goal. A plan of action is crucial to change. It can sometimes be complicated and sometimes simple. There must always be a plan. People who go through life without some sort of long-term plan, are like ships floundering without rudders. This procedure is the easiest to bring about if the therapist has prepared the way by the effective use of the more subtle procedures and environmental components already described. Nevertheless, if the plan is to be effective, it should be characterized by as many as possible of the following qualities summarized by the acronym SAMIC[3].

S = Simple: The plan is clear and not complicated.
A = Attainable: Realistically doable rather than grandiose and impossible.
M = Measurable. An effective plan is precise and exact.
I = Immediate. Implementation immediately after or even during the therapy session is desirable.
C = Controlled by the planner. A plan should not be contingent on the behavior of another person.
C = Committed to. The reality therapist elicits a firm commitment.
C = Consistent. The plan should be repeated.

The WDEP system should be seen as a unit, a system in which one component affects the others, and so, the subsystems W, D, E, and P are not isolated steps that must be followed one after another. Rather, it is more appropriate to extract from the system whatever component is most relevant at the moment. Through listening, practice, and supervision, a user of reality therapy can develop a sense of where to start and how to proceed through the "Cycle."

II. THEORETICAL BASES: CHOICE THEORY

The practice of reality therapy is based on choice theory. Previously lacking a theoretical framework for reality therapy, Glasser employed the relatively obscure principles of control system theory to explain its effectiveness, and extended the theory to provide a basis for clinical practice by presenting a detailed explanation of human needs, total behavior (actions, thinking, feelings), perceptions, and inner wants or "quality world," the phrase used to describe our specific wants and intense desires. Control system theory is based on the principle that living organisms originate their behavior from the inside. They seek to close a gap between what they have and what they perceive they need at a given moment. This discrepancy, called a "perceptual error," sets the behavioral system in motion so as to impact the external world. Human organisms act on their external worlds to satisfy needs and wants. They gain input from and generate output toward the external world. Because of the emphasis on inner control and especially because of the emphasis on behavior as a choice, the theory was renamed choice theory in 1996.

III. EMPIRICAL STUDIES

The question is often asked, "Does reality therapy work? Is it effective?" Robert Wubbolding has provided an extensive summary of research conducted on its efficacy. Investigators have found an increase in the self-esteem of clients and a greater realization of the meaning

of "addict," a significant reduction in the rate of recidivism with juvenile offenders, and a complete resocialization of a large number of prison residents, all of whom received reality therapy treatment.

Much research has been conducted in schools measuring the effects of counselor and teacher training in reality therapy. Teaching students to self-evaluate their behavior and their work has resulted in a drop in teacher referrals for discipline and other problems.

A sampling of research in a variety of settings illustrates the wide use of this system. Participants in training workshops leading to certification represent psychology, social work, counseling, classroom teachers, administration, corrections, geriatrics, and other disciplines. Although there is ample research to demonstrate the viability of reality therapy as a therapeutic method, more is needed. Wubbolding recommends that close attention be given to the quality of training provided for therapists, teachers, and others who use the system so that the genuine use of reality therapy is measured. Also, more studies measuring outcome (i.e., change in behavior) are needed.

IV. SUMMARY

Reality therapy, formulated as WDEP, is a practical and jargon-free system based on choice theory. Its philosophical principles include the belief that people choose their behavior. It is not imposed from early childhood or by external stimuli. Therapists help clients define their wants, evaluate their behaviors as well as their wants, and make plans for future change.

See Also the Following Articles

Adlerian Psychotherapy ■ Control-Mastery Theory ■ Family Therapy

Further Reading

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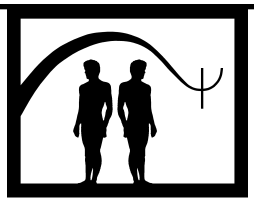

Reinforcer Sampling

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GLOSSARY

behaviorism School of thought that stresses the importance of studying behavior objectively and dealing only with directly or potentially observable stimuli and responses.

reinforcer sampling rule Before using an event or stimulus as a reinforcer, sampling of the reinforcer is required in the situation in which it is to be used.

token economy Reinforcement system in which individuals earn symbolic reinforcers that can be exchanged for a tangible reward for performing adaptive behaviors, or lose symbolic reinforcers for performing maladaptive behaviors.

Reinforcer sampling is the procedure of noncontingently presenting a portion of a reinforcer prior to a response to (1) determine that a stimulus or event is, in fact, reinforcing, and (2) increase the motivation of the organism to engage in behavior to obtain the reinforcer. This article will present a review of the theoretical and empirical bases of reinforcer sampling, provide ways in which reinforcer sampling has been used in clinical populations, and provide other practical examples of its utility.

I. DESCRIPTION OF TREATMENT

Reinforcer sampling is a procedure to identify or increase the reinforcing value of a stimulus or event. In order to identify whether a potential reinforcer is desirable to the subject, the reinforcer is presented noncontingently (i.e., the subject receives or "samples" the reinforcer without doing anything for it). After the subject has sampled the reinforcer, the probability that the subject will work to gain access to the reinforcer in the future may change. A response or set of responses are then specified upon which the reinforcer is made contingent. It is hoped that since the subject has had a chance to experience the reinforcer, he or she will be more motivated to obtain it, and thus will be more likely to engage in the desired behavior.

Reinforcer sampling could be used in a situation in which a parent wishes to obtain a specific behavior from a child. For example, a mother may want her child to pick up his toys when he is finished playing with them. To alter his behavior using reinforcer sampling, this mother could noncontingently introduce a potential reinforcer, such as a new computer game, several random times in the home. Then, after it appeared that her son liked playing the game and looked forward to playing it, the mother could tell him that he would be able to play the computer game only after he picked up all of his toys, therefore making playing the computer game contingent upon picking up his toys. Importantly, prior experience, or sampling the computer

game, would be necessary for this stimulus to have any relevance to the boy.

II. THEORETICAL BASES

Reinforcer sampling was described by Teodoro Ayllon and Nathan Azrin in their 1968 book on the token economy system of motivational and rehabilitational therapy. A token economy system requires individuals to earn tokens for adaptive behavior that can be exchanged for numerous reinforcers, such as meals, activities, and so on. The theory behind the token system is that individuals will engage in adaptive behaviors in order to gain access to available reinforcers. However, this will only be effective if the implementers of the token economy system accurately identify those stimuli or events (i.e., reinforcers) that may serve the function of increasing the probability of the occurrence of targeted responses (i.e., truly reinforcing stimuli). Ayllon and Azrin reported that many individuals in a token economy system would not engage in what was assumed to be a reinforcing activity. That is, the activity was not truly reinforcing to these individuals. Reinforcer sampling is a way of determining the reinforcing properties of a stimulus or event. Although the sampling of an event does not guarantee that it will be reinforcing, it will increase familiarity with the event. Thus, if the individual does not seek the reinforcer, one is assured that this is not simply due to unfamiliarity with it.

In their book, Ayllon and Azrin presented the Reinforcer Sampling Rule, which states that before using an event or stimulus as a reinforcer, sampling of the reinforcer is required in the situation in which it is to be used. This is important for several reasons. First, if an individual has not previously or recently come into contact with the potentially reinforcing event, then it may not be reinforcing to that individual. Second, a previously identified reinforcer may lessen or lose its reinforcing qualities in a new situation. In other words, while a stimulus may be familiar and somewhat reinforcing, it may not be worth the effort when subjects are required to engage in certain behaviors to obtain it.

The principle of stimulus generalization suggests that the probability of a response increases as a function of the degree of similarity of the stimuli to those previously present at the moment of reinforcement. Thus, to increase the odds that an individual will work for a reinforcer, the situation should closely approximate the original situation that existed when the individual initially obtained the reinforcer. Reinforcer sampling procedure allows the individual to be briefly presented with the reinforcer before the response, thereby reproducing all of the stimuli associated with the onset of the reinforcer. After the individual has sampled the reinforcer in the new situation, and thus has become familiar with the reinforcer in the new context, the remainder of the reinforcer could then be delivered after the individual has produced the desired response.

The sampling rule is often used in businesses. An example is the woman who hands out free food and drink samples at the grocery store hoping that shoppers will find the sample good (i.e., reinforcing) and buy the product (i.e., engage in the desired behavior).

III. EMPIRICAL STUDIES

In the 1960s, Ayllon and Azrin conducted a series of studies evaluating the use of reinforcer sampling with psychiatric inpatients. Each study evaluated the number of psychiatric inpatients that engaged in different activities, (e.g., a fair, a walk, watching a movie, a social evening, a music session, and religious services), without first being allowed to "sample" the event. The patients had to use one of their earned tokens to attend the event. In the second phase, patients were allowed to "sample" the event by being present at the fair grounds or watching the first few minutes of the religious service, and then were allowed to decide whether they wanted to use their token to attend the event for a longer duration. Ayllon and Azrin found that the patients were more likely to attend the event if they had been allowed to sample the event first. However, with a return to the regular procedure in which the patients were not allowed to sample the event before deciding whether they wanted to attend it, they were less likely to choose to use a token to participate. Ayllon and Azrin reported that this suggests that reinforcer sampling is an effective means of increasing utilization of a reinforcer, and that it can be used with a variety of different reinforcers. They also suggested that reinforcer sampling should be used for as long as the specific behavior is desired, as their results showed that patients decreased their utilization of the reinforcer event when the reinforcer sampling procedure was discontinued.

Reinforcer sampling does not appear to work solely by familiarizing individuals with reinforcers. That is, the experiments demonstrated an increased utilization of the reinforcer once sampling was available, even in patients who had previous experience with the event.

Since Ayllon and Azrin studied reinforcement sampling procedures in psychiatric inpatients, other studies have replicated their findings with other samples of

psychiatric inpatients, as well as in different populations. Often, reinforcer sampling has been studied in the context of token economy systems used with severely mentally ill individuals or individuals with mental retardation. In these populations, reinforcer sampling is used to encourage individuals to work for reinforcers and activities that are available. For example, in token economy systems, individuals earn tokens by engaging in specific desirable behaviors and then are allowed to use the tokens to "purchase" meals, access to objects such as musical instruments, and activities such as social events or outdoor passes. In research conducted in the later 1960s through the 1970s, with an occasional study in the 1990s, researchers examined the effectiveness of reinforcer sampling in increasing mentally ill or developmentally delayed individuals' utilization of positive reinforcers (e.g., arts and crafts) provided in a long-term care setting. Similar to Ayllon and Azrin, researchers have predominantly found that allowing individuals to sample the reinforcer prior to using the reinforcer as a contingent event or stimulus has increased the chances that individuals will choose to engage in the reinforcing activity.

Researchers have also experimented with alternate forms of reinforcer sampling. For example, some have employed response exposure as a form of sampling. Response exposure involves allowing an individual to observe a desired response being chosen or enacted by another person followed by receipt of reinforcement.

IV. SUMMARY

Reinforcer sampling is a procedure that can enhance the relevance of a reinforcer. Reinforcer sampling involves presenting a potential reinforcer noncontingently to an individual prior to requiring a specific behavior so that the individual's motivation to obtain the reinforcer is increased. This procedure is useful when individuals are unfamiliar with the reinforcer, or are unfamiliar with the context in which the reinforcer will be used to obtain a desired behavior. Reinforcer sampling also helps to identify those events, objects, or activities that will be reinforcing to a specific individual or group of people. Reinforcer sampling has been used primarily with psychiatric inpatients and developmentally delayed populations. However, behavioral principles suggest that it could be useful with a variety of types of populations.

See Also the Following Articles

Behavioral Consultation and Therapy ■ Negative Reinforcement ■ Positive Reinforcement ■ Token Economy

Further Reading

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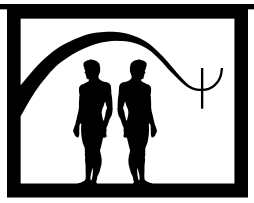

Relapse Prevention

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GLOSSARY

abstinence violation effect (AVE) Occurs when a client lapses and irrationally concludes that the lapse is so severe that they may as well relapse (e.g., since I broke the rule and I had one shot of whiskey, I may as well finish the bottle); a form of perfectionist or "all or none" thinking.

high-risk situation A situation identified by client and therapist as one in which the client has a greater likelihood to experience a lapse or relapse. Part of a behavior chain that probabilistically could lead to a lapse or relapse.

idiographic A self-referenced, as opposed to norm-referenced, context (e.g., comparisons with the client's previous level of function would be idiographic, whereas comparisons with the client's peers would be nomothetic).

lapse An occurrence of an undesired behavior in the context of behavior cessation or reduction program (e.g., smoking a cigarette by the client in a smoking cessation program or visiting a bar by an alcoholic). A lapse is always less serious than a relapse.

problem of immediate gratification (PIG) The orientation to positive, usually smaller, short-term consequences with adverse, usually larger, long-term consequences, rather than to adverse or unwanted short-term consequences for a more beneficial long-term consequence.

relapse A violation of the contract or terms of the behavior cessation or reduction program. Sometimes defined as a return to pretreatment levels of the problem behavior.

seemingly irrelevant/unimportant decisions (SIDS/SUDS) Decisions early in a behavior chain that place the client in a high-risk situation (e.g., the pedophile deciding to get milk from the market near the day care center rather than the market near the commercial district).

I. OVERVIEW

When one thinks of psychotherapy, a picture comes into view of a more or less theoretically inspired set of techniques that are employed as a primary clinical intervention to treat a constellation of psychological symptoms. Unlike most of the psychotherapies that are described in this volume, relapse prevention (RP) did not evolve as a front-line treatment for a particular mental disorder. It was instead a calculated response to the longer-term treatment failures of other therapies. It was not conceived as an alternative to those interventions, but as a supplemental tool that would make a variety of treatments, particularly for addictive behaviors, more effective.

Another unique feature of RP is that it was not originally concerned with all of the phases of treatment; for example, it did not address the precontemplation, contemplation, preparation, and action stages of treatment. The original target of RP was the maintenance phase of treatment, when patients are no longer receiving

a regular dose of the primary treatment and the positive effects brought about by regular treatment contact can begin to wane. RP was conceived as an answer to the problem of maintaining initial gains. Arguably the most difficult challenge for any patient is maintaining treatment gains over time without the structure and accountability of therapy, or the support of a therapist or group. RP provides some tools for maintaining treatment gains over time.

This article provides the history of RP and its evolution in the treatment of addictions and other impulse control problems. We describe some of the various forms of RP and its basic components. Relevant research is presented and we discuss the future potential of RP with the additions of motivational interviewing, stepped-care approaches to health, and harm reduction concepts.

II. THEORETICAL BASES

Relapse Prevention is a broad phrase that is used to describe a varied set of cognitive-behavioral techniques that are employed to maintain desirable addictive and impulsive behavioral changes. Alan Marlatt and Judith Gordon developed the approach over the course of several years and many discussions. Marlatt and his colleagues were working in the treatment of substance abuse and became increasingly concerned with follow-up data. Results indicated that although significant treatment gains could be produced in addictive behaviors such as drug, alcohol, and tobacco use, those gains also diminished significantly over time if no further intervention was implemented. In 1995 D. Richard Laws wrote of findings suggesting that within 1 year of ending treatment over 80% of patients would relapse (resume the undesired behavior) and two-third of these resumptions would occur in the first 3 months. Marlatt and his colleagues concluded that it was not the cessation treatments themselves that needed to be altered. These approaches initially appeared to facilitate abstinence for many patients. Instead, Marlatt reasoned that a supplemental treatment was needed that would focus on the maintenance of the gains that were acquired during the original treatment period.

The primary assumption of RP is that there it is problematic to expect that the effects of a treatment that is designed to moderate or eliminate an undesirable behavior will endure beyond the termination of that treatment. Further, there are reasons to presume a problem will reemerge, such as a return to the old environment that elicited and maintained the problem behavior; forgetting the skills, techniques, and information taught during therapy; and decreased motivation. Treatments typically involve an intense but limited period of time during which patients are brought into contact with new influences (some mental health workers, some patients like themselves), information, and contextual components that aid in creating changes in their behaviors. There is an accountability factor that is built into these techniques as well as a regular dose of treatment given reliably over a period of time. These accountability and dose elements are commonly removed after the client has reached his or her treatment goals (treatment is terminated) and the client must learn to implement the skills and knowledge he or she learned in a new context with little or no assistance. Generalizing the skills to varied situations poses a significant challenge and many treatment failures are the result.

Marlatt and his colleagues believed that treatment failures could be analyzed in order to discover internal and external variables that increased risk for relapse. They further reasoned that knowing items such as situational factors, mood states, and cognitions would identify individualized targets of change for clients, targets focused not on the acquisition of quitting behavior, but the maintenance of that behavior. Based loosely on Albert Bandura's 1977 social learning theory, the RP model proposes that at the cessation of a habit control treatment, a client feels self-efficacious with regard to the unwanted behavior and that this perception of self-efficacy stems from learned and practiced skills. Over time the client contacts internal and external risk factors such as seemingly irrelevant decisions (SIDS, sometimes seemingly unimportant decisions, or SUDS) and/or high-risk situations (HRS) that threaten the client's self-control, and consequently his or her perception of self-efficacy. According to the model, if the client has adaptive coping skills to adequately address the internal and external challenges to his or her control, the client will not relapse. However, if his or her skills are not sufficient to meet the challenge, a lapse or relapse may occur (this will be described in greater detail below). In response to a resumption of the change behavior at some level, the client has a reaction that either increases attempts to implement adaptive coping skills, or fails to cope effectively and engages in the undesirable behavior because it provides immediate gratification. Embedded in this model is Marlatt's supposition that the targets of intervention are cognitions and behaviors that are collectively referred to as coping skills. Marlatt and his colleagues' treatment therefore employs cognitive-behavioral techniques to improve the retention and accessibility of adaptive coping responses.

In the short period of time since its introduction, RP has evolved in numerous directions. It has been applied

to new problem areas such as risky sexual behaviors, overeating, and sexual offending. It has additionally come into use as a full program of treatment and lifestyle change, instead of simply a supplemental intervention strategy. That is, RP is often a primary treatment program in addition to addressing the maintenance issue. Lastly, RP is emerging as a bona fide theory of compulsive habit patterns and the processes of relapse. It should be noted that RP is most widely used with behaviors deemed volitional in origin (e.g., behaviors of consumption); however, some practitioners have applied RP in problem behaviors where the volitional element is less clear (e.g., schizophrenia, depression).

Tony Ward and Stephen Hudson in 1996 argued that this conceptualization often fails to accurately capture the addictive processes for which it was used. For example, the theoretical link between high-risk situation and lapse, as well the link from lapse to relapse has not been sufficiently demonstrated. As Ward and Hudson suggest, RP has rightfully undergone increasing scrutiny in recent years. Additional researchers and scholars have critiqued and extended the RP theory that commenced with the ideas of Bandura, Marlatt, and Gordon. See the edited work by Laws, Hudson, and Ward (2000) *Remaking Relapse Prevention with Sex Offenders* for the latest developments in RP theory in general, and treatment applications for sexual offenders.

III. TREATMENT COMPONENTS

In 1995 Laws outlined the tenets of RP. He provides 12 principles that serve as the foundation of this approach. Briefly summarized, the components of RP are identification of a maladaptive behavior, a process of change defined by commitment and motivation, behavioral change and maintenance of behavior change, identification of lapses (a single instance of the maladaptive behavior) and relapses (a complete violation of the self-imposed abstinence rules), lifestyle balance between obligatory and self-selected behaviors, recognition of the ideographic aspects of the maladaptive behavior, and recognizing and planning behavioral responses for high-risk situations. In practice, RP addresses the issues of identifying high-risk situations, seemingly irrelevant decisions, and the problem of immediate gratification. Therapists using RP to treat sex offenders also include skills training components, such as social skills and coping skills.

In general, relapse prevention's foci are first, identification of high-risk situations, and second, employing appropriate self-control responses. High-risk situations are determined by an analysis of past offenses and by reports of situations in which the client feels or felt "tempted." These situations may be a bar or tavern for smokers and drinkers, playgrounds and shopping malls for sexual offenders, and casinos for gamblers. Appropriate responses are those behaviors that lead to avoidance of high-risk situations, or if in a high-risk situation, behaviors that foster nonoffending actions. For example, if an offender realizes he is having a fantasy about offending, he can employ a thought-stopping behavior, such as saying out loud "Stop!" or distracting himself such that the deviant fantasy is interrupted. Laws suggests that responding with an appropriate coping response to high-risk situations will lead to increased self-efficacy and a decreased probability of relapse. He also indicates that if appropriate coping responses are not utilized or not in the behavioral repertoire, there will be a decrease in self-efficacy, an increased likelihood of positive outcome expectancies (perception of positive experiences resulting from engaging in maladaptive behavior), a lapse, and an increased probability of future lapses.

A. High-Risk Situations

This component often involves the ideographic assessment of high-risk situations. The client and clinician work together to identify the situations in which the client has previously engaged in problematic behavior and those situations in which the client is likely to engage in problematic behavior. The client will be asked to generate a list of situations that are lowrisk, and to determine what aspects of those situations differentiate them from high-risk situations. The focus will be to train the client to recognize themes and commonalties in his or her high-risk situations so that the client can generalize the ability to assess level of risk in a novel situation. The therapist works with the client to ensure that the client is realistic in his or her assessment of the level of risk in a variety of hypothetical situations. For example, the therapist often creates a series of hypothetical situations, based on the client's self-report of risk factors, to assess the client's ability to determine the causes and severity of risk.

B. SIDs/SUDs

Seemingly irrelevant decisions (SIDs) (also seemingly unimportant decisions or SUDs) are those behaviors that might not lead directly to a high-risk situation, but are early in the path of decisions that place the client in a high-risk situation. For example, if the client reports that he is more likely to engage in the problematic

behavior after drinking during lunch, a SID would be agreeing to attend a two-martini luncheon with a coworker. In addressing SIDs, the therapist works with the client to determine which decisions lead to high-risk situations. Coping skills are often taught in conjunction with therapeutic work on SIDs. Once the client can identify high-risk situations and SIDs, the client needs to learn effective coping strategies. For example, the therapist may direct the client to brainstorm strategies to resolve a high-risk situation without employing the problematic behavior. For example, the client may choose to walk away or the client may wish to change the situation so that the risk is lowered (e.g., for a smoker, moving a conversation to a room in which there are more nonsmokers, away from the break room or smoking area). The therapist must work with the client to ensure that client solutions and skills are adequate and appropriate. The therapist may also role-play situations with the client to allow the client a chance to practice skills in a hypothetical high-risk situation.

C. Problem of Immediate Gratification

The problem of immediate gratification (PIG) is the orientation of the client to smaller positive short-term consequences with larger adverse long-term consequences, rather than adverse or unwanted short-term consequences for a more beneficial long-term consequence. With smokers, the immediate relief from withdrawal symptoms provided by a cigarette is the proximal consequences, while emphysema, lung cancer, and death are more distal consequences. To address the PIG, the therapist typically employs psychoeducational approaches to teach the client how to create a decision matrix. This is usually a written exercise, in which the matrix contains the positive and negative outcome expectancies for engaging or not engaging in the problematic behavior, in both the immediate and short-term frame of reference. The therapist then confronts any unrealistic outcome expectancies until the client is able to generate more realistic outcomes. Following this, the therapist directs the client to analyze past situations in which the patient engaged in the problematic behavior, and to compare the immediate gratifications against the long-term consequences.

D. Abstinence Violation Effect

The abstinence violation effect (AVE) highlights the distinction between a lapse and relapse. Put simply, the AVE occurs when a client perceives no intermediary step between a lapse and a relapse. For example, overeaters may have an AVE when they express to themselves, "one slice of cheesecake is a lapse, so I may as well go all-out, and have the rest of the cheesecake." That is, since they have violated the rule of abstinence, they "may as well" get the most out of the lapse. Treatment in this component involves describing the AVE, and working with the client to learn alternative coping skills for when a lapse occurs, such that a relapse is prevented. The AVE occurs when a client is in a high-risk situation and views the potential lapse as so severe, that he or she may as well relapse. The client and therapist will practice identifying and coping with lapses. The treatment is not lapse prevention; lapses are to be expected, planned for, and taken as opportunities for the client to demonstrate learning. It is relapse prevention. Most often, relapse tends to be construed as a return to pretreatment levels of occurrence of the targeted behavior. Although there is some debate about the best definitions of lapse and relapse from theoretical and conceptual levels, these definitions should suffice.

E. Outcome Expectancies

An example of skills training is seen when addressing outcome expectancies. The client is asked to construct a decision matrix: on one dimension, the choice of offending versus not offending, on the second dimension, the positive and negative outcomes, and on the third dimension, the short- and long-term consequences. Often, the client will not generate accurate outcomes, and is instructed in more likely outcomes for their offending and nonoffending behaviors. Another component in some manifestations of RP is enhancing victim empathy. Clients are asked to do a variety of tasks, such as watching a videotape of victims telling of the effects of their victimization, imagining how the client and a loved one would feel if victimized, and writing a letter from the victim's point of view.

F. Cognitive Distortions

Therapists trained in CBT often find it necessary to address the client's cognitive distortions when dealing with clients who engage in problems of self-control. In 1989, as part of Laws's book on RP for sex offenders, Katurah Jenkins-Hall described the steps for changing cognitive distortions in sexual offenders as identification of the thoughts that lead to maladaptive behavior, analyzing the validity and utility of the thoughts, and an intervention designed to change the cognitive distortions into more adaptive cognitions. Jenkins-Hall

details how cognitive therapy can be adapted to sexual offenders. Step one is providing alternative interpretations in that the "client is taught that his initial interpretation of a given situation may not be the most accurate. He is asked to generate a list of alternative explanations." Step two, utilitarian counters, asks the client to evaluate whether his thinking assisted or hindered the achievement of the desired outcome (e.g., did having a biased interpretation of the victim's behavior make it easier for you to justify your actions to yourself?). In step three, objective counters, the therapist helps the client analyze the logic behind certain types of thinking. Step four, disputing and challenging, is based in Ellis's rational emotive therapy. In this stage the client is asked to identify irrational types of thinking and beliefs, and these irrational statements and beliefs are challenged in therapy.

G. Social Skills

Another common problem in some self-control problems relates to deficits in social skills. Clients may be misperceiving both verbal and nonverbal behaviors by those in high-risk situations. An ideographic assessment can be used to learn which, if any, key social skill deficits are present. The clinician should address relative deficits in perception, interpretation, response generation, enactment, and evaluation. In conducting social skills training with these clients, clients and therapists typically discuss the abstract principles of the particular class of social skills. The therapist then models the specific set of social skills. The client and therapist then role-play a situation that emphasizes the specific social skills relevant for the client. For example, for a client working sexually inappropriate behavior in the workplace, the client and therapist may role-play joke-telling situations, socializing, or other critical situations common at the workplace. The therapist would then provide feedback for the client regarding the skills present and absent during the role-play.

H. Aftercare

As with any therapeutic intervention, therapists are obligated to design a plan for aftercare. With RP, one of the essential elements of the psychoeducational process is instructing the client about the role of misbehavior in the context of one's life. Although the goal of RP is the prevention of the occurrence of problematic behavior, the lifestyle must be addressed. The repairing of a damaged boat hull is an appropriate analogy. Patching the hole is well and good (reducing problematic behavior), but the pilot of the boat should also learn not to run the ship aground, through rapids, or into icebergs (lifestyle balance).

Often, the development of positive addictions is presented. Positive addictions are healthy behaviors and hobbies, such as reading and bowling, in which the client can engage without experiencing adverse consequences. Lastly, each element of the RP approach, e.g., high-risk situation, the PIG, the AVE, and cognitive distortions are reviewed in the larger context of RP. For example, in work with sexual harassers, the harasser is directed to review the role of cognitive distortions as a component involved in sexual harassment, and then relate to how cognitive distortions are involved in the RP model.

I. Planning for Lapses

To dissuade the client from buying into the AVE, a realistic aftercare plan should include a plan for addressing lapses, because they are likely to occur. To plan for lapses clients should know how they would handle situations in which they feel at risk for engaging in the problematic behavior. What is the client's support group? How will the therapist work with the client to devise strategies for seeking help, should the need arise after therapy? The therapist and client should also review plan to prevent a lapse from becoming a relapse. One way to do this is to practice these skills beforehand, for example, the client and therapist can role-play situations in which the client will need to ask a friend or loved one for help, call a therapist for an appointment, and tell a new friend about their history of problematic behavior and what the new friend can do to help the client when the client is in need.

There is gradual waning of the active role of therapy and the therapist in the client's life. However, practitioners employing RP typically inform their clients that the clients will struggle with this problem for life, and they will likely never be "cured." To enhance the gains made in therapy, and during RP aftercare for other primary interventions, RP sessions are often faded to biweekly, then later to monthly, then bimonthly, and sometimes continue annually for years.

J. Data on RP

In 1995 Gordon Nagayama Hall demonstrated the effectiveness of a community-based outpatient RP program for male sexual offenders, while Karl Hanson has spearheaded an effort to collect and organize data from an international pool of researchers on the effectiveness of RP programs with sex offenders. Most of

these studies were limited by a lack of random assignment to conditions due to ethical and pragmatic difficulties. The effectiveness of RP with other problematic behaviors has been demonstrated as well, specifically with alcohol, tobacco, and overeating. Efforts to gather increasingly informative treatment outcome data are extensive and ongoing. In general, there is some evidence that RP can be an effective intervention to prevent the reoccurrence of many problematic behaviors. However, there exists a disconcerting lack of data on the theoretical foundations of RP, such as covert pathways to relapse and the role of motivation in treatment success. For example, there has not been a clear demonstration of the necessary and sufficient internal and external conditions that will predict instances of lapses and relapses. What the field does have is a bevy of clinical experience across a broad domain of client problems, all suggestive that RP is plausible as well as popular with both clients and therapists.

IV. FUTURE DIRECTIONS

A. Denial and Minimization—Motivational Interviewing

A common problem in working with clients who would likely benefit from RP is the evaluation and treatment of denial and minimization. In their 1993 work with sexual offenders, William O'Donohue and Elizabeth Letourneau developed an intervention that was designed to help the client to admit to the offense and be motivated to seek and participate in therapy. An adaptation of their techniques to the treatment of general self-control problems would include presenting the probable outcomes of receiving versus not receiving treatment (e.g., gainful employment versus lower wage or no employment) and likelihood and consequences of future instances of misbehavior (e.g., if treated, lower likelihood of re-offense, if untreated, higher likelihood of re-offense and more severe consequences).

In addition, therapists have successfully used intervention of motivational interviewing (MI). MI has been shown effective in a variety of other RP treatment evaluations (see the 1991 edited work by Miller and Rollnick, *Motivational Interviewing*.) MI involves presenting the client's data in a matter-of-fact manner in which problems are not discussed, but rather, a simple review of the facts is performed. This is thought to allow the client to make an informed choice about engaging treatment.

B. Stepped Care

Stepped care involves the gradual introduction of interventions of increasing cost and severity. The initial interventions are the least intensive, most costeffective, and have the lowest response cost to the client and have the greatest possibility of success. If this level of intervention fails, then more intense, high-cost interventions are introduced. As the level of intensity increases, fewer clients should require that level of intervention. As the active components of RP are better understood, the treatment dose and content may be tailored to the individualistic problem such that resources are used efficiently. In addition, as RP techniques are better documented and available to clients, the involvement of RP therapists may become limited or obsolete in some cases.

C. Harm Reduction

Laws describes the change in focus between RP and harm reduction (HR) as a difference based on expecting an absolute cessation of the problem behavior (RP) as opposed to a manageable and acceptable reduction (HR). In his work with sex offenders, Laws describes as recognizing that offenders may have the occasional fantasy or desire to act out sexually. By owning up to this reality, Laws indicates that client and therapist goals can be more realistic. Furthermore, lapses, when they occur in the HR model, can be seen as learning experiences rather than failures.

V. SUMMARY

Relapse prevention was not produced as a stand-alone treatment derived from theoretically based and empirically supported foundations. Instead, RP was created as a supplement to existing treatments to address as the treatment failures seen in other therapies for problematic behaviors often conceptualized as problems of self-control. Furthermore, RP was not an "intervention" per se, but rather a structured aftercare regimen to assist in the maintenance of treatment gains.

Over the course of time, RP was taken from the research laboratories at the University of Washington and field tested with problem drinkers, smokers, overeaters, and sex offenders, to name only a few. In its many manifestations, RP addresses high-risk situations, the avoidance of those situations, the management of those situations, and skills for recovery after encountering those situations. The data on RP, while

sparse, suggest that RP is generally effective for a variety of self-control problems. The future of RP includes motivational interviewing, stepped care, and harm reduction, as well as further clarification of the theoretical underpinnings, mechanisms, and outcomes of relapse prevention.

See Also the Following Articles

Cost Effectiveness ■ Efficacy ■ Objective Assessment ■ Outcome Measures ■ Substance Dependence: Psychotherapy ■ Termination

Further Reading

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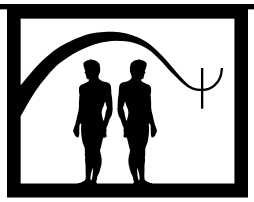

Relational Psychoanalysis

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GLOSSARY

intersubjectivity A developmental achievement in which both individuals within a dyad recognize each other's subjectivity.

multiple selves The concept that people experience themselves not as unitary and unchanging but as consisting of multiple selves that may be compatible or incompatible with one another.

mutuality The idea that both patient and analyst participate in the analytic process, that they mutually regulate or influence each other, consciously and unconsciously.

projective identification A process by which the patient's disavowed feelings are projected onto the analyst who has become a container for the dissociated features of the patient's experience.

transference–countertransference matrix Transference and countertransference are interdependent, mutually determined experiences that are shaped by both patient and analyst.

I. DESCRIPTION

Relational psychoanalysis is an intensive form of psychotherapy that places human relations at the center of motivation, psychopathology, and treatment. It is an alternative to classical Freudian psychoanalysis (including its modifications in psychoanalytic ego psychology). It considers relations to others, not drives, as the basic building blocks of mental life. From the relational perspective, individual experiences and the internal structures of the mind are viewed as deriving from and are transformations of relationships with significant others.

The term "relational psychoanalysis" is a relatively new coinage. It refers to a theoretical and clinical sensibility that integrates a variety of psychoanalytic theories that have evolved following the promulgation of Freud's seminal ideas. Thus, it is a contemporary eclectic approach that has been in a process of growth and development in the United States for the last 20 years. This new perspective includes recent developments within, and cuts across, U.S. interpersonal psychoanalysis, the British school of object relations, self psychology, and currents within contemporary Freudian theory. It is concerned with the intrapsychic as well as the interpersonal, but the intrapsychic is seen as constituted by the internalization of interpersonal experiences. Although these internalized interpersonal experiences may be biologically mediated, relational psychoanalysis is primarily concerned with the psychological determinants of experience.

There is considerable variation in the practice of relational psychoanalysis, but all relational analysts share a sensibility in which the therapeutic relationship plays a superordinate role in the treatment. Thus,

the analyst's subjectivity and personal involvement, including partially blinding entanglements, are given serious consideration. Gender, class, race, culture, and language are additional factors of great significance to relational analysts.

II. HISTORICAL DEVELOPMENT

The sea change that has been taking place in contemporary U.S. psychoanalysis in the last two decades is in sharp contrast to the popular view that modern-day psychoanalysis is a footnote to Freud. Psychoanalytic practice has evolved considerably since Freud's original creative contributions. Freud's body-based instinct (drive) model emphasizes intrapsychic conflict among id, ego, and superego as the child passes through the psychosexual stages of development. Interpretation, the main form of clinical intervention in Freudian analysis, is for the purpose of making unconscious content, such as sexual and aggressive impulses, conscious. In the Freudian model, relatedness is a derivative of the primary drives of sex and aggression.

The current paradigm shift away from the classical drive model to the relational model had its origins in the work of two psychoanalytic pioneers: the Europeans Sandor Ferenczi and Otto Rank. Both were students of Freud and in 1924 collaborated in exploring the primacy of experience in the here and now of the transference. After their collaboration, Ferenczi theorized about the mutuality of relationships in human development and clinical process. Rank went on to elaborate a theory of the birth of the self and the centrality of early relationships in the therapeutic interaction.

Working in the United States before World War II, Harry Stack Sullivan revised Freudian psychoanalytic ideas in his development of an interpersonal psychiatry. In an informal collaboration with Erich Fromm, Karen Horney, Freida Fromm-Reichman, and Clara Thompson, Sullivan came to disagree with the prevailing view of psychopathology as residing in the individual. He believed that human beings are inseparable from their interpersonal field and that focusing on the individual without considering past and present relationships is misdirected. Sullivan emphasized that human relatedness is a prerequisite of psychological well-being and a safeguard against anxiety. In treatment, he urged concentration on the here and now of the therapist–patient interaction. Subsequently, Thompson assembled the emerging concepts that constituted an interpersonal psychoanalysis and helped institutionalize them through the Washington School of Psychiatry and the William Alanson White Institute in New York City. Over time, two different clinical approaches emerged in the interpersonal tradition: Sullivan's emphasis on empathy and tact and Fromm's empahsis on frankness and confrontation. In stressing the role of actual and specific interpersonal relationships in personality development and psychopathology, interpersonal psychoanalysis came to be caricatured as social psychology by the mainstream and medical psychoanalytic power circles of the day. In recent years, however, interpersonal psychoanalysis has gained increased acceptance with the elegant writings of Edgar Levenson, who stressed that what was talked about between analyst and patient was also concurrently being enacted between the two.

Contemporary British object relations theories began to have a significant presence in the Unites States in the 1970s. The theoretical and clinical innovations of the British school stressed the importance of the pre-Oedipal stage and especially the early mother–infant relationship. Emphasis was placed on the conflictual nature of internalized relationships to others. Moreover, nonverbal phenomena, regressed states, and the actual relationship between analyst and patient were also highlighted. Melanie Klein's theorizing about greed, envy, aggression, and projective identification also played an influential role. As represented by Michael Balint, W. R. D. Fairbairn, D. W. Winnicott, and Harry Guntrip, the British school of object relations was a thorn for U.S. Freudian psychoanalysis in that the centrality of the Oedipus complex was downplayed.

A third psychoanalytic paradigm that contributed to relational approach is self psychology. In the late 1970s, Heinz Kohut reformulated Freud's ideas, first in terms of the concept of narcissism and then in terms of theory and practice. He emphasized the chronic traumatizing milieu of the patient's early human environment, not the intense sexual and aggressive pressures that Freud had defined as basic to human motivation. He viewed aggression and rage in treatment not as an expression of a fundamental force but as result of deep vulnerability. The self psychology school of psychoanalysis developed into a powerful presence and influenced the thinking and practice of many.

In their more contemporary cast, these three schools of psychoanalysis seemed to be moving along similar paths, toward a focus on self–other relations, an interest in feelings and experience rather than drives, and toward a less authoritarian stance on the part of the analyst. Furthermore, the clinical focus is often on the patient–analyst relationship and the way in which small, but subtle interactions and enactments dominate the clinical situation.

Other theoretical influences in the development of a relational approach were the works of Hans Loewald and John Bowlby. Hans Loewald, a prominent ego psychologist in the 1970s, redefined id, ego, and superego in terms of interpersonal experience giving drives a relational character. He argued against the Freudian idea that the human mind can be an independent unit of inquiry without taking into account the analyst's participation. John Bowlby's work on attachment theory in the 1960s and the subsequent rich research on attachment has also played an important role in recent relation theorizing. Bowlby and his followers have placed intimate attachments to others at the "hub" around which a person's life revolves throughout the life span.

In 1983, Jay R. Greenberg and Stephen A. Mitchell published their landmark treatise, *Object Relations and Psychoanalytic Theory,* in which they distinguished two distinct approaches to psychoanalytic theory: the drive-structure model and the relational-structure model. Despite its title, their book was not only about object relations theories. It compared various models including interpersonal theory and self psychology. In addition to making detailed comparisons, the authors argued that theoretical positions in psychoanalysis are inevitably embedded in social, political, and moral contexts. They used the term relational to bridge the traditions of interpersonal relations, as developed within interpersonal psychoanalysis, and object relations, as developed within contemporary British theorizing.

During the early 1980s, Merton Gill, a prominent leader in U.S. ego psychology, published a series of articles recognizing the contributions of the interpersonal theorists and their views. He contrasted the drive model with the more humanistic model in which relationships are given primary importance. He identified the depth of clinical process and the exploration of transference–countertransference issues as the defining characteristics of clinical psychoanalysis. Later in the decade, the English translation of *The Clinical Diary of Sandor Ferenczi* was published after having been suppressed for more than half a century. Consisting of Ferenczi's clinical experiments with mutual analysis, it demonstrated an objection to the hierarchical arrangement of the traditional analytic relationship between an analyst who dispenses interpretations and a patient who receives them.

Conceptually, two other broad developments occurred in the last two decades of the 20th century that facilitated the development of relational psychoanalysis. The first development was feminism. It launched a major critique on Freudian notions by deemphasizing the phallocentricity of its theories and practice. Sexuality was unlinked from both physical constitution and reproductive function, and homosexuality no longer pathologized. Using a feminist approach, Jessica Benjamin published *The Bonds of Love* in 1988. This work masterfully argued the importance for psychoanalytic theory to include both an intrapsychic and an intersubjective perspective. The second development was constructivism, in its moderate postmodern form. Basically, psychoanalytic theorists have used a constructivist approach to critique essentialism, positivism, and any pretext to objectivity. Constructivism is used to understand transference not as simply a distortion emanating from the patient as in Freudian psychology. Transference, according to Irwin Hoffman, is viewed as involving the analyst's subjectivity in a process of co-creation with the patient. In his 1998 book *Ritual and Spontaneity in the Psychoanalytic Process,* Hoffman brilliantly critiques theorists such as Sullivan, Kohut, and Winnicott charging that they are similar to Freud in that they suggest that analysts can keep their own subjective experience from "contaminating" their patients' transferences.

Organizationally, relational psychoanalysis was greatly bolstered by four developments. The Division of Psychoanalysis of the American Psychological Association operating outside the control of the traditional American Psychoanalytic Association acted as a forum for the relationally minded psychoanalyst and allowed for numerous creative and scholarly panel presentations at its annual conferences. This in turn gave relational psychoanalysis a national network and identity. The second organizational development took place in 1988 at the New York University Postdoctoral Program in Psychoanalysis and Psychotherapy where a "relational track" was established to go along with its Freudian, interpersonal, and independent tracks thus adding a prestigious university training legitimacy to relational psychoanalysis. Third, the establishment of the highly successful *Psychoanalytic Dialogues: A Journal of Relational Perspectives* in 1990 led to further consolidation of the identity of relational analysts. Finally, the formation of the International Association of Relational Psychoanalysis and Psychotherapy is well under way and will be inaugurated with a clinical conference in New York City in January 2002 titled *Relational Analysts at Work: Sense and Sensibility.*

III. THEORETICAL CONCEPTS

As articulated by Jay Greenberg and Stephen Mitchell, there are at least two different and incompatible views of human nature in psychoanalysis. Drive

theory is derived from a philosophical tradition that sees a person as an essentially individual animal and human goals and desires as essentially personal and individual. In contrast, relational theory holds the philosophical position that a person is a social animal and that human satisfactions are realizable only within a social community. Consequently, the relational position is not interested in the single mind as a unit of study. It is interested in the relationship as a unit of study.

Although unconscious processes, the Oedipal complex, dreams, slips of the tongue, and free associations are of importance to relational theorists, they do not hold privileged positions. Wary of privileging any conceptual notion, relational theory nevertheless places the conscious and especially the unconscious relationship between patient and analyst at the heart of the therapeutic effort.

The relational matrix involves conflict, constructivism, and an overarching two-person perspective. Unconscious conflict is central to the drive model. In this model, the analyst strives to help the patient come to understand that sexuality and aggression are not as dangerous as they appear to be in the patient's fantasy-dominated child's mind. In the relational model, the traditional notion of conflict is maintained, but it is understood as containing conflicts over loyalties to parents, an idea attributable to W. R. D. Fairbairn's object relations theory. Thus, conflict is not located "in the person" but rather conflict may best be explained as both intrapersonal and interpersonal.

Constructivism in psychoanalysis holds that the observer plays a role in shaping, constructing, and organizing what is being observed. Psychoanalysis is a particular method for organizing what there is into unique patterns, but the patterns can be understood and organized in any number of ways. Thus, ambiguity and uncertainty are features of all human relatedness. This does not necessarily lead towards nihilism. On the contrary, it can propel theorists toward further elaboration and synthesis. For Irwin Hoffman, the paradigm shift in contemporary psychoanalysis is not necessarily from the drive model to the relational model, but from the positivist model to the constructivist model. Thus, the great divide is between dichotomous and dialectical thinking. What is meant by dialectic is a process in which each of two opposing concepts creates, informs, preserves, and negates the other, each standing in a dynamic relationship with the other. Among the pairs of phenomena Hoffman considers dialectically are doubt and certainty, possibilities and constraints, hierarchy and egalitarian relations; risk taking and responsibility; neurotic and existential anxiety; psychoanalysis as an instrument of healing and as cultural symptom; the analyst's intentions versus the patient's will; action and reflection; and analytic rituals and the analyst's spontaneity. Last, constructivism in psychoanalysis holds that analytic therapists do not have privileged access to their own motives, nor are they able to know exactly what is best for their patients. Hence, the patient's perception of the analyst's subjectivity is critical.

Stephen Mitchell has argued that the distinction between a monadic theory of mind (a one-person psychology) and an interactional relational theory of mind (a two-person psychology) is pivotal to understanding psychoanalytic concepts. In general, those theories greatly influenced by classical analysis have been referred to as one-person psychologies. They emphasize the individual experience of the patient and view the analyst as a blank screen onto which the patient projects wishes and fantasies. The two-person psychologies are influenced by the notion of the analyst as co-participant in the therapy. Emmanuel Ghent has described the history of psychoanalysis as constituted by dialectical shifts between one-person and two-person psychologies. Neil Altman has added to the dialogue by suggesting that we consider not a one-or two-person psychology but a three-person psychology. A good example of a three-person psychology would be thinking through the therapeutic relationship as it operates in a particular clinic or in conjunction with a specific insurance company.

Another important concept in relational psychoanalysis is that of intersubjectivity. Jessica Benjamin's work on intersubjectivity emphasizes mutual recognition as an intrinsic aspect of the development of the self. She argues that we need to maintain a tension in our theory between relating to others as objects and relating to others as separate subjects. The infant research of Daniel Stern on the development of a sense of self yields evidence for intersubjective relatedness, a relatedness that includes the recognition of subjective mental states in the other as well in oneself. By contrast, for Robert Stolorow and his colleagues, the term intersubjective is applied whenever two subjectivities constitute the field, even if one does not recognize the other as a separate subjectivity.

Recently, relational thinkers have been hypothesizing about how the mind is structured in an effort to redefine notions of the self. The self has usually been thought of as a continuous, unitary phenomenon. Philip Bromberg has described a state of multiple selves. This concept holds that people experience themselves not as unitary and unchanging but as consisting of multiple selves that may be compatible or incompatible with one another. For example, an adult self may be taking in a logical

explanation about an interaction, while at the same time a child self simply feels vulnerable and angry. Multiple self-states are created not by unmet developmental needs, but by unintegrated, sometimes traumatic, early interactions with significant others. The therapeutic goal is to bring the different self-states into awareness and into a useful dialogue and not necessarily integration. For Jody Messler Davies multiple selves suggest a central role for the process of dissociation and consequently a very different vision of the unconscious. Unlike drive theory that utilizes the metaphor of an onion or an archaeological site for the unconscious, Davies prefers the metaphor of a kaleidoscope with which each glance through the pinhole of a moment in time provides a unique view and an infinite constellation of interconnectedness.

A fundamental principle in the relational model of psychoanalysis is that of mutuality. Mutuality is a process in which patient and analyst mutually regulate or mutually influence each other both consciously and unconsciously. What is regulated is subtle, but it can often involve feelings, thoughts, and actions. Heinrich Racker pointed out that analysis is not an interaction between a sick person and a healthy one, but rather an interaction between two personalities, each with healthy and pathological dynamics. Thus, the classical authority of the analyst has given way to a more democratic, respectful exploration of a joint reality. Mutuality means that the analyst and the patient are partners in the treatment, albeit unequal ones. This mutuality requires a certain type of emotional honesty from both participants. In the relational model, the analyst cannot function as a blank screen or a detached observer encouraging intense feelings in the patient and responding in a neutral manner. When mutuality in the clinical process is taken into account, dialectical tensions can arise. One such dialectical tension occurs between the patient's sense of the analyst as a person like himself or herself and the patient's sense of the analyst as a person with superior and magical power. Although the analyst engages in relative subordination of personal interests, the resolution of such tensions can be powerful emotional experiences for both participants.

IV. CLINICAL PROCESSES

The clinical attitude conveyed by a relational analyst depends very much on the particular analyst's personality, training, and the specific impact of a particular patient. She does not act as a judge of reality and nor does she presume that there is only one way to see something accurately. The patient's own sense of reality is greatly respected and encouraged. Compliant surrender to the analyst's presumed superior vision is not encouraged. The patient's observations and perceptions about the analyst are encouraged. Notwithstanding these attitudes, it is likely that there will develop repetitive reenactments of some of the most warping features of the patient's earlier experiences. These reenactments will likely involve the analyst and consequently also involve a range of feelings from attraction to conflict in relation to the analyst.

To a large extent, traditional analysis requires that the analyst interpret the true meaning of the patient's reactions to her. In contrast, when a patient feels discontent with her analyst, the relational approach requires both parties to examine how and why they are in conflict and to negotiate the conflict as best they can. This is a shift involving a move away from interpreting observer to active participant. The in-depth exploration will require that both parties track the way the patient's observations lead to conclusions about the analyst and how they might be reenactments in the here and now of earlier relationship difficulties.

Clinical psychoanalysts have tended to centralize the experiences of early childhood. The relational orientation acknowledges this importance as well, but it does not consider the uncovering of the past to be the major task of treatment. In the classical approach, the patient's problems are the result of repression; cure entails the release of impulses, fantasies, and memories from repression. The analyst interprets both the content of the repressed and also the ways the patient is defending against the content. The analyst helps the patient gain insight thereby releasing from repression unconscious conflicts and thus being cured. A number of relational approaches, particularly the British object relations school and the self psychology school, assume that from the moment of birth, the child's whole being has developed in the context of experiences with others. Normal development is thwarted due to inadequate parenting. What is curative in the analytic relationship is the analyst offering some form of basic parental responsiveness that was missed early on. The interpersonal approach regards the analyst's response to the patient as organized not along parent–child lines but rather along adult-to-adult lines requiring honest responses and engagement. Hence, relational analysts differ with respect to their use of efforts to reanimate stalled developmental processes or their use of frankness and authentic confrontations. For many espousing a more integrated relational approach, however, the belief is that the patient can be both child and adult. Both

the realities and the fantasies of early childhood experiences are important to understand in detail, but the realities and fantasies of adulthood are also important to understand in detail.

In the most general sense, all psychoanalytic treatment paradigms value the analysis of transference. The relational paradigm, however, considers more than just the transference; it values the transference–countertransference matrix. Transference represents the emergence of feelings toward early childhood figures, displaced onto the person of the analysts. Historically, countertransference is the displacement of feelings from the analyst's past into the analytic situation. This was considered a seriously negative developmental in the analysis. The analyst was enjoined to rid herself of it through self-analysis or to return to her own psychoanalyst for help. Relational analysts have a different approach. They believe that countertransference is a normal state of affairs and that it can advance the analytic work. The transference–countertransference matrix is mutually determined and shaped by the conscious and unconscious beliefs, hopes, fears, and wishes of both patient and analyst.

The clinical approach of the relational model holds that the analytic situation is more that an arena for playing out the past; it is also where the patient is firmly engaged in the present. Thus, the patient is not simply displacing feelings from earlier relationships onto the analyst; he or she is likely to have observed a great deal about the analyst and to have constructed a plausible view of her. This view is, in part, based on the patient's own past and his typical way of organization experience. For example, an analyst can be experienced by a patient as critical of certain actions on the patient's part, and indeed that may be an opinion of the analyst. However, an indepth exploration of a patient's observations about the analyst can show that the criticism is different from the patient's mother and does not require allegiance from the patient for a personal connection to be maintained.

With the qualification that indeed psychoanalysts can suffer from the very same problems they are trying to assist patients with, relational ideas stress that countertransference can be (a) an ordinary, common responses to the sort of interpersonal positions and pressures a patient can set up; (b) an analyst–patient reenactment of a patient's past relationships; (c) a complex result of the patient's projective identification; and (d) something the patient is doing to strike responsive chords in the analyst.

Given that all analysts have a less than complete understanding of their own defenses, and that the patient may have picked up features of the countertransference that the analyst is not aware of, some analysts like Lewis Aron and Irwin Hoffman have argued for the usefulness of extended explorations of the patient's experience of and hypotheses about the analyst's experience. Such explorations give permission to patients who grew up feeling that their perceptions of their parents were forbidden and dangerous, and discounting their own observations albeit subtle and sometimes unformulated. Aron prefers to speak of the analyst's subjectivity instead of the analyst's countertransference. He believes that the term countertransference implies that the analyst's experience is reactive rather than subjective. The patient's perception of the analyst's subjectivity does not replace the historical analytic focus on the patient's experience, but it is seen as one component of the analysis.

To a large extent, relational analysts view self-disclosure as a form of intervention. It may involve the analyst revealing to the patient information, such as her thoughts or feelings about an interaction, something about the analyst's personal life, or the analyst's values and biases. Although the information may be useful, it is not disclosed as oracular. Other information besides the analyst's countertransference is necessary to confirm an idea about the patient's experience or to provide an interpretation. Nonetheless, many relational analysts believe that judiciously chosen self-disclosures can be helpful.

Finally, the two-person framework is interactive and makes more demands on the analyst to be attentive to the field—from disclosures that may momentarily focus attention on the analyst's mind, through analysis of interaction, to interpretation of the patient's intrapsychic activity. Clinical techniques are not to be objectified into a hard set of rules and regulations. Rather, psychoanalytic techniques are an interlocking set of clinical concepts that the analyst uses as a framework for analyzing the unique interactive matrix. The dialectical tension between the rules of restraint in the analytic relationship and the analyst's personal participation is a major controversy in contemporary psychoanalysis. The relational framework considers the joint critical reflection of such dialectical events crucial to the clinical process.

V. CONCLUSION

Relational psychoanalysis is a selective integration of various theoretical approaches. Its origins can be traced to contributions by various psychoanalysts and schools of psychoanalysis primarily interpersonal psychoanalysis, British object relations, and self psychology. In the

last two decades it has evolved dramatically in the United States and is now the major challenge to the traditional Freudian school of psychoanalysis. Its current state of theoretical development and clinical innovations may make it a revolutionary challenge.

A major premise of relational analysis is that one's history of early relationships and present realities are critical. While classical Freudian theory holds that relatedness is a derivative of instinctual drives, relational theory considers relatedness to be at the center of human development and psychotherapy. In the clinical situation, relational analysts continuously track both the patient's subjectivity and their own. The relational matrix is understood to involve mutuality, conflict, and co-creation. Overall, the aim of relational psychoanalysis is to enrich the patient's experience, to expand the patient's degrees of personal freedom, and to examine the enormous complexities of the mind.

The success of the relational turn in psychoanalysis is consistent with a whole range of movements in other intellectual disciplines such as postmodernism. However, perhaps the major reason for its success is that it has proven to be a more useful approach to the problems in living that are presented in the consulting room of today. This utility in the day-to-day clinical work is based not on empirical research, which relational thinkers believe is only one of many narratives that can be useful, but on rigorous thinking, honest self-reflection and continuous cross-checking with clinical experience.

See Also the Following Articles

Acceptance and Commitment Therapy ■ Countertransference ■ History of Psychotherapy ■ Object-Relations Psychotherapy ■ Self Psychology ■ Sullivan's Interpersonal Psychotherapy ■ Transference

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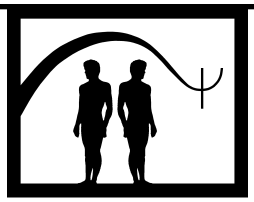

Relaxation Training

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GLOSSARY

autogenics Use of autosuggestions to evoke relaxation responses.

autosuggestion Process by which clients make self-statements, usually silently, that they then accept and believe.

biofeedback Integration of physiological assessment instrumentation (e.g., to record the temperature of the skin surface on one's finger) with audio or video stimuli (e.g., an outline of a human hand on a video monitor, with different colors indicating varying skin temperatures) to help a client learn to control physiological functions (e.g., skin temperature, muscle tension).

imagery Set of mental stimuli, existing cognitively, that can encompass all the senses (i.e., sights, sounds, tastes, smells, and tactile cues) that can be used to evoke a particular emotional or cognitive state (e.g., attention).

meditation Act of focused, quiet contemplation used to achieve a relaxed state.

patter Slow, rhythmic speech used by a therapist to maintain and enhance relaxation; repetition of statements often is involved.

relaxation Reducing or preventing levels of reactivity or arousal, in physiological, behavioral, or cognitive realms, which are so high as to constitute a problem.

I. DESCRIPTION OF TREATMENT

"Relaxation training" is a general term that refers to methods that are used to teach and learn specific techniques to help people moderate or control reactivity or arousal that is problematic to them. Often this term is associated solely with muscle relaxation, but given the commonalities among all relaxation-induction methods, we use it as an omnibus term. This label, then, includes various arousal control methods, such as muscle relaxation training, autogenics, biofeedback, meditation, imagery, and paced breathing. Hypnosis, often used to induce relaxation, has many similarities with these other methods, but is not reviewed in this article. The hyperarousal targeted by these techniques often is considered to be physiological (e.g., muscle tension), but can be cognitive (e.g., intrusive thoughts) or behavioral (e.g., fidgeting) as well. The widespread use and effectiveness of relaxation training have led some to call it "behavioral aspirin." The "training" component of relaxation training implies that it is a skill learned by someone, often a client or patient in a clinical setting, who ultimately can utilize it to induce relaxation on his or her own, in a variety of situations and settings. This procedure for producing relaxation then distinguishes it from other methods that are evoked by other persons (e.g., massage therapy) or substances (e.g., anxiety-reducing medications).

A. The Role of Relaxation Training in Behavior Therapy

Relaxation training often is used in behavior therapy as a means to reduce anxiety, tension, and stress. Research has shown it to be effective in a variety of disorders and conditions, primarily those related to anxiety, fear, and stress (e.g., specific phobias), but including those in the realm of behavioral medicine and dentistry, such as acute and chronic pain (e.g., tension headaches), hypertension, and coping with nausea related to chemotherapy. Training patients to relax typically involves providing a rationale, demonstrating exercises, and practicing relaxation in treatment sessions in clinics and hospitals. In addition, patients almost always are asked to practice ("homework") between therapy sessions. Often, forms or log books are used for patients to record details about their practice. Relaxation training can be relatively brief or long and more comprehensive. The former type has been referred to as "abbreviated" and the latter method as "deep," and has been associated with muscle relaxation.

Relaxation is a crucial ingredient in many empirically supported contemporary psychosocial treatments for various disorders, including such therapies as the Mastery of Your Anxiety and Panic program, which is a treatment for panic disorder. Relaxation training, in its various forms, is used most often as an adjunctive intervention, comprising one part of a comprehensive treatment program. Relaxation training also can be used to help facilitate communication during a therapy session with a client who may be too tense or anxious to communicate effectively with the therapist. Relaxation training (especially progressive muscle relaxation) often is used in conjunction with systematic desensitization, a procedure designed to lower fear or anxiety toward a specific stimulus (or stimuli) by pairing the feared stimulus or thoughts of the feared stimulus with relaxation.

B. Types of Relaxation Training

1. Progressive Relaxation Training

Progressive relaxation training (PRT) focuses on muscle relaxation; it is a widely used relaxation technique in behavior therapy, and has been the subject of considerable empirical research. Under the direction of the therapist, the client alternately tenses and then relaxes isolated muscle groups, until the entire body is completely relaxed. The rationale is that tensing the muscles before attempting to relax allows the client to become more aware of muscle tension, so as to be able to identify it when it occurs. The contrast between the tense and relaxed states also may help the client achieve a deeper state of relaxation than would be possible when begining from a resting state. By focusing on the feelings of tension and relaxation, the client can even learn to induce deep relaxation at a later time by using a recall procedure, allowing him or her to achieve a similar state of relaxation without actually creating muscle tension.

The exercises of progressive relaxation training follow a general sequence of individual muscle groups; each muscle group is relaxed as completely as possible before moving on to the next one. The most common contemporary methods include 16 muscle groups. As training progresses, the muscle tension exercises can be combined into 8 and then 4 groups. The specific order of muscle groups used varies according to the practitioner and his or her adherence to a particular sequence recommended in the literature, as well as to individual needs of the client. One possible sequence involves the following order:

1. Right (or dominant) hand and forearm
1. Right (or dominant) biceps
2. Left (or opposite) hand and forearm
3. Left (or opposite) biceps
4. Shoulders and upper back
5. Neck
6. Lower cheeks and jaws
7. Upper cheeks and nose
8. Forehead
9. Chest (breathing)
10. Abdominal region
11. Right (or dominant) thigh
12. Right (or dominant) calf
13. Right (or dominant) foot
14. Left (or opposite) thigh
15. Left (or opposite) calf
16. Left (or opposite) foot

The entire procedure is carefully controlled by the therapist; each exercise is precisely timed. Muscle tension is maintained for 5 to 7 seconds, during which the clinician may make such statements as "feel the tightness of the muscle; notice what the tension in the muscles feels like." The therapist will then instruct the client to relax, and make statements to direct the client's attention to the feelings of relaxation. This relaxation "patter" is used to capture the client's attention, to soothe and to encourage focusing of attention, and to promote quiescence. The relaxation part of the cycle continues for 30 to 40 seconds, after which the tension-release cycle is

repeated. During early sessions of progressive relaxation training, the tension-release cycle typically is performed twice on each muscle group to ensure complete relaxation. In later sessions, after the client is familiar with the feelings of tension and relaxation, the procedure is often abbreviated, as already noted, to fewer steps by tensing combined muscle groups (i.e., both legs simultaneously instead of each leg individually).

Once clients are comfortable with the briefer procedure, a recall procedure may be taught that can be used in a wider variety of settings. This "cue-controlled relaxation" does not involve any actual tensing of the muscles, but rather the client recalls the feelings of relaxation using a cue word such as "relax." The cue word is paired with relaxation in treatment sessions and becomes associated with the feeling of deep relaxation through conditioning. Another use of PRT is in differential relaxation training, in which clients are taught to recognize the muscles that are necessary in which activities (e.g., while standing) so that one can ensure that muscles not involved in that activity have minimum tension.

Edmund Jacobsen pioneered PRT in the 1930s. In his research, he found that persons who deeply relaxed their skeletal muscles did not show a normal startle response. Expanding on these findings, he developed a technique in which alternately tensing and releasing individual muscle groups, and learning to attend to and discriminate between the feelings of tension and relaxation, could moderate tension and produce relaxation. In the 1940s and 1950s, progressive relaxation training came to the attention of Joseph Wolpe, who in his research with cats, had discovered that a conditioned fear response could be diminished and even eliminated if an incompatible response (such as relaxation) was induced at the time of fear. Wolpe shortened Jacobson's methods, to make it feasible to use them in clinical settings. He used PRT in conjuction with systematic desensitization, as a way of producing relaxation during the reconditioning of fears in clinical patients. In 1973, Douglas Bernstein and Thomas Borkovec also streamlined Jacobson's approach, and produced a step-by-step treatment PRT manual for therapists. Since that time, there has been a great deal of research on PRT, and numerous variants and extensions of it have been forwarded.

2. Behavioral Relaxation Training

In 1988 Roger Poppen published a book on behavioral relaxation training (BRT), a variant of PRT based on modeling and operant conditioning. Like progressive muscle relaxation training, it emphasizes overt motoric behavior, which is important because it facilitates direct observation of the behavior by both the client and the therapist. Behavioral relaxation training is unique from progressive muscle relaxation training in its emphasis on observable behavior, including posture. Clients are instructed to observe their overt postures, as well as to be aware of feelings of relaxation. BRT also is somewhat different from progressive relaxation in that it is composed of four discrete steps for each of 10 postures or activities, including the hands, breathing, and other components very similar to that of PRT.

1. *Labeling:* A one-word label (e.g., feet) is assigned to each behavior (or posture) to facilitate communication between client and therapist.
2. *Description and modeling:* The therapist explains and demonstrates the relaxed posture, and contrasts it with frequently occurring unrelaxed postures.
3. *Imitation:* The client displays each posture.
4. *Feedback:* The therapist praises accurate posture portrayal, or provides corrective cueing if the client's posture is incorrect. Gentle manual guidance may be used by the therapist if the client is unsuccessful in achieving correct relaxed postures after several attempts. Positive feedback is then given for the correct postures.

The client maintains each correct posture for 30 to 60 seconds while being aware of the relaxation feelings. There are specific postures or behaviors for the hands, feet, body, shoulders, head, mouth, throat, quiet breathing, and eyes.

As a method of behaviorally assessing relaxation, Poppen devised the Behavioral Relaxation Scale (BRS). There are 10 descriptions of postures and activities in the BRS that are considered to be characteristic of one who is completely relaxed. Relaxation is assessed during an observation session at the conclusion of the session, or before relaxation as a baseline measure. Although the BRS was designed for use with BRT, it can also be used to assess relaxation induced by other methods.

Poppen proposed a taxonomy for analyzing complex behavior that can be easily applied to relaxation. His conceptualization of behavior is that it occurs in four domains: motoric, verbal, visceral, and observational. Poppen claimed that most relaxation techniques emphasize only one or another of these modalities while ignoring the others. BRT is intended to address all four of these areas.

3. Applied Relaxation

Another variant, and an extension of PRT, is applied relaxation, which was described by Lars-Goran Öst in

1987. It is conceptualized as a coping technique that focuses on physiological reactions when a person encounters a phobic object or situation. The intent is for the relaxation skill to be applied rapidly when confronted with such an event, to foster coping. Applied relaxation is intended to counteract, and later to prevent, phobic-level physiological reactions. Training includes the recognition of anxiety signals early in the chain of reactions to phobic events. PRT is then taught, followed by a shortened version in which only the relaxation (or muscle release) component is included. Cue-controlled relaxation is then reviewed, followed by differential relaxation. A somewhat unique component of applied relaxation is its focus on rapid relaxation in the natural environment. Then, application training ensues, first in generally stressful but nonphobic situations, and later in actual exposure to phobic objects or situations.

4. Stretch Relaxation

Much like PRT, stretch relaxation also is based on achieving a quiescent state through decreased muscle tension. The major distinction is that stretch relaxation does not require the individual to tense and release muscle groups. Rather, the reduction in tension is achieved through the systematic stretching of individual muscle groups. This technique was developed by Charles Carlson and colleagues, in part because some patient populations find the tensing and releasing of muscles painful or distressing, or that it is inappropriate for them. For example, some pain patients find that tensing their muscles increases pain and does not readily allow subsequent relaxation. Patients with certain cardiovascular problems, such as patients in whom creating muscle tension could cause arrhythmias or elevated blood pressure, also may be inappropriate candidates for progressive muscle relaxation. Stretch relaxation training is often an effective alternative treatment for these patients.

The process involves a series of 14 muscle-stretching exercises. Prior to the actual stretching exercises, the individual is instructed to assume a quiet resting position and breathe slowly and deeply. After 3 to 4 minutes of physical resting and relaxed breathing, the client or patient begins the stretching exercises, starting with the lower right leg and progressing through the 14 muscle groups. Similar to PRT that involves muscle tensing, stretching is utilized for the separate muscle groups in the extremities, back, buttocks, stomach, chest, forehead, eyes, jaws, neck, and shoulders. Examples of stretching exercises are those for the upper leg, in which one knee is raised and placed over the other leg to sag, and those for the shoulders and upper arms, in which the fingers of the hands are interlocked and the arms are raised over the head.

Each stretch is held for 15 seconds, and is followed by 60 seconds of relaxation. Clients are instructed to focus their attention on the sensations of stretching and relaxation and to breathe using a slow, regular rhythm.

5. Autogenic Training

Autogenic training (AT) is a passive autosuggestion technique with the goal of self-produced relaxation with a minimal amount of training. AT is used extensively in Europe, Russia, and Japan, but is less popular in North America. Some of the conceptualizations and wording are not common in American culture. In contrast to progressive muscle and stretch relaxation, AT is passive rather than active. It consists of six mental exercises that are based on short autosuggestions, or "formulas." Sensory feelings and states are emphasized, including heaviness and warmth in the extremities, regulation of respiration and cardiac activity, abdominal warmth, and coolness of the forehead. The therapist uses a calm, relaxed voice and makes statements about these feelings and physical states, which the client then repeats internally. The exercises are learned in a specific sequence, and the client achieves each state before initiating the next exercise. The six exercises or "formulas" are:

1. *Heaviness formula:* This exercise is intended to affect the muscles and reduce muscular tension. The therapist might utter a statement such as: "My left leg is very heavy."
2. *Warmth formula:* Blood circulation and dilation of blood vessels is the focus of this formula. The clinician focusing on this area with clients might suggest: "My right arm is very warm."
3. *Heart regulation:* Encouraging awareness of heart activity is the primary consideration, after which regulation of heart activity is the goal, consistent with statements such as "My heart is beating calmly and strongly."
4. *Breathing regulation:* Regular respiration is the key issue for this formula. Voluntary changes in breathing pattern are considered undesirable because that can involve tensing muscles and movement. Passive phrases are used, such as "It breathes me."
5. *Regulation of the visceral organs:* Clients focus their attention on the solar plexus as the central nerve center for the internal organs. A typical statement may be "Warmth radiates over my abdomen."

6. *Regulation of the temperature of the head:* Using statements such as "My forehead is cool," clients imagine the feeling of a cool cloth on their forehead, with the result of localized movement of blood away from the surface of the skin (i.e., vasoconstriction) on the forehead, creating sensations of coolness.

Autogenic training developed along a similar timeline to progressive relaxation training. In 1932, a German physiologist named Johannes Schultz began developing AT as a passive form of controlling arousal. Early psychophysiological studies led him and his colleagues to assert that the state brought about by AT was unique, and different from conscious awareness, sleep, or hypnosis. Electroencephalograph (EEG) recordings during AT led to the conception of the autogenic state as similar to a "pre-sleep state." Schultz believed that the shift from consciousness to the autogenic state was a specific process that involved changes in both psychological and physiological functioning, and allowed the person to "step behind" or "dive under" the usual conscious waking state. Schultz and his colleague Wolfgang Luthe believed that the mental and physical relaxation brought about by their procedure could eventually lead to relief from many physiological and psychological problems.

6. Biofeedback

The term biofeedback refers to a variety of procedures that provide ongoing information about physiological activity to persons attempting to learn to modify their physiological levels and responses. In particular, electromyographic (EMG) biofeedback is often employed as a relaxation technique to help people to control their levels of muscle tension. Thermal biofeedback also is common, in which the temperature of the skin surface is monitored, usually on a finger or foot, as increased blood flow to the skin surface is associated with relaxation. The general aim of biofeedback is to teach clients to use the feedback to gain conscious control of biological responses (e.g., skin temperature, heart rate) that have been operating maladaptively and that were previously thought to be uncontrollable. Biofeedback is shown to be effective across a variety of conditions, most notably anxiety disorders, tension headache, insomnia, and hypertension. In many cases biofeedback does more than teach individuals how to regulate their biological functions; it can also help improve their sense of personal control and ability to cope with stressful situations by showing that it is in fact possible to control the physiological events that accompany everyday life.

There are three major stages in biofeedback training. In the first stage, the client becomes aware of the maladaptive response (e.g., muscle tension) and learns that certain thoughts and biological events can influence the given response. The patient can relax some with a conscious effort. In the second stage, the client gains better control over the maladaptive response and can consciously relax with greater ease. The third stage marks the point at which the client can readily transfer the control to daily life, and can relax with little or no conscious effort.

Biofeedback training requires the use of instrumentation of varying degrees of sophistication. The essential requirement is that clients be provided with either visual or auditory information regarding their bodily state, usually in "real time," as the person's physiology is responding. The form of the feedback varies, can be shown visually on a video monitor, and/or can be transmitted by auditory tones or clicks, with higher or lower frequencies indicating the physiological response is increasing or decreasing.

Interest in biofeedback as a therapeutic technique burgeoned in the 1960s as a result of the work of various investigators. Among them, Joe Kamiya developed a technique of controlling alpha (EEG) rhythm by use of a tone to indicate that the brain was producing alpha waves. Second, Neal Miller demonstrated that autonomic responses could be conditioned through operant procedures in animals. Also, Thomas Budzynski and his colleagues built an alpha EEG feedback device with the intent of teaching subjects to produce more pleasant, tranquil alpha brain wave activity. Thereafter, attention shifted away from alpha feedback and toward skin surface feedback, generally measured through electrodes placed on the forehead to record facial muscle activity. This progression in research was based on investigations that found that the frontalis muscle of the forehead was a reliable indicator of anxiety, tension, and arousal. Over the years since this early research, EMG biofeedback has been demonstrated to be effective in helping clients to learn to reduce tension in the muscles of the head and scalp, thereby producing long-lasting reductions in tension headaches, among other uses.

7. Meditation

One of the currently most popular methods of relaxation is meditation. Examples are transcendental meditation and mindfulness meditation. In many forms, meditation enjoys widespread use across many lands and cultures. Quite old forms of meditation are involved in yoga practice; Japanese Zen, Chinese Tao, Hindu, and

Buddhist meditation are other forms. Some forms of meditation are associated with religious and spiritual beliefs about lifestyle. Others have no connection with religion or spirituality, but focus specifically on feelings of peacefulness and concentration. Across types of meditation, there are some qualities that are common to most or all of them.

First, meditation requires a comfortable position, usually sitting or lying down. Second, like other relaxation techniques, it usually must take place in a quiet, peaceful setting where interruption is unlikely. Thirdly, individuals regulate their breathing to a slow steady pace. Fourth, mental or cognitive activity during meditation often is focused on a particular word or phrase (e.g., a "mantra"). Some types of meditation, however, require the individual to empty the mind, think of nothing, and meditate on that mental silence.

One meditation technique that deserves special attention is one developed by Herbert Benson in 1975 termed "the relaxation response." Benson based his technique on laboratory observations of practitioners of transcendental meditation. He found that during meditation, the oxygen consumption and blood lactate levels of his subjects dropped to levels similar to those seen in sleep or hibernation. He concluded that meditation led to a hypometabolic state, which he termed the "relaxation response." Benson went on to specify a method to meditate in which one can acheieve the desired response through four crucial elements:

1. *Quiet environment:* A quiet place is essential for meditation practice, so as to eliminate distracting noises. Also, in this and most other forms of relaxation, the client closes his or her eyes, to reduce distracting visual stimuli.
2. *Target object to dwell on:* The target can be a repeated word, phrase, sound, symbol, or image, or can involve focusing on a particular feeling.
3. *Passive attitude:* The individual should allow thoughts and feelings to drift in and out of awareness without concentrating on them. Ongoing self-evaluation of progress with meditation practice should be avoided. Maintaining a passive attitude was identified by Benson as the most crucial factor in eliciting the relaxation response.
4. *Comfortable position:* As with most forms of relaxation, it is usually necessary for the person to be in a sitting position that can be comfortably maintained for at least 20 minutes.

Although Benson's technique has not been subjected to the same amount of empirical research as other techniques such as PRT or biofeedback, it has enjoyed widespread popularity in the United States and elsewhere.

8. Guided Imagery

In the use of guided imagery, the therapist and client develop imagery scenes that produce feelings of calmness, tranquility, or pleasure for the client. It is critical that the therapist consult with the client as to the appropriateness of scenes, as a scene thought to be calming (e.g., sitting at a waterfall) may not be relaxing to a particular individual (e.g., one who is phobic of water). The scenes are embellished with as much sensory detail as possible, both to make the imagery seem more real and to completely involve or "absorb" the client in the experience. Common settings for guided imagery include the beach, a tranquil forest, or a mountaintop. Note the sensory detail in these scene instructions:

> Close your eyes, sit back, take a few deep breaths, and relax. While your eyes remain closed, sitting in the chair and feeling relaxed, think about yourself on a tropical island. Make this image as real as possible, as if you really are there. As you look up, there are a few wispy clouds scattered across the brilliant blue sky. The turquoise ocean tumbles toward the shore in gentle, foam-capped waves. Gulls fly overhead; you hear their distant squawks. You feel the bright, warm rays of sun over your entire body and the light breeze blowing over your skin. You taste the salt from the air, as the wind blows in from the water. Walking along the beach, you encounter pleasing flowery scents from the nearby groves of tropical trees.

Actual scenes can be much longer. After the scene has been developed, clients are instructed to practice using the scene. In practicing, clients often focus on the scene for approximately 30 seconds, trying to picture, feel, and otherwise sense as much detail as possible. Over time, they should be able to readily and reliably evoke the image, leading to relaxation. It is possible also for clients to use the imagery to inoculate themselves from stressful or fear-provoking situations, or to mediate those reactions once they have begun. Guided imagery is often used as a distraction from pain during medical and dental procedures, or to combat anxiety during a feared situation.

Guided imagery relies somewhat on the clients' abilities to vividly imagine scenes, so in clinical practice, it may be important for the therapist to assess the clients' abilities in this area. Imagery ability can be assessed informally by asking clients to recall a particular event they enjoyed. Allowing clients to relax, the therapist then asks for as many details as they can provide, after

which clients rate the vividness of the image, for example, on a 1 to 10 scale. Another way to assess imagery ability is to use a rating scale in which the clients are instructed to imagine a variety of scenes and to rate the vividness of each. For clients whose skills are not well developed, imagery training can be employed to help them effectively utilize guided imagery.

9. Paced Breathing

Deep, regular breathing is a component of most relaxation training strategies. Many clients who experience problem levels of stress often have breathing-related complaints, and most of the symptoms associated with stress are those associated with hyperventilation. Variations in breathing patterns have an effect on cardiovascular functioning. Diaphragmatic breathing is a technique that teaches clients to breathe deeply using the diaphragm, expanding the abdomen rather than the chest. One of the most common ways of teaching diaphragmatic breathing is to have clients place their hand on the abdomen while breathing slowly. The client is instructed to breathe so that the hand on the abdomen raises up, minimizing any movement in the upper chest. Breathing in this manner allows the individual to inhale more air than normal shallow breathing. Deep breathing has been shown to release stress and tension, build energy and endurance, help with pain management, and to enhance mental concentration and physical performance. It can be taught as part of another relaxation technique or alone. Deep breathing usually is easily taught in one therapeutic session, and has the advantage that it can easily and unobtrusively be used by clients during the day whenever a stressful situation emerges.

C. Clinical Assessment and Treatment Issues

As with any treatment, assessment is a key issue in relaxation training. Identifying who can and cannot benefit from a given treatment is a critical consideration, although psychological science has not yet evolved to the point that it is known which treatments match to which clients. Those relaxation methods that focus on muscle tension or stretching may be particularly appropriate for clients who have high levels of tension and tension-related ailments, such as tension headache. Persons with highly reactive cognitive processes (e.g., worry, intrusive thoughts) may be well suited for those techniques that emphasize control over one's thinking. Relaxation skills can be taught in individual or group settings. There are numerous commercially available relaxation programs, including various media (e.g., audiotapes), for clients and therapists.

There are some considerations to be addressed in employing relaxation training. The first of these considerations is medical in nature. Before deciding on relaxation training, the clinician should ensure that medical problems have been properly evaluated, and that treatment has been provided or is ongoing. Many times, relaxation methods are a helpful adjunctive treatment for clients who have diseases (e.g., cardiovascular disease), and can be used in conjunction with medications. Another consideration is the possibility of contraindications to the use of relaxation training. Some clients (such as chronic pain patients, and those with temporomandibular joint [jaw] dysfunction) are advised not to tense certain muscle groups, so techniques that involve the tensing or stretching of muscles may not be the treatment of choice, although if only a few muscle groups are involved, the tension component can be skipped for them. Another issue to consider in using relaxation training is the source of the tension. If a person's tension is excessive or out of proportion to a situation, then relaxation training may be particularly appropriate. If, however, there is a life situation (e.g., marital disharmony) that is amenable to change that is leading to the problem tension, then addressing that problem directly (e.g., marital therapy) may be the treatment of choice. Another point to consider is that tension may be a conditioned response to some specific environmental stimuli. In this case, relaxation training alone may not be sufficient. Instead, systematic desensitization or *in vivo* exposure may be more appropriate. Finally, the preference of the client should be a prime consideration in choice of a relaxation strategy. As there presently are no hard and fast guidelines about which methods to use with which persons, client preferences may well be one of the most important factors currently in predicting treatment success.

Not everyone will benefit from relaxation training. Although it is rare, relaxation training sometimes can actually induce anxiety or even panic in some clients. There have been several explanations offered for such a reaction. One is that relaxation causes new and unusual sensations in the body, such as feelings of disorientation, or "floating." These unfamiliar feelings may provoke anxiety in some clients. Other patients may have a fear of losing control. It has been hypothesized that some people with chronic, pervasive anxiety may have learned to control their anxiety by never letting go or permitting themselves to relax. The feeling of loss of control associated with relaxation can cause excess anxiety in such individuals.

II. THEORETICAL BASES

By emphasizing "training," the conceptual underpinnings of relaxation training obviously include learning. It is assumed that individuals learn a new skill, enhance existing abilities, or learn to utilize existing adaptive responses. Some individuals may need relaxation training because of extreme life circumstances (e.g., undergoing chemotherapy). Others may have a unique psychophysiology, behavioral functioning, or cognitive processing that predisposes them to psychological problems that are amenable to relaxation training. The problem response may either be chronic (e.g., hyperactivity in the muscles due to job-related stress), acute (e.g., intense response to a phobia, such as public speaking phobia), or both. Regardless of the reason for the problematic physiological, cognitive, or behavioral response, training is utilized to develop, enhance, or prompt relaxation-related skills.

There are elements of classical conditioning, operant conditioning, and observational learning in relaxation training. The relaxed state is classically conditioned to various stimuli (e.g., sitting in a dimly lit room, closing one's eyes while sitting in a relaxed posture). Operant conditioning principles are employed, for example, when therapists use positive reinforcement for praising clients for proper use of relaxation procedures. When therapists model or demonstrate appropriate relaxation postures, for example, observational learning occurs. Moreover, in some forms of relaxation training (e.g., PRT), the individual is specifically taught to discriminate between tense and relaxed states. This training allows clients to discern more accurately tense and relaxed states, particularly in terms of muscle tension, which should allow then to prevent tension before it reaches problematic levels. In other types of relaxation training, the focus is on learning the relaxation response itself, and clients are encouraged to turn their attention away from impediments to relaxation (e.g., intrusive thoughts).

III. EMPIRICAL STUDIES

There is a wide body of literature that supports relaxation training as an effective therapy for a wide range of disorders. One problem with much of the existing data, however, is that most studies combine relaxation training with other forms of therapy; it rarely is used in isolation. Charles Carlson, who originated stretch relaxation, and a colleague, conducted a review in 1993 of 29 experiments with relaxation training. Their statistical analyses suggested that relaxation training is effective for a range of disorders, particularly including tension headache. Individual training was found to be superior to group sessions, and training audiotapes for home practice were determined to increase treatment effectiveness. Longer treatment duration in each session, and greater numbers of sessions, also were associated with more positive treatment outcome. In addition to this "meta-analysis" of the findings of a number of studies, recent individual experiments also provide strong support for the effectiveness of various forms of relaxation training.

One example is an investigation by F. Dudley McGlynn and colleagues in 1999; they examined the effects of PRT on levels of fear and arousal during *in vivo* exposure to phobic stimuli. There were 10 snake phobic individuals who were given six sessions of progressive relaxation training, while another 10 were not. All participants were then exposed six times to a 4-minute viewing of a caged snake on a conveyor; they were able to control how close the snake came to them. The distance between the subject and the snake was measured, a self-report measure of fear was obtained, and heart rate and sweat gland activity were recorded. Data analyses showed that the individuals trained in progressive relaxation had significantly lower fear ratings, and a smaller degree of heart rate change, throughout the course of snake exposure. These findings support the use of PRT prior to *in vivo* desensitization procedures.

As another example, a study of applied relaxation by Lars-Goran Öst and a colleague in 2000 compared it to cognitive therapy in the treatment of generalized anxiety disorder. There were 36 patients who met criteria for this anxiety disorder who were randomly selected to receive either one or the other of the treatments. At posttreatment assessment, both treatment groups showed clinically significant and lasting improvements in a variety of areas, including worry, cognitive and somatic anxiety, and depression.

IV. SUMMARY

Varying types of psychosocially based relaxation inductions have been used across known history. In the latter part of the 20th century, and into the 21st century, empirically tested forms of relaxation training have become widely available. There are many commonalities among the various forms of relaxation training, but each has its own unique characteristics. Some of the differences among these methods are based on societal perceptions, and the different labels that are used to describe them. Some of the similarities of these methods include the client being in an environment relatively

free of distractions (e.g., a quiet, dimly lit room) so as to reduce distractions, reposing in a relaxed posture (usually sitting), focusing on a specific stimulus (such as the therapist's voice in PRT, or a "mantra" in meditation), and having guidance by a practitioner using a soothing voice and calm manner. Clinicians now have a wide array of relaxation methods to choose from, allowing more individualized treatment for clients with complaints including anxiety, hypertension, insomnia, pain (including tension headaches), and many others. As in any science, research will progress to reveal more information about relaxation and its beneficial effects and limitations, and techniques will continue to improve.

See Also the Following Articles

Anxiety Management Training ■ Applied Relaxation ■ Applied Tension ■ Biofeedback ■ Emotive Imagery ■ Progressive Relaxation ■ Stretch-Based Relaxation Training

Further Reading

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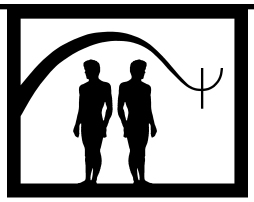

Research in Psychotherapy

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GLOSSARY

effect size A statistic that often is used in therapy research to indicate the magnitude of the difference in outcomes (or "effects") found in a research study between alternative treatments or between a treatment and an un- or minimally treated control group.

external validity A concept that refers to the inferences that can be accurately drawn from a research study's findings, specifically the confidence with which findings can be assumed to "generalize" or extend to situations, people, measures, times, and so on other than those particular to the study. A study's research design and methodology are major determinants of the external validity of its findings.

internal validity A concept that refers to the inferences that can be accurately drawn from a study's findings, specifically the confidence with which a causal relationship can be assumed to exist between a study's independent variables (e.g., forms of therapy) and dependent variables (e.g., outcomes or effects in a therapy study). The fit between a study's hypotheses, research design, and methodology is a major determinant of its internal validity.

managed care corporation A for-profit business that sells health care insurance contracts to employers and to individuals. Managed care corporations differ from traditional indemnity insurance companies in that the former directly oversee and control access to treatment by those who hold its contracts.

outcome research Studies that are designed primarily to test hypotheses and answer questions about the effects of psychotherapy and other treatments. "Outcome" is used as a synonym for "effects." For example, outcome studies can be designed to answer comparative treatment questions like, "Is cognitive-behavioral therapy associated with more improvement in depression than interpersonal psychotherapy?"

patient In the therapy research literature one of two words, "patient" or "client," usually is used to refer to a person who is the direct recipient of psychotherapeutic services. "Patient" typically is used in more medically dominated settings such as departments of psychiatry, "client" in more psychologically dominated settings such as university counseling clinics. Herein, the term patient is used.

psychoneurotic A global psychodiagnostic term that was in common use until about 1980. It connotes a wide range of problems that now (2002) are called anxiety disorders, unipolar depressions, and personality disorders in the American Psychiatric Association's diagnostic nomenclature *(Diagnostic and Statistical Manual of Mental Disorders)*. "Psychoneurotic" typically did not refer to what are considered more severe disorders such as schizophrenia and bipolar disorder.

psychopathology research A field that is focused on (a) distinguishing normal and abnormal human psychological, emotional, and behavioral functioning; (b) identifying causes for abnormalities; and (c) developing methods to assess and taxonomies for varieties of abnormal functioning.

psychotherapy Psychotherapy is used in this article as a synonym for "psychological therapies." It refers to all forms of treatment in which the primary therapeutic agent is a person

(e.g., in contrast to an instrument or machine) who relies exclusively on verbal/conceptual, psychoeducational, or behavioral methods, rather than on pharmacological or other somatic methods (such as electroconvulsive treatment or rapid transcranial magnetic stimulation), to ameliorate a broad array of behavioral and psychological problems, many of which fall under the contemporary medical terms, "mental illnesses" and "psychiatric disorders."

statistical significance A mathematically derived index of the probability that a research finding is valid versus due to chance.

I. INTRODUCTION

Psychotherapy research in the United States is a relatively young field, about 60 to 80 years old depending on the perspective taken. It encompasses a diverse array of activities, a uniting goal of which is to create a scientific foundation for the practice of psychotherapy. Alan Kazdin, a contemporary expert on psychotherapy research, described its aims this way: "To understand alternative forms of treatment, the mechanisms and processes through which these treatments operate, and the impact of treatment and moderating influences on maladaptive and adaptive functioning."

A broad mix of research strategies and methods are used to achieve the preceding aims. They span a continuum from relatively "uncontrolled" methods (e.g., systematic, naturalistic observation) to experimental procedures that are used to control (reduce the potential impact of) some variables so that the operation of others can be observed more clearly and precisely. Psychology and, in particular, clinical psychology often are said to be the parent disciplines of psychotherapy research in the United States. Other disciplines, notably psychiatry, also have made important contributions to it from the outset. The relatively short history of psychotherapy research includes marked shifts of focus ("turning points" herein), as well as scientific advancements ("milestones" herein). The field also has some long-standing, unanswered fundamental questions.

One goal of this article is to convey the dynamic nature of psychotherapy research—its responsiveness to social issues, government needs for information on which to base policy, developments in related fields—as well as to its own discoveries and other advances. A second goal is to provide an overview of some of the field's defining, substantive features as they have evolved to the present. The features described are primarily key research questions. A few, related research methods also are described. Detail on the conduct of psychotherapy research is not provided, nor are findings on different questions reviewed in depth. Relevant research methods (e.g., study design, measurement, statistical data analysis strategies) are extensive and are well described in many excellent sources, a few of which are listed in Further Reading. Similarly, sophisticated and comprehensive reviews of findings from the thousands of psychotherapy research studies that have accumulated over the years can be found in the five editions to date of *The Handbook of Psychotherapy and Behavior Change*.

A single article on an entire field of research requires many inclusion and exclusion decisions. This article is focused solely on the development of psychotherapy research in the United States. It also is limited to research on individual psychotherapy (not group or family therapy) for adults (not children or adolescents). The content pertains most directly to therapy research for problems other than addictions (e.g., to alcohol and drugs of abuse such as heroin) because substance abuse treatment research in the United States followed a partially separate developmental path. Within the preceding delimitations, a guiding principle was to highlight scientific milestones and turning points. Turning points herein are findings or events that changed the direction of at least a notable constituency of therapy researchers. Milestones are findings or other research-related developments that improved the possible scientific quality of research or its immediate value for informing clinical practice (the two are not distinct: "findings" from studies with poor scientific quality rarely if ever are properly regarded as having immediate implications for practice). Of course, the identification of milestones and turning points lies in the eyes of the beholder. To reduce the extent to which the topics discussed mainly reflect idiosyncratic biases of the author, several dedicated experts in psychotherapy research graciously reviewed the article (see Acknowledgments).

The preceding precaution could not eliminate another type of limitation. Doing psychotherapy research teaches well the general lesson that some "facts" are highly dependent on the perceiver. The author has been involved in therapy research for over 25 years in a variety of settings. Nevertheless, a participant–observer's perspective always is limited to just part of "the elephant" that is one's field. In addition, the perspectives herein on the primary forces that prompted turning points are likely to both overlap with and differ somewhat from descriptions by others who had different vantage points and who were influenced by different contingencies.

II. HISTORICAL OVERVIEW

Psychotherapy research is a branch of research on treatments for psychological, emotional, and behavioral problems, that is, for problems often referred to by the medically oriented term, "mental illnesses." The development of psychotherapy research has a strong historical link to clinical psychology. The link was solidified in 1949 at the Conference on Graduate Education in Clinical Psychology that was held in Boulder, Colorado. The "Boulder model," also known as the scientist–practitioner model of graduate-level training in clinical psychology, was established then. The essence of the Boulder model is that the doctoral degree (Ph.D.) in clinical psychology should be based on training both in research methods and in the clinical application of (i.e., direct use with people) psychotherapeutic interventions. To this day, Ph.D. clinical psychologists are expected to be able to conduct and evaluate research relevant to their field, as well as to provide psychotherapeutic services.

The psychotherapy studies done by clinical psychologists and other therapy researchers examine a broad range of questions. Some are designed mainly to answer more basic questions (e.g., "How do psychotherapies work?"), whereas others are designed to answer questions that have immediate implications for the practice of psychotherapy such as, "Which of the available forms of treatment has the best probable outcomes for depression in adults?" Both types of studies are said to have "applied" aims. Treatment-relevant research that primarily has applied aims is referred to as "clinical research." Psychotherapy research correctly is regarded as a branch of clinical, mental health research.

A. How Psychotherapy Research Relates to Other Mental Health Research

Psychotherapy research is distinguished from other types of clinical mental health research such as psychopharmacology (medication) research, which is strongly linked to the field of psychiatry and to the pharmaceutical industry. However, from the mid-1980s to the present an increasing number of outcome studies include psychotherapeutic interventions, pharmacological interventions, and their combination, thereby blurring the boundaries between psychotherapy and psychopharmacology research. Psychotherapy research also is distinguished from mental health services research. Traditional services research is intended to obtain data on the natural functioning of community-based, clinical care delivery systems. Typical data include how such systems are organized, their accessibility, fiscal features, and outcomes at a global level (e.g., recidivism). Services research usually utilizes large databases (e.g., several thousand service recipients and clinic "contacts" or visits) and provides information useful at a programmatic level. It is not designed to test and develop specific treatments. Psychotherapy research also can be differentiated from psychopathology research, although the two fields historically and presently overlap.

B. Psychotherapy Research versus Behavior Therapy Research

For many years (from about the 1950s through the 1970s), therapy researchers themselves drew a clear distinction between behavior therapy research and psychotherapy research. The distinction reflected what aptly has been described as an internecine struggle between those who endorsed forms of therapy that were grounded in theories and findings of subdisciplines of psychology known as learning and behavior ("behavioral" therapies), and those who favored therapies derived from Freudian psychodynamic theory or from humanistic principles (e.g., Rogerian client-centered therapy). The distinction was instantiated in the founding by psychologists of two scientific organizations at approximately the same time: the Association for the Advancement of Behavior Therapy (1966) and the Society for Psychotherapy Research (circa 1968). Both flourish to this day.

By the late 1970s, tangible signs of a rapprochement between the two camps emerged. One such sign was the "psychotherapy integration movement" that was spearheaded by psychologists such as Paul Wachtel and Marvin Goldfried. The period of rapprochement was spurred in part by outcome findings that indicated that behavior therapy-based and psychotherapy-based treatments both were associated with measurable benefits, often of comparable magnitude. Neither camp could claim unqualified victory. Indeed, contrary to the hopes and expectations of many, some studies in which a behavioral therapy was compared directly to a non-behavioral therapy (e.g., psychodynamic psychotherapy) failed to detect statistically significant outcome differences. A prototypic study like this was published in a 1975 book by Sloane, Staples, Cristol, and colleagues, *Psychotherapy vs. Behavior Therapy.*

At least partially due to mutually humbling outcome research findings, animosity between the camps substantially diminished, and some cross-fertilization even occurred. The two arms of therapy research also retained

some distinctiveness, as reflected in one of the field's most influential recent milestones, a listing of empirically supported forms of therapy ("ESTs") for specific types of problems. The list was first published in 1995, based on the work of the American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures. The Task Force was chaired by Dianne Chambless from 1993 to 1997. (Initially, the term "empirically validated therapies" was used for the list. It was changed to ESTs in part because the word "validated" could mistakenly connote that the process of validation for a therapy had been completed and no additional research on it was needed.) The list includes some therapies that are essentially behavioral (e.g., exposure and response prevention for obsessive–compulsive disorder), as well as some that are not such as interpersonal psychotherapy for depression (a type of psychotherapy that was developed by psychiatrist Gerald Klerman and colleagues, published in 1984).

The long-standing distinction in the literature between behavior therapy and psychotherapy, and between the corpus of research focused on each, marks a historically important epoch in the development of research on psychologically based interventions. Herein the term "psychotherapy research" includes research on all forms of psychologically based treatments.

C. "Coalescence" Phase of the Field of Psychotherapy Research

So, when did all this start? Several reviews of therapy research indicate that the earliest outcome studies of psychotherapies were published in the late 1920s, slightly over 80 years ago. A 1916 study was mentioned in a review by Allen Bergin, an unusually knowledgeable reviewer. The number of outcome studies published per year was very low at first—about two every 5 years between 1920–1930. The rate increased to about 10 every 5 years after that and during World War II. Starting in the early 1950s, the publication rate of psychotherapy outcome studies began to increase exponentially.

By 1958, the field of psychotherapy research definitely had emerged in the United States. In that year, the Division of Clinical Psychology of the American Psychological Association held the first national conference on psychotherapy research. The National Institute of Mental Health (NIMH) provided financial support for the conference. Broadly stated, its purpose was to evaluate the status of therapy research and to thereby provide information that also could stimulate further research. An important additional aim was to strengthen research collaboration and interdisciplinary relations between psychologists and psychiatrists. Psychiatrists were among the invited participants and also were asked to join the conference planning committee.

Several forces are likely to have contributed to the accelerating growth of psychotherapy research that was evident by the 1950s. The end of World War II played a role. For example, resources of many types became more available, and the kinds of acute problems that psychiatrists observed in soldiers led to greatly expanded interest in psychotherapy after the war. A closely related development was the U.S. Veterans Administration's promotion of the use of psychologists both to administer psychotherapy and to conduct research. Another factor was the methodologically groundbreaking and exemplary psychotherapy research program that was developed by Carl Rogers, his colleagues, and students at the University of Chicago beginning in 1949. The availability of funding from the NIMH, after it was established in 1949, was certainly growth promoting. The previously noted adoption in 1949 of the scientist–practitioner model for education in clinical psychology also contributed. Moreover, doubtless, what was reacted to by many as a gauntlet thrown down by Hans Eysenck in 1952 energized and focused psychotherapy outcome research initiatives.

In perhaps the most widely cited therapy research publication of the era, Eysenck presented data that he interpreted as evidence that existing outcome studies did not show that psychotherapy was associated with better improvement rates than occurred, over time, in untreated individuals who had comparable problems. The latter was termed "spontaneous remission." Eysenck used two previously published naturalistic data sets to estimate improvement rates that would occur in psychoneurotic problems over 2 years without the benefit of "systematic psychotherapy." One set of figures was from discharge records of neurotic patients from New York state hospitals; the other was from an insurance company's disability claims for psychoneuroses for a 5-year period. According to Eysenck's calculations, improvement rates found in psychotherapy outcome studies and improvement rates for the same types of problems in those who did not receive psychotherapy both were about 66%.

The validity of Eysenck's methods and conclusions were challenged by many therapy researchers over the years. The kinds of questions asked included "Was his assumption accurate that those in the naturalistic studies had not received any psychotherapy?"; "Were the improvement criteria used in the naturalistic studies

comparable to those used in therapy outcome studies?"; "Was spontaneous remission an established finding," as Eysenck's argument suggested it was? It was not until 1977 that data were presented (by Mary Smith and Gene Glass) that finally put to rest Eysenck's conclusion that no evidence existed that psychotherapy was effective. More about this in Section III.

Before leaving the topic, a key fact is worth noting. The heated debate stimulated by Eysenck's 1952 paper (and by a later, similar paper of his published in 1960) was to some extent both fueled by and a manifiestation of, the aforementioned behavior therapy versus psychotherapy struggle. Eysenck, himself, became a leader in the behavior therapy movement.

Despite the field's burgeoning growth since the 1950s, as recently as 20 years ago (1980) psychotherapy research was quaintly described as a "cottage industry" by some observers. The term seems to have originated mainly from comparison of psychotherapy research to psychopharmacology research, a field whose primary and huge funding source is the pharmaceutical industry. Among other things, cottage industry status connoted that outcome studies of psychotherapy typically had relatively small sample sizes—20 or fewer individuals included in each treatment condition. In addition, many studies were un- or underfunded and conducted by individual investigators who did not closely coordinate their efforts with those of others working on the same or related questions. Thus, findings did not typically build on each other, thereby creating a cumulative and obviously progressing body of knowledge. Although the quality of studies could be excellent, their findings typically were not highly influential in terms of affecting either the practice of psychotherapy or public policy on mental health treatment. (Cottage industry or not, the field was an active one. According to Michael Lambert who reviewed the psychotherapy research literature in 1980, 4,000 studies of various types had been published by then.)

D. "Coming of Age" Phase: Therapy Research Enters the Mainstream of Clinical Mental Health Research

The milestones and turning points described in the next subsections, with one exception (the NIMH treatment development grant mechanism), were in some way controversial within the field of therapy research. Indeed, controversy probably is a marker for publicly observable events that have the potential to precipitate widespread change. The points of contention are not discussed here but readily can be found in the psychotherapy research literature.

1. Large-Sample, Multisite Studies, Randomized Clinical Trial Design

A clear turning point for the field of therapy research began to take shape in about the late 1970s. Larger-scale outcome studies of psychotherapies—250 or more individuals treated—began to be undertaken with the assistance of substantial funding from the NIMH. The shift was at least partially due to a leadership role taken by NIMH staff like Morris Parloff and Irene Elkin, both of whom were experienced psychotherapy researchers. Psychiatrist Gerald Klerman also facilitated the changes from his position at the helm of the Alcohol, Drug Abuse and Mental Health Administration, the federal government agency that oversaw the NIMH at the time.

One study, in particular, marked the defining shift for psychotherapy research from its so-called cottage industry status to a recognized, influential branch of clinical research. The study is known as the NIMH Treatment of Depression Collaborative Research Program (TDCRP). Irene Elkin of the NIMH played a key role in the study's oversight and conduct throughout its course. Work began on conceptualizing and designing the TDCRP in 1977. Its initial outcome findings were published in 1989, a mere 13 years ago. The TDCRP was the first time that a collaborative, multisite outcome study of psychotherapies (i.e., the same research design and procedures were implemented simultaneously at three, geographically distant research settings) was conducted using the randomized, controlled clinical trial research strategy. Until then, collaborative clinical trials were commonly used for pharmaceutical company-funded research on psychoactive medications but not for psychotherapy research.

2. Selection of Patient Samples by Psychiatric Diagnoses

The TDCRP also illustrates the impact of a development external to the field of psychotherapy research that became a momentous turning point for it shortly after 1980. In 1980, the American Psychiatric Association published the third edition of its diagnostic nomenclature of psychiatric disorders, the Diagnostic and Statistical Manual of Mental Disorders *(DSM–III)*. The *DSM–III* was a major revision of the Association's existing nomenclature. The overhaul was undertaken in part to remediate features of prior versions of the *DSM* that made it an inadequate diagnostic system to

support clinical research—both psychopathology studies and outcome studies of psychopharmacological and other treatments. For example, the descriptions of diagnoses were not specific or detailed enough to enable diagnoses to be assigned reliably to the same patient by different, even expert, psychiatrists. Poor interrater reliability of diagnoses was a fatal handicap from a research perspective, and it created many problems from a practice perspective too.

The *DSM–III* had a major impact on psychotherapy research despite the fact that many mental health professionals from all disciplines and many psychotherapy researchers did not endorse it. Some even condemned it. They did not believe that the *DSM–III* was either a valid system for classifying psychopathology or a treatment-relevant nosology for selecting and planning most types of psychotherapeutic interventions. Despite rejection of the nomenclature by many therapy researchers, the *DSM–III* and its subsequent editions changed the direction of psychotherapy research. After the mid-1980s, psychotherapy outcome studies started to be focused on disorders as they were defined in the *DSM,* such as panic disorder and major depression. The TDCRP was a harbinger of this trend.

Developments at the NIMH in 1985 contributed to the impact on psychotherapy research of the *DSM–III* and its later editions. In 1985, the NIMH Division of Clinical Research was reorganized such that many of its subdivisions or "branches" were identified by disorders that appeared in the *DSM–III*. For example, the existing Psychosocial Treatments Research Branch was abolished and replaced by the Affective and Anxiety Disorders Research Branch. ("Psychosocial" was a term that was adopted at the NIMH by branch chief Morris Parloff in part to span the aforementioned rift in the field between behavior therapy and psychotherapy.) Prior to the NIMH reorganization, psychotherapy researchers often sought guidance from staff of the Psychosocial Treatments Research Branch on their grant applications. After the reorganization, many therapy researchers did not know which, if any, branch was the appropriate one to contact about their treatment study ideas and potential proposals. Moreover, it became evident rather quickly to researchers that the NIMH grant review committees were, in essence, requiring grant applications for psychotherapy outcome studies to be focused on a specific disorder. Study patients were to be selected primarily by diagnostic criteria, and disorders as defined in the *DSM* seemed most likely to be viewed as acceptable by review committees.

For the last 20 years and into the present, the largest and most influential psychotherapy outcome studies have been designed to test psychotherapies for specific *DSM* disorders—despite the continuing reservations of many therapy researchers, practicing mental health professionals, and psychopathology researchers about the validity of much of the nomenclature. One major result is that a cumulative body of treatment research findings has been achieved. At the same time, substantial and scientifically well-founded skepticism about aspects of the nomenclature continues among mental health researchers and practitioners from all disciplines, including psychiatry.

3. "Time-Limited" Courses of Therapy

The TDCRP illustrates yet another characteristic feature of therapy outcome research during its coming-of-age phase through the present. The length of therapies studied typically has been relatively short—12 to 24 sessions over 3 to 4 months. Particularly to psychotherapy research pioneers who espoused the psychodynamic orientation, examining therapies of less than 1 or more years duration was of uncertain relevance, at best, to the phenomenon of psychotherapy. Several forces converged by the late 1970s that resulted in the focus of psychotherapy outcome research, particularly federally funded studies, on time-limited treatments. Society's and insurance companies' concerns about the costs of long-term psychotherapy played a role, as did scientific considerations that made the conduct of interpretable studies of long-term psychotherapy problematic. Indeed, few outcome studies of long-term psychotherapy exist at this time. A study done of psychodynamically oriented therapy at the Menninger Foundation in Topeka, Kansas, from about 1954 to 1974 is a famous exception.

Findings from studies of time-limited treatments, particularly for depression, are renewing interest in conducting studies of longer-term therapy—up to 1 year. Disappointing percentages of individuals who reach a "recovery" criterion and evidence that a notable proportion of patients relapse after time-limited treatments support the interest. Indeed, 18-month follow-up findings from the TDCRP contributed to the currently nascent tendency to conduct outcome studies of longer-term courses of psychotherapy. A well-established trend is outcome studies of "maintenance" therapeutic interventions (e.g., monthly "booster" therapy sessions following time-limited, acute phase treatments) to determine if posttreatment relapse rates can be reduced. A contrasting direction, consistent with economic considerations and cost-cutting interests of managed care organizations, is the examination of very short treatments—three sessions for some types of anxiety problems. In addition, the

potential of technological advances, such as handheld computers ("Palm Pilots"), to enhance psychotherapy is being explored, e.g., between-session use of Palm Pilots by patients with panic disorder to prompt behavior change and to reduce the amount of contact with a therapist that is required to get desired outcomes.

4. Treatment Development Grants

Efforts of NIMH staff, such as psychologist Barry Wolfe, led to another pivotal milestone in the history of psychotherapy research. In 1993, the NIMH made available a type of funding opportunity called a "treatment development grant." NIMH's action followed a similar initiative by the National Institute on Drug Abuse that was cultivated by Lisa Onken, then of its Clinical and Experimental Therapeutics Branch. The appearance of the treatment development grant was embraced by psychotherapy researchers as a crucial attempt to help offset a very long-standing handicap from which the field suffered, particularly in comparison to psychopharmacology research. Pharmaceutical companies are and have been a major source of non-federal funding for psychopharmacology outcome research, as well as for the development and initial testing of new medications for psychiatric problems. The field of psychotherapy research never had a counterpart to this mammoth corporate funding source for treatment development. The development of new forms of therapy, or modified versions of existing ones, was completely dependent on the unfunded initiative of individuals before treatment development grants became available. The preceding major impediment to the development of psychotherapies was long recognized by therapy researchers.

E. Unfolding Directions

Three more turning points for psychotherapy research surfaced in the 1990s, the ultimate impact of which on the field and on the practice of psychotherapy in the United States is yet to be known. Two of the three were spawned directly by the NIMH. It, in turn, was responding to a host of forces, prominently including economic concerns (continually increasing costs of all forms of health care) and public health policy issues (e.g., what direct recommendations for typical clinical care settings could be made from existing treatment research?). One turning point was a call for cost data to be included in mental health treatment studies. A second began as the "efficacy versus effectiveness debate" and culminated in the intentionally revolutionary endorsement by the NIMH of "the public health model" as a new paradigm for mental health treatment research. The third, not completely distinct from the other two in terms of causal forces, was the introduction to therapy research of a "patient-focused" research paradigm.

1. Cost-Effectiveness, Cost-Benefit, and Related Methodology

By the mid-1970s if not before, insurance companies and various U.S. social institutions voiced concerns about the cost of mental health treatment. By the early 1990s, rising health care costs were a major focus of the U.S. Congress. In addition, managed care treatment delivery systems, an intended antidote for rising costs, were actively seeking cost-effectiveness data on mental health treatments. Concurrently, the NIMH began making concerted efforts to get investigators to obtain cost data in treatment outcome studies. (The concept of costs is very broad and includes resources of many types that are used in the delivery of treatments such as office space, supplies, and transportation.) Various types of cost information were needed by federal and local health care policymakers and by managed care entrepreneurs—the comparative costs of alternative treatments, such as medication and psychotherapy for the same problem; the relative benefit obtained for resources consumed by different treatments (cost benefit); and savings in medical expenses, work days lost, and so on, that might be associated with mental health treatments (cost offset).

Highly sophisticated and complex methods for assessing costs associated with treatments existed though they rarely were used in psychotherapy outcome research at the time. The NIMH recommended that health care economists be added to outcome study grant applications to ensure that adequate cost data would be obtained. Now, in 2002, experts in cost analysis are on NIMH treatment grant review committees. The impact is not yet widely evident of cost data from outcome studies on practice patterns and on directions in psychotherapy research.

2. From Efficacy versus Effectiveness to the Public Health Research Paradigm

From a public health perspective, a core issue of what often is called "the efficacy versus effectiveness debate" is the generalizability to community-based, clinical practice settings of treatments examined in, and outcome findings from, randomized controlled studies. Sometimes the issue is characterized as the "transportability" of treatments from research into typical practice settings. From a scientific perspective, the debate's core issues are: (a) alternative experimental designs and methods that can be used for clinical treatment studies,

and (b) the kinds of inferences (conclusions) for practice in non-research, community settings that most confidently can be drawn from them.

The seeds of the efficacy versus effectiveness debate were sown years before its rise to the forefront as a bonafide scientific debate in the mid-1990s. Its emergence then was a side effect of several forces, including: (a) dramatic shifts in health care delivery that occurred in the United States beginning about the mid-1980s, (b) the U.S. Congress's (failed) attempt in 1993 to reform national health care, and (c) escalating dissatisfaction of practitioners with the output of therapy research (e.g., manuals for therapists that describe how to implement specific types of psychotherapy).

In the mid-1980s, health care delivery patterns increasingly moved away from indemnity insurance coverage toward managed care. The managed care model gained momentum from the mid-1980s on as a way to contain and cut health care costs. Both managed care and the health care reform movement spotlighted the need for valid information about existing treatments to guide decisions of government policymakers and managed care entrepreneurs. Both groups were motivated to make decisions rapidly that would affect the treatments that millions of citizens could receive using insurance benefits. Gaps became widely evident between the types of information wanted by these and other stakeholders in mental health treatment (e.g., its "consumers" and clinical providers) and what was available from existing therapy and other mental health-related research. Recognition of the limitations fostered lively debates about how treatment research, particularly federally funded research that is mandated to meet broad public health needs, should be designed.

From a scientific standpoint, two concepts that are key to the efficacy versus effectiveness debate are internal and external validity. The concepts first were proffered in the early 1960s by Donald Campbell and Julian Stanley as part of a conceptual framework that linked different experimental designs and methods to the types of questions that could most validly (logically correctly) be answered with them. Internal validity relates to designs and methods that increase a study's logical strength for drawing causal conclusions about the relationship between its independent (e.g., form of psychotherapy) and dependent (e.g., outcome indices) variables. When a therapy outcome study has a design and methods that maximize internal validity (e.g., random assignment of patients to the treatment conditions that are being compared; inclusion of a "control" condition of some type to provide an estimate of the improvement that could occur, without treatment, over the same period of time that a study treatment is provided), confidence is maximized that its findings can be interpreted as evidence that the therapy or therapies examined caused the outcomes obtained. Studies that have high internal validity are referred to as "efficacy" studies in the parlance of the debate. The aforementioned TDCRP is a prototypic efficacy study.

External validity relates to study designs and methods that enhance the generalizability of study findings. Generalizability means the confidence with which a study's results can be assumed to extend to situations, people, measures, times, and so on, other than those particular to the study. For example, say a finding is that cognitive therapy plus progressive muscle relaxation for generalized anxiety disorder is associated with more reduction in anxiety than nondirective therapy plus relaxation. The external validity features of the study's design and methods determine the types of "real-world" clinical settings, therapists, patients, and treatments to which we can confidently generalize the expectation (i.e., infer) that the same cognitive therapy plus relaxation will be associated with more reduction in anxiety in generalized anxiety disorder than an alternative therapy will be. Studies with designs and methods that achieve high external validity are referred to as "effectiveness" studies in the efficacy versus effectiveness debate.

In a series of actions that became clearly evident to psychotherapy researchers by about 1998, the NIMH indicated it wanted to receive grant applications for studies that were designed to have external validity strengths in the sense of having direct implications for practice in typical care settings. In actuality, a much more dramatic and far-reaching change was in progress, a change that has the potential to affect therapy research at least as profoundly as the 1985 NIMH reorganization did.

Another major reorganization of the NIMH funding by programs occurred in 1997 under the leadership of a new director. Once again, as in 1985, psychotherapy researchers interested in federal funding needed to determine what new branch of the NIMH they should contact with their ideas, and so on. In addition, a Clinical Treatment and Services Research Workgroup was established and charged by the new NIMH Director Steven Hyman to advise on "strategies for increasing the relevance, speeding the development, and facilitating the utilization of research-based treatment and service interventions for mental illnesses into both routine clinical practice and policies guiding our local and national mental health service systems." In 1999, the Workgroup's report, *Bridging Science and Service,* became available. Moreover, in 1999, Dr. Hyman co-authored a

publication with key NIMH treatment research administrators that said that NIMH was now dedicated to advancing "a public health model approach to clinical research." The model is intended to eventually fill the information gaps that various stakeholders need and want. It also is expected to meet the treatment dissemination and other goals, described earlier, that the Workgroup was charged to consider.

Obviously, yet another major turning point for therapy research is underway, spurred by the NIMH's recent transformation and new aims. As yet, the field's new directions, questions, and findings largely remain its unforeseen future.

3. Patient-Focused (versus Treatment-Focused) Research

In 1996, Kenneth Howard and colleagues presented a research strategy that was new to the field of therapy research. It was called "patient profiling." The strategy was an outgrowth of Howard's direct knowledge of contemporary trends in the provision of psychotherapy in managed care delivery systems and lifelong career doing therapy research in naturalistic settings. Patient profiling also was an outgrowth of the application of developments in data analysis techniques. Other therapy researchers concurrently pursued similar directions, using what now are sometimes classified as "patient-focused" research strategies. In general, patient-focused research answers questions like, "Is this patient's therapy working?" It is contrasted with conventional or "treatment-focused" therapy research that addresses questions like, "Does this type of therapy work?"

A main difference between patient-focused and treatment-focused studies (like the TDCRP) is that the aim of the newer strategy is to provide information that can be used to evaluate the progress of a specific patient's treatment by comparing his or her ongoing treatment response in real time to an expected response of clinically comparable individuals. The expected (or predicted) response is estimated from archival data on many treated patients, that is data of the type collected by managed care corporations.

The potential value and impact of patient-focused research on the main questions in therapy research is yet to be known. A hope is that it will, at minimum, provide one type of bridge across an ironic and chronic gap between therapy research and clinical practice. For example, the utility of patient-focused research currently is being examined for giving community-based therapists up-to-date information on how a patient is progressing compared to a predicted course so that therapists can consider modifying the treatment that they are providing.

F. Comment

The foregoing has been a thumbnail sketch of trends in and forces that have shaped psychotherapy research in its first 60 or so years. One aim was to illustrate that psychotherapy research is characterized so far by noteworthy shifts in focus and style. Many of the shifts described reflect the responsiveness of the field to external forces rather than to its own findings or findings in closely related fields such as psychology and other behavioral sciences. Therapy research has responded to research priorities established by the NIMH to meet public health and policy needs; developments in psychiatry; and insurance providers' demands for data on the efficacy, safety, and costs of psychotherapies to form and defend their mental health care reimbursement policies. Indeed, the applied (practice-relevant) potential of psychotherapy research can make it a quickly changing, exciting field both to work in and to observe. Unfortunately, many of the sources of excitement and the sense of urgency associated with studying practice-relevant questions also can challenge the maintenance of scientific integrity.

III. KEY QUESTIONS

Fundamental features of a scientific field are its focal aims, focal questions, theories, and primary research methods. In research, aims are instantiated in the form of specific questions and hypotheses. Several key questions that have been examined by psychotherapy researchers are reviewed in this section. The emergence of milestones and turning points along the way is noted.

A. What Can Be Learned about Personality Psychology from Psychotherapy?

During the late 1940s and 1950s when psychotherapy research was beginning to coalesce as a scientific field, an aim endorsed by many investigators was to use psychotherapy as a method to advance personality theory, a major subdiscipline of psychology. At least into the early 1960s, some psychologists were exploring the question of whether psychotherapy provided a "valid method for the science of psychology." In other words, psychotherapy as a vehicle for advancing basic academic, rather than applied, research questions was of considerable interest.

Psychotherapy had several features that suggested its promise as a sort of laboratory for systematically

investigating human personality and behavior. Psychotherapy provided a relatively standard, simple-to-construct situation in which a person and his or her psychological processes could be observed closely. Moreover, to achieve therapeutic goals, the psychotherapy situation specifically was designed to enable people to reveal themselves in the most complete and honest way possible. This feature also afforded a unique opportunity to achieve scientific goals. It was hoped, for example, that both observations of people and information they revealed about themselves and their life histories might answer basic questions about personality, its developmental antecedents, and also provide data from which a valid taxonomy of personality traits (cross-situationally consistent patterns of perceiving and behaving) might be derived and tested. In turn, from the preceding types of knowledge, principles of personality change could be developed.

The foregoing early trend in psychotherapy research reflected, in part, Freud's legacy. Freud viewed psychoanalysis as both a treatment and a method to examine hypotheses about personality and its development. A similar perspective was prominently displayed at the first conference on psychotherapy research in 1958 that was mentioned in Section I. The authors of a summary of the conference, Morris Parloff and Eli Rubinstein, noted that many of the researchers present were relatively uninterested in outcome studies compared to research that was intended to advance understanding of personality.

B. What Is "the Problem" to Be Treated?

The early interest of psychotherapy researchers in personality psychology points to the intrinsic link between psychotherapy research and models of psychopathology. The development and identification of efficacious, efficient psychotherapeutic interventions are fundamentally contingent on conceptualizations of the problem(s) to be treated. Widely endorsed models of psychopathology have been elusive, although models have not been in short supply. None have generated widespread acceptance despite their lynchpin role for the development, refinement, and evaluation of psychotherapies. The lack of consensus has been an enduring handicap for psychotherapy research, as well as for other types of clinical mental health research.

Why has the development of consensually agreed-on models of psychopathology been unattainable to date? One reason is that many problems that seem to be legitimately regarded as mental health concerns are neither objectively observable nor measurable deviations from clearly definable and delimited "normal" functioning and states of mind. Even though behaviors of the type that often are the focus of mental health treatment can be observed, their deviation from "normalcy" frequently is a judgment call. (The preceding two statements do not apply to psychotic and manic symptoms of conditions like schizophrenia and bipolar disorder that are associated with obvious impairments in adaptive functioning. The two conditions exemplify a few that are consensually viewed as more "severe" by mental health professionals across disciplines.) In brief, the nature of the problems that can be the focus of psychotherapy (and of psychopharmacology by current practice patterns) often is much different than the physical anomalies and abnormal processes that typically are the focus of medical treatment.

Medicine characteristically has the relative luxury of being directed to physically observable and, thus, readily agreed-on deviations from equally observable, normal functioning of the human organism. Obvious examples are broken limbs, flesh wounds, and cancers. Many serious medical problems are not observable by the unaided eye, but technological aids such as microscopes, x-rays, and imaging equipment allow their presence to be observed and consensually assessed. Mental health complaints often are not similarly available to visual inspection or verification and, thus, to consensual agreement on the nature of (or even presence of) the problem to be treated. Moreover, attitudinal, emotional, and behavioral functioning that is regarded as in the normal range seems to be much more heterogeneous than physical functioning in the normal range. Thus, using indices of normality as a benchmark from which to create models of psychopathology is unlikely to be as helpful as it has been in medicine. The medical model is only partially applicable, at best, to dimensions of "mental" functioning.

Unfortunately, attempts so far to develop models of psychopathology that could provide strong foundations for psychotherapy research and for other mental health treatment research often have elicited, or have been notably influenced by, guild interests of the various mental health professions. Such factors compound the difficulty of an extremely difficult, yet crucial conceptual challenge for psychotherapy research and for mental health treatment, in general.

C. Does Psychotherapy Work?

Alternatively stated, the question is, "Is psychotherapy effective?" Its answer requires results from studies that are designed to determine if a type of psychotherapy

is associated with greater or different change than no treatment, using a standard criterion to judge whether or not a difference exists.

1. A Compelling, Affirmative Answer

It was not until 1977 that data were presented that provided a widely influential and convincingly positive answer to the simplistic yet fundamental question, "Does psychotherapy work?" The answer came from the application of meta-analysis, a statistical technique, to data from nearly 400 (in 1977) and then 475 (in 1980) therapy outcome studies, many of which included a no- or minimal treatment control condition. The two meta-analyses (the first authored by Mary Smith and Gene Glass; the second by Smith, Glass, and Thomas Miller) were a major milestone for the field of psychotherapy research. The larger one showed that when findings were pooled from outcome studies in which treated individuals were compared in the same study with either (a) untreated or minimally treated individuals, or (b) groups who received placebo treatments or "undifferentiated counseling," the average person who received a form of psychotherapy was better off on the outcomes examined than 80% of those who needed therapy but were not treated. The advantage for psychotherapy was larger when the meta-analysis included only studies in which therapy groups were compared to no- or minimal treatment groups. Subsequent meta-analyses to date, often focused on the effects of psychotherapy for specific problems (like depression), have supported the conclusion that it is an effective treatment modality.

As noted previously, numerous and often painstaking prior attempts were made to effectively challenge Hans Eysenck's 1952 conclusion that no evidence existed from outcome studies that psychotherapy was associated with a higher rate of improvement than could be expected to occur, over time, without therapy. For some years, a major impediment to disproving Eysenck's conclusion was a lack of psychotherapy outcome studies that included a no- or minimal treatment condition whose outcomes were compared with those of the therapy of interest. The presence of such a condition provides an experimental way to estimate or "control for" change that might occur without treatment—with just the passage of time and normal life events. Randomized controlled psychotherapy outcome studies became increasingly prevalent over the years following 1952. Thus, a lack of controlled studies was not the only impediment to the appearance, before 1977, of a compelling counterargument to Eysenck's proposition.

Before Smith and Glass applied meta-analysis to controlled outcome studies of psychotherapy, others had summarized the results of such studies using a "box score" or tallying method. That is, the results of available studies were coded on whether or not the therapy of interest was associated with statistically significantly more improvement than was the no- or minimal therapy control condition. Conclusions based on the box score method were not as convincing as those of a meta-analysis. This was partially because the possibility of finding differences between therapy conditions in outcome studies is heavily influenced by a study's sample size. Larger studies have a greater probability of obtaining statistically significant differences between therapy and control conditions.

2. How Should the Question Be Formulated?

Even while many therapy researchers were trying to disprove Eysenck's conclusion that psychotherapy did not work, they already had concluded that the global question, "Does psychotherapy work?," was not a productive one to guide research. For example, in a 1966 paper that, itself, qualifies as a milestone for the field, Donald Kiesler argued for the need to study "which therapist behaviors are more effective with which type of patients." In a similar vein, in 1967 Gordon Paul framed the question for outcome research as: "*what* treatment, by *whom* is most effective for *this* individual with *that* specific problem, and under *which* set of circumstances" (original emphasis)? Others, such as Nevitt Sanford noted as early as 1953 that the global question, "Does psychotherapy work?," was inadequate from a scientific standpoint to guide the field and suggested alternatives—"which people, in what circumstances, responding to what psychotherapeutic stimuli . . . ." However, it was Paul's phrasing of the question that essentially became a mantra for psychotherapy research.

One of the most recent and major milestones in the history of psychotherapy research illustrates the field's answers so far to a partial version of the applied question that Paul formulated for it 30 years earlier. The milestone was the aforementioned 1995 (updated in 1998) American Psychological Association list of empirically supported psychotherapies for various types of problems, such as depression and panic attacks.

D. What Is "the Treatment"?

For years, many researchers' energy and attention was directed toward answering the question, "Does psychotherapy work?," before methods were developed that enabled them to know of what, exactly, "the therapy" consisted that was done in outcome studies. Particularly for research on non-behavioral therapies, the field

essentially was in the position of saying "it works (or it doesn't), but we don't really know for sure what 'it' is." More interesting, many therapy researchers were not fully aware that they were in the foregoing position. Investigators often assumed that study therapists were conducting the type of therapy that they said they were (e.g., "psychodynamic"), and that all therapists who said that they used a particular form of therapy implemented it more similarly than not. Donald Kiesler brought "myths" like the foregoing ones to the field's attention in 1966 in his previously mentioned, classic critique of conceptual and methodological weaknesses of therapy research at the time. The increasing use of audiotaping technology in therapy research no doubt contributed to the uncovering of mythical "therapist uniformity assumptions" like those which Kiesler identified.

It was not until the mid-1980s that detailed descriptions of non-behavioral psychotherapies were put into written, manual form for therapists to learn from and follow in outcome studies. (Manuals began to be used in behavior therapy research about 20 years earlier, the mid-1960s.) The development of therapy manuals for all types of therapy was a crucial milestone for psychotherapy research. In effect, manuals were operational definitions of the main independent variable(s) of psychotherapy outcome studies. They also enhanced the scientific quality of research on psychotherapies in other ways.

Manuals made it more possible for all the therapies examined in a study to be implemented as they were intended to be. Manuals contributed to consistent, correct implementation in two primary ways. First, they facilitated systematic training of therapists in the conduct of a study's therapies. Second, they provided criteria that could be used to monitor each therapist's implementation of a therapy for accuracy (i.e., Is the therapist "adhering" to the manual?) throughout the entire course of each study therapy that he or she did. In addition, and very important from a scientific perspective, therapy manuals greatly facilitated attempts to replicate outcome findings in different settings, with therapists from different disciplines and experience levels, for example. Finally, from both the practice and public health perspectives, manuals aid widespread and efficient dissemination of therapies that are found to be efficacious in outcome studies.

In 1984, Lester Luborsky and Robert DeRubeis observed that "a small revolution in psychotherapy research style" had occurred with the use of manuals. What is particularly interesting is not that the revolution of manualization occurred, but that this fundamental methodological advance did not occur earlier. How could a clinically-relevant, scientific field conduct valid tests of its treatments without first clearly articulating and defining them? As already noted, manuals were used in behavior therapy research almost 20 years before they were widely used in research on other forms of therapy. The lag largely reflected different fundamental assumptions of those who endorsed psychodynamic and some humanistic therapies, compared to therapies based on principles of learning and behavior. For example, a common view among psychodynamically oriented researchers and practitioners was (and is) that the treatment could not be "manualized" because it essentially requires artful and ongoing responsiveness of the therapist to shifts in the patient. When the aforementioned emphasis on time-limited forms of therapy occurred, it began to seem more possible to advocates of non-behavioral therapies to extract the theoretically essential change-promoting principles and techniques from their therapies, and codify them into manuals for the conduct of time-limited versions of the therapies.

As alluded to earlier in this article, ironically, one of the most important scientific advances for psychotherapy research—*therapy manuals*—became one of its most ferociously criticized accomplishments by practitioners in the 1990s. The reaction is only one example of a well-chronicled, perpetual gulf between research and practice. Historically, a central problem was that practitioners ignored therapy research and described its findings as irrelevant to or otherwise unhelpful for their work. More recently, practitioners do not feel as free to ignore findings. External pressures exist (e.g., from managed care payers) to make their care conform with findings by being able to provide manualized treatments found to be efficacious in treatment studies. The gulf is, of course, especially fascinating given that therapy research was fostered largely by the scientist–practitioner (Boulder) model of training in clinical psychology.

E. What Does It Mean to Say a "Psychotherapy Works"?

Two of many basic, yet conceptually and methodologically difficult questions that therapy researchers encountered early on were: "What effects (outcomes) should be measured to evaluate the usefulness of a psychotherapy?," and "How can the effects of interest be measured reliably (with precision) and validly (correctly)?" As investigators formulated answers to the first question, and both used and contributed to developments in psychometric methods to answer the second one, their findings revealed considerable additional

complexity. Some of the complexity will become evident in topics that are discussed next. Many, if not most, of the relevant issues continue to be debated: "How frequently should effects of interest be measured in a therapy outcome study?"; "What is the impact on the validity of outcome data of repeated measurement?"

1. The "Perspective" Problem

By the early 1970s, findings unequivocally indicated that the answer to the outcome question often depended on whom was asked. The patient's assessment typically differed from the therapist's perspective on the same effect (e.g., degree of improvement in self-esteem). For example, it was not unusual to find very low coefficients of correlation—0.10—between patients' and therapists' ratings of patients' status on the same outcome variable. (A correlation of 0.80 or larger typically is regarded as high. Squaring a correlation coefficient indicates how much overlap, or "shared variance" scores on two measures have—0.80 × 0.80 = 64%.) Moreover, both perspectives could differ from the judgment of a clinically experienced, independent assessor. (Independent assessors' ratings came to be included in outcome studies for several reasons such as to obtain a judgment from someone who was not invested in either the benefit experienced by individual patients or the study results). In the rare instances when family members or others who knew a patient well were asked to evaluate outcomes, this "significant other" perspective did not necessarily agree with any of the other three.

In 1977, Hans Strupp and Suzanne Hadley presented a conceptual "tripartite model" of mental health and therapy outcomes. The model helped to resolve the problem of ambiguous outcome findings posed by low agreement between perspectives. It identified three parties who have a vested interest in a person's mental health ("stakeholders" in current parlance): the individual, mental health professionals, and society. The model included the idea that no one perspective was inherently more valid than another, although each perspective differentially valued aspects of an individual's functioning and experience. For example, the individual can be expected to be most interested in subjective experiences of well-being and contentment. Society is likely to be most interested in the adaptive qualities of a person's behavior. Another research-relevant idea of the tripartite model was that multiple perspectives should be obtained on the primary outcomes measured in an outcome study. The standard continues to this day.

The perspective problem was only one of many discoveries along the way that indicated the complexity of the focal phenomenon of interest in psychotherapy research. It also illustrates the challenges that the phenomenon poses for obtaining simple answers from even the most sophisticated applications of scientific methods to the study of psychotherapy.

2. Statistical Significance versus Clinical Significance of Effects

In a series of papers from the mid-1980s to 1991, Neil Jacobson and colleagues provided a solution to a basic limitation of what were then state-of-art psychotherapy research methods. Their contribution was a major conceptual and methodological milestone for psychotherapy outcome research. At the time, statistical significance typically was the sole criterion used to determine if study results indicated that a therapy worked or worked better than an alternative treatment. For example, if the difference between a therapy group's and a minimal treatment control group's posttreatment scores on an outcome measure was statistically significant favoring the therapy group, the therapy was concluded to be efficacious (assuming, of course, that the study design and methods had adequate internal validity to test the question).

An important problem was that the criterion of statistical significance could be met even if treated individuals remained notably impaired on the outcomes of interest. For example, a therapy group's average posttreatment scores could indicate that, although statistically significant improvement had occurred in symptoms of depression, most people's outcome scores were still not in the normal (non-depressed) range on the outcome measure. Thus, statistical significance did not give a full picture of the potential usefulness or effectiveness of a therapy. Jacobson and colleagues' milestone contribution was a set of logical and statistical procedures that provide information on how close to normal or to individuals with non-impaired scores on outcome measures those who receive a therapy are.

3. A Note on Data Analytic Techniques

The development of clinical significance methodology for evaluating outcomes illustrates the central role that data analytic techniques and statistics play in the kinds of conclusions that are possible from therapy research. As noted previously, the topic is excluded from this article. However, many developments in data analysis have been stimulated by or appropriated for psychotherapy research and are properly regarded as milestones for the field because they have had a profound impact on the kinds of questions that can be asked and answered. For example, effect sizes—as described by Jacob Cohen in 1970 and as used in the

aforementioned technique of meta-analysis—came to be preferred over statistical significance indices for comparing the outcomes of treatment and control conditions. An effect size is a statistic that can indicate the magnitude of differences between two alternative treatments or a treatment and a control condition. Random effects regression and hierarchical linear modeling are other examples of techniques that were not available to therapy research during its coalescence phase that subsequently extended how outcome and other questions can be examined and answered.

4. Stability and Longevity of Effects

Obtaining data from outcome studies on the question, "How long do the desired benefits of a psychotherapy last?," was recognized as important early in the development of psychotherapy research. For example, Victor Raimy's 1952 chapter in the *Annual Review of Psychology* noted both the importance and absence of posttreatment follow-up data on the outcomes of psychotherapies. By about the mid-1960s, the collection of follow-up data was regarded as a crucial component of therapy outcome studies.

The need to know how long a therapy's effects last to fully evaluate its utility is another fundamental question that has proven to be an intransigent one. Over time, as more and more alternative treatments for the same problem have become available (e.g., various forms of psychotherapy and various medications for depression), data on the stability of effects of treatments have become particularly important because they bear directly on the relative desirability of the alternatives. Yet, it seems accurate to say that as of 2001 it is impossible to derive conclusive, no caveats, answers to stability of effects questions using currently available research methods.

A major problem is the phenomenon of attrition (loss) of study subjects during follow-up periods. Posttreatment follow-up periods typically range from 3 months to 2 years. Some portion of treated individuals inevitably become unable to be located or unwilling to continue to provide data. The longer the follow-up period, the larger the attrition problem typically becomes. The lack of complete follow-up data from all individuals treated in a study raises the possibility that the data obtained are biased in some way, that is, do not reflect the follow-up outcomes of the entire original sample (also called the "intent-to-treat" sample). For example, perhaps those who experienced more positive outcomes are more likely to agree to provide follow-up data. One obvious solution is to offer study participants large financial incentives to provide follow-up data. However, such a procedure raises the ethical concern of coercion of participants and typically is frowned upon by human subjects research review committees.

All the limitations associated with collecting unequivocally interpretable stability of effects data notwithstanding, interesting evidence exists for a variety of problems. For example, a recently completed multisite comparative outcome study of cognitive-behavioral therapy, medication, and their combination for panic disorder by David Barlow and colleagues suggested that the treatments that included medication (medication alone or combined medication and therapy) were associated with less stable benefits after treatments were discontinued than were treatments that did not include medication (i.e., therapy alone or therapy plus pill placebo).

F. How Does Psychotherapy Work: Mechanisms of Action

The question of how psychotherapy works often is stated in the contemporary therapy research literature as a "mechanisms of action" question: "What are the primary mechanisms and processes by which psychotherapeutic treatments potentiate desired changes (outcomes)?" Using no jargon, William Stiles and David Shapiro stated the essential question this way in 1994: "How do the conversations between therapists and clients (psychotherapy process) reduce psychological suffering and promote productive, satisfying ways of living (psychotherapy outcome)?" Many therapy researchers have devoted substantial parts of their careers to this and related questions.

Mechanisms of action questions have been examined since at least the 1940s when Carl Rogers and associates began doing methodologically groundbreaking research on them. Such questions have been studied from widely divergent vantage points—a range that has been characterized as "elephant to amoeba." For example, at a macro level, studies are done to identify therapeutic processes that might operate in all forms of psychotherapy (i.e., "nonspecific" or "common" factors) and that, thus, characterize psychotherapy as a treatment modality. At a more intermediate level, mechanisms of action are tested that are posited by the theory of a specific type of psychotherapy ("specific" factors) such as Beckian cognitive therapy for depression. At a micro level, "therapeutic change events" are examined—patterned sequential shifts in a patient's focus of attention and affect states in a therapy session—that might constitute universal psychological change processes that can be prompted by specifiable therapist interventions.

The importance of mechanisms of action research cannot be overemphasized. Without knowing the

causally dominant processes by which a form of psychotherapy can prompt desired changes, therapists cannot structure their interventions to achieve a therapy's potential effects as quickly and as completely as is possible. Therapists can identify very specific goals for a patient's progress and improvement. Yet, without knowing a therapy's active mechanisms, they cannot rationally guide their interventions in the most effective and efficient ways to help a patient attain identified goals. Without mechanisms of action knowledge, therapists' moment-to-moment choices between alternative interventions must be based mainly on their knowledge of the theory that underlies a form of therapy, more general theories of how therapeutic change can be facilitated, or on their reflexive sense of what to do (or not do) next. Even the most well developed theories are not detailed enough to guide all the momentary decisions that therapists must make. Moreover, theories remain just that until posited mechanisms of action are tested and supported by empirical findings.

1. Process and Process-Outcome Research

The importance of conducting research on mechanisms of action questions has been matched so far by the difficulty of answering them. Pursuing such questions required therapy researchers to develop new methods, a task on which great strides have been made. The relevant methods collectively are referred to as process research methods. The development and refinement of process methods was a key advance for the field of therapy research during the last 50 years. Several colleagues and students of Carl Rogers at the University of Wisconsin in the 1960s such as Donald Kiesler, Marjorie Klein, and Philippa Mathieu-Coughlan made major early contributions to the needed methodological infrastructure.

The traditional type of process methods are observational. The researcher(s) or trained raters are the observers. Observational process methods involve systematic examination of actual therapy session material (i.e., the "process" of therapy), such as videotapes and/or transcripts of therapy sessions. Process methods extend to the collection of other types of data on therapy sessions such as patient and therapist self-report questionnaires completed immediately after sessions. The term "systematic examination" is a deceptively simple one that masks much complexity when used to describe process research methods. For example, it refers to detailed procedures for selecting (sampling) therapy session material to examine in order to answer a particular research question. It also refers to the development of psychometrically sound instruments that are needed to observe and quantify therapy process variables of theoretical or pragmatic interest (e.g., the therapeutic alliance). Process outcome research is a subset of process research that specifically involves combining therapy process data and outcome data from the same patients with the aim of identifying the aspects of therapies that can be either helpful or harmful.

Donald Kiesler authored a classic, still relevant text on observational process research, *The Process of Psychotherapy: Empirical Foundations and Systems of Analysis*. The book was the first attempt to compile and systematically review process methods, methodological issues, and "systems" (instruments and related instructions for their use) that had been developed. Seventeen major therapy process research systems of the time are reviewed in detail. Only process methods used to study non-behavioral types of psychotherapy are included, an omission consistent with the aforementioned bifurcation of the field at the time into "behavior therapy" and "psychotherapy" research. In 1986, Leslie Greenberg and William Pinsof edited a similar volume that included many of the then, major process research systems. A succinct contemporary summary of process research methods and issues can be found in Clara Hill and Michael Lambert's chapter in the most recent edition (5th edition) of the *Handbook of Psychotherapy and Behavior Change*.

2. Process-Outcome Research: Problems with the Paradigm

David Orlinsky and colleagues described process-outcome research in their 1994 review of existing studies this way: "Process-outcome studies aim to identify the parts of what therapy is that, singly or in combination, bring about what therapy does." An enormous amount of effort has been devoted to investigations of this type. Even after using specific definitions to delimit process-outcome studies, Orlinsky recently estimated that about 850 were published between 1950–2001. However, the yield from them, in terms of identifying mechanisms of action, was judged to be disappointing by many therapy researchers as of the late 1980s. Newer studies have not modified the overall disappointment of researchers' and practitioners' wish to know precisely (a) what the active agents of change are, and (b) how they can be reliably initiated and supported by a psychotherapist's actions. Yet, useful knowledge has been obtained from process outcome research.

Cardinal advances to date include the identification of overly simplistic conceptualizations that drove much process outcome research, that is, hypotheses about

how therapeutic interventions might causally potentiate desired outcomes. For example, advances include: (a) elucidation of limiting assumptions that underlie the correlational design, a traditional one in process outcome research; (b) enhanced recognition that a network of contributing variables must be taken into account in this type of research; and (c) proposals for alternative, more complex strategies that incorporate (a) and (b).

a. Limiting Assumptions: The Drug Metaphor. Several limiting assumptions were highlighted for the field in a 1989 paper by Stiles and Shapiro with the attention-getting title: "Abuse of the Drug Metaphor in Psychotherapy Process-Outcome Research." The authors' general thesis was that "slow progress" in identifying the mechanisms of action of therapies was due to the ubiquity of a research paradigm in which therapeutic techniques were tacitly assumed to act like medications. So, for example, study designs reflected the assumption that therapeutic "ingredients" were dispensed by a therapist to a passive patient. Many studies also reflected the assumption that the relationship between a therapy's potentially helpful interventions and desired outcomes was linear and ascending—more is better.

The linear dose–response assumption guided many, if not most, of the mechanisms of action studies through the 1980s. That is, theoretically posited or other possible agents of change, measured with process methods in therapy session material, were correlated with outcome scores obtained at the end of a therapy. Such correlational designs are based on the assumption that a linear function accurately describes the relationship between two variables. For example, severity of depression scores (outcome variable) might be correlated with the frequency of therapist interventions in sessions that were intended to help the patient identify and change ways of thinking and behaving that (theoretically) were creating and maintaining symptoms of depression.

Most therapy researchers were at least dimly aware of the limitations of correlational designs for examining mechanisms of action hypotheses and of the other conceptual simplicities that Stiles and Shapiro elucidated. Yet, the research strategy continued to be used (overused) for a variety of reasons. As Stiles and Shapiro noted, the correlational design is not inherently flawed for use in process outcome research. Rather, it is highly unlikely to reveal all of the ways in which therapeutic interventions might robustly potentiate desired changes.

The drug metaphor analysis of process outcome research fostered widespread awareness of the need to formulate and test alternative hypotheses about relationships between outcomes and theoretically posited and other possible mechanisms of action of psychotherapies. It helped to solidify, disseminate, and encourage the implementation of "new ways to conceptualize and measure how the therapist influences the patient's therapeutic progress," in George Silberschatz's words.

b. Network of Contributing Variables: Moderators and Mediators. Pioneers in psychotherapy research were very much on target when they endorsed Gordon Paul's aforementioned formulation of the overarching question for psychotherapy research, that is, "*what* treatment, by *whom,* is most effective for *this* individual … and under *which* set of circumstances (original emphasis)?" Increasingly, therapy researchers have tried to identify "moderator" and "mediator" variables that might modify and determine the potential therapeutic outcomes of a psychotherapy. A paper by Reuben Baron and David Kenny that helped clarify therapy researchers' thinking on the issues appeared in 1986. In brief, moderators and mediators are "third variables" that can affect the relationship between independent variables (like a type of psychotherapy) and dependent variables (e.g., reduction in symptoms of depression). So, for example, a therapist technique that is specific to a form of therapy, as interpretation is to psychodynamic psychotherapy, is a therapy process variable that is hypothesized to be a primary mediator of the potential benefits of psychodynamic psychotherapy. Specifically, as defined by Baron and Kenny, a mediator is "the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest." A moderator is "a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relations between an independent or predictor variable and a dependent or criterion variable."

The impact of possible moderating and mediating variables on hypothetically important mechanisms of actions of therapies (which also are posited mediators of outcome) is increasingly being attended to in process outcome research.

G. How Does Psychotherapy Work?: Specific versus Non-Specific (Common) Mechanisms of Action

The specific versus non-specific question is an enduringly central one for psychotherapy process outcome research. The basic question is: "What is the contribution to therapy outcomes of the specific therapeutic techniques that characterize different forms of therapy, compared with other possibly therapeutic, but

common (non-specific) features that characterize psychotherapy as a treatment modality?" The potential causal contribution of common factors to therapy outcomes was convincingly argued 40 years ago by Jerome Frank.

In a classic book, *Persuasion and Healing: A Comparative Study of Psychotherapy,* Frank tried to account for the fact that existing psychotherapy outcome studies typically failed to show that markedly different types of psychotherapy had different outcomes. He specifically noted three types of null or "no-difference" findings. One was that "about two thirds of neurotic patients and 40 percent of schizophrenic patients are improved immediately after treatment, regardless of the type of psychotherapy they have received." Second, comparable improvement rates were found even when patients had "not received any treatment that was deliberately therapeutic." Third, follow-up studies, although very few at the time, did not demonstrate differences in long-term outcomes of diverse treatments.

The lack of evidence for any clearly superior form of therapy was, itself, perplexing. It was completely inconsistent with the expectations of many therapy researchers and nonresearcher, practicing mental health professionals alike. Different forms of therapy, such as Rogerian client-centered therapy and Freudian-derived psychodynamic therapy, were based on very different theories of the psychological processes that needed to be potentiated to achieve desired benefits. In addition, each theoretical orientation endorsed very different specific therapist techniques—techniques that were believed to potentiate the theoretically posited and theoretically required, psychological processes. In other words, a fundamental assumption was that the specific techniques of a type of therapy made a causal contribution to the outcomes that were sought. In addition, proponents of each orientation assumed that its underlying theory was more valid than the theories of alternative forms of therapy. Failure to find any one therapy that was superior to others was a stunning challenge to the preceding widely held assumptions.

Given that the results of therapy outcome research did not support the specific factors hypothesis (at least, not when using research methods and statistical analyses that were accepted at the time), Frank posited an alternate hypothesis. He suggested that similar improvement rates were due to psychologically influential elements that were common to all types of psychotherapy. Moreover, he posited that the common factors were those that operate in all human healing relationships and rituals, including religious healing. For example, he identified the arousal, or rearousal, of hope (e.g., the expectation of help) as one common factor. Frank did not, however, completely dismiss the role of specific factors. He hypothesized that improvement rates in outcome studies reflected changes due to common factors in many patients plus change due to specific factors in some patients who did, indeed, respond to the particular form of therapy that they received. So, Frank's common factors hypothesis included the idea that specific techniques of different forms of therapy could be helpful to certain individuals although they were not needed by all those who could benefit from psychotherapy.

By 1971, Frank had further developed his common factors hypothesis and identified six "therapeutic factors" that are present in all forms of psychotherapy. For example, one was giving the patient a rationale or "therapeutic myth" that included both an explanation for the cause of the distress and a way to remedy it. Frank posited that his or her therapeutic action of such rationales, whatever their specific content or validity, includes strengthening a patient's confidence in the therapist. This, in turn, can reduce a patient's distress by reducing anxiety, as well as make the patient more open to the therapist's "influence" (e.g., suggestions for needed changes in attitudes and behaviors, and possible ways to achieve such changes).

Currently, 40 years after Frank's common factors treatise, research designed to identify the contributions to therapy outcomes of specific therapeutic techniques compared to common factors still is of central importance to the development of maximally effective and efficient psychotherapies. In general, it continues to be true that much less evidence than expected exists for the contribution to outcomes of specific techniques endorsed by different forms of therapy. Many researchers have attempted to explain why the null findings persist, given that process research has repeatedly demonstrated that purportedly different forms of therapy (e.g., cognitive therapy for depression and interpersonal therapy for depression) are associated with observably different and theoretically consistent, specific therapist interventions. For example, Alan Kazdin summarized and evaluated the situation this way for the 1994 *Handbook of Psychotherapy and Behavior Change:*

> Comparative studies often show that two different forms of psychotherapy are similar in the outcomes they produce. … This finding raises important questions about whether common mechanisms underlie treatment. Yet methods of evaluation are critical to the conclusion. It is possible that the manner in which treatment is studied may lead to a no-differences finding. The vast majority of therapy studies, by virtue of

their design, may not be able to detect differences among alternative treatments even if differences exist.

It is of interest that a similar situation exists for medications commonly used to treat depression. Classes of medications that have demonstrably different effects at the level of brain neurochemistry, such as selective serotonin reuptake inhibitors and tricyclics, have not yet been found to be associated with notably different outcomes. (Side effect differences are documented, however.) The similar failure to find outcome differences in medication treatments that differ at another level of observation lends some credence to contentions that current, standard methods for evaluating therapy outcomes might not allow different effects of psychotherapies to be observed. It also could be that the current difficulty demonstrating outcome differences between therapies that are demonstrably different at the level of implementation (therapeutic techniques) is a repetition of the fact that it could not be convincingly demonstrated that psychotherapy was better than no psychotherapy until the effect size statistic was applied to the task.

H. Do Some Forms of Psychotherapy Work Better Than Others?

Questions about the comparative efficacy of different forms of therapy have been a central focus of therapy research. As already noted, to the continual amazement of advocates of various specific forms of therapy, an enduring finding when different forms of therapy are compared is that their effects are not demonstrably different.

Over the years, the creative language skills of many experts in psychotherapy research have been stimulated by the frequent failure to demonstrate differential efficacy of different forms of therapy. For example, in a widely-cited 1975 paper, Lester Luborsky and colleagues adopted the Dodo Bird's salubrious verdict from *Alice in Wonderland* that "all have won and all must have prizes" to describe the weight of the evidence. Almost 10 years later, in 1984, Morris Parloff similarly summarized the findings as "all psychotherapy works, and all psychotherapy works equally well." However, the title of Parloff's paper highlighted a less sanguine implication of the no difference results: "Psychotherapy Research and Its Incredible Credibility Crisis." Shortly thereafter in 1986, William Stiles and colleagues analyzed possible reasons for the "equivalence paradox," that is, the fact that comparative outcome studies repeatedly found no differences in outcomes, yet the therapeutic techniques used in the different treatment conditions had been demonstrated (via process research methods) to be different.

As of now, 2002, very detailed and comprehensive reviews of the comparative outcome study literature on different types of problems (e.g., anxiety disorders like obsessive–compulsive disorder and generalized anxiety disorder) and different patient groups (e.g., children, adolescents, and adults) suggest that it is not completely true that all therapies work and work equally well for every type of problem. For example, evidence exists that different specific forms of behavior therapy (such as exposure plus response prevention vs. progressive muscle relaxation) are differentially effective for obsessive–compulsive disorder. However, the general situation remains that less evidence for differential effects of specific forms of therapy exists than predicted by prevailing theories of psychotherapy and their posited mechanisms of action.

I. How Well Do Psychotherapies Work Compared to and Combined with Medications?

Increasingly, since about the early 1980s, psychotherapy researchers have collaborated with experts in psychopharmacology research to design and conduct comparative outcome studies of medications and psychotherapies. Comparative studies that include a combined medication plus psychotherapy condition also have become more frequent. A keen interest currently exists in comparative medication, psychotherapy, and combined medication and therapy outcome studies. The interest reflects the fact that medications have become more and more widely used in mental health treatment. Increased use can be traced to many forces including, of course, the aforementioned national emphasis on cost containment and cutting in mental health care.

In the early 1960s, Hans Strupp noted that chemical means were likely to be a challenge for psychotherapy. Indeed so. Within the past 3 years (since 1999), psychoactive medications (e.g., for depression) started to be advertised in television commercials in the United States. Viewers now are even encouraged to inform their doctors when new forms of existing drugs are available (e.g., an extended time release, once weekly, Prozac pill). As yet, no forms of psychotherapy are advertised in this way.

Conducting comparative psychotherapy and medication outcome studies heightened therapy researchers' awareness of some of the assumptions on which their standard research methods were based. For example, in therapy outcome studies the posttreatment outcome assessment traditionally is done after therapy sessions have been discontinued. The procedure is consistent

with both internal and external validity aims because of a general assumption about how psychotherapeutic interventions work. Historically, diverse forms of therapies all were expected to continue only for a time, to foster desired changes during that time, and then end when the patient had learned or otherwise "internalized" the ameliorative psychological processes that the therapy was intended to potentiate. When therapy researchers started to collaborate with psychopharmacology researchers, they observed alternative procedures for measuring outcome. For example, in medication studies, the convention was to obtain outcome assessments while patients still were taking the study medication. Differences in research methods made therapy researchers more aware of alternative methods and indicated the need for careful selection of methods that would yield "fair" and clinically-relevant findings from comparative studies of psychotherapies and medications.

Focal questions examined in comparative medication and therapy studies include rate of reduction in symptom severity, percentage of treated patients who reach a recovery criterion, stability and longevity of recovery, length of continuing treatment needed to retain response, and cost-effectiveness. Additional questions are associated with testing combined medication plus therapy treatments such as, "In what sequence should each intervention be administered to obtain the best outcomes?" An example of such a sequence is: Provide medication alone first for 2 months, then add in psychotherapy for 3 months, then discontinue medication while therapy continues for 3 months.

Fascinating, yet now completely unknown mechanisms-of-action questions about how medications and psychotherapies can interact are likely to be key to our ability to ultimately devise the most effective and efficient combined treatments. For example, do a particular medication and a psychotherapy interact in an additive way to affect certain problems so that the benefits of combined treatment are equal to the sum of the separate effects of each component? Alternatively, is the interaction "permissive" meaning that the presence of one component is needed to enable the other component to have its potential benefits? Alternatively, is the nature of the interaction inhibitory so that the presence of one component reduces the potential effects of the other component?

It is difficult to provide concise, general summaries of the findings from comparative studies of psychotherapies and medications, and their combination. Results exist for a variety of problems that differ markedly in symptoms and functional impairment (e.g., various anxiety disorders, types of mood disorders, schizophrenia). The findings are not the same across disorders. It is of interest, though, that for at least some disorders (major depressive episode, panic disorder) the common expectation that combined treatment would be more effective than single modality treatment (either medication or psychotherapy alone) generally has not been supported yet. For example, as mentioned previously, some evidence exists that combined treatment of panic disorder is associated with poorer stability of response after treatment is discontinued than cognitive-behavior therapy alone is. For major depression, the evidence now indicates that combined treatment is not generally more effective than monomodality treatment of either type except, perhaps, for individuals with more severe or chronic (e.g., ≥ 2 years) symptoms of unipolar depression.

J. Can Psychotherapy Be Harmful?

The importance of conducting research to determine the frequency and nature of negative effects of psychotherapeutic interventions has been recognized by various therapy researchers over the years, such as Allen Bergin in the early 1960s, and Daniel Mays and Cyril Franks in the early 1980s. In the mid-1970s, Strupp and colleagues received a contract, initiated and funded by the NIMH to examine the topic. Their conclusions were published in a 1977 book, *Psychotherapy for Better or Worse: The Problem of Negative Effects.* In 1983, Edna Foa and Paul Emmelkamp edited a book focused on unsatisfactory outcomes, not negative effects per se, *Failures in Behavior Therapy.* The book illustrates the effort to improve the effectiveness of existing therapies by studying cases in which their effects are disappointing. The value of studying poor outcomes was noted in 1954 by Carl Rogers in a book that reported on the first 5 years of the therapy research program at the University of Chicago Counseling Center, *Psychotherapy and Personality Change:* "The field of psychotherapy cannot come of age until it understands its failures as well as it understands its successes."

Research on deterioration, negative effects, and failures associated with psychotherapeutic interventions has not been prolific, but many questions have been examined. For example, the possible contribution of therapist personality features to poor outcomes has been studied as has the interaction of treatment approach (e.g., supportive vs. more "confrontational") with patient characteristics.

A review of research on the important topic of negative effects is included in Michael Lambert and Allen Bergin's chapter in the 1994 *Handbook of Psychotherapy and Behavior Change.*The review does not include

relevant findings and methods that now are emerging from patient-focused research strategies. Such information can be found in Lambert and Ogles' chapter, "The Efficacy and Effectiveness of Psychotherapy" in the fifth edition of the *Handbook of Psychotherpy and Behavior Change*.

IV. CONCLUDING COMMENTS

Much ground has been covered in this article. Even so, some milestones in psychotherapy research have not been discussed, such as research on the therapeutic alliance (a subject that is covered in a separate article in this volume). Important topics have been skipped (e.g., research on training in psychotherapy) or referred to only in passing (e.g., the gulf between therapy research findings and clinicians' satisfaction with their utility for practice). Moreover, the Key Questions section doubtless has left the impression that some crucial and basic discoveries are yet to be made. For example, much more remains to be learned than is known about the major causal agents of change in existing therapies, and the relevant moderating variables.

Bountiful evidence has been provided that conducting informative, reasonably conclusive research on psychotherapy is difficult. Sol Garfield, one of the field's major contributors and astute critics, is among those who observed that a core problem is that clinical research is very unlike controlled laboratory experiments. The central variables in therapy research (e.g., patients, therapists, extratherapy events, outcomes) have proven to be particularly intransigent both to evaluation and to the kind of experimental controls needed to obtain unambiguous findings. Given the challenges, many of which were revealed as researchers tried to answer the field's fundamental questions, Michael Lambert and Allen Bergin's appraisal of progress as of 1992, seems apt: "Psychotherapy research has been exemplary in facing nearly insurmountable methodological problems and finding ways of making the subjective more objective."

Given the difficulties of the endeavor, one might ask, "Why do psychotherapy research?" The field's first 60 to 80 years has revealed that the work can be painstaking and can yield results that, although very informative and important, are surprising and disappointing—sometimes especially to those who worked to find them. But what are the implications for clinical practice and for the patients who are served by it if therapy research is not pursued? Lee Sechrest, in an electronic mail message to the Society for the Study of Clinical Psychology in 2000, observed: "reliance on authority (teachers, supervisors, trainers) or on one's experience does not allow you to know whether you are right or wrong." In the same message, Sechrest credited C. P. Snow for saying: "Science cannot guarantee that you will be right forever, but it can guarantee that you won't be wrong forever." For those who are dedicated to the responsible and ethical provision of mental health treatments, Paul Meehl's observation in 1955 (*Ann. Rev. Psych.* 6) exemplifies a compelling justification for psychotherapy research:

> The history of the healing arts furnishes ample grounds for skepticism as to our nonsystematic "clinical" observations. Most of my older relatives had all their teeth extracted because it was 'known' in the 1920's that the clearing up of occult focal infections improved arthritis and other disorders … Like all therapists, I personally experience an utter inability not to believe I effect results in individual cases; but as a psychologist I know it is foolish to take this conviction at face value.

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See Also the Following Articles

Cost Effectiveness ■ Effectiveness of Psychotherapy ■ Efficacy ■ History of Psychotherapy ■ Outcome Measures

Further Reading

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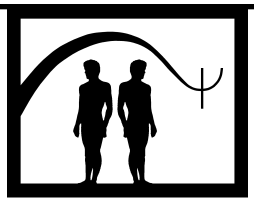

Resistance

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GLOSSARY

character A person's enduring patterns of thinking, feeling, and acting, as well as habitual ways of resolving inner conflict.

compromise formation The mind's attempt to resolve conflict between various aspects of a person's inner world and external reality by reorganizing the various aspects of the inner world so that competing interests are all given expression. For example, a fantasy may represent a compromise formation in that it expresses a wish, as well as defenses against the wish and ways a person imagines being punished for the wish.

defense A general term used to describe the mind's, usually unconscious, attempts to protect itself from felt dangers, such as loss of love or of the loved one, loss of physical integrity, or a harsh conscience and all the attendant uncomfortable feelings.

drive (instinctual drive) A strong endogenous motivational force, especially of a sexual or aggressive nature, that motivates behavior toward a particular end.

interpretation The analyst puts into words his or her understanding of what the patient has been expressing, perhaps even without knowing it, to add new knowledge about a patient's mental life.

object relations The particular, individual patterns of relating to others that are characteristic of a person.

repression The exclusion of painful ideas, impulses, and feelings from conscious awareness.

transference The largely unconscious process of shifting feelings, thoughts, and wishes originally experienced with significant figures in childhood onto current figures in one's life.

unconscious Mental content that one is not aware of at any given time, though one may get glimpses of it through dreams, slips of the tongue, and disconnected thoughts.

Resistance is a term used to describe the various ways patients in psychotherapy oppose the process of change. This article briefly traces the development of this concept in Freud's thinking and then presents contemporary psychoanalytic views of resistance. In addition, psychoanalytic views will be contrasted with a behavioral perspective. Finally, clinical examples illustrate how a psychoanalytically oriented psychotherapist might understand and treat resistance in a treatment situation.

I. DEFINITION

Perhaps the clearest and most direct definition of resistance was Freud's deceptively simple statement in 1900, in his landmark work, *The Interpretation of*

Dreams: "Whatever disturbs the progress of the work is a resistance." His discovery of the phenomenon, his attempts to understand it, and his work with it led him to some of his most important technical and theoretical discoveries in psychoanalysis. The concept of resistance still stands today as a cornerstone of psychoanalytic theory and practice; however, precise definition of the term remains elusive. In fact, any comprehensive definition of resistance includes almost all the key analytic concepts: drive, defense, compromise formation, character, and transference.

II. FREUD ON RESISTANCE

Early in his psychotherapeutic career Freud worked with Joseph Breuer treating women with hysterical symptoms. In their jointly published book, *Studies on Hysteria,* Freud describes his work with Fraulein "Elisabeth von R.," his first reported full-length analysis of hysteria and his first case report of resistance. By this time Freud had seen the limitations of using hypnosis and the power of suggestion to help his patients give up their hysterical symptoms, and he had already turned to encouraging his patients to talk freely as a method of cure. As Freud worked with Elisabeth, she would fall silent and refuse to speak. When Freud asked her what was on her mind she replied, "Nothing." Freud surmised that her not talking was a way of resisting treatment. Undiscouraged, Freud was able to make virtue out of a defect. He realized that resistance was not an obstacle to be overcome, but a way in and of itself to reach the repressed and overcome neurosis.

Freud learned through clinical experience how tenacious and persistent resistance could be even in patients truly interested in symptom relief and in the process of therapy. Anything could be used as a resistance to treatment: falling silent, forgetting, intellectual discussions about theory and treatment, coming late, seeing the therapist as the enemy. Equally suitable for resistance was coming on time, finding everything the therapist says helpful and brilliant, talking without hesitation.

At first blush, resisting treatment seems irrational. Why would someone who is suffering and coming for help in relieving that suffering resist efforts to get better? The attempt to answer this question led Freud to the discovery of key aspects of his theory and therapy. Freud posited that people fall ill due to the repression of painful memories or wishes, that is by pushing painful experiences out of conscious awareness. They get better by remembering those painful experiences. However, to readmit those warded-off mental contents into consciousness is inherently marked by conflict. It entails undoing or giving up the mental structures that have been created to achieve some form of adaptation, however costly and unsuccessful. The patient, understandably, resists recognition of painful experiences, and, in essence, mounts the same efforts that brought about the repression of the pain in the first place.

When Freud attempted to overcome this resistance through suggestion and authority, he was met with increased resistance. This led him to recognize the importance of interpreting the resistance rather than directly interpreting the warded-off aspects of the patient's experience. Resistance to treatment begins to seem more understandable in light of the patient's fear (perhaps even unconscious) that the "cure" may be worse than the "disease." Competing wishes are doing battle within the patient: the wish to leave well enough alone and the desire to ally with the therapist to be able to "remember" in the hopes of eventual relief of suffering. Ultimately the patient must ally with the therapist well enough to develop a partnership in exploration, and first and foremost exploration of his resistances.

In one of Freud's technical papers "Dynamics of Transference," he elaborates: "Resistance accompanies the treatment at every step; every single association, every act of the patient's must reckon with this resistance, represents a compromise between the forces aiming at cure and those opposing it." In fact, Freud defined psychoanalysis in terms of resistance. In a later work he wrote,

> It may thus be said that the theory of psychoanalysis is an attempt to account for two striking facts of observation which emerge whenever an attempt is made to trace the symptoms of a neurotic back to their sources in his past life: the facts of transference and resistance. Any line of investigation which recognizes these two facts and takes them up as the starting point of its work has a right to call itself psychoanalysis, even though it arrives at results other than my own.

Freud's first attempt to inventory resistances was in his previously cited book, *Studies on Hysteria.* Here he recognized that some resistances are manifest and some are hidden which led him to recognize the unconscious aspects of resistance and ultimately to see that his current model of the mind (topographic theory of conscious and preconscious) was not sufficient to account for the clinical phenomena he observed. Consequently he developed the structural theory of id, ego, and superego. Reflecting the further development of his ideas

Freud was still expanding his inventory of resistances 25 years later in "Inhibitions, Symptoms and Anxiety" in which he outlined three types of resistances: ego resistances—repression, transference resistance, and secondary gain from illness; superego resistances—unconscious guilt and need for punishment; id resistances—such as the repetition compulsion.

As Freud developed his theories of psychoanalytic technique he continued to emphasize the central role of interpreting resistance, along with the transference (i.e., relating to the therapist as if he or she were an important figure from the patient's past). In fact, he viewed transference itself as, in part, a resistance in that the patient was enacting a prior relationship rather than remembering and verbalizing it. Freud came to see that transference and resistance both impede and facilitate cure. The desire to remember is opposed by the desire to forget. According to Freud, analytic technique must first and foremost address itself to overcoming resistance.

III. CONTEMPORARY PSYCHOANALYTIC VIEWS

Psychoanalytic thinking, including the theory of resistance, has developed along several paths since Freud laid down his original ideas. Psychoanalytic thinkers since Freud have been trying to sort out his somewhat diverse legacy concerning resistance. At times Freud seemed to consider resistance as something to be overcome and at other times as psychical acts that could be understood. That same duality persists today in those who endorse techniques designed to overcome or bypass resistance and make the unconscious conscious, and those who would seek to recognize and clarify resistance at work and to try to analyze the perceived threat to the patient's functioning posed by trying to overcome the resistance. Adherents to the work of Melanie Klein in Great Britain (Kleinians) have been responsible for the development of the former view, while ego psychologists in North America (contemporary Freudians) have been developing the latter view. In addition, another school of thought has developed inspired originally by the works of Hans Kohut (self psychology, interpersonal or relational psychology) that has taken psychoanalytic theory and technique in quite a different direction. Although the ego psychological perspective has been the dominant view in North America, the influence of the Kleinians and the self psychologists is increasingly felt and is working its way into the mainstream of analytic thinking.

A. Ego Psychology

The central role of resistance in theory and technique has been best preserved in analysts schooled in an ego psychological approach (contemporary Freudians). Resistance, along with its successful interpretation by the analyst, is held as the essential unit of clinical psychoanalysis. A patient resists not just remembering but also resists understanding the nature of the felt dangers that caused the original repression. The patient is seen as struggling with internal conflicts not with the therapist. Resistance is a ubiquitous, recurring, ever-present aspect of the psychotherapeutic work. Successful therapy does not bring about removal of resistances but an understanding of them so that a new set of resistances can emerge and be explored. Successful psychoanalysis is the successful negotiation of one resistance after another. Problems occur when the patient becomes stuck in one particular resistance and cannot move on to other ones.

Contemporary Freudian efforts to develop Freud's ideas on resistance have focused on the defensive aspects of resistance. In this vein contemporary analytic thinkers view resistance as whatever gets in the way of a patient being able to recognize what comes to mind, as well as how and why it comes to mind. Paul Gray and his followers have led the field in contemporary efforts to develop Freud's ideas on resistance. Gray is particularly interested in the defensive aspects of resistance. He argues that traditionally analysts work to get past the resistance to get at what the patient is experiencing but not why the experience is so painful that the patient resists knowing it. Gray and his adherents argue for an approach that takes into account the importance of understanding why something is resisted as well as what it is that is being resisted. In Gray's view, it is not just that an experience is painful that it is avoided but that it threatens the patient with feeling overwhelmed and losing the capacity to function adequately.

B. The Kleinian School

In this school the emphasis has been on penetrating interpretations aimed at reaching the deepest levels of a person's unconscious experience. Trying to locate and articulate unconscious fantasies takes precedence over interpreting resistance. Resistances are seen in terms of object relationships rather than as impersonal mechanisms of the mind. That is to say they occur in the context of the relationship between the analyst and patient or between figures in the person's internal world.

C. Self Psychology, Interpersonal or Relational Psychology

In this framework resistances are not viewed as ways the patient is avoiding communicating or knowing something about the self, but as yet another way the patient has of communicating something important about the self to the analyst. What another analyst might see as resistance, a relational analyst would view as a communication from the patient to the analyst about something the patient wants the analyst to know and to hold in the analyst's mind because the patient cannot yet tolerate knowing it consciously. It is then the analyst's job to "contain" the communication and eventually to put this "unspeakable, unknowable" mental content into words.

In sum, a contemporary analyst might hear Freud's patient, Elisabeth's response of "Nothing" when asked what was on her mind as an attempt to keep painful experience out of mind and hence avoid feeling overwhelmed (ego psychology); as an unconscious repetition of an internal object relationship (Kleinian); or as an attempt to communicate something about herself to the analyst (self psychology/interpersonal psychology).

IV. BEHAVIORAL THERAPY PERSPECTIVES

Behavior therapy, of course, is a multifaceted approach about which generalizations should be made cautiously. So it would be misleading to state that there is a particular perspective or approach to the idea of resistance emanating from behavior therapists. Nevertheless, certain similarities and differences can be noted. For one, although behavior therapists and psychodynamic psychotherapists both believe that human behavior is more or less lawful and ultimately understandable, the laws that are in question are fundamentally different between the two approaches. Behavior therapy is based on the idea of the preeminence of the environment in controlling and shaping actions whereas the psychodynamic psychotherapist is concerned with the internal environment of the individual actor and the role of unconscious mental processes in governing behavior. Naturally then, when faced with the inevitable difficulty of the patient in complying with the prescribed treatment, adherents to the two approaches will see different (from one another) forces at work. Behavior therapists will look to the environment as the source of the problems while the psychoanalytically oriented therapist will see the key environment driving the patient as being located within the patient.

The definitions of resistance of the two perspectives are also different. For behavior therapists resistance is antitherapeutic behavior. For the psychodynamic psychotherapist resistance is the force working against making conscious unconscious processes in the context of the patient's effort to make changes in action, thinking, and feeling. In both perspectives, the patient acts in a way to keep the therapy from having a full effect. Behavior therapists tend to see resistance as something that has to be changed or eliminated. Psychoanalytic therapists see resistance as an essential element of the change process. For the behavior therapist, resistance is usually conceptualized as the therapist's failure to perceive accurately and fully the lawful rules by which the environment is influencing the behavior of the patient. The behaviorists think of resistance as just another part of the patients' world that has to be taken care of in the delivery of the therapy. For the behaviorist, it is not a central or core concept.

V. CLINICAL EXAMPLES

Though psychotherapists today may not be familiar with the history of Freud's thinking about resistance they are intimately familiar with the same clinical phenomena that led Freud to his theoretical and technical innovations. Day by day, hour by hour, psychotherapists confront powerful resistance on the part of even the most motivated patients.

Ms. A., usually very responsible in her time management, found herself over the course of a number of weeks arriving later and later for her psychotherapy appointment. At times she was as much as 15 or 20 min late and would berate herself for wasting valuable time. "How will I ever get better if I can't even get here on time to talk about my problems?" she asked. Her therapist suggested that perhaps she had mixed feelings about her therapy, wanting to be here to get better, but perhaps she was also aware of something that felt uncomfortable about being here. Several weeks later Ms. A. arrived only a few minutes late and saw the previous patient leaving her therapist's office. She felt a wave of jealous, competitive feelings come over her that she immediately wanted to disavow. Instead she decided, reluctantly, to talk to her therapist about her feelings of jealousy and dislike for the woman who saw him in the hour before her. As they talked about this the therapist suggested that these jealous feelings that clearly disturbed her might be playing a part in her recent pattern of coming late to her sessions. Immediately she saw that she had unwittingly avoided these feelings by coming

so late she would never run into any "rivals" leaving her therapist's office. This understanding of her resistance led her to talk more about the role of jealous and competitive feelings in her life and also led her to resume coming to her therapy hour on time.

Mr. B. came to treatment feeling desperately unhappy about almost every aspect of his life. He had few friends, was not able to sustain romantic relationships, and felt stymied in trying to choose among various career paths open to him. Mr. B.'s therapist noticed that no matter what kind of comment she made to Mr. B., Mr. B. rejected it. For example, Mr. B. was talking about being in a social situation the previous evening and described becoming extremely anxious as he began to talk to a particular woman he found attractive. His therapist, thinking she was empathically reflecting what he had already said, responded that Mr. B. seems to become anxious around women he finds attractive. Mr. B. immediately responded, "Well, not exactly. I mean maybe but not always." After repeated efforts to try to talk with Mr. B. about his feelings and dilemmas the therapist realized that the work would go nowhere until the resistance was explored. The therapist pointed out to Mr. B. that every time she attempted to say something, even if it was something the patient has just described, the patient would reject it. The therapist interpreted that the patient seemed to be having trouble taking in anything from the therapist. Over time with the therapist's help the patient was able to observe this response over and over again in their conversations, and he began to be curious about it. He came to understand more about his attempts to shut out the therapist in this way and about the ways this related to his experiences with his intrusive mother as well as with others in his present life.

In these examples we can see that resistance is not just an obstacle to be overcome but the expression of essential aspects of the patient's characteristic ways of relating to themselves and others, the exploration of which can lead to significant therapeutic gains, as well as open doors to further areas of conflict and to transference manifestations.

VI. SUMMARY

All psychotherapists are faced with the many ways patients seek and resist help in the same endeavor. How that resistance is defined, understood, and worked with varies widely between schools of therapy, as well as within a particular school of thought. There is no single voice in psychoanalysis or in behavioral therapy, yet meaningful distinctions between the two schools of thought exist.

Practitioners of behavior therapy and psychoanalysis treat the clinical phenomenon of patients' opposition to the effects of the treatment in very different ways. Adherents of both perspectives recognize the clinical phenomenon and its salience for the effectiveness of the treatment. In the case of the psychoanalytic perspective, resistance is seen as an essential, indeed necessary element of the treatment process. It is inevitable, and there are technical, specific strategies and clinical rules and theoretical formulations designed to address this phenomenon. Of course, this conceptualization depends on the existence of an unconscious mental process that can both enhance as well as oppose conscious motivations and intentions at the same time.

Behavior therapy practitioners, on the other hand, tend to conceptualize the patient's inability to follow the treatment program as a lack or defect on the part of the therapist in not accurately understanding and formulating the contingencies in the patient's life. Behavior therapy provides no such motivational construct of patient-originated resistance to the treatment. Rather, behavior therapists locate the problem as existing in a faulty understanding of and/or application of treatment on the part of the therapist. Indeed, behavior therapists make room for the prospect that it would be impossible for all therapists at all times to understand all patients. The responsibility, however, for the treatment progress or lack thereof rests clearly on the shoulders of the therapist.

The different ways of conceptualizing the phenomenon of patient-originated opposition goes to the core of the differences between behavior therapy and psychoanalysis. Psychoanalysis postulates underlying and unwitting motivational complexes that can be in conflict with one another, and behavior therapy locates these conflicts entirely in the contingency environment of the patient.

See Also the Following Articles

Countertransference ■ Engagement ■ Interpretation ■ Object-Relations Psychotherapy ■ Termination ■ Transference ■ Unconscious, The ■ Working Alliance

Further Reading

Boesky, Dale. (1990). The psychoanalytic process and its components. *Psychoanalytic Quarterly, 59,* 550–584.

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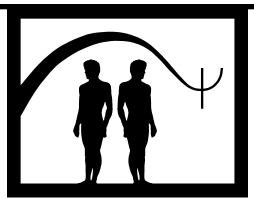

Response-Contingent Water Misting

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GLOSSARY

AB design A case study design in which the behavior of interest is first measured in the absence of treatment (during Condition A). Treatment is then applied (during Condition B). Changes of the behavior in Condition B cannot be attributed to the change from Condition A to Condition B.

ABAB withdrawal design A single subject research design in which A = baseline (no treatment) conditions; B = treatment conditions in which, after the occurrence of baseline (no treatment) treatment is presented for a number of sessions and then is withdrawn, and then is re-presented. The intent is to establish the effect of treatment.

aggression Behavior directed toward another individual that either produces or intends to produce physical or emotional damage.

alternating treatment design A research design in which several treatments are presented in succession in random order within sessions.

aromatic ammonia The use of ammonia as a punisher by holding it under an individual's nose contingent upon the emission of undesirable behavior (often pica).

BAB design Where B = treatment and A = no treatment; same as ABAB withdrawal design except that the study starts with the treatment condition immediately.

demand condition A diagnostic condition in which an individual is asked to perform a response the result of which is aggression by the individual against the asker with the intent that the aggression will make it less likely that the demanded response will be performed.

differential reinforcement of incompatible behavior (DRI) Reinforcement of a response (R_1) that is functionally incompatible with another response (R_2) with the intent of reducing in frequency that other response (R_2). The intent is that R_1 will occur frequently enough because it is being reinforced so there is limited opportunity for R_2 to occur.

differential reinforcement of other behavior (DRO) Reinforcement of the absence of a response (R_1) for a period of time with the intent of reducing it in frequency. At the end of the period of time whatever response (R_0) is occurring, as long as it is not the response that is supposed to be absent (R_1), is reinforced. As with DRI, the intent is that R_0 occurs frequently enough because it is being reinforced so there is limited opportunity for R_1 to occur.

facial screening A punishment technique in which the individual's face is briefly covered with a towel whenever an undesirable behavior occurs.

fading procedures Any of a number of procedures in which the known controlling stimuli of a discriminated response are gradually diminished in their apparentness such that their stimulus control passes to other stimuli that are more apparent in the current environment.

forced arm exercise Raising and lowering the arms of an individual in rapid succession as a punishment technique.

generalization of punishment The occurrence of the effects of punishment (i.e., the reduced frequency of the punished response) in an environment in which the response was not formally punished.

hand biting A self-injurious response in which the hand is inserted in the mouth and bitten, often with resulting tearing of the skin.

head banging/hitting Any response of an individual that brings the head into forceful contact with an object or body part.

lemon juice (therapy) Typically a squirt of lemon juice in the mouth contingent upon the emission of an undesirable behavior; often used with individuals who ingest nonedible substances in an attempt to punish such ingestion.

mental retardation Any endogenous or exogenous condition the result of which is an individual who has significant challenges in functioning independently in everyday life.

mouthing Putting an open mouth on objects or more typically on other body parts (e.g., skin) usually to the point where the other body part is damaged.

multiple baseline across settings The sequential treatment of a response in each of several settings; while being treated in one setting measurements of the frequency of the treated behavior occur in the other settings. If no change in frequency occurs in the other settings until and only if the behavior is treated in that setting, causal inferences about the treatment are typically thought to be strengthened.

pica The ingestion of inedible substances.

positive reinforcement Response-contingent presentation of a stimulus that has the effect of increasing the frequency (strength) of the response that it follows; both parts of this definition are necessary to the inference of positive reinforcement.

prepunishment baseline The frequency of occurrence of a response before punishment of the response.

programmed generalization The processes that produce the occurrence of a behavior therapeutic outcome in an environment in which it was not treated.

punisher A punishing stimulus, the presentation of which causes a decrease in the frequency of the response on which it is contingent.

punishment Either the presentation of a stimulus or the withdrawal of a stimulus, which has the effect of reducing the frequency of the response on which such presentation or withdrawal is contingent.

punishment procedure Either the response-contingent presentation or withdrawal of a stimulus, which has the effect of reducing the frequency of the response on which such presentation or withdrawal is contingent.

response Anything an organism (person) does or says that can be reliably observed and reported.

response-contingent faradic shock Electrical current delivered to an individual contingent upon the emission of a response, typically a self-injurious or aggressive response.

response-contingent water mist Water misting a person contingent upon that person's emission of a response, typically a self-injurious or self-stimulatory response.

restitutional overcorrection The overcorrection procedure in which the individual undergoing the procedure returns the environment to its former (presumably unspoiled) state, such as righting furniture that may have been thrown over during a tantrum. May also include a component in which the individual is required to improve on the unspoiled environment, such as polishing the furniture.

self-choke Any response of an individual that has the effect of cutting off the supply of oxygen to the brain.

self-injury Tissue damage caused by an individual's own behavior, such as head banging or head slapping.

self-injurious (behavior) responses Any response an organism emits that is either immediately tissue damaging or is tissue damaging in the long term.

self-stimulatory behavior (responses) Behavior that occurs in the absence of apparent, empirical reinforcement; typically assumed to be inherently reinforcing.

side effects Unprogrammed outcomes of behavioral procedures that may be positive or negative.

skin tearing Picking/pulling at loose pieces of skin.

stereotypic behaviors Peculiar responses that are emitted repetitively across long periods of time (e.g., mouthing), may be synonymous with self-stimulatory responses.

time-out (from positive reinforcement) Either the removal of a person from a reinforcing environment for a few minutes or the removal of the reinforcing environment from the person for the same few minutes contingent upon the emission of some undesirable response; a punishment technique.

water mist The spray from a water bottle.

water misting The act of spraying water mist at a person; typically a reaction to the occurrence of a self-injurious behavior by that person.

Response-contingent water misting has been used as a mild punisher to suppress self-injurious behavior (SIB) and/or self-stimulatory behavior in people with mental retardation. It is the subject of a little over a dozen clinical and research papers in the literature. Response-contingent water misting came to prominence as a function of the search by behavior analysts for mild punishers to use when reinforcement-based behavior reduction techniques had failed and stronger punishment techniques were inappropriate, as discussed by Bailey and colleagues in 1983. This article describes the use of the technique, its effectiveness, and drawbacks to its use. It also provides a chronological, annotated bibliography of the known literature.

I. EQUIPMENT

In its most prevalent use, water, at room temperature, is placed in a plastic spray bottle. Spray bottles used for

the purpose of water misting are those commercially obtained for household use. They are manufactured in a variety of sizes that hold up to 1 liter of water. Spray is emitted from the nozzle of the spray bottle when a hand pump/trigger that is part of the nozzle and the cap to the bottle is squeezed. Each squeeze of the pump dispenses about 0.5 cc. The nozzle is usually adjustable to produce gradations from a thin stream of water (like that from a squirt gun) to a fine mist. The mist usually describes a diffuse arc of water greater than 90 degress and travels no more than about 46 cm. Thus, those operating the water mist must hold the spray bottle within 30 cm of the subject of the water misting.

II. OPERATIONAL DEFINITION

Room temperature water mist is sprayed in the recipient's face from a distance of 30 cm contingent upon the emission of a defined response. As is the case with all punishment procedures, unless the procedure is being used for research purposes, water misting does not occur absent concurrent positive reinforcement for behavior incompatible with the water-misted response.

III. FUNCTIONAL OUTCOME

The desired outcome is complete cessation of the water-misted response. Such an outcome is rare. Rather, the technique most often produces good, but partial, suppression of the response. Thirty to 90% suppression of the contingent response roughly encompasses the range of suppression in the literature. Suppression of the contingent response appears to be enhanced by the concurrent positive reinforcement of behavior incompatible with the contingent response. Response-contingent water mist does not appear to produce permanent suppression of the contingent response, as there is often recovery when the procedure is withdrawn, as discussed by Bailey et al., in 1983, Dorsey et al. in 1980, and Osborne et al. in 1992. Recovery is often incomplete; that is, the rate of the punished response does not return to the prepunished baseline. One implication of the recovery finding is that the procedure must be used chronically to maintain suppression of the responses on which it is contingent. However, fading procedures, in which the spray bottle is kept near to hand but where its presence cannot be discriminated by the subject, are effective in producing generalization of suppression beyond the occasions and environments of therapy, (according to research by Jenson et al. in 1985 and Rojahn et al. in 1987. In these procedures, the bottle has been made smaller so that it can be easily concealed.

IV. SUBJECTS

Subjects in the clinical and research literature have been primarily individuals with severe to profound mental retardation, often with additional challenges such as impaired vision and hearing and limited mobility. Most subjects described in the literature had been exposed to many other procedures to reduce the self-injurious or self-stimulatory responses that are frequently the focus of their behavioral programs, in the absence of good effect. These procedures are often the differential reinforcement of other behavior (DRO) or the differential reinforcement of incompatible behavior (DRI) in which the attempt is made to strengthen behavior that—when it occurs—precludes the occurrence of the self-injurious or self-stimulatory behavior. The literature is silent on how effectively these other procedures were applied. As these other procedures usually are mentioned as the reason to proceed with water misting, their ineffectiveness is assumed.

V. SIDE EFFECTS

No negative side effects have been reported. However, as with any punishment procedure there is always a chance of aggression against the therapist, according to Rojahn et al. in 1987. It may be notable that many of the subjects of this procedure appeared to be less than capable of aggression against a therapist because they were nonambulatory and confined to wheelchairs as discussed by Dorsey et al. in 1980, or they had visual impairments according to Dorsey et al. in 1980, Fehr & Beckwith in 1989 and Osborne et al. in 1992. Positive side effects appear to include enhanced effectiveness of concurrent positive reinforcement, as described by Fehr and Beckwith in 1989, and increased social interaction, as discussed by Singh et al. in 1986, which are common to other punishment procedures as well, according to Risley in 1968.

VI. OBSERVATIONS AND OPINIONS

Water misting was initially used for several reasons, as discussed by Dorsey et al. in 1980. First, it was easier to administer than other punishment procedures such as faradic shock or restitutional overcorrection. Second, the equipment (a spray bottle) was inexpensive

and highly portable. Thus, it could be used in many different environments. Third, unlike other punishment procedures (e.g., response-contingent faradic shock), water misting appeared not to present any health risks to those on whom it was used. Fourth, because of its relative simplicity, it was easy to train staff in its use. Fifth, staff had fewer objections to using water mist than they did other punishment procedures. Sixth, given all of the foregoing, water misting—as punishment—could be considered relatively innocuous.

Notwithstanding these reasons, no evidence suggests that the technique has been used in the past decade. Since this time period is concurrent with the absence of virtually all other applied punishment research, it is concluded that the national crusade against the utilization of formally described punishment procedures is responsible. (I say formally here, because most therapists involved with institutionalized people understand that informal punishment procedures continue to be used by the staff of such institutions.)

Water misting is not a completely effective punishment procedure. If it were, it would produce complete cessation of responding, no negative side effects, no avoidance of the therapist, and generalization outside treatment sessions. Therefore, it is possible that the reason that it is no longer used is that it was not effective enough. However, absent complete suppression, there are no negative side effects of the procedure, there is no evidence of avoidance of the therapist, and there is some evidence of generalization outside treatment sessions. Therefore, response-contingent water misting is an effective—if not completely effective—punishment procedure. Utilization of the procedure has suffered the fate common to the formal application of all other punishment procedures.

In the beginning, water misting was used as an alternative to more effective punishment procedures, such as response-contingent faradic shock, according to Dorsey et al. in 1980. It was used also because it was thought that society would tolerate its use better than had been shown to be the case for faradic shock. Clearly, this was an incorrect supposition. No behavior analyst ever feels good about administering any form of punishment during therapy sessions, particularly to a subject who is not capable of escape. Water misting was no exception. Colleagues worried about changes in subjects' dignity and self-worth. Yet, such concerns were overridden by the felt need to help reduce what was, and is, perceived to be serious self-injury and its long-term effects. Response-contingent water misting seemed a good compromise.

A possibly serious restriction on the effectiveness of response-contingent water misting is the absence of application of this procedure to normal populations. The procedure would seem, on its face, to constitute a possible backup to ineffective verbal reprimands by parents of their young children. It could constitute a viable alternative to the more ungoverned use of corporal punishment. Absent any such information, however, it should be understood that generalization of the effectiveness of contingent water misting beyond the rather restricted populations on which it has been successfully used is unwise.

VII. CHRONOLOGICAL ANNOTATED LITERATURE REVIEW

1. Peterson, R. F., & Peterson, L. W. (1977). Hydropsychotherapy: Water as a punishing stimulus in the treatment of a problem parent-child relationship. In B. C. Etzel, J. M. LeBlanc, & D. M. Baer (Eds.), *New developments in behavioral research, theory, method, and application.* Hillsdale, NJ: Lawrence Erlbaum.

Study Design. Single subject, ABAB withdrawal design imbedded in contact/no-contact context; punishment only in contact context; during no contact, parent ignored child's head banging; followed by time-out phase.

Subject. 3.5-year-old male; with mental retardation.

Response. Head banging/hitting.

Treatment. 4-oz water splash delivered by parent from a water glass from a distance of 18 to 30 cm concurrently with a shouted, "No!"

Results. Good suppression by water splash over baseline in contact and no-contact periods; suppression not as good during no-contact context; but no-contact period provided evidence of generalization of punishment. Recovery during withdrawal phase, but phase stopped before recovery could further increase. Time-out was about as effective as water splash. Suppression maintained during follow-up, however, time-out was continued during this period.

Critique. Not really water misting. Study included because it appears to be a precursor to the water-misting procedure. Note difficulty of governing amount of water to be splashed and how much less water appears to be as effective when using water misting.

2. Murphrey, R. J., Ruprecht, M. J., Baggio, P., & Nunes, D. L. (1979). The use of mild punishment in combination with reinforcement of alternative behaviors to reduce the self-injurious behavior of a profoundly retarded individual. *AAESPH Review, 4,* 187–195.

Study Design. Single subject, BAB design.

Subject. Profoundly retarded male.

Response. Self-choke.

Treatment. Water squirt in the area of the mouth for self-chokes; positive reinforcement of other behaviors; treatment application in six different settings; utilization of seven different therapists.

Results. Good suppression of self-choking (near 90%); quick recovery during treatment cessation (A); considerable recovery by follow-up after 20 months.

*Critique.*Treatment begun in the absence of a recorded baseline. Good attempt at programmed generalization.

3. Dorsey, M. F., Iwata, B. A., Ong, P., & McSween, T. E. (1980). Treatment of self-injurious behavior using a water mist: Initial response suppression and generalization. *Journal of Applied Behavior Analysis, 13,* 343–353.

Experiment 1:

Study Design. ABAB within-subject, reversal designs.

Subjects. Seven nonambulatory persons with profound mental retardation, with additional auditory and visual impairments, 5 to 37 years old.

Responses. Mouthing; hand biting; skin tearing; head banging.

Treatments. Water mist contingent upon SIB.

Results. Substantial reductions in SIB frequencies during treatment conditions—but not to zero—followed by recovery (instantly in four of the seven cases) to prior levels during treatment absence (baselines).

Critique. No concurrent positive procedures. No generalization outside sessions.

Experiment 2:

Study Design. Single subject; case study with successive treatments, across two environments; i.e., AB1B2B3 where A = baseline; B1 = response contingent "No"; B2 = "No" + water mist + DRO 1 minute; B3 = "No" + DRO.

Subjects. 21-year-old female, nonambulatory, with profound mental retardation; 26-year-old female, nonambulatory, from Experiment 1.

Response. Hand biting.

Results. Little or no suppression during B1; good suppression in one environment each for each subject during B2, but not in the second environment; addition of DRO helped with suppression for one subject but not the other in the second environment; upon withdrawal of water mist (B3) there was continued suppression in both subjects in the previously successful environment and good suppression in the remaining environments for both subjects.

Critique. No measurements beyond treatment sessions. Authors anecdotally note no generalization in terms of long-term maintenance of suppression across the entire day.

4. Gross, A. M., Berler, E. S., & Drabman, R. S. (1982). Reduction of aggressive behavior in a retarded boy using a water squirt. *Journal of Behavior Therapy & Experimental Psychiatry, 13,* 95–98.

Study Design. Single subject; ABAB design with follow-up.

Subject. 4-year-old male with mental retardation.

Response. Biting; gouging (i.e., aggression).

Treatment. Baseline continued a hand slap and "No!" contingent on aggression that was already in place; treatment consisted of water misting—with mister set to the concentrated stream setting.

Results. Good suppression by water squirt over the hand slap procedure; some recovery during withdrawal of water squirt, but not back to original baseline; subsequent good suppression during second treatment application; zero frequencies at 6-month follow-up.

Critique. All day use of technique may have helped its success. Note that the study is only one of two (see work by Peterson and Peterson in 1977) that use water not in mist form.

5. Bailey, S. L., Pokrzywinski, J., & Bryant, L. E. (1983). Using water mist to reduce self-injurious and stereotypic behavior. *Applied Research in Mental Retardation, 4,* 229–241.

Study Design. Single subject; ABAB design with no treatment probes.

Subject. Ambulatory 7-year-old male with severe mental retardation with autism.

Response. Mouthing; hand biting.

Treatment. Water misting contingent upon finger/hand mouthing; all other contingency-based programs continued; including time-out for aggression during water misting.

Results. Excellent, but not complete, suppression during treatment periods; suppression also during no-treatment probes but not nearly as much as during treatment periods; recovery—but not complete recovery—during withdrawal phase; good suppression thereafter in no-treatment probe conditions.

Critique. Lengthy study, but no follow-up.

6. Friman, P. C., Cook, J. W., & Finney, J. W. (1984). Effects of punishment procedures on the self-stimulatory behavior of an autistic child. *Analysis and Intervention in Developmental Disabilities, 4,* 39–46.

Study Design. Single subject; ABACADAB where A = baseline; B = water mist; C = lemon juice; D = vinegar with follow-up.

Subject. 11-yr-old male with severe mental retardation and autism.

Response. Hand touching (hand clapping; hand jabbing; finger jabbing).

Treatment. Water mist to the face or lemon juice squirted in the mouth; or vinegar squirted in the mouth.

Results. Partial suppression during water mist followed by complete recovery during withdrawal; less suppression with lemon juice; about same suppression as water mist with vinegar; more suppression in second water mist phase; follow-up was continued use of water mist by staff and teacher with very good suppression.

Critique. Sessions were only 5 minutes. Baseline conditions and background in all treatment sessions consisted of structured play that involved therapists telling subject what to do explicitly—a demand condition that may have contributed to baseline frequencies.

7. Reilich, L. L., Spooner, F., & Rose, T. L. (1984). The effects of contingent water mist on the stereotypic responding of a severely handicapped adolescent. *Journal of Behavior Therapy & Experimental Psychiatry, 15,* 165–170.

Study Design. Single subject; multiple baseline across settings and teachers with follow-up.

Subject. 15-year-old female, deaf and blind.

Response. Stereotypic behavior (e.g., picking up coats, paper, etc., and covering her head with these items).

Treatment. Head coverings removed and water mist applied to subject's face immediately, while during baseline she was allowed to keep covered for 2 minutes before covering was removed.

Results. Good, but not complete, suppression on application of water misting in each environment only when water mist applied; good suppression in the presence of each teacher. Zero frequency at 17 months follow-up.

Critique. Not a very exciting response. There did not seem to be anything life threatening about it, nor did it have the qualities of stereotypic behavior (that is, on its face, did not seem highly self-stimulatory). Rather, response appeared to be attention getting. However, DRO had been tried and had failed.

8. Jenson, W. R., Rovner, L., Cameron, S., Peterson, B. P., & Keisler, J. (1985). Reduction of self-injurious behavior in an autistic girl using a multifaceted treatment program. *Journal of Behavior Therapy and Experimental Psychiatry, 16,* 77–80.

Study Design. Single subject; case study with generalization and follow-up.

Subject. 6-year-old-female, autistic, with moderate to severe mental retardation.

Response. Hand biting.

Treatment. Contingent water mist plus loud "No!" Size of spray bottle reduced across phases (fading). Parents also used program at home.

Results. Virtually complete suppression. Long-term follow-up showed almost complete suppression also.

Critique. Case study design. However, fading size of bottle and having parents do procedure at home, may have contributed substantially to long-term effectiveness.

9. Singh, N. N., Watson, J. E., & Winton, A. S., (1986). Treating self-injury: Water mist spray versus facial screening or forced arm exercise. *Journal of Applied Behavior Analysis, 19,* 403–410.

Experiment 1:

Study Design. Single subject; alternating treatments design with follow-up.

Subject. 17-year-old female, with profound mental retardation.

Response. Face slap.

Treatment. Alternation of contingent water mist with facial screening counterbalanced across the two daily sessions.

Results. Substantial reductions in frequencies of face slapping by both water misting and facial screening with slightly more reduction by the facial screening.

Critique. No generalization or measurement to other times of day.

Experiment 2:

Study Design. Same as Experiment 1.

Subject. 17-year-old female with profound retardation.

Response. Finger licking.

Treatment. Same as Experiment 1.

Results. Only about 25% reduction by water mist; much greater reduction by facial screening; socially positive interactions increased.

Critique. No generalization or measurement to other times of day.

Experiment 3:

Study Design. Same as Experiment 1.

Subject. 17-year-old female, with profound retardation.

Response. Ear rubbing.

Treatment. Water misting alternated with forced arm exercise.

Results. Water mist reduced ear rubbing by 80%; but forced arm exercise reduced it by 90%; socially positive interactions increased.

Critique. No generalization or measurements to other times of day. Forced arm exercise may have been more effective because subject was precluded from ear rubbing during the exercise.

10. Rojahn, J., McGonigle, J. J., Curcio, C., & Dixon, M. J. (1987). Suppression of pica by water mist and aromatic ammonia: A comparative analysis. *Behavior Modification, 11,* 65–74.

Study Design. Simultaneous (alternating) treatment design with fading.

Subject. 16-year-old female, autistic, with severe mental retardation, with mild cerebral palsy.

Response. Pica (tacks, staples, crayons, strings, woven material, paper, cigarette butts).

Treatment. Three daily sessions (7.5 minutes). Water mist, aromatic ammonia, and no treatment alternated across these sessions; location of bottle faded; generalized to other therapists.

Results. Virtually complete suppression of pica by water mist. Early ammonia administration produced increase in pica followed by decrease. Possible increase in collateral mild aggressive behavior. No increase in collateral SIBs.

Critique. No long-term follow-up. Absence of concurrent positive reinforcement program.

11. Fehr, A., & Beckwith, B. E. (1989). Water misting; Treating self-injurious behavior in a multiply handicapped, visually impaired child. *Journal of Visual Impairment and Blindness, 83,* 245–248.

Study Design. Single subject; case study; combined multiple baseline across settings and ABA design.

Subject. 10-year-old male; visually impaired; auditory agnosia; profound mental retardation.

Response. Head hit.

Treatments. Fine water mist spray to face contingent upon head hit, preceded with "No!" Food contingent on peg placement and toy play.

Results. Substantial reductions of head hitting in breakfast and lunch environments but not in class or residence hall until positive reinforcement for appropriate behavior was added in the latter two.

Critique. No follow-up. No measurement of response outside of treatment sessions and environments.

12. Paisey, T. J. H., & Whitney, R. B. (1989). A long-term case study of analysis, response suppression, and treatment maintenance involving life-threatening pica. *Behavior Residential Treatment, 4,* 191–211.

Study Design. Single subject.

Subject. 16-year-old male with profound mental retardation.

Response. Wandering; pica.

Treatment. Phase 1: Assessment. Pica observed in 4 settings—observers present; subject alone; baits on the floor but neck screen on (blocked vision of floor); neck screen on but baits on furniture, unlimited edibles, contingent mesh hood (did not permit ingestion); contingent water mist accompanied by loud "No!", contingent lemon juice. *Phase 2. Lemon juice punishment for pica and boundary training using water mist; Phase 3: Residential treatment package.* Lemon juice punishment for pica; water mist contingent upon crossing a taped line (wandering); DRI; DRO.

Results. Assessment. Pica greatest during alone context; pica lowest during lemon juice, mesh hood, and ad lib edibles, high during water mist contingency. Still mean frequencies of pica were reduced by half during water misting. *Program Development.* Excellent suppression of pica by lemon juice; good suppression of boundary crossing by water mist and warning. *Residential treatment package.* Lemon juice suppressed pica about 50%; with addition of water mist for boundary crossing there was additional suppression; upon withdrawal of lemon juice and water mist after 30 months there were some increases in pica but suppression was still about 50%.

Critique. Water mist shown not to be too effective with pica, but more effective with boundary crossing (wandering); Excellent study length, although disappointing to see that after so much time there was still an increase in pica after withdrawal of water misting and further increase in pica after withdrawal of lemon juice.

13. Peine, H. A., Liu, L., Blakelock, H., Jenson, W. R., & Osborne, J. G. (1991). The use of contingent water misting in the treatment of self-choking. *Journal of Behavior Therapy and Experimental Psychiatry, 22,* 225–231.

Study Design. Single subject, case study; AB design with treatment generalization and follow-up.

Subject. 25-year-old deaf, blind, male with profound mental retardation.

Response. Self-choke.

Treatments. Fine water mist spray to face contingent upon self-choke, paired with "No!" 20-second absence of self-choke produced face wipe, juice sip, and hug or pat on back.

Results. Approximately 2 responses/min in baseline to .03 to .12 responses/min during treatments—17- to 70-fold reduction. Zero responses during 8-month follow-up.

Critique. AB case study design; no disaggregation of water misting and the positive reinforcement procedure. Except for follow-up—an important exception—no measurement of response outside of treatment sessions and environment.

14. Osborne, J. G., Baggs, A. W., Darvish, R., Blakelock, H., Peine, H., & Jenson, W. R. (1992). Cyclical self-injurious behavior, contingent water mist treatment, and the possibility of rapid-cycling bipolar disor-

der. *Journal of Behavior Therapy and Experimental Psychiatry, 23,* 325–334.

Study Design. Single subject, case study; multiple probe design in which pre- and posttreatment baselines were taken before and after each treatment session.

Subject. 45-year-old female; visually impaired, with profound mental retardation.

Response. Head slap.

Treatments. Water mist spray to face contingent upon head slap, paired with "No hitting!" DRO 1 to 6 minutes for social and tangible reinforcers. Session end contingent upon a successful DRO interval.

Results. Subject cycled between high- and low-frequency periods of SIB lasting 4 to 14 weeks. Mean reduction from presession baseline during treatment was 71% for high-frequency periods; mean reduction from presession baseline during treatment baseline was 85%. No difference between presession baseline and treatment during low-frequency periods; reduction to zero in posttreatment baselines after treatment during low-frequency periods.

Critique. Use of pre- and posttreatment baselines shows recovery of SIB frequencies from posttreatment to next pretreatment baselines. DRO procedure not uncoupled from water mist procedure. No effect of water mist procedure on length of this subject's high- and low-frequency SIB periods.

See Also the Following Articles

Differential Reinforcement of Other Behavior ■ Fading ■ Negative Punishment ■ Overcorrection ■ Positive Punishment ■ Response Cost ■ Time-Out

Further Reading

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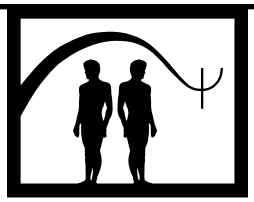

Response Cost

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GLOSSARY

point-based response cost procedure Point removal in a point economy contingent on a targeted undesirable behavior.

response cost A punishment procedure in which a person loses a reinforcer or a portion of reinforcers following an undesirable behavior. A naturally occuring example of response cost is a traffic fine following an arrest for speeding.

I. DEFINITION

Response cost is the removal of a person's or group's reinforcer(s) as a consequence of an undesirable behavior. Although the entire reinforcer can be removed, more commonly, only a portion is removed. Response cost derives from the notion that the probability of the occurence of a behavior is related to its physical or monetary cost. That is, the greater the cost of performing a behavior, the less likely it is that the behavior will be performed. Some authors specify that the lost reinforcers must be conditioned, but they may also be primary, as in the loss of a portion of a person's edible reinforcers.

II. CONCEPTUAL SYSTEM

A response-cost procedure that results in a decrease in the future rate of a certain behavior is classified as Type II punishment. It differs from Type I punishment in that a reinforcer is removed rather than an unpleasant event (e.g., a loud verbal reprimand) being applied. Response cost differs from extinction, which involves termination of the delivery of ongoing reinforcers. It differs from time-out, which specifies a period of time in a less reinforcing environment following an inappropriate behavior. Response cost does not involve a temporal component, although a person can lose alotted minutes from a desired activity. Response cost is similar to time-out in that both procedures have an aversive component.

Hierarchies of restrictiveness of decelerative procedures usually place response cost as more restrictive than extinction and equal in restrictiveness to time-out procedures. The present author recommends that this classification be revised because response cost is quicker acting and associated with fewer undesirable side effects than extinction. Also it does not require physical intervention (e.g., removing people from ongoing activities), as do many time-out applications.

III. FORMS

The most common form of response cost is evident when a government fines its citizens for traffic violations, paying taxes late, or failure to obey health and safety regulations. A precondition for its application is that an individual have something to lose. Therefore, in order for a response-cost procedure to be applicable, a person must either have reinforcers to lose or must be provided with them.

Often, response-cost procedures are carried out in the context of token-reinforcement programs. Tokens in the form of points, stars, chips, check marks, smiley faces, and so on are removed contingent on display of inappropriate behaviors. The tokens are conditioned reinforcers that can be exchanged periodically for back-up reinforcers. The amount of tokens an individual is penalized is crucial since it must be large enough to impact behavior, but not so large that a person quickly loses all of her or his reinforcers.

In one common form of response cost, people lose reinforcers from an existing pool. The pool of reinforcers can already exist in the person's possession or can be provided to the person by the program implementer. For example, a client could be fined $25 each time she missed an appointment at a weight-control clinic. Or a teacher could give a student 15 tokens each day and remove one each time he violated a classroom rule.

In a second form of response cost, a person could start the day with no reinforcers, but earn reinforcers for appropriate behavior and lose them for inappropriate behavior. The popular television quiz show, "Jeopardy," is conducted according to this format. People residing in group homes often experience programs of this type. Thus, the individuals may receive points for carrying out household chores and for prosocial behaviors and lose points for violations such as fighting and failing to do assigned work.

Variations of each of these approaches can also be applied. First, response cost can be carried out on a group-contingent basis. Thus, students can be given 10 extra minutes of free play, but lose 1 minute each time a classmate breaks a classroom rule as follows:

10,9,8,7,6,5,4,3,2,1,0

In this case there were a total of three violations; thus, each member of the class had 7 extra minutes of free time.

In a second variation, free reinforcers can be retained on an all-or-none basis. This modification, frequently mislabeled as differential reinforcement of low rate of response (DRL), could involve allowing a child to stay up an extra 15 minutes if she takes her brother's toys less than three times during the day. If she violates the rule three or more times, she loses the privilege of staying up 15 minutes late.

Finally, as was the case in the two previous examples, program implementers can program penalties from a bonus pool. That is, people can be offered a bonus for refraining from inappropriate behavior. Rule violations then result in the loss of the bonus, rather than what was already due the individual (e.g., the regular recess time). This variation can reduce ethical objections to the use of response cost.

IV. APPLICATIONS

The variety of settings, populations, and behaviors to which response cost has been successfully applied is immense. Settings include traditional homes, schools, clinics, group residences, work sites, correctional facilities, playgrounds, and athletic fields. Populations include children and adults, with and without handicaps. A partial list of behaviors comprises classroom disruptions, aggressiveness, sleep difficulties, excessive drinking, overeating, inattentiveness, speech disfluencies, psychotic speech, food scavenging, toileting accidents, failure to use seatbelts, occupational injuries, failure to keep appointments, failure to hand in assignments punctually, and hair and eyelash plucking. In a naturalistic environment, it has been shown to radically reduce directory assistance calls and could probably be employed to combat resource shortages involving fuel usage and water consumption.

V. ADVANTAGES

Response cost is one of the most effective interventions available. It commonly produces immediate, large, and enduring changes in behavior. It can be applied immediately, easily, and precisely following an undesirable behavior. The application typically does not interfere with the ongoing activity. Unlike time-out, response cost does not remove a violator from the setting in which the problem behavior occurred. Thus, a student who committed an infraction would not lose academic time. Unlike time-out and overcorrection, response cost does not involve physical interaction that could lead to injury. Compared to extinction, response cost works more quickly and produces greater decreases in behavior.

Unlike other punishment procedures, response cost is seldomly associated with adverse side effects. At times it results in desirable side effects. Thus, a reduction in disruptive behavior through response cost has sometimes resulted in appropriate social interactions. Also response cost rarely incurs public objections. It tends to fall within society's norms on how people should treat each other and is compatible with the principle that those who break a rule should pay proportionally.

VI. DISADVANTAGES

Although uncommon, adverse side effects of response cost have been noted. These include emotional responses and aggression following reinforcer removal and avoidance of the environment in which response cost occurs. Also response cost calls attention to the inappropriate behavior, possibly reinforcing its occurrence. All of these problems can be reduced or eliminated by combining response cost with positive reinforcement for appropriate behavior. Thus, a person will not avoid an environment that is mostly reinforcing, but employs occasional response cost. Also attention to appropriate behavior will lessen the likelihood that response cost will reinforce inappropriate behavior.

A significant problem that can occur is that a person could lose all of her or his reinforcers, thereby nullifying the response-cost procedure. In such cases a back-up system such as time-out might be necessary. Another problem is that, due to its effectiveness and ease of implementation, response cost can be overused. It might, for example, be effectively applied to minor infractions that do not justify a punishment procedure. Finally, given the numerical nature of many response-cost procedures, some mastery of quantification is often necessary. This may limit its usefulness with very young or severely cognitively limited individuals.

VII. CONSIDERATIONS IN USING RESPONSE COST

Given that response cost is a punishment procedure, it should only be used when more constructive approaches, such as positive reinforcement, are unreasonable or ineffective. Also the usual operations concerning any behavioral intervention should be employed. This includes defining the behavior(s) of concern, measuring its occurrence during baseline and intervention, specifying the rules of the operation, and revising the procedure when necessary.

In point-based response-cost procedures, point removal should be immediate, obvious, and follow all infractions. The point removal should be done in such a manner as to provide feedback to the offending individual, but should not involve comments that could reinforce inappropriate behavior (through attention) or trigger additional problems.

Significant issues with point-based response cost are setting the upper limit and determining how many points to remove on each occurrence. As indicated earlier, the procedure can be negated when all points are lost. Baseline measures can help set the upper limits for response cost. Thus, the upper limit for a person who displays 40 misbehaviors might be 20, whereas the upper limit for someone who displays 5 misbehaviors might be 3. Research has indicated that the removal of two points per infraction is more effective than removing one. Yet, removing two points might cause the upper limit to be exceeded more quickly than removing one point. In general, the effectiveness of response cost is so great that the upper limit is seldom reached.

Without exception response-cost procedures should be combined with positive reinforcement for appropriate behavior. This can take the form of bonuses or can simply consist of praise for appropriate behavior. The combination of response cost and positive reinforcement is more effective than either procedure used alone. The combination of procedures also allows for the possibility of gradually removing the response-cost procedure and maintaining improved performance with positive reinforcement procedures alone.

VIII. SUMMARY

Response cost is a punishment procedure in which a person loses a reinforcer or a portion of reinforcers following an undesirable behavior. It is powerful, easily implemented, and socially acceptable. It has been successfully used across a wide variety of behaviors, populations, and settings. For reasons of effectiveness and humaneness, it is best combined with positive reinforcement for appropriate behavior.

See Also the Following Articles

Differential Reinforcement of Other Behavior ■ Extinction ■ Good Behavior Game ■ Overcorrection ■ Positive Reinforcement ■ Punishment ■ Token Economy

Further Reading

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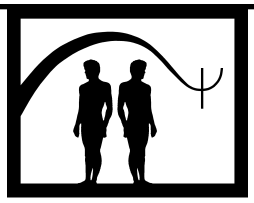

Restricted Environmental Stimulation Therapy

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GLOSSARY

chamber REST A type of REST that involves secluded bed rest in a small light-free and sound-attenuated room.

dry flotation REST A type of REST that involves a sound and light attenuated enclosed chamber designed so that the research participant is separated from the fluid, a solution of $MgSO_4$, by a velour-covered thin plastic polymer membrane.

restricted environmental therapy/treatment (REST) An experimental psychotherapeutic practice that, through the use of a solitary environment and a drastically reduced level of external sensory stimulation (i.e., light, sound, touch, and gravity) can produce beneficial effects on medical, psychological, and behavioral health outcomes, particularly when used in conjunction with other therapies.

wet flotation REST A type of REST that involves the use of a specially designed sound and light attenuated enclosed tank filled with a skin temperature aqueous solution of Epsom salts and water.

I. DESCRIPTION

Two decades ago, Peter Suedfeld coined the term restricted environmental therapy or technique (REST) as a less pejorative description of sensory deprivation. REST was born out of experimental methods designed to study the affects of environmental stimulus reduction on human beings. The earliest and most relevant preliminary research was published in the 1950s by Donald Hebb of McGill University who, with his students and collaborators, described the effects of "severe stimulus monotony" on his research participants to test his theory of centrally directed behavior. Hebb's experimental setup consisted of a completely light-free and sound-attenuated chamber in which the participant was isolated on a bed for a period of 2 to 3 days. Further sensory reduction was attempted by using variations of the basic setup such as having the participant wear translucent goggles and cardboard sleeves that fit over the hands and arms to limit visual and tactile stimuli and/or enclosing research participants in "iron lungs."

Shortly after publications involving chamber REST methods, John C. Lilly, a neuropsychologist at the National Institute of Mental Health, published findings from his sensory reduction research that focused on the effects of many natural or non-experimental experiences of isolation. These included details of autobiographical accounts from individuals who were isolated geographically or situationally. As a result of these findings, Lilly and his associate, Dr. Jay Shurley, pursued the origins of conscious activity within the brain and whether the brain required external stimuli to keep its conscious states active. To fully address this question, Lilly designed the flotation tank, which restricted environmental stimulation as much as was practical and feasible.

The experimental setup of flotation REST required that the research participant be submerged up to the neck in an enclosed tank of water. A diving helmet acted to block out outside visual stimulation and a breathing apparatus was used so that the participant could respire if the nose and mouth should drop below the level of the water. Although the helmet decreased visual stimuli, the breathing apparatus was anything but noise free. Over the years, Lilly continued his experiments with flotation, simplifying and improving the general design of the tank. Lilly found that one could float in a more relaxing supine position, rather than suspended feet downward in fresh water, if more buoyant salt water was used. This method allowed for the subsequent elimination of the breathing apparatus. Other refinements, such as water heaters, air pumps, and water filters for the reuse of the Epsom salts, were added and by the early 1970s, Lilly had developed the flotation tank in much the design that is used today.

Early studies addressing chamber and flotation REST tested participant endurance, often up to several days, and included setups that were ultimately stressful (being enclosed in iron lungs, cardboard sleeves and/or goggles, or having to rely on a noisy breathing apparatus for respiration as well as being almost completely submerged). It was no wonder that many of the findings from the initial reports were dramatic and negative. Such findings included aversive emotional reactions, disruptions of conscious states, negative hallucinations, interference with thinking and concentration, and sexual and aggressive fantasies. Later research suggested that these negative findings could be understood on the basis of a negative experimental set (aberration and endurance), of an excessive duration of isolation, and of demand characteristics. The most frequent and replicable results of REST are an openness to new information, increased suggestibility, increased awareness of internal cues, decreased arousal, and attentional shifts. These results not only contradict earlier studies, they actually hint at some potential benefits of REST. Research evidence indicates that REST consistently has beneficial effects on medical, psychological, and behavioral health outcomes, particularly when used in conjunction with other therapies.

Current use of REST involves three differing optimal methods and one method that can be used in clinical settings without substantial accommodations. The first, chamber REST, involves secluded bed rest for a variable amount of time, generally 24 hours or less, in a small, completely dark, and sound-attenuated room. Most of the data to date has been generated through the use of this technique. The second method, wet flotation REST, involves the use of a light-free, sound-attenuated flotation tank, resembling a large covered bathtub filled with a skin temperature solution of saturated Epsom salts and water. The research participant floats supinely in the tank for a time period that is generally 90 min or less. The third method is termed dry flotation REST. This method includes a rectangular chamber that is designed so that the research participant is separated from the fluid, a solution of $MgSO_4$, by a thin, plastic polymer membrane. Again, the float time is generally 90 min or less. In clinical settings it is possible to restrict the environment by using darkened goggles, earplugs, sound maskers, and a room with reasonable sound attenuation.

II. BIOLOGICAL AND PSYCHOPHYSIOLOGICAL EFFECTS

The research examining the biological and psychophysiological effects of chamber and flotation REST has been based on more than 1,000 incidents in which 90% of the individuals interviewed reported marked feelings of relaxation and a greater focus on internal processes because external stimuli is limited. A summary of specific findings regarding the relaxation response and cognitive processes are discussed in this section. Such findings include both subjective and objective measurements of various effects.

The relaxation response can be understood by studying several different biochemical and psychophysiological parameters. First, subjective measures of REST have been collected to study relaxation effects using various instruments including the Spielberger State Anxiety Scale, Zuckerman Multiple Affect Adjective Checklist, subjective units of disturbance scale (SUDS), and the profile of mood states (POMs). These instruments conclude that REST participants perceive significantly lower levels of subjective measures of stress and feelings of calmness, alertness, and deep relaxation.

Endogenous opiate activity has been studied, as it is frequently associated with increased pleasure responses and is related to a reduction of stress and pain, and increased relaxation. Results of these studies suggest that REST increased central nervous system availability of opioids across sessions. In addition, a state of relaxation can be defined as exhibiting low levels of the biochemical substrates involved in the stress response. The stress response is a fairly complicated reaction that involves hormone changes from the adrenal glands in

particular. Basically, the hormones triggered by stress in this response include norepinephrine, epinephrine (commonly known as adrenaline), adrenocorticotropin (ACTH), cortisol, renin, and aldosterone. Each of these hormones play a role at various organ systems that results in the increase of heart rate, blood pressure, respiration, and muscle tension. Therefore, stress response parameters studied in REST research include blood pressure, muscle tension, and heart rate, as well as the adrenal axis hormones mentioned earlier.

Research studies that have examined heart rate, muscle tension, blood pressure, and various plasma and urinary adrenal hormones conclude that REST consistently produces significant decreases both within and across sessions of these measurements. Other hormones have been measured in conjunction with those mediating the stress response to provide an experimental control. These hormones have included testosterone and lutenizing hormone (LH) and have been found to remain consistent in a 1990 study by Charles R. Turner and Thomas H. Fine. Significant reductions in blood pressure was a finding that was established through case studies of hypertensive individuals, and later in controlled research studies that began in the early 1980s. Researchers that studied REST's effects on hypertensives included Fine and Turner, Jean L. Kristeller, Gary E. Schwartz, and Henry Black, and Suedfeld, Cuni Roy, and Bruce P. Landon, to name a few. This research concludes that a significant decrease in both systolic and diastolic blood pressure can occur in hypertensives. Furthermore cortisol and blood pressure have been shown to maintain these effects 9 months after cessation of repeated REST sessions in a follow-up study by Kristeller, Schwartz, and Black in 1982. Thus, the effects of REST are more than an immediate response that is reversible.

Cognitive effects of REST include a shift in cognitive processing strategies away from analytic, sequential, and verbal thinking toward non-analytic, holistic, and imaginal thought processes. A review of common reports by Helen Crawford in 1993 describes a decrease in external stimuli with redirection to internal stimuli or more narrowly focused external stimuli with possible shifts in attentional processing (changes in focused and sustained attention). The increases in internally generated stimuli, such as fantasies and thoughts, tend to be more vivid and involving. Since 1969, researchers have studied the effects of REST and increased suggestibility. Arreed F. Barabasz and Marianne Barabasz found that floatation REST enhances hypnotizability in participants who scored low on the Stanford Hypnotic Susceptibility Scale: Form C in 1989. Findings by A. Barabasz have also revealed that chamber and dry flotation REST dramatically influence hypnotizability whereas wet flotation REST elicits spontaneous hypnosis in participants that are highly hypnotizable.

A 1990 A. Barabasz study involving measurements of electrocortical (EEG) activity showed significantly increased theta (4–8 Hz) after flotation REST. Fine, Donna Mills, and Turner compared frontal monopolar EEG and frontal EMG readings of wet flotation versus dry flotation REST in 1993. The results showed that wet flotation REST had higher amplitude alpha frequency components. They concluded that wet flotation REST is qualitatively different in terms of central nervous system activity and may resemble the "twilight learning state." This state is induced through hypnosis and Stage 1 sleep. Differences between dry and wet flotation REST include humidity, temperature, and amount of tactile stimulation available to the participant. It is unknown which of these factors may contribute to differences in EEG readings.

III. APPLICATION EFFICACY

In 1982, Suedfeld and Kristeller suggested that, based on the implications of research and theory, REST should be "particularly appropriate" in two types of clinical situations: habit change and states of lower arousal and relaxation. Habit change, is based on the known cognitive effects of REST. The lack of distraction, increased hunger for stimuli, and increased openness to new information associated with the stimulus reduction experience, leads to a uniquely focused state of awareness. Lower arousal or relaxation effects of REST facilitate treatments addressing problems associated with chronic or acute stimulus overload such as dysfunction of information processing and stress-related disorders. Research findings have shown that chamber REST applications are particularly effective for the modification of habit disorders, whereas flotation REST sessions have been applied and have been found to be effective in the treatment of stress-related disorders, chronic pain, anxiety disorders, and sports performance enhancement. Notwithstanding the promising outcomes of REST as a treatment, as well as an augmentation strategy, the status of REST is predominantly an experimental procedure with many open questions regarding its utility and appropriateness in the clinical setting. Subsequently, REST research has been applied to a variety of problems, disorders, and opportunities for performance enhancement.

Smoking cessation studies combining REST with other traditional treatments have shown considerable promise as an augmentation strategy with multiple research sites demonstrating success rates of over 50% with follow-up periods ranging from 12 months to 5 years. In a few clinical studies, 1 to 2 years in duration, REST has been combined with weekly support groups. In those instances 75 to 80% with support group and tailored message have maintained abstinence for the length of the study.

Controlled studies have also demonstrated efficacy in decreasing the alcohol consumption of heavy drinkers. In 1987, Henry B. Adams, David G. Cooper, and John C. Scott studied the effects of REST on heavy social drinkers treated with 2.5 hours of REST with an antialcohol educational message during the treatment. The results of the study showed 55% reduction in alcohol consumption in the first 2 weeks after the treatment whereas control participants showed no significant reduction. A replication of this study showed similar results and alcohol reduction was maintained at 3- and 6-month follow-ups. A 1990 study by M. Barabasz, A. Barabasz, and Rebecca Dyer found that, for heavy drinkers, after exposure to one 12-hour or 24-hour chamber REST session, the average daily consumption of alcohol continued to drop over 6 months of follow-up. The 24-hour group's average consumption before REST was 42.7 ounces per day, immediately post-REST, it was 23.3 ounces per day, 16.0 ounces per day at 3 months, and 12.7 ounces at 6 months. Chamber REST was studied by David Baylah in 1997 as a relapse prevention technique with substance abusers enrolled in outpatient substance abuse treatment programs. At the end of 4 years of follow-up, 43% remained continuously sober and drug free, whereas none of the control group did after an 8-month follow-up.

Eating disorders have also been responsive to REST in a number of controlled studies. In a study that examined REST as a treatment for bulimia, the elimination of purging behaviors was a significant finding with a 50% success rate. In three studies using REST as a treatment for obesity, a slow continuous weight loss over a 6-month follow-up period after treatment was noted. In 1990, Dyer, A. Barabasz, and M. Barabasz utilized a true experimental design using a 24-hour REST treatment with a message (participants were asked to focus on the importance of diet and exercise and the role their particular problem foods had in their weight problems) and a REST treatment with problem foods (problem foods were brought into the chamber with the participants). Participant's total caloric consumption, problem food consumption, and body fat percentage were significantly lowered, and interviews revealed that REST appears to facilitate the resolution of conflicting attitudes and behaviors about food. Those individuals who had 25 to 30 or less pounds to lose benefited most from the study, whereas participants who had more weight to lose reported initial losses of 5 to 10 pounds and then reported that they were unable to maintain diet and exercise regimens. Non-REST participants did not show significant weight loss in the study.

Recreational, competitive, and intercollegiate sports including basketball, archery, tennis, gymnastics, rowing, darts, skiing, and rifle marksmanship have been the focus of flotation REST treatments to enhance performance. A performance enhancement study has also been done on commercial pilots, and REST treatments showed significant improvement on instrument flights tasks as opposed to control in a Lori G. Melchiori and A. Barabasz study. REST greatly enhances mental imagery, relaxation, and visualization of skills and has been shown to produce remarkable results in anecdotal and controlled performance studies. Studies in 1991 by Jeffery D. Wagaman, A. Barabasz, and M. Barabasz have been done on improving basketball performance. In these studies, improvements on shooting foul shots in a non-game session has been shown with REST, as well as improvements on objective performance skills and coaches' blind ratings as compared to a control group. Six sessions of flotation REST plus performance enhancement imagery of approximately 50 min over a 5-week period produced improved skill in passing, dribbling, shooting, and defense game and non-game measures when compared with an imagery-only control group.

An intercollegiate tennis study by Patrick McAleney in 1991 controlled for relaxation and guided imagery confounds noted in previous research on the enhancement of human performance using REST. Twenty participants took part in 50-min flotation REST treatments with visual imagery group or an imagery-only group. Participants were pre- and posttested on athletic performance and precompetitive anxiety measure. The analyses of performance scores revealed a significant performance enhancement effect for first service winners for the flotation REST plus visual imagery group in contrast to the group that received visual imagery only. No other performance analyses (key shot, points won or lost) were significant. The results of the analyses of anxiety scores were not significant. Another study by A. Barabasz, M. Barabasz, and James Bauman in 1993 looked at the enhancement of rifle marksmanship scores to determine the effects of dry flotation REST versus hypnotic relaxation, which is a confounding variable because flotation REST elicits spontaneous hypnosis in participants that are highly hypnotizable. Twelve participants who took

part in a rifle marksmanship training course, and who were exposed to dry-flotation REST, showed significantly higher rifle marksmanship scores than 12 participants who were exposed to relaxation only. This suggests that REST's positive effects on marksmanship go beyond the induction of relaxation by hypnosis.

As mentioned previously, REST increases relaxation effects and pleasurable effects via endogenous opiate activity. Flotation REST has been studied as a treatment for chronic low back pain and chronic pain in rheumatoid arthritis, fibromyalgia, and premenstrual syndrome. Wet flotation REST was consistently associated with improved range of motion and grip strength and decreased pain both within and across sessions in all participants involved a Turner, Anna DeLeon, Cathy Gibson, and Fine 1993 rheumatoid arthritis study. Responses with dry flotation REST were less consistent and less vigorous. The moisture and heat associated with wet flotation REST are likely factors in the differences between the two types of REST treatments because rheumatoid arthritis is relieved by moist heat. A different study found that the pain associated with rheumatoid arthritis significantly decreased in participants treated by REST and autogenic training (a form of self-hypnosis). Studies on low back pain, fibromyalgia, and premenstrual syndrome also yielded significant relief of pain from REST treatments.

Stress and anxiety-related disorders are the focus of many flotation REST studies because of the role that REST plays in decreasing adrenal axis hormones associated with the stress response. Many foundational studies have been done that have illuminated REST's effects on lowering specific stress-related hormones. Other studies on anxiety-related disorders such as social anxiety, obsessive–compulsive disorder (OCD), trichotillomania (chronic hair pulling), psychophysiological insomnia, and induced stress have added to the growing body of research demonstrating that REST is effective at reducing physiological arousal related to stress and anxiety.

REST has also been used as an augmentation strategy for exposure treatments. In one case study involving a treatment refractory OCD patient, REST was used, along with an imaginal exposure treatment (using a loop tape), to treat severe contamination obsessions and compulsions. It was determined that the primary reason for the patient's unresponsiveness to traditional exposure treatments was his inability to focus on the stimulus. Subsequently, he would not meet the basic requirements of a sufficient time of exposure, as well as a lack of focused arousal. After an initial period of "REST only," the patient was exposed to the loop tape containing the fear-evoking material. This unconventional use of REST resulted in a substantial reduction of OCD symptoms.

IV. SUMMARY

REST has come a long way since its conception in the 1950s. Although it was initially used to test hypotheses about human endurance in monotonous, sensory-deprived environments and to test theories regarding brain processes, several side effects emerged from that early research that included an openness to new information, increased hypnotizability, increased focus on internal processes, and lower arousal. These cognitive and relaxation effects of REST were studied as they were seen as potential treatments for a wide variety of psychophysiological problems, addictive behaviors, and performance enhancement. In the past decade, REST has emerged as an effective therapeutic treatment with a low occurrence of negative side effects. The relaxation and pleasurable effects of REST have been used as a mechanism to decrease anxiety and pain in treatments of stress-and pain-related disorders. The cognitive effects of REST have been effective in modifying addictive behaviors and treating phobias and compulsive behaviors. Although there are many theoretical questions that remain to be answered as well as many possible applications that have yet to be studied, continued research builds its credibility and increases its visibility and practicality as a sound therapeutic treatment.

See Also the Following Articles

Applied Relaxation ■ Arousal Training ■ Neurobiology

Further Reading

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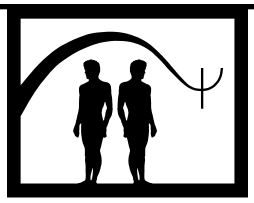

Retention Control Training

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GLOSSARY

enuresis Involuntary discharge of urine after an age at which urine control should have been established.
micturition The passage of urine; urination.

Retention control training (RCT) is an intervention developed for the treatment of nocturnal enuresis. This article discusses the basic components of RCT, incorporating a brief description of the clinical phenomena for which it is used. Next, the theoretical and empirical basis for the development and use of this intervention is described. Finally, a review of the effectiveness of this intervention with nocturnal enuresis is provided.

I. COMPONENTS OF THE INTERVENTION

Enuresis is a condition that involves the involuntary passage of urine by a child after the age at which urinary control would be expected. According to the American Psychiatric Association's *Diagnostic and Statistical Manual, Fourth Edition, Text Revision (DSM-IV, TR),* an individual must be at least 5 years of age, chronologically or developmentally, in order to be diagnosed as enuretic and experiencing repeated voiding of urine into bed or clothes, either intentionally or involuntary, at least two times per week for 3 consecutive months. If the enuretic behavior has not been present for the specified period of time, then clinically significant distress or impairment in social, academic, or other important areas of functioning must be present. Enuresis cannot be the result of a medical condition or the physiological effect of a substance, such as a diuretic. Furthermore, enuresis can be classified as either nocturnal (during sleeping hours), diurnal (during waking hours), or both. In addition to the subtypes of enuresis, it can also follow two different courses. Primary enuresis is characterized when the individual has never had a period of time with urinary continence, whereas enuresis is characterized as secondary when it begins after the individual has once established urinary continence.

Enuresis has a relatively high prevalence rate among young children and decreases as age increases. The literature reports there to be a 14 to 20% prevalence rate for 5-year-olds, 5% for 10-year-olds, 1 to 2% for 15-year-olds, and approximately 1% for 18-year-olds. In addition to differences across ages, the prevalence rate of enuresis also differs across gender. Males are twice as likely to be enuretic than females: 7% and 3%, respectively, at age 5; 3% and 2%, respectively, at age 10; and 1% and less than 1%, respectively, at age 18. Enuretic

individuals may also experience a period of spontaneous remission without treatment. The likelihood of spontaneous remission is reported to be approximately 14% between the ages of 5 and 9, 16% between the ages of 10 and 14, and 16% between the ages of 15 and 19. Finally, a strong indicator of enuresis has been found to be family history. According to the *DSM-IV, TR,* 75% of children with enuresis have a first-degree biological relative who also experienced the disorder.

RCT is an intervention technique used for the treatment of nocturnal enuresis. As an intervention, RCT is relatively simplistic and typically involves the implementation of procedures during waking hours as a means of indirectly altering urine retention during sleeping hours. In general, RCT involves instructing the enuretic child to delay micturition from the time that he or she first senses the urge to urinate. In this manner, the child is learning to increase the amount of urine that can be held in the bladder prior to urination, thus establishing appropriate inhibitory responses. In addition to delaying urination, children are typically instructed to increase fluid consumption above normal levels. By doing so, they experience more frequent urges to urinate, providing more frequent opportunities for mastering retention control.

There are several variations in the basic procedures of RCT described in the current literature. First, procedures may differ regarding the method used to delay urination. One model instructs the child to delay micturition by programming successively longer periods of time. For example, the child is encouraged by parents to increase the delay between feeling the urge to urinate and doing so by 10 minutes across successive weeks. During the first week of intervention, the child is requested to delay urination for 10 minutes. The delay is then increased to 20 minutes and 30 minutes during the second and third weeks of treatment, respectively. In contrast, another variation of RCT entails the requested delay to be systematically increased over time by first instructing the child to go to the bathroom and urinate. The child is then provided with 500 ml of fluid and coached to delay urination as long as possible. Parents note the time at which the child requests to use the toilet, ask the child to delay urination for as long as possible, and then note when the child uses the restroom. From this information, postponment time can be calculated. This latency period serves as the baseline used during subsequent training trails so that the parents and therapists can monitor that the child is delaying urination 1 to 2 minutes longer with each consecutive attempt. Finally, RCT can involve a procedure that involves instructing the child simply to delay urination for as long as possible.

Second, the use of rewards for successful retention of fluids may also differ. Parents may be instructed not to provide any tangible reinforcement contingent upon successful delay of urination, to administer praise only, or to utilize procedures that involve the delivery of tangible rewards contingent upon increased fluid consumption and/or successful delay. Further, methods of reinforcement may also include instructing the child to change his or her own bed linens after voiding during sleep prior to returning to bed.

A third variation in RCT involves the child delaying urinations during the night. With this method the parents are instructed to give a large drink (i.e., 1 pint) to the child before bed and wake him or her every hour. At each awakening, the child is asked if he or she could delay urination for another hour. If so, the child returns to bed. If not, he or she is encouraged to delay urination for a few more minutes, is praised for doing so, and then is allowed to void. The child is then given another large drink and returned to bed; the amount of fluid loading may vary. Current research has only evaluated using this specific routine during the first night of treatment.

As mentioned earlier, methods of RCT may vary. To date, research has not systematically compared the various methods of administering RCT to determine which is most effective. Therefore, deciding which variation of the intervention to use depends on the structure of the child's environment (i.e., the willingness of the parents and the child) and the comfort level of the therapist with the different methods of the procedure.

II. BLADDER CAPACITY AND ITS ROLE IN NOCTURNAL ENURESIS

Various theories have been put forth to explain enuresis. Currently, enuresis is considered to be a functional disorder that is multiply determined, often with more than one causal mechanism operating with any given child. Physical causes accounting for the disorder include, but are not limited to, urinary tract dysfunctions and infections, nervous system dysfunctions, and bladder capacity deficits. Further, psychological and behavioral causes that have been shown to account for enuresis include toilet training practices and emotional disturbances.

Some research suggests that a proportion of children who experience nocturnal enuresis display small functional bladder capacities (i.e., the volume of urine at

which contractions designed to evacuate the bladder occur). Thus, although the structure of the bladder is normal, its capacity to hold typical amounts of urine is underdeveloped. This smaller-than-expected functional bladder capacity may result in excessive urination diurnally in response to small amounts of urine in the bladder, resulting in fewer opportunities to learn micturition inhibitory responses. In fact, researchers have determined that a significant portion of enuretic children urinate more frequently than nonenuretic peers. At night, this may translate into an enuretic episode given the likelihood of decreased sensitivity to urination urges while asleep. RCT is based on the assumption that increasing functional bladder capacity will result in a decrease in enuretic episodes. In order to increase the bladder capacity, enuretic children are prompted to engage in certain behaviors during the day to train their bladders to hold increasing amounts of urine before voiding.

III. EFFECTIVENESS OF RETENTION CONTROL TRAINING

A significant amount of research has been conducted over the years in regards to the effectiveness of RCT and other behavioral treatments for nocturnal enuresis. Not surprisingly, RCT has been empirically demonstrated to increase functional bladder capacity. For example, in 1960 S. R. Muellner demonstrated that enuretic children produced greater urinary output following the use of RCT. Further, in 1975, Daniel Doleys and Karen Wells demonstrated that RCT resulted in normalized functional bladder capacity for a 42-month-old child. Regarding its effectiveness in treating nocturnal enuresis, RCT alone has been found to be effective in decreasing enuretic episodes in 50 to 75% of individuals. Further, it has been shown to be 30 to 50% effective in producing complete cessation of bedwetting episodes.

RCT reduces enuresis by normalizing bladder capacity and is thus more beneficial to those with a low functional bladder capacity. A child's bladder reaches full development around the age of 4 to 5. In a 1996 study, Tammie Ronen and Yair Abraham found that the rate of increase in bladder capacity is directly related to the age of the individual utilizing RCT. Specifically, they reported that the closer one is to the typical age of bladder maturity, the faster one can increase bladder capacity. Further, the rate of increase is slower for children much younger and much older than age 4 to 5. This is consistent with the results found in a 1990 study by Sandra Bonser, Jim Jupp, and Daphne Hewson. They implemented RCT with a 13-year-old female. Prior to implementing the treatment, the adolescent female was required to track her daily number of urinations and number of wet and dry nights for 5 weeks. This information continued to be monitored during the treatment and then for 1 week during each of the 2 months following termination of the intervention. In this study, RCT involved the adolescent holding her urine for successively longer periods of time. During the first week of treatment, she was instructed to hold her urine for 15 minutes after she first felt the urge to urinate. After 15 minutes, she was allowed to void. During the second week she was instructed to hold her urine for 20 minutes and then follow the same procedure as the previous week. In weeks 3 through 8, the adolescent was required to load her bladder with extra fluid as a means of increasing bladder capacity while continuing to hold her urine for 20 minutes. To accomplish this, she drank three large glasses of fluid in addition to her normal daily fluid intake throughout the day at breakfast, lunch, and after school. Finally, a reward system was in place based on the number of dry consecutive nights experienced. It took 8 weeks for her to decrease from seven wet nights per week to two wet nights per week and at 6-month follow-up she was experiencing only one wet night per week.

In 1970 H. D. Kimmel and Ellen Kimmel were among the first to systematically investigate the use of RCT in modern times. Three female children ages 4 and 10 participated. Baseline data revealed almost nightly bedwetting for all participants. RCT involved encouraging fluid intake (via reward contingent upon consumption) at any hour of the day and rewarding successively longer periods of retention of urine in the bladder, up to 30 minutes. Results showed that complete cessation of nocturnal enuretic episodes occurred for two of the participants within approximately 7 days of the initiation of RCT, and within 14 days for the third. Further, follow-up data indicated that none of the subjects had more than one enuretic episode during the year following treatment.

In 1972 A. Paschalis, H. D. Kimmel, and Ellen Kimmel conducted a more extensive investigation of RCT with 35 children who exhibited nocturnal enuresis. Treatment was essentially the same as that described by Kimmel and Kimmel in 1970 and was conducted for 20 days. Results showed that 40% of the participants met the criteria for success (i.e., seven consecutive nights without an accident) during the treatment period, and

an additional participant achieved success through a continuation of the treatment beyond 20 days. Of those who were successful, no relapse was noted over a 90-day period.

As mentioned previously, reinforcement methods are at times used as a component of, or in addition to, RCT. In 1987, M. Carmen Luciano used an A-B-C single-subject design to test the effects of RCT plus reinforcement on nocturnal enuresis in two male participants, ages 11 and 12. After first obtaining baseline data, Luciano introduced RCT for 5 weeks in order to evaluate the effects of increasing bladder capacity on enuretic behaviors. RCT entailed the children drinking as much fluid as possible throughout the day and then holding their urine as long as possible for progressively longer periods of time until they reached 45 minutes. In addition, the children were told to practice stream interruption exercises (i.e., physically stopping and starting the voiding of their urine) three to five times each time they voided. The boys received points throughout the day for following directions as part of a reward system. The occurrence of bedwetting was recorded daily. Results showed that the use of RCT both increased bladder capacity and reduced the number of wet nights. However, because complete cessation of the enuretic episodes was not achieved, Luciano introduced differential contingency dry wet bed (DCDWB). DCDWB entailed an inspection of the child's bed each morning with a parent. If the bed was dry, a token reward system was implemented and the parent praised the child. If the bed was wet, the child was instructed to replace the dirty linens with clean ones and to wash his soiled nightclothes. From the point at which DCDWB was initiated, the nocturnal enuresis stopped within 5 to 6 weeks for both boys. At weeks 17 and 18, fading procedures were implemented by gradually decreasing the daily monitoring, exercises, and reward system. These findings are consistent with other studies demonstrating that providing tangible rewards plus fading as a treatment for nocturnal enuresis has a higher success rate (85%) and lower relapse rate (37%) than both dry bed training and the urine alarm.

In 1982, J. Bollard and T. Nettlebeck implemented a component analysis of dry bed training, a comprehensive treatment for enuresis consisting of the urine alarm, RCT, waking schedule, and positive practice/cleanliness training. This study included 177 enuretic individuals between the ages of 5 and 17. Each individual was randomly assigned to one of the eight groups. Group 1 was considered the standard condition, which entailed the use of the urine alarm during sleep. Group 2 involved the use of a waking the schedule in addition to the urine alarm. The waking schedule consisted of waking the individual every hour to void during the first night and one time 3 hours after falling asleep during the second night. Then after each dry night, waking would occur one-half hour earlier than the previous night, until the waking time was equal to 1 hour after sleep onset. Group 3 entailed the use of the urine alarm in addition to RCT. Here, RCT included the third variation of RCT at night that was discussed earlier (i.e., fluid loading before bed, hourly waking, prompting urine retention). The fourth group included the use of positive practice, cleanliness training, and the urine alarm. Positive practice entailed the child lying in bed with the lights off and counting to 50. When the child reached the set number, he or she was to go to the toilet and try to void. This process was repeated 50 times before falling asleep. Immediately following an enuretic accident, the child was reprimanded and sent to the toilet. The child then implemented cleanliness training, which involved changing one's nightclothes, removing and replacing the soiled bed linens, and drying and repositioning the detector pad of the urine alarm. Prior to returning to bed the child again had to carry out the positive practice exercises 20 times. There were also four additional groups that were composed of combinations of the first four groups. Group 5 included waking and RCT. Group 6 entailed waking, positive practice, and cleanliness training. Group 7 included RCT, positive practice, and cleanliness training. Finally, Group 8 was composed of the full dry bed training package. Bollard and Nettlebeck found that groups 6 and 8 had significantly fewer wet nights than each of the other groups. Further, they found no significant differences between the other groups. However, they did report that each of the four groups that included the waking schedule responded faster to the treatment than those without the waking schedule. In the RCT group specifically, 11 of the 12 participants met the criterion for becoming dry with an average of 24 wet nights during the 20-week treatment period.

As noted, studies have evaluated the combined effectiveness of RCT and other intervention methods as a means to stop enuresis. In 1986, Gary Geffken, Suzanne Bennett Johnson, and Dixon Walker compared the effects of the urine alarm alone against the urine alarm plus RCT with 50 5- to 13-year-old enuretic children. Baseline measures of wetting frequency were collected over a 2-week period of time; in addition, classification of either a small or large maximum functional bladder capacity was determined prior to randomly assigning participants to each of the

groups. All participants were instructed to use the urine alarm. Half were also instructed to implement RCT based on Paschalis, Kimmel, and Kimmel's 1972 model of RCT. In this study, children in the RCT plus urine alarm group were instructed to hold their urine for progressively longer periods of time until they reached 45 minutes beyond the initial urge. Over the course of treatment, 10 participants dropped out. Of the 40 remaining participants, 92.5% ($n = 37$) achieved 14 consecutive dry nights, although 41% ($n = 16$) of the children relapsed. The fewest bedwetting accidents occurred in children with a large functional bladder capacity who were in the urine alarm only group and with the children who had a small functional bladder capacity and were in the urine alarm plus RCT group, suggesting a relationship between functional bladder capacity and method of treatment. This decrease in bedwetting may have also been a result of the increase in nighttime arising to use the toilet. This suggests that RCT was able to increase the sensitization to a full bladder but not actually increase functional bladder capacity as has been suggested throughout the literature.

Research on the effectiveness of RCT and other behavioral methods, such as dry bed training and the urine alarm, continue to provide information regarding the effective treatment of nocturnal enuresis. Further, treatment of nocturnal enuresis tends to produce a high dropout rate due to the demands placed on the parents to implement and follow through with the treatment. As discussed, different variations and combinations of RCT and other methods will result in different outcomes. It is important to choose a method that best suits the therapist and the family being treated.

IV. SUMMARY

RCT is an intervention model used to decrease the presence of nocturnal enuresis. Enuresis is the voluntary or involuntary voiding of urine in clothes or in bed after the age of 5. RCT encourages the holding of urine for extended periods of time after the first urge to urinate is detected. This functions as means of increasing the functional bladder capacity of an individual. Variations of RCT may also include fluid loading and reward systems as methods of reinforcement for increased fluid consumption, delayed urination, or both. On average, RCT is effective with 50 to 75% of individuals in reducing nocturnal enuresis, and with 30 to 50% of individuals in completely eliminating bedwetting. Based on the varying methods of implementation and the results of previous studies, specific intervention programs for treating enuresis should be tailored to the specific family and individual being treated.

See Also the Following Articles

Bell-and-Pad Conditioning ■ Child and Adolescent Psychotherapy ■ Modeling ■ Nocturnal Enuresis: Treatment ■ Primary-Care Behavioral Pediatrics

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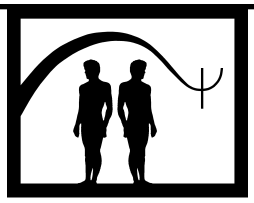

Role-Playing

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GLOSSARY

confederate An individual who pretends to be a participant in a research study, but is actually part of the research study.

modeling A procedure in which a particular behavior or behaviors is/are demonstrated for an individual to allow that individual to emulate the behaviors.

operant conditioning A theory of behavioral modification that states that behaviors are controlled by contingencies that occur following the behavior.

role reversal The client acts "as if" they are another individual involved in a problematic situation.

Role-play is a procedure in which scenarios are designed to elicit particular behaviors from an individual. The individual is asked to respond "as if" the situation were actually occurring. The individual may respond to another person or to a situation presented by video-or audiotape. This article presents a review of the uses of role-play in therapy, guidelines for use, advantages and disadvantages of this techniques, and information regarding empirical studies of the technique.

I. DESCRIPTION

Role-playing, also known as behavioral rehearsal, has a number of uses in behavior therapy, in terms of both behavioral assessment and treatment. Whether used as part of an assessment or intervention, role-playing requires the client to act "as if" they are in a real-life situation involving a problematic behavior. Role-play may enable clinicians to directly observe deficits (e.g., unassertiveness) or excesses (e.g., aggression) in an individual's behavioral repertoire. Role-play may also be used in treatment for a number of behavior-based problems including phobias, anxiety, social skills training, and interpersonal difficulties.

Role-play sessions can be audio- or videotaped in order for the behaviors to be rated by either the therapist, the client, or an objective judge. Frequently, behavior checklists are used to rate target behaviors the client is attempting to learn. Behaviors can be rated in terms of their effectiveness, frequency of occurrence, duration, or presence or absence. Clients can also provide ratings of self-perceived competence or level of arousal while performing the behaviors. Based on the ratings, a therapist provides feedback to the client. Feedback includes specific information regarding the individual's performance and suggestions for improvement and additional practice.

A. Assessment

Often, it is not possible for a therapist to observe directly a problem behavior in the natural setting in

which it occurs. In these cases, it may be possible to recreate the situation in the therapists' office. Role-play frequently involves the therapist and client reenacting a problematic interpersonal situation. Outside models may also be used to better simulate the actual situation. For example, if the client is a male college student reporting difficulties asking women for dates, the therapist may want to recruit a young female assistant to assist in the role-play.

Role-play may also be beneficial if the client has a difficult time verbally expressing the nature of the problem. Enacting a similar situation with the client may provide the therapist with specific knowledge of the client's behavioral excesses and deficits that he or she is not able to verbalize. For instance, if the college student described above is not able to explain the nature of his difficulties interacting with women, conducting a role-play may clarify the specific nature of the problem.

B. Intervention

Role-play is often conducted within the therapy session to assist clients in learning and practicing new skills, decrease and extinguish undesirable behaviors, and increase and reinforce desirable behaviors. Through role-play exercises, the therapist is able to observe the client's behaviors directly and provide feedback regarding strengths and limitations, and to reinforce the target behavior. For example, a therapist engaging in social skills training may describe the procedure to the client, provide a rationale for its use, establish several scenarios that approximate the problematic situations, model the appropriate behavior with a confederate, then ask the client to respond to a confederate (live, audio, or video) "as if" the situation is occurring. Feedback is then provided to the client on her or his performance. Role-play is also frequently used is to assist parents in teaching new skills or modifying behavior of a child. Role-play may be first conducted in session with parents. The parents are then instructed to engage in role-play practices at home with their child. For example, role-play may be appropriate for teaching an aggressive child socially appropriate means of interacting with other children.

Role-play is also useful for helping a client attend to internal processes of which they are unaware. For instance, while enacting a scene in which the client is practicing assertive behavior, the therapist may call attention to thoughts, feelings, and stimuli to which the client typically does not attend. Once the client has identified the internal processes, role-play can be used to learn new ways of responding to the situation. For example, clients with social anxiety may not be aware of automatic, distorted cognitions (e.g., "Everyone in the audience thinks I'm stupid") that may be increasing their levels of anxiety.

Role-play is frequently used to introduce the concept of generalization of therapeutic techniques to other contexts. For example, if a client has been working on increasing his assertive behavior with his wife around money issues, the therapist may ask him to role-play confrontation with a friend or a problem at work. Further, a therapist may ask the client to take on various roles to gain other's perspectives on a problematic situation. This type of role-play is termed role reversal and is useful in challenging and modifying automatic thoughts concerning how a client is perceived by others.

Other forms of behavioral rehearsal that may be used as an adjunct to role-play are instruction, physical guidance, modeling, and imagery rehearsal. The decision to incorporate other techniques will depend on the desired skill or the behavior to be changed, the nature of the situation, and the current level of client functioning. For example, if the goal is acquisition of a new skill or if the client's behavioral repertoire is lacking, modeling appropriate behaviors may be required prior to initiating role-playing. Effective intervention with complex new skills may require breaking the skill down into smaller components and role-playing each component, gradually piecing together the total skill. An individual with a severe snake phobia may need to practice imaginal exposure or watch others interact with snakes before he or she is able to role-play exposure to a toy snake.

C. Guidelines for Use

The effectiveness of role-play techniques may be increased with the following strategies:

1. Make the scenarios as realistic and as close to the actual problematic situation as possible.
2. Start role-play with simple situations and graduate to more complex situations and behaviors.
3. Use a variety of different scenarios to help generalize skills to different contexts.
4. Specific role-plays should target the most salient problem behaviors for each client.
5. Monitor a client's progress over time. It may be helpful to provide a graphic depiction of the client's progress. For example, if the frequency of occurrence of target behaviors is the rating focus, the

therapist can plot changes in this frequency within and across sessions.

5. If role-plays are to be conducted across time as part of an ongoing assessment, care should be taken to standardize instructions and scenarios to ensure that it is the client's behavior that is being assessed, not changes in the scene, environment, or other individual(s) in the scene.

D. Advantages and Disadvantages

As with any procedure, there are numerous advantages and disadvantages to the use of role-play in assessment and as a therapeutic intervention.

1. Advantages

Role-play allows for the direct observation of clients' verbal and nonverbal behaviors. It can be used to corroborate self-reports of problem behaviors. Role-play assessments of target behaviors are easily conducted in the research laboratory or the therapist's office and are inexpensive. It provides a rich record of client responses that are difficult to assess using paper and pencil measures or interviews. Role-play scenarios are typically brief, so many can be conducted within one session.

Role-play can have many advantages in therapy. Clients frequently experience difficulties completing homework assignments at home. Role-playing within session may help decrease fears about the assignment and increase compliance. Role-play allows clients to achieve small successes, which in turn increase motivation for change. Further, role-play can be used as a steppingstone for performing more complex skills or conducting *in vivo* practice of target behaviors.

2. Disadvantages

There are also several disadvantages to consider. Scenarios need to be standardized in order to provide an accurate assessment of behavior change. Inconsistencies in the behavior of a confederate or the format of stimuli used may impact the behavior of the client and may inaccurately suggest improvement and make comparisons difficult. Perhaps the most salient limitation is the questionable criterion validity of role-play. The participants' or clients' behavior in session or in a research setting may not be an accurate representation of their behavior in a natural situation. Also, the therapist is not able to sample all possible scenarios, thus there is a potentially erroneous assumption of cross-situational consistency. Finally, the accuracy of the simulations themselves may not be completely acceptable in all scenarios.

II. THEORETICAL BASIS

In this discussion, role-play is presented as a behavioral technique and its utilization is based on the behavioral principle of focusing assessment and treatment on observable behaviors. It is not meant to provide an understanding of the etiology of a behavior; rather, problematic behaviors are identified and modified through practice in simulated situations regardless of etiology.

The theory of operant conditioning holds that the probability of the occurrence of specific behaviors is determined by the contingent consequences of those behaviors. The frequency of a behavior can be increased through positive (i.e., adding a desired stimulus) or negative (i.e., removing an aversive stimulus) reinforcement and decreased through positive or negative punishment. In cases in which the target behavior does not occur or is not yet a part of the client's behavioral repertoire, modeling (i.e., observational learning) may be used to introduce the behavior. Depending on the complexity of the target behavior, shaping (i.e., reinforcing approximations of the target behavior) may be incorporated in the role-play.

Once the skill is learned and the behavior performed, the therapist uses positive reinforcement to increase the occurrence of the behavior and to encourage the client to engage in the behavior outside of the therapy session. It is hoped that the modified behavior will positively impact the contingencies, further reinforcing the client's desire to engage in the behavior.

III. EMPIRICAL STUDIES

Research evaluating the validity of the use of role-play in either an assessment or as part of a therapeutic intervention is somewhat limited and dated. One of the primary difficulties involved in conducting such research is the lack of standardization of role-play stimuli used across studies. For the most part, research demonstrates that ratings of subjects' behavior responding to simulated situations correlates highly with evaluations of those who knew respondents well. Role-play (alone or as part of a treatment protocol) has been found to be effective for emotional and behavioral disorders including depression, social skills training, anxiety, phobias, aggression, and interpersonal problem solving. Role-play also has some support for prevention efforts. In 2000, Arthur Perlini and Christine Ward investigated the effectiveness of HIV prevention interventions and found that role-play was associated with increased

knowledge about AIDS and HIV in comparison to video, lecture, or no intervention.

IV. SUMMARY

Role-play techniques have been widely used in behavioral assessment, as part of therapeutic interventions, and as a means of evaluating therapeutic interventions. Empirical support for role-play is fair; however, there are a number of factors that limit one's ability to evaluate techniques across studies. There are numerous advantages (e.g., brief and inexpensive) and disadvantages (e.g., questionable criterion validity) to consider when deciding whether or not to use role-play. However, it appears to be an appropriate technique for a variety of difficulties including anxiety and interpersonal interactions.

See Also the Following Articles

Behavioral Assessment ■ Behavioral Therapy Instructions ■ Behavior Rehearsal ■ Corrective Emotional Experience ■ Heterosocial Skills Training ■ Self-Statement Modification ■ Modeling ■ Working Alliance

Further Reading

Bellack, A. S., Hersen, M., & Kazdin, A. E. (1985). *International handbook of behavior modification and therapy.* New York: Plenum Press.

Cormier, W. H., & Cormier, L. S. (1991). *Interviewing strategies for helpers* (3rd ed.). Pacific Grove, CA: Brooks/Cole Publishing Company.

Schizophrenia and Other Psychotic Disorders

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GLOSSARY

psychosis A mental state characterized by loss of reality testing as in delusions and hallucinations, often accompanied with severe interferences with the capacity to meet the ordinary demands of life, maintaining social and personal boundaries, manage profound levels of anxiety, focus attention, and experience pleasure.

schizophrenia A disorder of cognition and behavior that lasts for at least 6 months and includes two or more of the following: delusions, hallucinations, disorganized speech (positive symptoms), grossly disorganized or catatonic behavior (disorganized symptoms), emotional flattening, poverty of thought, and speech and severe impairments in motivation (negative symptoms).

I. INTRODUCTION

Contemporary treatment of patients with schizophrenia is an amalgam of its biopsychosocial determinants, heterogeneous presentation, and phasic course. It includes psychopharmacological, psychoeducational, and rehabilitative interventions, and a continuum of care with a variety of ambulatory-based alternatives. Comprehensive treatment tailors these interventions to the phase of illness and is reinforced with a variety of flexible and supportive psychotherapies that emphasize medication compliance, problem-solving tasks, community reintegration and tenure, and in its most stable phase, conflict resolution and personal growth. This article describes the evolution and implementation of these psychotherapies as well as their interface with the various above-mentioned interventions.

II. HISTORY

Although Sigmund Freud was skeptical about the use of psychoanalytical therapy for patients with schizophrenia, many practitioners from early in the 20th century applied his methods for these patients. Because of their withdrawal from the external world and essential narcissism (e.g., autism), Freud felt that patients with psychotic disorders were unable to form a meaningful, stable, and workable transference, the basis of psychoanalytic treatment. This inability made it difficult to work through unconscious conflicts and their accompanying defenses as they appeared in relation to the therapist. Other psychoanalytic pioneers and followers of Freud, such as Paul Federn, Karl Abraham, and Carl Jung, felt otherwise and began a long tradition of utilizing insight-based techniques that developed side by side with psychodynamically oriented psychotherapy generally. To the earliest list was added the

work of Victor Tausk, A. A. Brill, Wilhelm Reich, Gregory Zilboorg, Sandor Ferenczi, and Ernst Simmel. Simmel and Georg Groddeck introduced the psychodynamic approach into the mental hospital. It is noteworthy that all these early practitioners recommended modifications of the traditional analytic technique to be more directive, less focused on the transference, and employing more techniques than interpretation alone.

Use of these modified approaches reached its peak in the United States in the post–World War II decades of the 1940s and 1950s. Represented in the work of Harry Stack Sullivan, Frieda Fromm-Reichman, and Harold Searles, practitioners of the interpersonal school of psychiatry worked with patients as if schizophrenia were fundamentally a disorder of interpersonal relatedness. Along with British object relations theorists and practitioners such as Melanie Klein, Wilfred Bion, and Herbert Rosenfeld, these therapists believed that the illness was caused and could ultimately be cured, or at least significantly ameliorated, by interpersonal, psychotherapeutic, and interpretive techniques. Although much of the focus of treatment remained with an elucidation of the meaning of various symptoms and their relationship to the patient's past and current stressors, modifications in classical technique continued with patients being seen face to face, often less than daily, and with much more interaction between patient and therapist.

In the decades of the 1960s and 1970s clinicians like Lewis Hill, Milton Wexler, and Victor Rosen continued the psychodynamically oriented approach to patients with the idea that psychosis was just like neurosis only more so. Others, like Ruth and Ted Lidz, Steven Fleck, and Lyman Wynne, supported somewhat by the previous work of Searles, believed that schizophrenic pathology made it difficult to attain adequate separation from important figures in the patient's life. As opposed to the primacy of intrapsychic conflict, this more developmental or family point of view focused on the etiological role of dysfunctional events and faulty communication patterns within families. At the same time, this approach led to a more reality-based, adaptive thrust with straightforward language and problem-solving techniques. Unfortunately for those espousing this approach, the dysfunctional impact on families of living with a family member with schizophrenia was not adequately considered.

After reaching a peak in the two decades between 1950 and 1970, the clinical use of, reimbursement for, and educational input toward the psychodynamically informed psychotherapy for patients with schizophrenic, schizoaffective and psychotic depression steadily declined in the United States. The causes for this decline are well known and reflect a myriad of documented social, scientific, and economic realities. The development of the earliest antipsychotic medications dramatically reduced some of the most dramatic symptoms of psychosis. Research efforts were unable to confirm the effectiveness of psychotherapy, whereas others demonstrated a lack of its effectiveness. Questions about patient selection invalidated many of the remarkable and compelling anecdotal case reports of successful treatment. In addition, there was a dramatic proliferation of nonpsychological forms of treatment, and trends in the overall practice of psychotherapy itself shifted in ideology from psychodynamic to interpersonal to cognitive-behavioral modalities of therapy.

III. CONTEMPORARY APPROACHES

This nearly 30-year decline in the practice of dynamically informed psychotherapy for patients with psychotic disorders appears to be slowing down and even leveling off. There are several factors that account for this shift, not the least of which, paradoxically, is the revolution in and explosive growth of neuroscience over the last two decades. This growth directly affected psychotherapeutic work in two ways. First, there has been a clear-cut, experimentally verified recognition of the dynamic interplay between heredity and environment, between hard wiring and experience and between protein synthesis at the receptor site and input from the perceptual apparatus. Thus, a modern conception of severe mental disturbance suggests that the structure of a psychosis derives from the patient's genetic predisposition, prenatal environment, constitution and brain; whereas its content (the expression and experience of illness) issues from the patient's developmental environment, meaning system and mind. Because the interaction of psychosocial stressors and brain vulnerability leads to dysfunctional adaptation, optimal treatment addresses both sides of the interaction.

The second and more practical effect of the remarkable advances in *neuroscience* is the ability to design pharmacological agents to enhance effectiveness with the positive and disorganizing aspects of the illness and diminish some of those agents' most irritating side effects. Far from being perfect, the new so-called atypical antipsychotics also show promise for mitigating negative symptoms without the troubling extrapyramidal side effects of earlier neuroleptics. Much like the application of a brace to the paralyzed limb of a stroke victim, the antipsychotics appear to protect the

receptor site on an affected neuron against continued overstimulation. Neither intervention cures the fundamental pathological condition, but in both cases their removal activates the symptoms: in the first case, hemiplegia; and in the second, decompensation and the exacerbation of psychotic symptoms.

The ability to manage positive, negative, and disorganized symptoms, the most debilitating aspects of schizophrenic illness, have made the patient more available for psychotherapy and brought the following crucial treatment issues into bolder relief: personality and character, treatment compliance and therapeutic alliance, and long-standing cognitive, social, and vocational deficits. With respect to personality and character, it was within the past decade that many believed that a diagnosis within Axis I of schizophrenia or schizoaffective illness precluded the personality or character diagnoses of Axis II. This was because regression to psychotic levels was presumed to have a fundamental and disorganizing effect on identity, personality, and coherence of the self-concept. Most people who work closely with these patients, however, believe the personality remains essentially intact and, depending on its configuration, can have both facilitating and inhibiting influences on the treatment, the treatment alliance, and the course of illness. The emergence of personhood in the previously withdrawn and disorganized patient makes the patient available to discuss the substantial problems of living that result from debilitating illness and form the centerpiece of an effective psychotherapeutic process. Other issues that may come to the foreground as a result of effective medication include depression, negative symptoms, and a profound demoralization and despair about the afflicted individual's deviance from the mainstream of friendship and social life.

The reduction of disorganizing symptoms also makes it possible to look more closely at the treatment alliance and some of its resistances, and secondarily, of course, the whole question of treatment compliance. Treatment alliance is critical for the success of any of the therapies proposed in this section and takes us immediately into the realm of object relations and interpersonal theories. Unlike Freud's conceptualization of the narcissistic neurosis, it is now more commonly believed the problem with the transference in these patients is not that there is not enough for a treatment alliance; rather, the issue appears over and over to be a very intense and highly unstable alliance and difficult to manage transference reaction. As mentioned there is by this time an enormous anecdotal literature on this subject, most of which precedes the modern pharmacological era. Clinicians continue to report on this kind of work with patients. In these highly evocative accounts, the vicissitudes of attachment and separation and transference and countertransference suggest much that can be reexplored and investigated with today's patient in an entirely new context and without the same level of anxiety about losing or doing damage to a patient. Psychodynamically oriented psychotherapy, however, with its emphasis on the regressive transference neurosis, may well be overstimulating for many of these patients especially in the early and more volatile phases of the illness. Thus, keeping in mind issues of separation and attachment while helping the patient reintegrate and cope—without focusing on them—becomes the task of the therapy.

Very often the psychotherapist of the patient with schizophrenia must perform auxiliary ego functions such as reality testing, assistance with impulse control, anticipation of consequences (judgment), and sharpening self-object differentiation. Therefore, the most widely practiced form of psychotherapy for patients with schizophrenia is supportive. The techniques include the establishment and maintenance of the therapeutic alliance, a steady focus on medication compliance and side effects, and paying attention to and helping reduce stress. These techniques are supported with clarification, education, and reassurance and are the heir to the psychodynamic tradition in which the relationship between therapist and patient is crucial and adaptive defenses are encouraged and reinforced. Finding the appropriate synthesis of the modifications from traditional psychotherapeutic technique, developing and maintaining a stable and durable therapeutic alliance, while keeping in touch with the dynamic unconscious, comprise the art of the therapeutic work with these patients. Furthermore, supportive psychotherapy is the basis of the majority of contemporary psychotherapies for the illness in virtually all its forms and phases. Figure 1 outlines the historical trends in the psychodynamically oriented psychotherapy of patients with schizophrenia.

Compliance with effective medication regimens is one of the most important issues in the ongoing treatment of patients with schizophrenia. The idea of learning in more detail about a patient's reluctance to continue a medication that is fostering the reintegration of his or her personality may be quite helpful. Is noncompliance the same or does it go beyond the same kind of denial of illness that one sees in any chronic illness, diabetes for example, in which issues of pride and autonomy play such a strong role in problems with compliance? Or is this denial significantly connected to the patient's low awareness of symptoms?

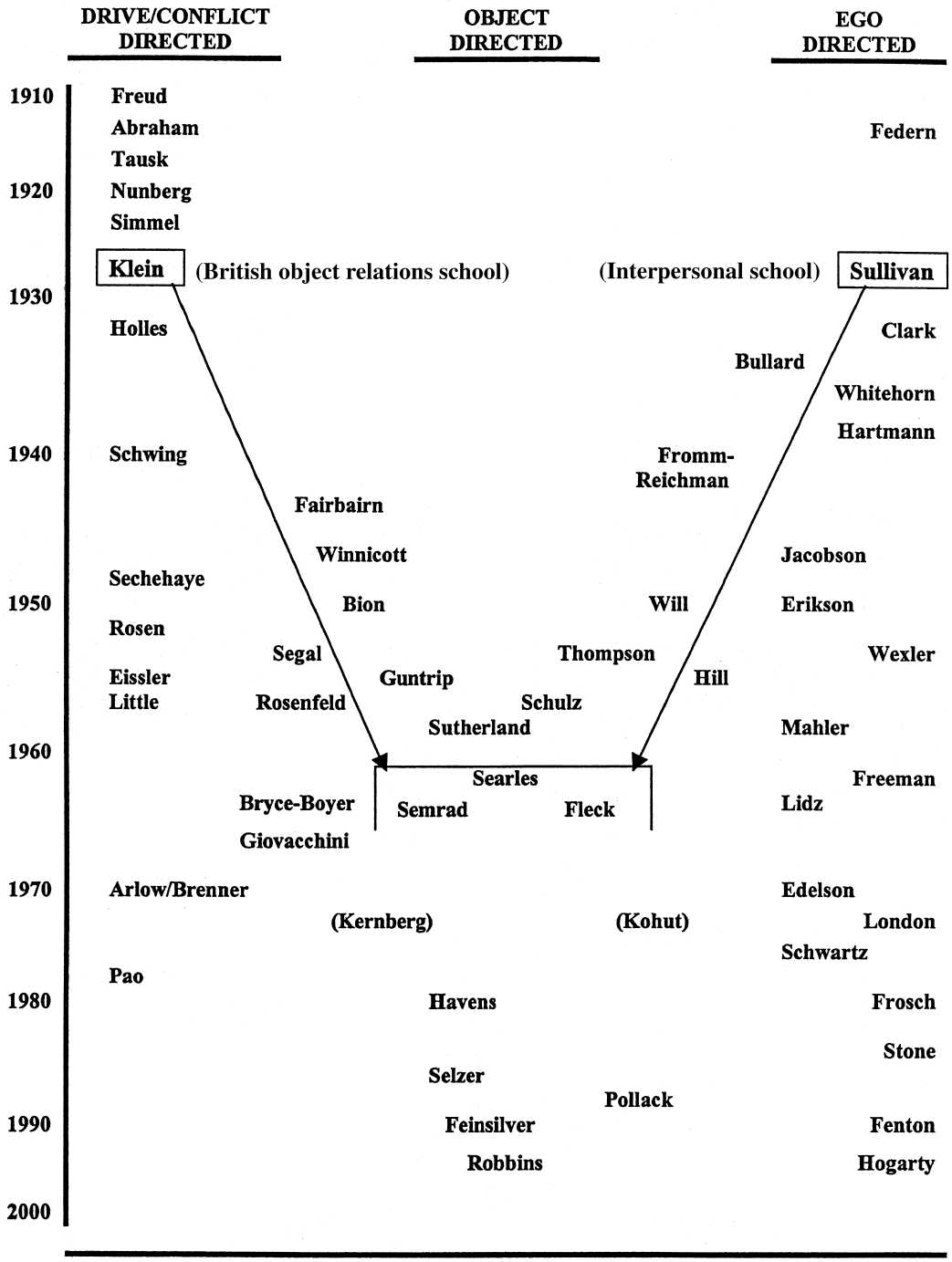

FIGURE 1 Major theoretical/clinical trends in psychotherapy of schizophrenia. Reproduced with permission from Spiegel (ed.). (1999). *Efficacy and Cost-Effectiveness of Psychotherapy.* Washington, DC: American Psychiatric Press.

Or is the reluctance to continue medication more like the patient with a bipolar disorder who stops their lithium or valproic acid because they miss the intense high associated with a manic state? Or is it a flight from inner deadness, a manipulative effort to obtain more from the treatment team, or a retreat from the despair associated with the many demands of external reality in the absence of requisite adaptive skills? Or

finally, is it yet another manifestation of basic faults in internalized object relations alluded to when speaking of issues of attachment and separation earlier?

When a patient is not threatened so immediately and unpredictably by disorganizing symptoms, the psychotherapist is in a much better position to understand the dysfunctional interaction of these relevant and dynamic issues. It is noteworthy, however, that these issues may be sidestepped in many contemporary educative and rehabilitative approaches that take the position that noncompliance has more to do with a poor understanding of the illness, its symptoms, and the role of medications.

One of the most painful but important issues to emerge as a result of more effective psychotropic medication is the clear-cut cognitive, social, and vocational deficits that inhibit the functional adaptation of many of the patients with serious and persistent mental illness. In an increasingly technological age it may be preferable, in fact, to be considered mentally ill than it is to labeled a "drop-out." There are many patients who have emerged from several years of psychosis and withdrawal only to discover they are way behind their peers in the capacity to solve the problems of everyday life, to feel socially attuned, to enter the workforce, or otherwise construct a meaningful life. These represent another kind of deficit, a deficit that results from being more or less "out of it" and which adds a new dimension to the illness itself. Various forms of psychotherapy are especially helpful with the problems in living that are functional and emotional sequelae of severe mental illness.

IV. LINKING PSYCHOTHERAPY WITH PHASE OF ILLNESS

Growing from the work of John Strauss and his colleagues at Yale utilizing longitudinal patterns and an interactive-developmental model, Wayne Fenton and his colleagues at the Chestnut Lodge Hospital formulated a set of phases through which symptoms develop, progress and retreat. The phases include

1. A prodromal period signaled by a constellation of symptoms including sleep difficulty, perceptual abnormalities, and social isolation.
2. An acute or active phase with the characteristic signs of decompensation.
3. A subacute or convalescent phase characterized by a reduction in florid symptoms, some reorganization of function, especially reality testing, and postpsychotic depression.
4. Moratoriums or adaptive plateaus during which, somewhat like the latency period of psychosexual development, there is a consolidation of gains, a gradual restitution of personal identity and a strengthening of confidence and adaptive skills.
5. Change points, called "mountain climbing" by Strauss during which there may be upward shifts in functioning (moving from halfway house to community; beginning a job, etc) either self-motivated or initiated by others but that carry potential for improvement or relapse.
6. Stable plateaus which can be more or less enduring and range from remission to fixed deficits or persistent symptoms.

Instead of a monolithic therapeutic approach to patients with psychotic disorders, the contemporary clinician flexibly modifies his or her interventions and contact according to the phase of illness. In this approach, that sensitive clinicians have long understood, therapeutic contact may range from quite time limited, reality based, problem solving, and ego supportive along one end of the continuum to more exploratory, nondirective, interpretive, and insight oriented along the other end. More specifically, during the acute phase, at onset of the psychosis, exacerbation or relapse of illness, the focus is on acute symptom stabilization, and the therapist is encouraged to be supportive and directive. Because patients in the acute phase are often out of touch with reality and highly sensitive to social stimulation, group therapy is contraindicated at this time.

In the subacute and convalescent phase, the supportive and directive approach is continued with the additional task of assessing stressors and vulnerabilities, mobilizing social supports and constructing the treatment team. The subacute and convalescent phase corresponds in timing and intervention to the basic phase of so-called personal therapy outlined by Hogarty and his colleagues at Pittsburgh. If group modalities are used during this phase, they should also be supportive and interactive as opposed to uncovering and insight oriented. Group therapy can be helpful in this phase if the patient does not have prominent paranoid or negative symptoms, and it can be helpful with discharge planning and return to the community.

In the first moratorium or adaptive plateau, the therapist can begin focusing on the treatment alliance and helping the patient with problem solving. In this phase interventions are tempered with considerable reassurance, supporting defenses and strengths. This approach is consistent with the idea that this is a phase

in which the patient is consolidating gains and restoring self-esteem. It is at this point that Hogarty's personal therapy would also introduce a step-by-step plan for the resumption of expected roles as well as the provision of social and avoidance techniques from social skills training. Group therapy during this phase is dependent on the patient's baseline level of functioning: for patients who can converse normally and function well between episodes, an interactive, non-insight-oriented approach is recommended; for those with chronic conditions and relatively good premorbid functioning, behaviorally oriented approaches should be used (see later).

When the patient moves to the next phase, begins to contemplate or becomes involved in changing status or venue, the therapy, now based on a reasonably solid treatment alliance, might begin to identify individual-specific prodromal and relapse factors because this is a very vulnerable time. This is also a phase when denial of illness may become prominent, so the therapist must pay attention to the patient's level of acceptance of illness. This phase roughly corresponds to Hogarty's intermediate phase. At this point his team provides internal coping strategies that include the identification of individual, cognitive and somatic indicators of distress, and the appropriate application of basic relaxation and cognitive reframing techniques.

After stable plateaus have been achieved and community reintegration and tenure sustained, the regular and by this point more traditional admixture of supportive and expressive psychotherapy can be employed. Here, interpretations continue to be quite modest, signs of regression are monitored very closely, and it is the patient who sets the pace of discovery. The later phases of recovery from the illness are usually those in which rehabilitative modalities are employed, inevitably highlighting the patient's premorbid difficulties, stressful familial patterns, and vulnerability to the social and technological demands of modern culture. This phase corresponds to Hogarty's advanced phase of personal therapy and includes encouragement for social and vocational initiatives in the community, progressive awareness of one's affect, together with its expression and perceived effect on the behavior of others. This latter phase also includes principles of criticism management and conflict resolution. Although it is a relatively recent addition to technique, personal therapy has modest research support.

Higher functioning patients may utilize an interactive group psychotherapy on an outpatient basis to learn more about their illness, to understand and utilize their medications more effectively, apply reality testing as positive symptoms threaten to emerge, and learn communication and problem-solving skills. Ambulatory patients with more severe disorders are best served with approaches derived from cognitive and problem-solving techniques, as well as skill training derived from more recent psychiatric rehabilitation methods. Many recommend co-therapists in groups for patients with schizophrenia, somewhat more personal disclosure as compared to that in groups for patients with character disorders, and a steady focus on the techniques of clarification, support, and the here and now of interpersonal interactions. There is virtually universal agreement that interpretive activity aimed at uncovering unconscious conflict is contraindicated in group work with this population.

In the resurgence of psychotherapy for patients with serious disorders, the psychodynamics are far more part of the understanding than they are of the technique. The psychotherapy is much more a part of the treatment than the principal element in or the guide of the treatment. The psychotherapy is more flexible, adjusting to the phase of illness and primarily supportive, focal and educative rather than explorative, general and insight oriented. It is more about coping, adapting, problem solving, and coming to terms with deficits rather than collaborating in a regressive enterprise to uncover and resolve conflict. Emerging from the ego psychological point of view, this version of supportive psychotherapy is more reality based and adaptive and closer to a developmental and educative rather than an interpersonal and interpretive focus. It might even be called rehabilitative psychotherapy. This point of view is closest to that held by Lidz and others, and it contrasts with a more interpersonal and interpretive point of view outlined by Harry Stack Sullivan and held by Otto Will, Elvin Semrad, and Michael Robbins (see Table 1).

V. COGNITIVE STRATEGIES

The last two decades have seen a rapid increase in an interest in schizophrenia from a neurocognitive perspective, beginning with a focus on attentional dysfunction and moving to the more recent focus on working memory and its various components. This interest has naturally led to innovative treatment approaches. Cognitive-behavioral therapies (CBT) for patients with schizophrenia and other psychoses represents a radical departure from traditional, and even from the flexible

TABLE 1
Listening to the Patient with a Psychotic Disorder: Interpersonal and Developmental Psychodynamic Views

Issue	*Interpersonal*	*Developmental*
Advocacy	Sullivan, Will, Semrad, Selzer, Robbins	Lidz, Fleck, Wynne, MacFarland, Leff
Etiology	Interpersonal Primary versus secondary incapacity to cathect an object	Interfamilial Actual Dysfunctional events Faulty communication patterns
Symptom	Failure to connect with objects	Failure to separate from objects
Best theory	Closer to object relations	Closer to self-psychology
Treatment goal	Address deficits interfering with therapeutic alliance (self-other differentiation, faulty reality testing, observing ego).	Address pathogenic family transactions interfering with continuing development (marital schism, marital skew, double binds)
Individual psychotherapy	Conflict resolution Transference-countertransference Relate associations, restitutional phenomena to alliance	Problem solving Real, tangible life problems Discourage free association and exploration of restitutional phenomena
Milieu organized to:	Support psychotherapy; more confrontation	Support adaptive skills; less confrontation
Similarities	Both approaches look for and reinforce health functioning, tolerate regression, and minimize the use of somatic modalities.	

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and personal psychotherapies of the last decade. CBT shifts the focus of intervention from the internal, dynamic, and supportive expressive to the external, symptom centered, and highly structured. Rather than a model of the mind based on psychoanalytic thought and various theories about the etiology of severe psychopathology, CBT addresses distortions in the cognitive sets or schemata that individuals develop to organize and understand their experience. These distortions may effect social-cognitive, perceptual, and inferential processes and lead to such diverse phenomena as hallucinations or delusional beliefs. Thus, rather than confronting or interpreting a delusion, the form and content of that false percept or belief, CBT's approach establishes a therapeutic alliance that increases the awareness and inconsistency of the belief. The goal is the replacement of the dysfunctional and maladaptive belief with one that is more evidence and reality based.

CBT for patients with schizophrenia and psychotic symptoms are based on the cognitive therapy developed in the 1960s and 1970s by Albert Ellis and Aaron Beck for patients with depression and anxiety. The emphasis placed on a nonthreatening and supportive therapeutic alliance, the effort to find aspects of the patient that are normal to help solve problems and a focus on adaptation and current problems harkens back to the developmental perspective on individual psychotherapy and have much in common with other contemporary psychotherapeutic treatments. The collaborative and accepting mode of the treatment focuses on the symptoms and problems that the patient wishes to address. A rational and common-sense approach is taken to the patient's attitudes, underlying assumptions, symptoms, and problems of daily living.

The major CBT approaches to these disorders include belief modification, focusing/reattribution, normalizing, cognitive therapy following acute psychosis, cognitive therapy for early psychosis, coping strategy enhancement and combinations of these. In belief modification, the patient is urged to view a delusion as only one possible alternative explanation of events. Without telling the patient that the belief is wrong, evidence for the belief may be challenged while inconsistencies are pointed out. Nonconfrontational verbal challenge and empirical testing help modify the degree of conviction patients may hold toward their beliefs.

Focusing/reattribution is the intervention most suited for patients with auditory hallucinations. Over a series of sessions the patient is asked to focus on specific aspects of the hallucinatory experience, from the characteristics of the voices, their content, and the patient's

beliefs and thoughts about the voices. Following sessions, patients are given "homework" assignments to record these matters that are then used to discuss the timing and context of the hallucinations. The ultimate goal of this technique is to change the attribution of the voice from external to the patient to the patients themselves. Similarly, in the normalizing technique, the therapist attempts to help the patient describe the situation and stressors immediately preceding the onset of symptoms, as well as elucidate the cognitive distortions at the time of the onset. Normalizing also utilizes relaxation and anxiety management techniques, as well as the diary and notebook assignments as in the homework sessions described earlier. Much like the interpersonal school of psychoanalysis, every effort is made to emphasize the continuity of psychotic and normal experience and to reduce stigma and distress.

CBT interventions in acute psychosis and early psychosis combines many of the elements listed earlier but also include small group work in which patients are exposed to the irrationalities and inconsistencies of other group members, thus reducing some of the pressure on the individual patient. Efforts are also made to help patients integrate the experience, much like in the normalization technique, and families are encouraged to cooperate in helping reduce stress. These techniques also include illness education and focus on issues of motivation and stigma. Many of these techniques mirror the early phase of illness work in flexible and personal psychotherapies described earlier.

Coping strategy enhancement involves the reinforcement of those techniques already employed by patients to compensate for their illness. This method helps patients identify those environmental stressors that trigger dysfunctional cognitive, behavioral, and physiological reactions leading to psychotic symptoms. The process includes the careful and systematic identification and following of symptoms and their contexts, enhancement and development of ongoing strategies in response to the symptoms, and practicing new strategies in the sessions, and with homework assignments between sessions. Patients are taught to prioritize symptoms, whether or not to increase or decrease their activity, sensory input or social involvement in response to each symptom.

Because cognitive therapies have clear protocols, it is easier to design studies of effectiveness than with more dynamically oriented treatments. Since 1990 there have been well over a dozen variably controlled studies of the types of CBT mentioned earlier. The results are best for those patients with clear-cut symptoms and who acknowledge those symptoms as ones to be addressed. Within that group the most effective results are with those patients with delusional symptoms. Investigators in the field are calling for better controlled studies with better and more random patient selection with respect to severity and concurrent treatments.

VI. RELATED MODALITIES

The final developments that have modified the practice of psychotherapy for patients with psychotic disorders is the increased sophistication in other modalities of treatment beyond psychotherapy and psychopharmacology. These techniques include psychoeducation, psychiatric rehabilitation, case management and assertive community treatment. These techniques serve to reduce stressors, facilitate adaptation, improve thinking, and mobilize resources in ways that reinforce self-esteem and enlarge the conflict-free zone, freeing the psychotherapist to more collaboratively share a focus with the patient in a more expansive and interrelated manner. These modalities address areas that were rarely meant to be dealt with in traditional psychotherapies.

Psychoeducational approaches do not dwell on the past and do not employ confrontative nor particularly interpretive techniques; rather, they make an effort to increase the family's knowledge of the illness and facilitate a rapprochement between parent and afflicted child, thus decreasing the pressure on both. Gone are the efforts to separate patients and their families. By reducing the stressors associated with dysfunctional interactions, experimental evidence has indicated a reduction in relapse rates. Then, like the early advertisements about medication, the patient becomes more amenable to and more continually available for the previously described, phase-appropriate psychotherapeutic interventions.

It is clear that medication, dynamic, personal, psychoeducational, and cognitive-behavioral therapies do not solve all the problems confronting the patient with a psychotic disorder. This is the case because most problems in living, especially for someone recovering from psychosis, have many interrelated components. With respect to the matter of social adjustment, for example, it is worth noting just how much might be involved from the different neuropsychological spheres encompassing sending, receiving, and processing. Starting at the foundation, social adjustment requires molecular skills such as eye contact and what to say in an introductory conversation—sending information. Acquiring these skills requires a sufficient level of motivation. Another critical element at the foundation for social

adjustment is the ability to perceive social cues, such as knowing when one might be welcome versus when one might be interrupting—receiving information. Acquiring social perception requires the capacity for self-object differentiation as well as the ability to recognize affects in the other. The final element in the foundation is problem solving. As mentioned, problem solving depends on intact cognitive processes, especially as has been more recently demonstrated, memory and visual-spatial mechanisms—processing information. Thus, effective treatment for social adjustment—a crucial factor in community reintegration and tenure—could involve cognitive remediation, social skills training, and psychotherapy—three separate treatment modalities, before coalescing into the molar skills necessary for social competence. And even then, these instrumental skills must be integrated with attachment needs. Insofar as some patients have the instrumental skills premorbidly, then a dynamically oriented psychotherapy that is helpful around issues of affiliation and attachment may be all that is needed. It is unusual, however, that this kind of intervention is sufficient for the modal patient with a psychotic disorder. Personal therapy as practiced by Hogarty and his colleagues appears to combine the elements most important for social adjustment. Their recently published study of 151 patients demonstrated a steady improvement in social adjustment for those patients living within a family. Their treatment had no effect on symptoms or anxiety and actually increased relapse rate in those patients living outside a family. Thus, like the recommendations of Fenton, they recommend that the later phases of their treatment await symptom and residential stability. Figure 2 outlines the many factors involved in social adjustment.

There is an important note to be made about the new modalities in the context of psychotherapy. Incompatible as they may seem on the surface, there are aspects of the contemporary treatment of schizophrenia and other psychotic disorders that are heir to the psychodynamic tradition in the continuing treatment of the seriously and persistently mentally ill. In determining a patient's specific rehabilitation goals, ideal environment and readiness for these interventions, the patient's interest and motivation, meaning system, symbolic, and value-laden world are critical. These emerge from the biopsychosocial model of illness and a thorough understanding of the patient and provide the energy for and shape of the treatment plan.

Expecting too much from or being too quickly discouraged with the lack of progress of a recovering patient can replicate exacerbating features such as high levels of tension or demoralization. Therefore, issues of

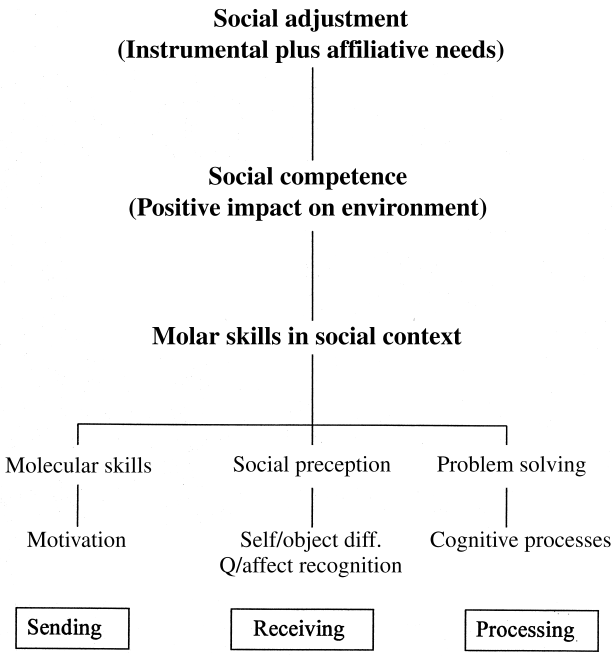

FIGURE 2 Elements of social adjustment.

psychological safety and trust are paramount, leading to difficulty coming to a shared reality and experiencing helpful intentions from a caregiver. A familiarity with the principles of psychodynamic psychiatry, with its emphasis on unconscious mental life, its principle of multiple determinants of actions, thoughts, and feelings, areas of sensitivity and vulnerability, and the presence of the past in the present—especially as represented in self- and object relations and transference phenomena, can only enhance the sensitivity and effectiveness of the treatment professional. Finally, the effectiveness of other treatments makes it possible for more appropriate technical neutrality than has often been the case in the psychotherapy for patients with a psychotic disorder. This is not meant in the sense, of course, of being a neutral object; rather, it means freeing the psychotherapist to shape the psychotherapy to fit the patient, whether it be from the point of view of therapeutic activity as previously mentioned, or whether it concerns itself with the patient's drives, ego operations, object relational, interpersonal, or self-system paradigms.

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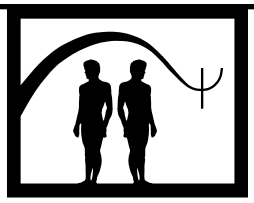

Self-Control Desensitization

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GLOSSARY

anticipatory anxiety Anticipating one's future anxiety when thinking about an anxiety-producing situation.

counterconditioning The replacement of one conditioned response to a stimulus by another.

hierarchy An arrangement of anxiety-producing scenes, from low anxiety arousal to high anxiety arousal.

in vivo desensitization Desensitization based on exposure to real-life anxiety-producing situations, generally by the practice of coping strategies.

proprioceptive responses Internal physiological responses, such as muscle tension, that occur in response to anxiety-producing situations.

reciprocal inhibition The inhibition of a learned anxiety response by pairing a new adaptive response with the original anxiety-producing situation.

self-control desensitization Desensitization based on a coping skills mediational format involving sensitivity to proprioceptive cues and cognitive relabeling.

systematic desensitization Reducing the connection between an anxiety-producing stimulus and anxiety by pairing an anxiety-incompatible response with the original stimulus.

I. DESCRIPTION OF TREATMENT

Self-control desensitization is a variant of systematic desensitization that gives more control of the procedure to clients than does the latter, which is therapist run. It is also based on a somewhat different theoretical model. In self-control desensitization, clients are given a rationale that is essentially coping skills oriented in nature. They are told that they have learned, on the basis of past experience, to react to certain situations by becoming anxious, tense, or nervous. They are then told they will learn new coping strategies to replace these negative reactions with more adaptable ones. They are taught the relaxation skills and other coping methods, such as breathing control and attention to internal sensations, and are then instructed to use them in a hierarchy of anxiety-producing situations to relax away tensions and provide covert rehearsal for situations they may face. The anxiety-producing scenes in the hierarchy are constructed jointly by the therapist and the client, and the client is asked to imagine them for 10 to 15 sec if there is no anxiety response. If there is such a response, the client is asked to terminate the scene and concentrate only on relaxation, relaxing away any tension. It is important that the use of these coping strategies be practiced repeatedly for the new coping skills to become well learned. This is especially important for scenes that arouse considerable anxiety.

The construction of the hierarchy originally followed the guidelines described by Wolpe in which it

was considered necessary to construct separate hierarchies for each specific anxiety-producing situation. However, in accordance with a more mediational paradigm, clients were taught to cope with their internal proprioceptive responses rather than coping directly with the situations that caused the anxiety. Thus, early on the use of exact hierarchies was not considered to be as important in self-control desensitization. In fact, the therapist was urged to include items that reflected a series of different anxiety-producing situations.

In systematic desensitization, it was considered important that scenes in the hierarchy be terminated if anxiety was aroused. In self-control desensitization clients are encouraged to remain in the scene if anxiety increases and to cope with this anxiety by relaxation or other coping strategies. Clients are encouraged to practice these new skills in real-life *(in vivo)* situations. The *in vivo* practice of these coping strategies in actual anxiety-producing situations should lead to enhancement of these skills.

II. THEORETICAL BASES

Systematic desensitization, as originally developed by Joseph Wolpe, was theoretically based on reducing anxiety by causing a response antagonistic to this anxiety to occur in the presence of the anxiety-producing stimulus. Thus, if the presence of a snake (the anxiety-producing stimulus), which normally produces anxiety, was paired with relaxation (a response antagonistic to anxiety), then a reduction in anxiety should occur. Wolpe thought that in this fashion the bond between the fear-producing stimulus (the snake) and the anxiety response would be weakened or reciprocally inhibited. Wolpe thought that it was important that a hierarchy of fear-producing stimuli (ranging from looking at the snake to approaching the snake to touching the snake) be constructed so the individual was not overwhelmed by anxiety early in the process. The procedure was based on the counterconditioning model in which the original bond between stimulus and anxiety response was automatically reduced or eliminated by the introduction of an antagonistic response.

Self-control desensitization was originally developed by Marvin Goldfried in 1971 and was based on a somewhat different theoretical rationale. Rather than considering relaxation as "reciprocally inhibiting" the anxiety response, Goldfried proposed a mediational model that was a forerunner of cognitive-behavior therapy. This mediational model consists of two aspects: the active construction of the muscular relaxation response and a cognitive relabeling of the entire sequence between the fear-producing stimulus and the fear response. Theoretically, the client learns a method of actively coping with the anxiety rather than an automatic weakening of a psychological bond taking place. The client also learns to identify proprioceptive cues that are associated with muscular tension and to relax them away, essentially coping with these proprioceptive anxiety responses rather than the actual situations that elicit the anxiety. With considerable repetition, the client also learns to react to anticipatory anxiety with anticipatory relaxation, and eventually this process can become automatic in nature. However, both self-control desensitization and systematic desensitization are based on an important assumption of the counterconditioning model that the relaxation response must be stronger than the anxiety response for counterconditioning to occur.

Both systematic desensitization and self-control desensitization originally postulated that the construction and use of a hierarchy of anxiety-producing stimuli was important because a too-rapid introduction of an anxiety-producing stimulus might overwhelm the new relaxation response. If that occurred, it was thought that anxiety would reduce the relaxation rather than the reverse. However, research by Goldfried and Goldfried indicated that the use of a hierarchy of target-relevant behavior was not necessary for effective self-control desensitization. More recent research conducted on systematic desensitization itself has shown that a hierarchy may not be as necessary as originally thought. Implosive therapy (or "flooding"), in fact, is based on the opposite rationale—that it is more effective to begin at the top of the hierarchy rather than the bottom so that rapid extinction might take place. Thus, the construction of a hierarchy has been deemed less important as the theoretical explanatory model shifted from a counterconditioning to a coping skills model. Likewise, in line with the mediational model, it was not considered as important to terminate the anxiety-producing scene if anxiety increased; rather the client should implement the model by coping with the anxiety itself and relaxing it away. Only if the client is unable to tolerate the anxiety should the scene be terminated. The coping skills model assumes that skills are enhanced by practice and success under somewhat adverse conditions.

III. EMPIRICAL STUDIES

The majority of the empirical research on self-control desensitization was conducted in the 1970s and early 1980s, with some doctoral dissertations

conducted in the late 1980s. Summary literature and case studies combining self-control desensitization with similar techniques, such as applied relaxation and Suinn's Anxiety Management Training, have appeared well into the 1990s. Especially noteworthy are the series of studies conducted by Jerry Deffenbacher and his colleagues on comparisons of self-control desensitization with Anxiety Management Training and self-control relaxation. Other studies have compared it to systematic desensitization, rational restructuring, and neurolinguistic programming. Its use has been investigated primarily with anxiety disorders but also with related problems such as phobias, vaginismus, and the management of psychotic patients and individuals with mental retardation.

The research has shown that, although self-control desensitization is effective when compared to control groups receiving no treatment, it is no more effective than a variety of alternative treatments. Furthermore, the use of a graduated targeted hierarchy does not appear to be necessary. What appears to be the mechanism of its effectiveness is the gradual installation of coping skills by practice, perhaps with the attendant nonspecific effects of hope, confidence, and optimism.

IV. SUMMARY

Self-control desensitization is a modification of systematic desensitization, as originally developed by Joseph Wolpe. It relies on a an active, mediational, coping skills model of change rather than a passive counterconditioning model. It utilizes coping skills such as relaxation as alternative responses to an anxiety response in the presence of anxiety-producing stimuli. A hierarchy of anxiety-producing situations is often used although research and clinical observation have shown that it is not as necessary as was once thought. Rather than terminate the scene as soon as anxiety is felt, clients are encouraged to remain in the situation and relax away the anxiety. *In vivo* practice in actual anxiety-producing situations is encouraged. It is similar in many ways to other self-control anxiety reduction techniques such as applied relaxation and Anxiety Management Training. Research has shown that self-control desensitization is effective for a variety of anxiety disorders but is not more effective than other cognitive or behavioral techniques.

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Coverant Control ■ Eye Movement Desensitization and Reprocessing ■ Self-Control Therapy ■ Self-Statement Modification ■ Systematic Desensitization ■ Vicarious Conditioning ■ Vicarious Extinction

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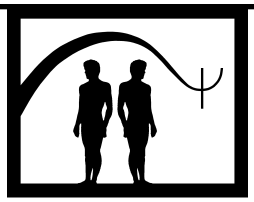

Self-Control Therapy

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GLOSSARY

self-management therapy A highly structured manualized, cognitive-behavioral therapy program for depression. Based on Frederick Kanfer's model of self-control, the treatment involves self-monitoring, self-evaluation, and self-control.

self-reward A strategy to increase probability of accomplishing difficult subgoal behaviors by setting up contingent rewards for their completion using a list of pleasurable activities for that purpose.

Self-control therapies involve teaching people skills and techniques for controlling their own behavior when striving to achieve long-term goals. It is usually assumed that people employ self-control implicitly in their efforts to change behavior, such as when starting a diet or exercise program. The self-control therapies attempt to teach these strategies in an explicit way. Many theories and therapies can be considered self-control theories. This article focuses on self-management therapy for depression developed by Lynn Rehm and his colleagues.

I. DESCRIPTION OF TREATMENT

Self-management therapy is a highly structured, manualized, cognitive-behavioral group therapy program for the treatment of depression. The program is currently presented in 14 weekly, one-and-a-half-hour sessions. Each session includes a didactic portion, a discussion period, in-session paper-and-pencil exercises, and weekly homework assignments that are reviewed at the beginning of the next session. It is an illustration of self-control therapies in that it is "transparent" to the participants. They are told that the depressive target of the intervention is identified, they are instructed in applying the intervention on their own, and they are told the theoretical rationale for the intervention. Participants are consciously applying psychological principles to change their own behavior.

Self-management therapy can be thought of in three ways. First, it is targeting specific components of depression and teaching the participants self-change techniques for modifying each target behavior. Second, it can be thought of as teaching principles of self-change in the context of depression. Third, it can be seen as teaching behaviors that are the opposite of depression, that is, positive self-esteem and self-control behaviors. People with positive self-esteem are people who accurately view their world, have a realistic sense of their abilities, set reasonable standards and goals, and are able to control their behavior with feedback to themselves.

The first session of the self-management therapy program serves to introduce the participants to one

another and to the program. The nature of depression is described and related to the symptoms presented by the participants. A brief overall description and rationale for the program is presented by the therapist. Homework for this first session involves keeping track of daily mood by rating average mood for each day on a scale of 0 to 10, where 0 is the worst most depressed day ever and 10 is the happiest day ever. The purpose of the assignment is to focus on daily variations in mood and to get participants used to the mood scale.

In the second session homework is reviewed with emphasis on participants' observations on their mood variability during the week and any correlates of their mood that they might have observed (e.g., felt better on days when they got out of the house). The didactic presentation in this session conveys a central idea in the program. The program is premised on the idea that mood in influenced by behavior and cognition, that is, activities that people engage in daily and the "self-statements" they make to themselves about what they do. Although the relationship may go both ways, the program is premised on the idea that depressed participants can change their daily mood and, thus, their depression by changing activities and self-statements. In various ways the rest of the program involves strategies for increasing positive activities and positive self-statements. The homework assignment is to continue monitoring mood and, in addition, to list positive activities and self-statements. This self-monitoring assignment is continued throughout the program with a variation in focus with each new topic.

In session three, the relationship between mood and events is demonstrated to participants by graphing their week's homework. For each day of the week the mood rating is graphed with a connected line. Then the total number of activities and self-statements for each day is graphed on the same form. Parallel lines illustrate the relationship between mood and activity. The homework assignment is to continue the self-monitoring logs daily.

The topic covered in the next session is the idea that any event has both positive and negative immediate and delayed consequences. When they are depressed, people tend to focus on immediate consequences. Activities can be positive either because they are immediately pleasurable or because they produce some delayed, or long-term positive outcome. Eating ice cream is immediately pleasurable whereas mowing the lawn may be a positive activity because the end product of a nice-looking lawn is pleasing. The homework assignment is to list each day at least one positive activity that is positive because it has a delayed positive effect. Each time such an activity is listed, a positive self-statement is to be listed noting the positive long-term effect.

Having covered the effects of activities, the next few sessions focus on their causes. Depressed persons are seen as making external, unstable, and specific attributions for positive events. "That was nice, but it wasn't my doing. It was just luck and may never happen again." Exercises in the session teach the participants to realistically take credit for positive activities. The exercise includes having participants take positive events from their self-monitoring logs and examine their causes. The homework assignment is to include in each day's self-monitoring log, one positive self-statement recognizing credit for taking responsibility for a positive activity.

In a parallel session, the idea is presented that depressed people tend to blame themselves for negative events. For a negative event, depressed persons tend to make internal, stable, and global attributions. In effect they are saying "It was my fault. I always fail in this way and I fail in everything else of this type." Again an exercise takes participants through a series of examples teaching them not to take excessive blame for negative effects, but instead, to see the that some of the reasons for negative events are external, unstable, and specific. The homework assignment is to write a self-statement daily that diminishes blame from oneself for negative events.

Goal setting is the focus of the next sessions. Depressed persons tend to be disconnected from long-term goals, and they often set goals poorly. Drawing from the behavioral literature on goal setting, good goals should be positively stated, concretely defined, in the person's control, and attainable. Participants are asked to choose any goal of intermediate range that they can work on in the next few weeks. With a goal-setting form they are guided through an exercise to define their goal and to establish a list of component subgoals necessary to reach the main goal. The homework assignment is to include the accomplishment of subgoals on the daily self-monitoring log list of positive activities. The intent of the homework is for participants to acknowledge to themselves progress toward the distal goal.

Following the goal-setting topic, the idea of self-reward as a means of motivating oneself to pursue the goal is introduced. Essentially one can increase the probability of accomplishing difficult subgoal behaviors by setting up contingent rewards for their completion. Participants construct a list of pleasurable activities that they could use to reward themselves when they accomplish difficult subgoal behaviors. For example, when completing shopping for the materials necessary for a goal of completing some home repairs, the participant might self-reward with a stop at a favorite donut shop.

The homework here is to list the subgoal activities accomplished on the self-monitoring log and also to record contingent reward activities.

The final topics of the program deal with the way in which depressed people talk to themselves. Depressed persons typically talk to themselves in ways that are punishing and diminishing of motivation. For example, "Why should I try to do this? I'll never succeed. I always make a fool out of myself by failing at things like this." The idea presented is that talking to oneself in realistically more positive ways can increase rather than decrease motivation. Self-talk can be a self-administered reward or punishment. In one exercise, participants are asked to make a list of comfortable statements that acknowledge a positive accomplishment. As one person might say to a friend "You did a great job with that task," the person might list for him-or herself "I did a great job with that task." The corresponding homework assignment is consciously to practice contingent self-rewarding statements daily and to record them in the self-monitoring log as positive self-statements.

A final session allows for continued practice of the lessons taught in the program and review of the ideas involved. The therapist is given some latitude in deciding when to go on to a new topic during the weeks of the program. The extra sessions may be spent earlier to go over a topic that the therapist feels needs further effort.

II. THEORETICAL BASES

The self-management therapy program is based on an integrative model of depression that takes elements identified by other models and subsumes them in a larger coherent framework. In doing so, the model adds a focus on depression as a problem in disconnection from long-term goals. Frederick Kanfer's model of self-control provided the basis for Rehm's self-control model of depression. According to Kanfer, when an individual initiates an attempt to achieve a new long-term goal (e.g., quitting smoking, losing weight, getting "in shape"), that person regulates his or her own behavior via a three-phase feedback loop, including self-monitoring, self-evaluation, and self-reinforcement. Self-monitoring involves observing one's own behavior, including antecedents and consequences. Self-evaluation involves comparing one's behavior to an internal criterion or standard. On the basis of this comparison one feels good or bad about progressing toward the goal. Rehm added another consideration in thinking about self-evaluation. To self-evaluate and feel good or bad about a behavior, an internal attribution is necessary. The person does not experience self-control if the control is actually external (e.g., spent the day in a nonsmoking environment).

The third phase of Kanfer's model is self-reinforcement. Kanfer argues that people influence their own behavior in the same way they may influence another person, by rewards and punishments. Metaphorically, if people are successful in their self-control attempts they "pat themselves on the back," and if they do poorly they "kick themselves." The reactions function as rewards and punishments to maintain the self-controlled behavior in the face of external stimuli and reinforcers operating against the behavior change (e.g., smoking urges, the effort of exercising). Self-reinforcement can be overt (rewarding oneself with a movie) or covert (feeling good about an accomplishment).

Rehm's model of depression uses Kanfer's self-control model as a framework. Rehm views depression as a failure of self-control to supplement external controls. When people are depressed they are hypothesized to show six deficits in self-control behavior. First, depressed people tend to self-monitor negative events to the relative exclusion of positive events. They are vigilant for things to go wrong. A similar idea is described by Aaron Beck as selective abstraction and a negative view of the world. Second, depressed people tend to self-monitor the immediate as opposed to the delayed consequences of behavior. Although they may ruminate about long-term goals they tend to be self-indulgent and respond to immediate consequences (watch TV rather than complete the housework).

Third, in terms of self-evaluation, depressed persons tend to set stringent self-evaluative standards for themselves. They view their own behavior as never good enough and tend to make all-or-none judgments that their behavior was either perfect or a complete failure. Perfectionism has been cited by various authors as a component of depression. Fourth, depressed people make negative attributions for their behaviors. Martin Seligman has elaborated this point in an extended attributional analysis of the behavior of depressed people.

The fifth and sixth deficits in the depression model are lack of contingent positive self-reinforcement and excessive self-punishment. Peter Lewinsohn's behavioral model of depression posits a loss or lack of response contingent positive reinforcement as the source of depression. This model assumes that self-administered rewards and punishments supplement external sources. A person with good self-control skills can successfully manage to get through a time of lack of external reinforcement with self-reinforcement and other self-control skills.

As can be seen, the elements of the model are dependent on earlier elements. The person who focuses on negative events and immediate consequences does not take credit for positive events, sees efforts as not meeting standards, fails to self-reinforce, and excessively self-punishes will be disconnected from long-term goals and suffer depression when the environment does not reinforce behavior benignly. The model forms the basis for the therapy program. Each deficit is focused on in sequence with a didactic presentation of the idea, an exercise to help participants understand the idea, and a homework assignment to try out more effective self-control behavior.

III. EMPIRICAL STUDIES

Self-control therapy was first examined in a series of six studies conducted by Rehm and his colleagues. The first two studies conducted were traditional outcome studies, in which self-management therapy was compared to a control group. In 1977, C. Fuchs and Rehm randomly assigned depressed female community volunteers to 6 weeks of self-control therapy, nonspecific group therapy, or a wait-list control condition. Self-control therapy was found to be the most effective treatment for alleviating symptoms of depression. In a second study in 1979 Rehm, Fuchs, D. Roth, S. Kornblith, and J. Romano assigned depressed women from the community to 6 weeks of self-control therapy or a behavioral assertion skills training program. Self-control therapy was found to be more effective than the assertion skills training program with regard to improving self-control and reducing symptoms of depression, whereas the assertion skills training program more effectively improved assertiveness. One year follow-up data on participants in these two studies, reported by Romano and Rehm in 1979, indicated that treatment gains were maintained over time. However, differences between the self-management and other active treatment conditions were no longer significant. Individuals in the self-management condition did report fewer additional depressive episodes and less severe recurrences of depression.

Next, to examine the various components of self-management therapy, two dismantling studies were conducted. The first study, conducted in 1981 by Rehm, Kornblith, M. O'Hara, D. Lamparski, Romano, and J. Volkin, examined five conditions, including: (1) self-monitoring plus self-reinforcement; (2) self-monitoring plus self-evaluation; (3) self-monitoring alone; (4) the complete therapy package; and (5) a wait-list control condition. All four treatment groups outperformed the wait-list control condition with regard to self-reported and clinician measures of depression, with no consistent differences found between the active treatment groups. In a similar study, Kornblith, Rehm, O'Hara, and Lamparski compared four groups, including: (1) self-monitoring and self-evaluation alone; (2) self-management training without homework assignments; (3) the complete self-management therapy program; and (4) interpersonally oriented group psychotherapy, serving as the control condition. All four groups were successful in alleviating symptoms of depression, with no significant differences found among the groups.

Next, specific behavioral and cognitive targets of self-management therapy were examined. The self-control manual was revised, and programs were developed that focused primarily on cognitive targets (i.e., focusing on self-statements), behavioral targets (i.e., focusing on increasing activities), or both (i.e., the "combined" version). In 1985, Rehm, Lamparski, Romano, and O'Hara compared the three versions of treatment with a wait-list control group. All three treatment groups improved more than control subjects with regard to symptoms of depression, with no differences found between the treatment groups. In 1987, Rehm, N. Kaslow, and A. Rabin again compared the three versions of self-management against each other, using a larger number of participants. Again no differences were found between the three groups, with each group showing significant improvement in self-reported and clinician measures of depression over time. They also improved equally in behavior and cognition.

Self-management therapy has been evaluated by a number of other researchers in various contexts. B. M. Fleming and D. W. Thornton, in 1980, assigned depressed volunteers to self-management therapy, cognitive therapy, or a nondirective therapy control condition. At posttest and follow-up all three groups showed significant improvement, with the self-management group showing the greatest improvement on a number of measures. In 1980, D. P. Tressler and R. D. Tucker conducted a disassembly study in which depressed female volunteers were treated with either the self-monitoring and self-evaluation components alone, or the self-monitoring and self-reinforcement components alone. The self-monitoring and self-reinforcement combination was found to be superior at posttest and at a 12-week follow-up. In 1982, D. Roth, R. Bielski, M. Jones, W. Parker, and G. Osborn compared self-management therapy alone, to the combination of self-management therapy and a tricyclic antidepressant; although there was a faster response in the combined condition, no significant differences were found between the two

groups at posttest and a 3-month follow-up in self-reported symptoms of depression. S. Rude in a 1986 paper assigned depressed women to both cognitive self-control treatment (a modified version of Rehm's therapy) plus assertion skills training (administered in random order), or to a wait-list control group. Participants who received the combination of self-control and assertiveness training experienced significantly larger reductions in depressive symptoms than the control group. However at the midtreatment point, when each participant had only received one form of therapy, no significant differences were found between the three groups. R. Thomas, R. Petry, and J. Goldman in a 1987 paper assigned depressed female volunteer participants to 6 weeks of self-control therapy or cognitive therapy. Both forms of therapy were effective in alleviating depression, with results remaining at a 6-week follow-up. In 1995, J. H. C. van den Hout, A. Arntz, and F. H. J. Kunkels compared 12 weeks of self-control therapy plus standard treatment, to standard treatment alone, for depressed patients in a psychiatric day-treatment center. The addition of self-control therapy was significantly more effective than standard treatment alone with regard to improving self-control, self-esteem, and depression. Although gains were maintained at a 13-week follow-up, significant differences were no longer found between the two groups.

Self-management therapy has also been applied to diverse populations. In 1982, P. Rogers, R. Kerns, Rehm, E. D. Hendler, and L. Harkness found self-management therapy to be more effective than nonspecific individual psychotherapy in reducing depression in renal dialysis patients. S. Bailey in a 1996 study examined the effect of self-management therapy compared to a wait-list control condition as a treatment for abused women. Treated participants experienced significantly greater improvement than control subjects in symptoms of depression, self-control, and dysfunctional attitudes.

Self-management therapy has also been modified for use with depressed children and adolescents. In 1986, W. Reynolds and K. I. Coats assigned moderately depressed high school students to self-management therapy, relaxation training, or a wait-list control condition. Both therapy groups, compared to the control group, experienced significant reductions in depression and anxiety, as well as improvements in academic self-image. K. Stark, Reynolds, and Kaslow (1987) assigned children, ages 9 to 12, to either behavioral problem solving, self-control therapy (a child version), or a wait-list control condition. At posttest and 8-week follow-up, both treatment groups showed significant improvements in self-reported and clinician-rated depression, whereas the wait-list control group showed little change. In 1996, Rehm and R. Sharp reported the results from a study in which self-management therapy was provided to fourth- and fifth-grade students; although little improvement was seen in depression across participants, those children who were classified as "depressed" at pretest significantly improved with regard to symptoms of depression, social skills, and attributional style.

Self-management therapy has also been applied to older adults (age 60 or older). P. Rokke, J. Tomhave, and Z. Jocic in a 1999 paper assigned depressed older adults to one of two forms of self-management therapy (one with a cognitive focus and one with a behavioral focus), or to a wait-list control condition. Both self-management groups, compared with the control group, experienced significant reductions in depressive symptoms (with gains maintained at a 3-month and 1-year follow-up), as well as improvements in depression-related cognitions, learned resourcefulness, self-control, and self-reinforcement. No differences were found between the two versions of self-management therapy. In a similar study published in 2000 Rokke, Tomhave, and Jocic randomly assigned depressed older adults to 10 weeks of self-management therapy, an educational support group, or to a wait-list control condition. No differences were found between the two treatment groups, each of which was more effective than the control group in alleviating depression and improving self-reinforcement, learned resourcefulness, and self-control knowledge. In addition, reductions in depression levels were maintained at the 1-year follow-up.

IV. SUMMARY

In sum, Rehm's self-management therapy program is a structured, manualized, cognitive-behavioral group therapy program, designed for the treatment of depression. The therapy is designed to address deficits in the three phases of the self-control feedback loop, including self-monitoring, self-evaluation, and self-reinforcement. A number of empirical evaluations have validated the efficacy of self-management therapy as an effective treatment for depression.

See Also the Following Articles

Grief Therapy ■ Self-Control Desensitization ■ Self-Help Groups ■ Self-Help Treatment for Insomnia ■ Self Psychology ■ Trauma Management Therapy

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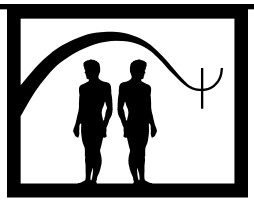

Self-Help Groups

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GLOSSARY

helper-therapy principle Introduced by Riessman in 1965 to convey the notion that in the act of helping others, the member is empowered, both to help others and simultaneously to help him- or herself.

professional-centrism The tendency of professionals to view self-help groups with higher levels of professional involvement as being more helpful than non-professional self-help groups. This leads them to be more likely to refer to and support groups with higher levels of professional involvement.

self-help clearinghouses Organizations dedicated to cataloging and referring interested parties to the self-help groups in a particular district or region.

self-help groups Voluntary associations of persons who share common concerns or problems and who try to support and help each other at little or no cost.

self-help organizations Refers to a more complex and broader level of organization (regional, national, or international associations) that foster the development and management of local self-help groups.

I. OVERVIEW AND HISTORY

Despite rather humble beginnings, self-help groups have become a pervasive phenomenon in the United States. Although their history can be traced as far back as the guilds in the Middle Ages and likely before, the origination of modern self-help organizations is most typically associated with the start of Alcoholics Anonymous (AA) in June of 1935. AA is the largest and oldest self-help organization in the United States. It started as the brainchild of two recovering alcoholics, Robert Holbrook Smith and stockbroker William Wilson. AA is the prototype for modern self-help groups in the United States and Canada and, in fact, has become one of the most commonly utilized groups among those seeking treatment for alcohol problems. There are now estimated to be more than 55,000 AA groups in the United States, and Canada.

Other well known self-help groups include Recovery, Inc., the National Alliance for the Mentally Ill (NAMI), Narcotics Anonymous, and Schizophrenics Anonymous as well as lesser known groups for epileptics, families of suicide victims, a variety of neurological diseases, eating disorders, a multitude of serious emotional crises (retirement, widowhood, loss of a child, various illnesses, handicaps, unemployment, divorce), almost all chronic diseases, minorities, marginalized peoples, and parenting to name but a few of the groups available. This list is by no means exhaustive because estimates suggest that there are over 400 distinct types of self-help groups in the United States alone.

Self-help clearinghouses have sprung up due in part to the wide variety and the sheer number of self-help groups in any one geographical area. These clearinghouses are dedicated to cataloging and referring interested parties to

the self-help groups in a particular district or region. For example, Gerald Goodman reports that in 1993 the California Self-Help Center clearinghouse alone, with 4,600 groups in its database, referred about 120 people a day to self-help groups.

Self-help groups have grown at an astounding rate. At present, it is estimated that the number of people being treated in self-help groups exceeds those in professionally-led individual and group therapy combined. It is surmised that roughly 25 million Americans have attended one of 500,000 self-help groups at some point in their lives. Telephone surveys of random individuals indicate that almost 7% of people admit to being actively engaged in a self-help group at any one time.

Despite the ubiquitous nature of self-help groups, there is less clarity on what is meant by the term. Mental health professionals have struggled for years to define these groups. Part of the difficulty lies in the fact that the concept itself is somewhat fluid. For instance, each one of the estimated 500,000 self-help groups add their own unique contributions to the definition. Despite this challenge most researchers have settled on four basic definitional tenants:

1. Members have common concerns or problems that they are dealing with.
2. Members of the group have control over the structure and format of the group.
3. Help that is received is given primarily through other members in the group.
4. There is little or no cost for the members of the group.

Although this definition has utility as an anchor point, it is important to keep in mind that individual self-help groups will vary on each one of these dimensions. For example AA groups and other "Anonymous" groups are built on a structured 12-step approach in which local chapters are facilitated by a larger national organization. Thus, although local members have some control over the structure and format of the group, much of what happens in group is a result of the structure set by the national program.

Other self-help groups are entirely controlled by local members without any affiliation with local or national organizations. In fact, given the earlier definition, a group of three or four single mothers who get together a couple of times a month for lunch to talk about their struggles could be classified as a self-help group. Of course, these self-help groups will never be classified by clearinghouses, receive publicity, and are closed to other outsiders; nonetheless they fall under the rubric of self-help groups.

Given the aforementioned definitional variability, is there a typical self-help group? The answer depends on whether one includes AA and the approximately 150 other 12-step groups as the model group. A persuasive argument for such is offered by Kathryn Davison and colleagues who found that out of 12,596 self-help groups identified in four major cities for 20 different diseases or disorders, 10,966 (87%) were AA groups. Given the pervasive nature of AA groups, a brief overview is warranted.

AA meetings are divided into four types.

1. Open Meetings: Any interested person may attend.
2. Closed meetings: Only people who are alcoholic or who have a desire to stop drinking may attend.
3. Discussion meetings: Typically the chairperson suggests a topic for the group.
4. Speaker meetings: The speaker presents his or her life before entering the group and gains made since then.

AA and other "Anonymous" groups follow a 12-step program. The first 3 of the 12 steps deal with the admission of defeat or powerlessness over addiction. Steps 4 through 9 consider healing the ruin of the past, and the last 3 steps deal with maintaining peace and serenity. There is an unmistakable emphasis on religious or spiritual influences in 12-step groups, which has led to their marginalization in some contexts. Nevertheless, 12-step programs have flourished and are considered by many professionals today to be an integral part of treatment for addictions.

The majority of all self-help groups (about two-thirds) formally introduce existing group members to new members and have new members introduce themselves. Some (about one third) ask new members to share personal experiences related to the group's stated purpose. With few exceptions new members are welcomed and accommodated. In recent comprehensive surveys, as many as 40% of self-help groups were oriented toward the treatment of physical illness. Attendance at these group meetings varied considerably, with some being very large (50 people in attendance) and others involving only 2 to 5 individuals (average attendance is in the range of 13 to 21 people). Most self-help groups recruit new members by word of mouth, but a significant number also use newspaper or magazine advertisements or solicit professionals for referrals.

Some authors have tried to differentiate self-help and mutual support groups (also referred to simply as

support groups). The usual distinction is the level of professional involvement in leading, sponsoring, or otherwise controlling the nature of the group. Support groups are more frequently aligned with mental health professionals and are often led by a trained therapist. On the other hand, self-help groups are usually viewed as being relatively autonomous from professional involvement, and peer leadership is endorsed.

Critics of professional involvement voice their concern about the loss of the self-help group's ideology and effectiveness when a professional assumes the leadership role. This is based on an important therapeutic principle that self-help group members experience autonomy, control of the group, and a sense that they are the experts on their difficulty. Opponents to professional involvement postulate that when an authority steps in, the unique benefits of self-help groups are lost, and the members of the group may begin to engage in docile "patient behavior." This concern has led some writers in the field to characterize groups by the presence or absence of professional involvement with the former being classified as a treatment group (psychotherapy or psychoeducation).

The distinction between groups with and without professional involvement may have more ideological and historical value because modern self-help groups often incorporate professionals. More specifically, recent research indicates that most "self-help" groups have some professional involvement. In 1993, Morton Lieberman reported that over 60% of observed groups were professionally facilitated while simultaneously being characterized as self-help. Eight years earlier (1985), Jennifer Lotery randomly sampled 850 self-help groups in California and found that 14% "frequently" had professionals in the role of solo leader with another 35% using professionals as co-leaders. Thus nearly one half the groups experienced a professional as part- or full-time co-leader. More recently, Scott Wituk's work in 2000 found that in a sample of 253 randomly selected self-help groups only 27% were peer led with no professional involvement. Other recent random samples have also shown similar results, that is, a growing trend to include professionals in self-help groups.

Lotery's survey suggests that most self-help groups welcome professionals, especially as a referral source, speaker, teacher, student, or co-leader. Respondents also stated an interest in having professionals serve as solo leaders or coordinators/organizers. In general, most self-help organizations echo this sentiment. For instance, a recent study reports that groups with a combination of both peer and professional leadership had greater longevity and continued group membership than either professional or peer-led groups. Thus, peer-leadership versus professional leadership seems to fall on a continuum rather than the dichotomous variable that early researchers conceptualized.

Despite potential for collaboration and consultation, it is important to note that self-help groups and professionals often view the consulting role rather differently. Self-help group members can view professionals as wanting to control the group using their clinical experience and training. Thus, it is important for professionals to approach self-help groups with an attitude of mutual respect and partnership rather than as a source for expert solutions that may conflict with self-help group ideology. Several recent studies of mental health professionals' perceptions of self-help groups suggest that the majority view groups with higher levels of professional involvement as being more helpful, effective, good, strong, healthy, understandable, active, interesting, predictable, and safer than groups with less professional association. This phenomenon has been labeled by Mark Salzer as "professional centrism" and has been well documented. Professionals are more likely to refer to and support those groups with higher levels of professional involvement. Paradoxically, scant research exists to either support or refute professionals faith in self-help groups with more professional involvement.

II. HOW SELF-HELP GROUPS WORK

Members of self-help groups are empowered by not only being responsible for helping themselves, but also by being accountable for helping others. This is known in the self-help literature as the "helper-therapy principle." In helping his or her peers the member is enabled, both to assist others and at the same time to help him- or herself. The opportunity to help others with a similar problem is often a catalyst for personal change. Some research supports the help-therapy principle. Specifically the number of helping statements made by a member has been directly and significantly correlated with increasingly positive outcomes by Linda Roberts and her colleagues. Being in a position to help others with similar problems may be a unique experience for members of self-help groups, an opportunity not present in individual psychotherapy. In most self-help groups, even members who are experiencing serious challenges are given an opportunity to help others in the group.

A second source of therapeutic potential for self-help groups is the opportunity to observe strong role models

of individuals who have overcome similar problems. According to Festinger's social comparison theory, people have a drive to evaluate their opinions and abilities by comparing themselves to others that they deem as similar. Self-help groups provide a unique opportunity to compare oneself with homologous others who have overcome analogous problems. Strong role models can exemplify success, reinforce group norms, provide empathy, and promote identification and motivation. In self-help groups, many successful members continue to attend to share their success and offer support to new or struggling members. This continued long-term involvement is possible because the groups are usually free from financial obligations. Moreover, research suggests that the longer a person participates in a self-help group the more likely they are to benefit from it.

III. EFFECTIVENESS

The scientific study of self-help groups has been slow and difficult at best. The traditional research paradigm for studying the effectiveness of psychotherapy groups involves randomly assigning participants to experimental and control conditions and then observing differences between the two groups. Application of this protocol to self-help groups is problematic because they are not under the researcher's control and participants cannot be randomly assigned to a no-treatment or wait-list control condition. More specifically, refusing or delaying fellowship to interested members is in direct opposition to the open philosophy of the self-help movement.

Critics have also argued that there is an inherent selection bias in studies that assess the outcome of self-help groups. Indeed, research has shown that individuals who do not expect to benefit from self-help groups drop out. This phenomenon led Leon Levy to argue those who remain in self-help groups will undoubtedly find the group to be effective thereby skewing the effectiveness results in the "positive" direction.

A final obstacle in the scientific study of self-help group effectiveness lies in the purported effects. In traditional group psychotherapy therapists focus on the removal of symptoms by treating the underlying causes for pathology (maladaptive relationships, distorted cognition, etc.). On the other hand, self-help groups focus on mutual support. In short, the expected outcomes for the self-help and traditional psychotherapy groups are different. More specifically, one measure of effectiveness for self-help groups may be the amount of support these groups give to each other and not the reduction of psychopathology. Members often highlight the salubrious effect of the group on their feelings of isolation and social seclusion rather than reduction in pathology reporting high levels of satisfaction. Although robust empirical data on the effectiveness of self-help groups is scarce, the current literature does support their effectiveness. Participation in self-help groups has been linked to improved subjective well-being, attenuated use of professional services, strengthened coping skills, shorter hospital stays, less denial of problems, less identification with the patient role, and reduced psychiatric symptomatology. Self-help groups also help individuals form a new identity, give them a sense of belonging and association, and assist in personal transformations through support, advocacy, and empowerment. Self-help groups are recommended by a majority of treatment programs for substance disorders. In fact, studies that evaluated AA as one element in a treatment program suggest that alcoholics who attend AA in addition to other treatment modalities do better than those who attend only AA or use professional treatment alone. In general 12-step groups have produced beneficial outcomes.

It is important to note that not all research has supported the effectiveness of self-help groups. In 1999, Sally Barlow and colleagues focused on self-help groups in the medical field. Seventeen studies that compared controls with active self-help treatment groups when examined as an aggregate found no evidence that members of medical self-help groups improve more than a non-treated control group. However, this does not mean that members of the self-help groups were not satisfied with their groups or that they did not receive benefits other than those objectively measured by the researchers.

IV. THE FUTURE

Self-help groups are not an endangered species. Gerald Goodman and Marion Jacobs predicted that self-help groups will become the nation's "treatment of choice" in the next 10 to 20 years. Given self-help groups' exponential growth in recent years, it is hard to imagine a mental health field without them. In fact, with the increasing scarcity and lack of availability of mental health services to the general public, self-help groups are virtually assured a position of prominence in the future. It is also likely that professional involvement in self-help groups will not only continue but intensify over time. Self-help groups are being recognized as a

legitimate resource for clients and, as such, increasing numbers of professionals will vie to become involved with these groups.

Online groups are beginning to gain acceptance as a viable treatment alternative to the formal self-help group venue. They are likely to become increasingly common as more and more people gain access to this mode of communication. Advantages of online self-help groups include their availability (24-hours-a-day), breadth (worldwide), specificity (support for those with relatively rare conditions), and lower level of interpersonal risk (anonymity and indirect participation). Online self-help groups appear to be expanding despite the fact that almost no research exists to delineate whether participation is helpful or satisfying—a topic in need of future research.

V. SUMMARY

Self-help groups have grown exponentially since the inception of AA and are now a primary treatment method for many individuals. Although defining self-help groups has been problematic given the variety of groups available, they are typically composed of members with common concerns who have control over the structure and format of the group and who give mutual aid and support to each other for little or no cost. Of the over 400 documented types of self-help groups, most have some professional involvement, especially as a referral source, speaker, teacher, or consultant. Core therapeutic principles include giving members opportunities to help others, motivating them to emulate successful others in the group, and offering friendship and support. The study of how effective self-help groups are has been fraught with a number of problems that center around self-selection. Despite these problems, most research indicates that they are effective. In addition, most members of these groups report being highly satisfied with their group experience and rate the group as beneficial. It is likely that in the coming years self-help groups will become even more common.

See Also the Following Articles

Anxiety Disorders: Brief Intensive Group Behavior Therapy ■ Behavioral Group Therapy ■ Cognitive Behavior Group Therapy ■ Group Psychotherapy ■ Matching Patients to Alcoholism Treatment ■ Minimal Therapist Contact Treatments ■ Psychodynamic Group Psychotherapy

Further Reading

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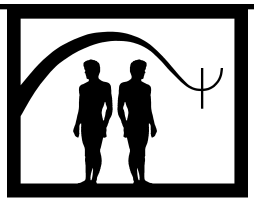

Self-Help Treatment for Insomnia

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GLOSSARY

chronic insomnia Insomnia persisting more than 1 month.
insomnia A condition involving difficulties falling asleep, staying asleep, early morning awakening, or nonrestorative sleep.
meta-analysis A quantitative method using a common metric (z score) to summarize the data from different studies.
primary insomnia Insomnia that is not associated with another medical, psychiatric, or sleep disorder.
self-help treatment Intervention based on printed information or audio/video material designed to improve a medical or psychological condition.
sleep efficiency A measure of sleep continuity obtained by dividing the total amount of time slept by the time spent in bed, multiplied by 100.
sleep hygiene Education about the impact of lifestyle and environmental factors on sleep.
sleep-onset latency Time required to fall asleep at bedtime.
sleep restriction therapy Behavioral procedure consisting of limiting time in bed to the actual time spent sleeping.
stimulus control therapy Behavioral procedures aimed at establishing a consistent sleep-wake rhythm and reassociating the bed and bedroom with sleep rather than with insomnia.

I. INTRODUCTION AND DEFINITION

Insomnia is a prevalent condition affecting about 10% of the adult population on a chronic basis. It involves either difficulties falling asleep, staying asleep, early morning awakenings, or nonrestorative sleep. Insomnia can occur as a unique disorder, as in primary insomnia, or may be secondary to an another medical (e.g., cancer) or psychological condition (e.g., depression or anxiety). Chronic sleep disturbances are often associated with negative daytime consequences such as fatigue and mood disturbance, thus significantly affecting one's quality of life. Despite its high prevalence and potential impact on social or occupational functioning, only a small portion of individuals with chronic primary insomnia actually receives any treatment. For those who do seek relief for their insomnia, the first interventions are usually self-initiated and generally involve medications bought over-the-counter, natural products, or the use of alcohol. When insomnia is brought to the attention of physicians, pharmacotherapy is the most widely used and often the only recommended treatment option, despite the controversy existing over the long-term use of hypnotic medications. In the past 20 years, there has been an increasing interest in psychological and behavioral factors contributing to insomnia. This had led to the development of diverse psychological therapies for insomnia, many of which have been shown to produce significant and

durable effects. However, these interventions remain underutilized because they are not well known to health care practitioners and are less easily accessible, both physically and financially, than pharmacotherapy. A self-help treatment for insomnia is a valuable alternative to overcome some of these barriers by making treatment more accessible, at a low cost, to a larger number of individuals with insomnia. Self-help treatment refers to any intervention, either for a psychological or physical condition, that is implemented with the assistance of printed material (e.g., books, pamphlets), audio- or videotapes, or any other medium (e.g., Internet). It can be implemented with or without guidance from a health care professional. The objective of this article is to provide an overview of self-help treatments that have received empirical validation in the management of primary insomnia.

II. DESCRIPTION OF TREATMENTS

Self-help treatments for insomnia incorporate much of the same information and material provided in a face-to-face therapy. Interventions that have received adequate empirical support and that are usually included in self-help treatment programs include stimulus control, sleep restriction, cognitive therapy, sleep-hygiene education, and relaxation procedures. The main goals of these interventions are to induce sleep rapidly at bedtime, to sustain it with minimal interruptions throughout the night, to enhance sleep quality and duration, and to improve daytime functioning. To achieve these outcomes, treatments focus on psychological and behavioral factors presumed to perpetuate sleep difficulties. They seek to curtail maladaptive sleep habits, to regulate the sleep schedule, to correct faulty beliefs and attitudes about sleep, to reduce autonomic arousal, and to educate patients about good sleep hygiene. Another common goal of these therapies is to teach self-management skills for coping with residual sleep disturbances once treatment is completed. Some interventions, such as stimulus control instructions, or sleep restriction, are more amenable to a self-help format because they are primarily educational or instructional in nature. Others, like relaxation or cognitive therapy, are likely to require more direct guidance, possibly with the help of a therapist, if they are to be fully effective. Provided next is a brief description of several of the psychological interventions that can be applied in a self-help format.

A. Stimulus Control

Stimulus control therapy consists of a set of behavioral rules designed to bring the patient to reassociate the bed and bedroom with sleep rather than with arousal or the frustration caused by the inability to sleep. This is achieved by curtailing sleep-incompatible activities. A second objective is to establish a consistent sleep-wake rhythm by setting a regular arising time and by avoiding naps. Standard stimulus control instructions are:

- Go to bed only when sleepy.
- Use the bed and bedroom for sleep and sexual activity only; do not read, watch TV, or worry in bed.
- When unable to sleep within 15 to 20 min, leave the bed and go into another room; return to bed only when sleepy again (this step is repeated as often as necessary throughout the night).
- Arise at the same time every morning regardless of the amount of sleep obtained the night before
- Do not take naps during the day.

B. Sleep Restriction

Individuals with insomnia sometimes spend excessive amounts of time in bed in a misguided effort to obtain more sleep. In turn, this practice may cause more fragmented sleep and perpetuate insomnia. The standard sleep restriction procedure consists of curtailing time in bed to the actual sleep time. Once the usual sleep time and time spent in bed have been estimated with the help of a sleep diary kept for at least one week, an initial time window is defined in which the patient can sleep or attempt to sleep (i.e., total time allowed in bed). This window is set to correspond to the average total sleep time and is readjusted periodically (usually weekly), either decreased or increased, based on estimations of sleep efficiency that can be easily calculated from the sleep diary (ratio of total sleep time over time spent in bed x 100). As sleep efficiency improves, the sleep window is progressively extended until an optimal sleep duration is achieved. Although the task of setting and adjusting the sleep window is usually left to the therapist in face-to-face treatments, this procedure, if well explained in written material, can be easily implemented by the individual. Sleep restriction guidelines are fairly operational and easy to follow for adjusting the sleep window: for example, if a person has been able to maintain a sleep efficiency of at least 85% for 1 week, the time allowed in bed is increased by a small amount, usually 15 to 20 min. Conversely, if

sleep efficiency is lower than 80%, the time allowed in bed is decreased by the same amount. Sleep restriction induces a mild state of sleep deprivation, which promotes a more rapid sleep onset, more efficient and consolidated sleep, as well as less internight variability. This procedure should however be used with caution with individuals who engage in hazardous activities (e.g., construction workers, truck drivers). In all circumstances, the time allowed in bed should never be less than 5 hrs to prevent excessive daytime sleepiness.

C. Relaxation Therapies

Patients with insomnia are often tense and anxious, both at night and during the day. Relaxation-based interventions are the most commonly used nondrug therapy for insomnia. A variety of techniques target different types of arousal. For example, progressive muscle relaxation, autogenic training, and biofeedback are used to reduce somatic arousal such as muscle tension. Cognitive or emotional arousal in the form of worries, intrusive thoughts, or a racing mind are addressed using attention-focusing methods such as imagery training (i.e., focusing on pleasant or neutral mental images) or meditation. Relaxation therapies may be less easily self-implemented than stimulus control or sleep restriction because they require the learning of specific relaxation techniques through appropriate training. Professional guidance or an audiotape is often necessary, particularly in the initial phase of treatment (e.g., the first 3 weeks), to optimize an adequate use of the techniques. Regardless of the training method selected, therapeutic gains usually require at least 2 to 3 weeks of relaxation training.

D. Cognitive Therapy

Poor sleepers tend to entertain faulty beliefs and attitudes about sleep, which feed into the vicious circle of insomnia, emotional distress, and more sleep disturbance. As such, insomnia often becomes a self-fulfilling prophecy. For instance, the belief that 8 hrs of sleep is an absolute necessity, or the perception that one is unable to function after a poor night's sleep is often enough to produce anxiety and exacerbate sleep disturbances. The objective of cognitive therapy is to alter these types of sleep-related cognitions by challenging them and replacing them with more adaptive substitutes. Several clinical procedures, modeled after those used in treating anxiety and depression, can be used for changing patients' misconceptions about sleep. Such techniques include attention shifting, reappraisal, reattribution training, and decatastrophizing. Cognitive therapy is also used to teach patients strategies to cope more adaptively with residual difficulties that recur occasionally even after treatment.

E. Sleep Hygiene

Sleep hygiene education fosters healthy habits through simple recommendations about diet, substance use, exercise, and environmental factors that promote or interfere with sleep. Standard sleep hygiene measures include the following:

- Avoid stimulants several hours before bedtime. Caffeine and nicotine, both central nervous system stimulants, can impede sleep onset and reduce sleep efficiency and quality.
- Do not drink alcohol too close to bedtime. Alcohol consumption prior to bedtime can lead to more fragmented sleep and early morning awakenings.
- Avoid heavy meals too close to bedtime, as they can interfere with sleep. A light snack may be sleep inducing.
- Regular exercise in the late afternoon or early evening can deepen sleep. Conversely, exercising too close to bedtime could have a stimulating effect and delay sleep onset.
- Keep the bedroom environment quiet, dark, and comfortable.

III. TREATMENT FORMATS AND PROCESS

Several formats have been used to implement self-help therapies for insomnia, including printed material (books or pamphlets), audiotapes, and videotapes. Some Internet sites are also under construction, a format that should make treatment more interactive. Most treatments available tend to combine different formats, for example by offering a self-help book in conjunction with an audio- or videotape.

The basic structure of a self-help intervention for insomnia is similar to a therapist-led treatment. The first step is to provide basic information about sleep and insomnia. A brief self-assessment method is introduced to ensure proper diagnosis. The daily use of a sleep diary throughout treatment is an essential feature of any self-help intervention for insomnia. Indications and contraindications of self-help treatment are also underlined. Patients should be informed to seek professional help

when they are not sure whether they suffer from insomnia or from another condition (e.g., sleep apnea, depression). Once these preliminary steps have been completed, a conceptual model of insomnia is described, and the rationale behind the treatment is explained. This is particularly important because some treatment procedures, such as sleep restriction or stimulus control for instance, can appear paradoxical to individuals seeking relief for their insomnia, especially when they are sleep deprived. Consequently, it is important to inform the patient that mild sleep deprivation might occur in the initial phases of treatment, and to explain how this procedure will help them if they adhere to the treatment protocol. This understanding may influence the patient's willingness to invest time and efforts in carrying out the therapeutic recommendations.

Although therapist-led treatments often comprise 6 to 10 therapy sessions spread over a period of 10 to 12 weeks, there is no standard time frame when it comes to implementing a self-help treatment. Nonetheless, 4 to 6 weeks of strict adherence to treatment is usually necessary for sleep improvements to become noticeable. As treatment is often multifaceted, it is preferable to introduce each therapeutic component in a sequential fashion. Once basic information about sleep and insomnia and the rationale for treatment has been provided, sleep restriction and stimulus control procedures may be introduced. When these components are well integrated (about the 3rd week), treatment can move on to cognitive restructuring of dysfunctional beliefs and attitudes about sleep. Sleep hygiene education can be incorporated at any point in the treatment. If a relaxation-based component is added to the treatment, it should be introduced early on to allow sufficient time for training.

IV. EMPIRICAL STUDIES: EVIDENCE FOR EFFICACY

The efficacy of psychological treatments (mostly behavioral in nature) for chronic and primary insomnia has been well documented in the last 20 years. Two meta-analyses have shown that psychological treatments are effective in treating sleep-onset insomnia (problems falling asleep) as well as sleep-maintenance insomnia (problems staying asleep). Overall, it is estimated that about 70% to 80% of individuals with insomnia achieve some clinical benefits with behavioral interventions. Typically, treatment is likely to reduce the main target symptoms of sleep-onset latency and wake after sleep onset below or near the 30-min criterion initially used to define insomnia severity. Sleep duration is increased by a modest 30 to 45 min, but patient's satisfaction with sleep quality is significantly enhanced. Moreover, treatment gains are well sustained or even enhanced up to 24 months after completion of treatment.

There have been only five studies conducted on the topic of self-help treatment for insomnia. Table 1 presents a summary of these studies. The first investigation of self-help treatment for insomnia was conducted in 1979. It was designed to compare the efficacy of two self-administered treatment manuals for sleep-onset insomnia with a waiting-list control condition. One manual included relaxation and standard stimulus control instructions, whereas the other involved a different form of relaxation plus a countercontrol procedure in which participants were instructed to stay in bed when unable to sleep. Sleep-onset latency, number of awakenings, and worries about sleep were assessed with sleep diaries completed daily by the participants. Twenty-nine participants aged between 17 and 80 years old were enrolled in the study. The results showed a significant reduction of sleep-onset latency in both treatment conditions, although the standard stimulus control condition was superior (59% versus 32%). Participants receiving the manual with the standard relaxation and stimulus control procedures also reported higher ratings of sleep quality. Greater improvements were observed in younger individuals as compared to the elder participants. The authors suggest that the higher prevalence of medical conditions in the elderly might interfere with sleep and thereby moderate treatment efficacy.

The next study was performed 10 years later by David Morawetz in Australia. Three questions motivated his study: *(a)* Is self-help treatment more effective than no treatment? *(b)* Is self-help treatment as effective as a therapist-led treatment? and *(c)* What factors moderate the treatment response to self-help interventions? One-hundred-and-forty participants aged from 23 to 63 years took part in the study, including 63 who were taking sleep medication. Daily sleep diaries were again used to evaluate the comparative efficacy of three conditions: a self-help treatment, a therapist-led treatment, and a waiting-list control. The treatment material included basic information on sleep physiology and sleep disorders, a description of the standard stimulus control instructions, and relaxation training instructions. Whether they were in the self-administered or in the therapist-led treatment group, participants

TABLE 1
Summary of Empirical Studies on Self-Help Treatment for Insomnia

Authors	*Sample*	*Design*	*Self-help format*	*Treatment content*
Alperson & Biglan (1979)	*N* = 29 17–80 years old	Relaxation + stimulus control Relaxation + counter control Waiting-list	Printed manual	Relaxation + Stimulus control relaxation + in-bed activities
Morawetz (1989)	*N* = 141 23–60 years old	Self-help treatment Therapist-led treatment Waiting-list control	Audiotape/manual	Sleep information + relaxation + stimulus control
Oosterhuis & Klip (1993)	*N* = 325 15–86 years old	Single group, quasi-experimental design	Television and radio segments, booklet and audiotape	Sleep information + relaxation + stimulus control + sleep hygiene
Riedel et al. (1995)	*N* = 100 > 60 years old	Video treatment with or without therapist guidance; good sleepers controls	Videotape/pamphlet	Sleep information + sleep restriction
Mimeault & Morin (1999)	*N* = 54 18–54 years old	Self-help treatment Self-help treatment + phone consultation Waiting-list control	Treatment manual	Stimulus control, sleep restriction, sleep hygiene education, cognitive interventions

received the same therapeutic components. The results showed significant reductions of sleep-onset latency for the two treatment groups, both at posttreatment and at a 3-month follow-up assessment. No significant improvement was observed in the waiting-list condition. The authors noted only limited improvements among participants who received treatment but were concurrently using a sleep medication. These improvements were nonetheless greater for the group receiving therapist-led treatment than for the group receiving the self-administered intervention. These results suggest that self-help treatment is effective but also highlight the importance of therapist assistance in cases where complicating issues, such as medication use, are present.

In 1993, a Dutch public television channel scheduled a series of television and radio programs that were broadcast in the Netherlands to offer educational material about insomnia and its treatment. There were eight television (15 min each) and nine radio segments. In addition, participants received by mail a relaxation tape and a booklet summarizing the critical information covered during the television and radio programs. The written material incorporated basic information about sleep and sleep hygiene education, relaxation training, and stimulus control techniques. Psychologists Aart Oosterhuis and Ed Klip evaluated the impact of this program. Participants were recruited via a survey and completed a daily sleep diary and different sleep and mood questionnaires. This program reached an estimated 23,000 individuals. Of 400 participants who volunteered for the evaluation of this program, a total of 105 returned their assessment material. The results showed a significant decrease in sleep-onset latency and in the number of awakenings as well as a significant increase in total sleep time. In addition, 40% of the participants discontinued their medication during treatment. Although the results must be interpreted carefully because of the absence of control, this type of innovative program has the advantage of reaching a large number of individuals who may suffer from insomnia without ever consulting for it.

In a 1995 study, Brant Riedel, Kenneth Lichstein, and William Dwyer evaluated if therapist guidance, added to a self-help video program, influenced the efficacy of a self-help treatment for insomnia in older adults. Participants kept daily sleep diaries and completed a questionnaire evaluating knowledge about sleep. The video lasted about 15 min and contained information about sleep in the elderly, the benefits of restricting time in bed, and the possible hazards associated with the use of sleep medications. Subjects in the video-only condition and the video-plus-therapist guidance condition viewed the video twice with 2 weeks between viewing sessions. Participants in the therapist-guided condition received two additional group training sessions with a therapist. During these sessions, the therapist emphasized the

importance of restricting time in bed. Participants were evaluated before and after each session, and 2 months after the end of the intervention. The results indicate that both self-help interventions were effective to improve several sleep variables, but also that the addition of therapist guidance enhanced treatment outcome.

Véronique Mimeault and Charles Morin conducted the most recent study of self-help treatment in 1999. This investigation examined the efficacy of cognitive-behavioral therapy with and without professional guidance. Fifty-four adults were enrolled in this study after being carefully screened with structured diagnostic interviews. Participants were excluded if there was evidence of another sleep disorder, severe depressive or anxiety symptoms, as well as if they were using an antidepressant medication or if they were concurrently involved in psychotherapy. Participants were randomly assigned to a condition involving a self-help treatment manual only (bibliotherapy), a self-help treatment manual plus weekly telephone consultation (15–20 min), or a waiting-list control group. Treatment outcome was evaluated with daily sleep diaries and different questionnaires. Treatment was implemented over a 6-week period. Participants in both treatment groups were mailed one booklet per week, with each booklet introducing a new treatment component, its rationale, and methods to foster its implementation. Treatment components included basic information about sleep and sleep hygiene, stimulus control, sleep restriction, cognitive therapy, methods for discontinuing sleep medications, and relapse prevention. The results showed that sleep efficiency and total sleep time improved significantly at the end of treatment for both self-help conditions, and that therapeutic gains were well maintained at the 3-month follow-up evaluation. The addition of a weekly telephone consultation enhanced outcome at posttreatment but not at follow-up.

Taken together, the results of these five studies support the efficacy of insomnia treatment implemented in a self-help format. This approach may therefore be considered as a useful and cost-effective alternative to therapist-led treatments. It is important to note, however, that several factors may moderate the efficacy of self-help treatment, including the individuals' age, the use of sleep medications, the presence of medical or psychological factors (e.g., generalized anxiety disorder, depression) and, naturally, the individuals' willingness to comply with behavioral procedures. Older adults are more likely to suffer from sleep disturbances complicated by medical factors and may require a more thorough evaluation before undertaking a self-help treatment for insomnia. Likewise, individuals who are chronic users of hypnotic medications are more likely to present comorbid anxiety or depressive disorders and may require therapist guidance, both for the initial evaluation and for treatment.

V. ADVANTAGES AND LIMITATIONS OF SELF-HELP APPROACHES

The main advantage of a self-help treatment format for insomnia is that it allows for a greater dissemination of treatment knowledge. The best example of this is with the Dutch television program, which was estimated to reach several thousands of individuals, many of which, might never have sought out treatment for their sleep difficulties. In this regard, it is possible that widespread dissemination of self-help interventions can actually prevent the development of more severe and chronic insomnia. Another advantage of self-help approaches is their low cost, rendering treatment more accessible to individuals who may never have consulted a professional for insomnia because of financial limitations.

Self-help interventions also have several drawbacks. First of all, there is always a danger of self-misdiagnosis. Insomnia can be easily confused with other sleep (e.g., apnea, periodic limb movement) or psychological disorders (e.g., generalized anxiety disorder, depression). In the presence of such disorders, insomnia should not be the initial target of treatment. Second, there is also a risk of inappropriate application of treatment techniques, particularly if the rationale is unknown or misunderstood. The third limitation concerns treatment failure, which can occur either because of misdiagnosis or inappropriate technique application, or because the problem is so severe that the individual is unable to sustain treatment long enough to make any improvement. Regardless of the cause of failure, it may lead to a worsening of the problem and may discourage patients to seek help from a health care professional. Another danger of self-help treatment is that there is no provision for monitoring patient's compliance and for ensuring adequate follow-up.

VI. SUMMARY

Insomnia is often undertreated and behavioral interventions remain underutilized, partly because they are more time-consuming and are not always known or accessible. Self-help behavioral therapies are a cost-

effective alternative to drug therapy for the management of primary insomnia. This type of intervention offers several advantages such as lower costs and greater availability. Treatment information that can be conveyed in a self-help format includes basic facts about sleep and insomnia, standard stimulus control and sleep restriction instructions, relaxation methods, sleep hygiene education, and cognitive restructuring techniques. It cannot be overemphasized that compliance is a critical element for insomnia treatment to be effective, and this is particularly true for self-help approaches. Although guidance from a therapist is not always essential for a self-help method to be effective in improving sleep, it can be particularly useful to enhance motivation and willingness to adhere to the treatment protocol. Professional guidance is more likely to be needed when there is a complicating medical (e.g., chronic pain) or psychiatric condition (e.g., generalized anxiety disorder, depression) or when an individual is using a medication for sleep, because such factors can influence the course and effectiveness of the treatment. It may also be indicated to consult a professional prior to initiating a self-help treatment for insomnia to ensure a proper evaluation and diagnosis. Additional research is needed to determine what is the most adequate administration format (e.g., printed material, audio- or videotapes, Internet), who are the best candidates for this treatment modality, and what are the predictors of the response to self-help treatment for insomnia. More important, it remains to be evaluated whether widespread dissemination of information about healthy sleep habits (through simple self-help programs) could be useful in preventing the development of severe and persistent insomnia in the general population, thus significantly reducing health care costs.

See Also the Following Articles

Behavioral Treatment of Insomnia ■ Bibliotherapy ■ Relaxation Training ■ Self-Control Therapy ■ Self-Help Groups

Further Reading

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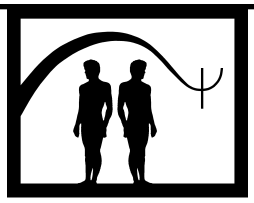

Self Psychology

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GLOSSARY

empathy A cognitive tool, how a clinician comes to know the internal states of another. Called "vicarious introspection" in the case of the analyst at work, with the aim of understanding another's experience. Kohut describes empathic ambience as the positive attunement of analyst to analysand and empathic failures as the misattunement of analyst to analysand.

introspection A person's ability to use self-reflection to know his or her own internal states, including emotions, thoughts, fantasies, and values.

narcissism Used primarily in two ways—first, a way of conceiving of human development, characterized by the growth and stability of the self independent of its transactions with externally experienced others; second, a line of development (vs. a fixed stage or pathological state) characterized by the strivings to form and maintain a vital self. Kohut distinguished between healthy narcissism, a strong and vital self with ambition and ideals striving toward the realization of individual talents and skills, and pathological narcissism wherein self strivings are unsuccessful in maintaining a cohesive and stable self-representation.

self-object The manner by which another is experienced as if that person were an extension of the self and performs functions necessary for the smooth continuity of the functioning of oneself. A self-object relationship aids the experience of the self as cohesive, harmonious, firm in limits of time and space, connected to the past and present. Self-object relationships according to Kohut support mirroring, idealization, twinship, and alterego functions in the development and maintenance of a cohesive self.

transference When the patient responds to the analyst as if the analyst were some significant figure of the patient's past. Transference provides the self psychologist the means to accurately diagnose the patient's developmental level.

I. SELF PSYCHOLOGY DEFINED

Self psychology refers to the method, observations, and theory that grew from the novel clinical descriptions put forward by a pioneering psychoanalyst from Chicago, Heinz Kohut, primarily in the late 1960s and 1970s. However, the seeds for the development of self psychology were put in place by Kohut in a seminal 1959 paper titled "Introspection, Empathy, and Psychoanalysis." In this early paper, Kohut set the groundwork for what was to come by defining the faculties of introspection and empathy as crucial tools and determinants of the clinician in the analytic encounter. Much as an internist uses a stethoscope, an analyst uses introspection and empathy. Introspection was defined as a person's ability to use self-reflection to know his or her own internal states, including emotions, thoughts, fantasies, and values. By contrast, empathy was defined as "vicarious introspection," by which Kohut meant a person's

ability to be cognizant of and accurately apprehend another's mental states, that necessarily involved accessing one's own internal cognitive skills, memories, and emotional states. In defining the arena of psychoanalysis as within the jurisdiction of that which is comprehended by empathy and introspection, Kohut moved psychoanalysis away from a preoccupation with forces, vectors, and structures, and toward subjective states and more explicitly phenomonological processes. It was the "self" rather than a more abstract metapsychological concern that dominated Kohut's thinking, and which was made accessible by introspection and empathy.

How self psychology and classical analysis fit together is a fascinating study of politics in psychoanalysis. In some ways, over the years, self psychology has taken its own path and departed from the mainstream of classical analysis in the United States. However, in other ways, certain key aspects of self psychology have more recently been integrated into the mainstream of classical analysis and has fueled and enriched the entire corpus of contemporary psychoanalytic theory. Thus, although there are many clinicians who think of themselves as "self psychologists," some of the principles of self psychology can now as well be found in the mainstream and are the source of many different and helpful ways of formulating clinical interaction.

II. HEINZ KOHUT

Heinz Kohut was an analyst who emigrated to Chicago from Vienna as a young man. As so many immigrant pioneers in the psychoanalytic movement did, he brought with him the enormous charm and intellectual prowess characteristic of old world scholarship. In a relatively short amount of time, and at a young age, he established himself as one of the leaders of the psychoanalytic world. Trained in analysis at the Chicago Institute, he rapidly rose up in the ranks and was soon to become the leading luminary in the Chicago milieu, the acknowledged leader and pacesetter within that institute. At first a conservative analyst, quite loyal to the tradition of Hartman and ego psychology, he was to break ranks and found the self psychology movement that he came to see was markedly at odds with classical psychoanalysis.

It was largely the description of narcissistic patients that led Kohut to develop his original and, at the time, controversial views. While practicing as a classical analyst, Kohut found that what he called a patients' "self-cohesion" was disrupted when the patient perceived the analyst to have committed an empathic failure. Kohut came to believe that many failures in analysis were not due to a narcissistic patients' predisposing pathology, but rather to the clinicians' failure to tune in to the analysand's underlying states. Believing that many failures in analysis were due to this factor, Kohut sought to expand the range of patients treatable by psychoanalysis. Although always a controversial topic, prior to Kohut many considered the narcissistic patient untreatable for a variety of reasons attributable to the patient, but rarely the clinician. Most telling, however, was the sense that such patients could not be reached by clinical interpretations, because they would contemptuously reject insight while at the same time displaying characteristics of extreme fragility and hypersensitivity. It was Kohut's inspiration to design a treatment that did not emphasize interpretation and insight, and in so doing, soon was to develop a whole new way of looking at people and the treatment situation. In moving away from interpretation as the primary mutative factor in psychoanalysis, Kohut spoke of "transmuting internalization" as a key concept, when the patient is enabled to take in those experiences that are empathically offered, and then convert them into psychic structure, thereby remediating early developmental failures that had been laying dormant for many years. The concept of transmuting internalization explains how patients change through the provision of empathic ministrations rather than through the acquisition of insight and understanding.

In 1968, Kohut published his first views on narcissistic disorders, which was to lead to his eventual postulate that narcissism was a line of development, rather than a stage, type of energy, or a personality disorder. At first, Kohut sought to meld his views with those of mainstream psychoanalysis. However, as his ideas developed, he perceived the need to carve out an independent niche for self psychology, which took the theoretical form of claiming that a self/narcissistic line of development follows an independent course from what he termed the "object-libidinal" line of development more typically described by classical analysis. Still, in 1971, when his first major book was published, titled *The Analysis of the Self,* it was framed in the patois of classical analysis. In this book, Kohut laid out the fundamentals of his views concerning the treatment of narcissistic patients, including transference and countertransference considerations. Most important, the analyst had to maintain an empathic immersion in the psychological field of the patient and tolerate the emptiness of their own emotional reaction to such individuals. What Kohut termed "empathy" was

crucial, for departures from such empathic immersion lead to profound disruptions in the patient's personality, what Kohut called "fragmentation" of the self. The self became the focus of the analyst treating the narcissistic patient, which was phenomonologically closer to clinical experience than the reigning tripartite model of the classical analysts. The patient grew in the crucible of the analyst's empathic immersion, rather than through the analytic imparting of insight by way of interpretation. The actual experience of the clinical interaction became more important than the knowledge that could be deduced from the interaction.

The fragmented self was seen to result from early failures in what Kohut termed "self-object experiences," which were seen as failures in caregivers' empathic relationship to their children and which tended to get covered over by what Kohut termed the "compensatory structures" of development, that is, defense-like structures that covered over and protected the individuals' self-esteem from these early deficits. Although covered over by subsequent life span experiences, such early failures lurked in the personality of the child and could only be altered through an isomorphic reevocation of the early self-object experience, which Kohut termed a "self-object transference." In particular, he identified two kinds of self-object transference, an idealizing and a grandiose one. Loosely speaking, the idealizing transference can be equated with paternal object relations and the grandiose transference with maternal object relations. The idealized self-object transference referred to the normative need of a child to see the other in perfectionistic terms. The grandiose self-object transference referred to the normative need of a child to experience themselves as omnipotent as mirrored by a caregiver. Eagle has critically written about a developmental psychology based solely on these two types of reconstructed transferential configurations. Over the years, Kohut's vision of the child embedded in a world of self-objects has held up to research scrutiny far better than his description of these two types of transferences, which were reconstructed from the analytic situation of adults rather than actually observed in the behaviors of children and their caregivers.

Note again the emphasis on the concept of "self" in Kohut's thinking. The self is quite different than the ego of Freud. Kohut thought of the self and defined it as the center of initiative and action. The self develops through experiences of being independent, mirrored properly, and empathically understood until "self-cohesion" has formed. Self-cohesion is the term Kohut chose to describe the self of an emotionally strong, vigorous, expansive, and resilient person. The developing self is understood as potentially traumatized through subtle ways, such as a caregiver's rigidity, lack of empathy, or inability to affectively attune to a growing child. The child is seen as formed into a world of self-objects and is natively happy and prone to fit into such relationship patterns. The mind of the child is more akin to a tabula rosa than that described in classical analysis—children are born good and made bad, rather than inevitably suffering from the frustrations and limitations of intrapsychic conflicts as implied by an epigenetic psychobiological blueprint. This self psychology take on early development is in stark contrast to the classical view of trauma, which is understood more explicitly as an external assault on a psychic apparatus incapable of withstanding overstimulation, understimulation, and affective regulation.

The reception to his 1971 book was mixed. As Kohut inquired deeper and his clinical experience deepened, he felt the need to expand the scope of his investigations. As a consequence, Kohut began to describe what he called "the psychology of the self in the wider sense" that referred to a vision of self psychology as an approach to most patients, not just narcissistic ones (and which he contrasted with the "psychology of the self in the narrow sense"). Encouraged by many of his early followers in Chicago and elsewhere, such as Paul and Anna Ornstein, John Gedo (who was soon to break from this group), Arnold Goldberg, Michael Basch, Marian Tolpin, Joseph Lichtenberg, and Ernest Wolf, self psychology became a movement in its own right. In 1976, Kohut published a book titled *The Restoration of the Self* that became a virtual manifesto of this new movement. No longer seeking a rapprochement with classical analysis, a new vocabulary and new way of looking at virtually all clinical phenomena was born. It was also only a short amount of time before self psychology was to expand far beyond the frontiers of four to five times a week clinical psychoanalysis and become a treatment modality and method of investigation that addressed and incorporated psychotherapy, brief treatments, informed a tremendous amount of research, as well as a remarkable fecundity of applied psychoanalysis (art, history, politics, and literature). Reaching far beyond the borders of Chicago, self psychology became an international movement with chapters worldwide. It also was picked up by many nonmedical practitioners, who sensed a sympathetic and compatible view of people and treatment that they found lacking elsewhere.

As mentioned, in a subtle shift, self psychology overtly became a method of investigation into narcissism as a

line of development rather than as a type of personality disorder. The narcissistic line of development was defined as the relationship of the self to the self, and the object-libidinal line as the relationship of the self to the other. Individuals were seen as growing up among and requiring self-object relationships of all sorts. The self was not seen as boundary by the skin. Self-objects were defined as environmental objects that fulfilled functions required by the self, and in fact were experienced as if they were a part of the self. Although outside the self, they were experienced as if they were inside. Thus, soothing and/or self-regulating self-objects were sought if an individual did not have internalized capacity for self-soothing or self-regulating; then, these functions were treated as if they were internal although they belonged to someone external. This framed a kind of attachment to others, and so individuals were seen as embedded in a social and interactive matrix far more than classical analysis had emphasized. The classical emphasis on infantile sexuality and aggression was markedly deemphasized, in favor of self cohesion and empathic immersion. Self-objects were also defined as incorporating not necessarily people but also ideas, ideals, and other factors such as goals and values.

In his 1976 book, Kohut also addressed many aspects of the treatment situation that were the pillars of the classical approach; for example, he reexamined the Oedipus Complex and claimed that its turbulence was a "breakdown product" resulting from developmental failures in empathic self-object relations rather than a universal period of conflict stemming from entry into the world of triadic object relations. In a series of sharp exchanges, Kohut and Otto Kernberg, a New York-based analyst with a more classical persuasion, engaged in a scintillating and intriguing series of exchanges concerning the treatment of patients with severe disturbances, particularly those termed borderline. At the time, it was unfortunate that many clinicians perceived a rubicon of sorts between classical analysis and self psychology and were drawn into taking sides. This probably delayed or prevented an integrative assessment of the significance of self psychology, as many felt they either had to reject or accept it in its entirety.

Kohut, after the 1976 book, was yet to publish a great many influential papers. One such paper that has captured the attention of a great many scholars of psychoanalytic history was titled "The Two Analyses of Mr. Z" which he said was his analysis and reanalysis of a particular patient; the first employing the techniques of classical analysis, and a second employing the techniques of self psychology. Needless to say, he reported that the second analysis was far more helpful and reached areas that the first analysis could not. Kohut reported that it was this analysis that truly opened his eyes to the depths and powers of self psychology. Although this cannot be confirmed, several independent sources hypothesize that Mr. Z. was Kohut himself. The two analyses referred to were actually the two analyses Kohut himself underwent.

III. TRANSFORMATION

Heinz Kohut died in 1981. His last book *How Does Analysis Cure* was published posthumously in 1984. With his death, self psychology underwent a profound transformation, as it became unclear whether it consisted of one theory or many. Clinicians such as Robert Stolorow and colleagues, Arnold Goldberg, Michael Basch, Howard Bacal, and others too numerous to name carried on the tradition. Many went their own way without the unifying force of Kohut's vision. As the group of adherents to self psychology grew, several individuals worked hard to clarify the specific principles of therapy native to self psychology. Although there was disagreement, the unifying thread seems to be that the main goal of treatment is to strengthen the sense of self and to facilitate growth. Treatment works to facilitate the latent potential for self-vitalizing experiences, largely through the positive and affirming experiences that take place in the transaction between the therapist and the patient. It did not necessarily require four or five visits per week nor a couch. As the principles of therapy expanded, so to did the theory of self psychology informing treatment. For example, Stolorow went on to elaborate on a worldview he termed "intersubjective." Goldberg sought something of a rapprochement with classical analysis, emphasizing that interpretation is and always has been the primary instrument of self psychology. Goldberg wrote persuasively of how empathy and introspection alone cannot define the field of psychoanalysis. Basch went on to describe psychoanalysis as "applied developmental psychology" and using a self psychology framework, brought in the method and findings of general psychology (perception, developmental psychology, brain-behavior correlations, etc.) to elaborate upon such issues as empathy, Freud's corpus of writings, and principles of psychotherapy.

Many of these authors took issue to some extent with some of the basic and fundamental tenets of Kohut's work. For example, Stolorow criticized Kohut's model of the bipolar self for having the potential for reification of self-experience, for mechanistic thinking, and for limiting the number of potential self-object transferences that

can be found in the clinical situation. Basch also criticized the notion of the bipolar self and replaced it with his own version of a functional self-system, with a brain psychology integrating the affective and cognitive information processing activities governing the individual's adaptation to the environment. Bacal argues that self psychology is in reality an object-relations theory, and that the self-object transference is itself a particular type of object relationship; Kohut was explicit that he was not defining an object-relational psychology, which he pejoratively referred to as a "social psychology" that was outside of the arena of psychoanalysis.

As previously touched on, self psychology was informed by and spawned a significant amount of empirical research, particularly in developmental psychology. In many ways, the pioneering research of Daniel Stern in the early 1980s that pointed toward an interactive baby swept up in developmental currents was closer to Kohut's reconstruction of childhood then the child of classical analysis. Relationships rather than intrapsychic conflicts assumed a research priority. Other developmentalists, such as Louis Sander, Edward Tronick, and Beatrice Beebe, found the inspiration and a model in Kohut's description of childhood that fostered a great deal of creativity in their empirical research. Joseph Lichtenberg, himself not an infant researcher, was particularly active in conceptually seeking to integrate experimental and observational infant research with self psychology. Eventually, he was to go on to describe five motivational systems as the engine of action in self psychology, roughly equated with the drives in classical analysis. In several important publications, he described principles of treatments for the self psychological perspective that utilized his notion of these five motivational systems. Certainly one major advantage of these five motivational systems was their grounding in the developmental literature of the time, which in some people's view provided for a scientific grounding that could not be found in Freud's psychology of personality.

Self psychology was to develop its own diagnostic system (a kind of nomenclature) quite different from any other. A good example is depression. Many self psychologists spoke of "empty depression," a sort of experience of depletion or lack of vitality that characterize a sense of futility in connecting with others. Others were concerned with severely disturbed patients. They addressed how patients can develop the all-important capacity to sustain a stable self-object transference and defined this as the border between narcissistic and borderline states. Each has characteristic treatment implications in the self psychology diagnostic nomenclature. In borderline states, the transference was not stable, and "secondary compensatory structures" interfered too readily, so as to make such an individual not amenable to analysis (although, to be sure, psychotherapy could be embarked on with such individuals). Narcissistic states could thus best be diagnosed from an assessment of the transference, rather than from stable intrapsychic personality factors standing apart from the treatment situation. A very important step became the articulation of translation rules from the diagnostic nomenclature of self psychology to others in the psychodynamic arena thinking and practicing with a different theoretical frame of reference. In many ways, this is a work still in progress.

The study of dreams became a focus of self psychology as it expanded its network of influence. Some self psychologists expanded upon Kohut's notion of a "self-state dream." Whereas classical analysis looked for infantile wish fulfillments lurking within the patient's associations to the manifest content of a dream, self psychology looked for "self-states" in dreams that provided an indication of the patient's sense of connection, mood, and integration. Ernest Wolf, a colleague of Kohut's in Chicago, was one of the first to investigate the self psychology construal of dreams and the departure therein from the prevailing classical analytic theory dating back to Freud's revolutionary portrayal of the role and functions of dreams.

IV. SUMMARY

As is true for many branches of contemporary psychoanalysis, self psychology at present is in a state of flux. In the classical world, it is certainly clear that after an initial period of rejection, many of Kohut's ideas have found their way into the mainstream. For example, Kohut's observations concerning the fragility of the narcissistic person and the need not to interpret transference early on until the patient is able to make constructive use of it now seems to be the dominant view in classical theory. Many classical analysts, such as Evelyn Schwaber, have described how they proceed by always assuming that the patient's perceptions are primary, and that empathically the analyst must always understand the world as seen through the eyes of the patient. Such sensitivity to the subjective states of the patient is an example of the type of technical advancements attributable to Kohut's writings and influence. It is unclear, looking toward the future, whether self psychology will continue as a monolithic tradition, become a loose confederation of post-Kohutian psychologies, or proceed apace toward an integration with the very same points of view it rejected

40 years earlier to make its own way in the evolving psychoanalytic tradition.

See Also the Following Articles

Relational Psychoanalysis ■ Self-Control Desensitization ■ Self-Control Therapy ■ Self-Help Groups ■ Self-Statement Modification

Further Reading

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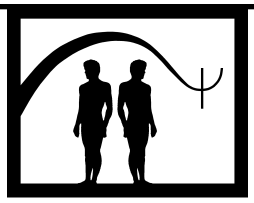

Self-Punishment

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GLOSSARY

extinction The weakening of a behavior by withdrawing reinforcement.
learning theory Pertaining to learning through classical conditioning, operant conditioning, or modeling.
reinforcement The presentation of a positive stimulus or the removal of a negative stimulus to increase a desired behavior.

Self-punishment is a behavior in which a person is responsible for removing a positive stimulus or presenting an aversive stimulus to himself to decrease an undesired behavior. This article explains the concept of self-punishment, its behavioral underpinnings, and the limits to its effectiveness.

I. DESCRIPTION

To most people, punishment tends to be equated with a harsh consequence that is expected to teach a lesson, whether it is a part of childrearing, education, or civil law. A child may be grounded for missing curfew, a student kept in for recess because she failed to complete her homework assignment, or a criminal sentenced to jail for committing a felony. This definition, although adequate for everyday usage, is insufficient to describe the psychological connotations.

Behavioral psychologists, and others familiar with learning theory, appreciate punishment to be the presentation of a negative stimulus or the removal of a positive stimulus so that a particular undesired behavior will be decreased. The lay definition may include the aversive situation that comes with either the presentation of a negative stimulus or the removal of a positive one, but it is often irrelevant as to whether or not the behavior being punished will likely be deterred.

For persons to engage in self-punishment means that they are responsible for implementing the appropriate consequences without external support. For example, if a student tends to daydream while studying, a self-punishment tactic she could use to keep herself from going off-task would be to cancel her usual evening phone call with her best friend whenever she catches herself daydreaming (removal of a positive stimulus). The girl's decision not to call her friend must be self-generated for it to be self-punishment. Should her father revoke her phone privileges whenever she daydreams, it would be an external form of punishment. Similarly, every time a man deviates from his diet by eating fast food he could punish himself by having to drink an extra serving of wheat grass juice (presentation

of an aversive stimulus) instead of having a fruit smoothie (removal of a positive stimulus). If his wife decides that he cannot eat dessert after dinner, it would be external punishment.

II. THEORETICAL BASIS: A BEHAVIORAL PERSPECTIVE

In behavioral psychology, three possible events other than punishment can follow a behavior: negative reinforcement, positive reinforcement, or extinction. Punishment should not be confused with negative reinforcement, which is the removal of an aversive stimulus to increase a desired behavior. Although homework is not designed to be an aversive stimulus, most students would insist otherwise because they have other tasks on which they would much rather spend their time. Therefore, a teacher could negatively reinforce students to participate in class discussions by canceling the homework assignment whenever the entire class actively participates. Another example of negative reinforcement would be the use of an umbrella during a rainstorm: the action of opening the umbrella removes the negative stimulus of becoming wet. Therefore, this reinforces the use of an umbrella when it rains.

Positive reinforcement also serves to increase a desired behavior, but it is achieved by presenting a positive stimulus after a desired response. The term reward is often equated with a positive reinforcement, although it is important to keep in mind that a reward in lay vernacular does not necessarily imply a positive reinforcement. For example, a person may receive a monetary reward for finding a lost pet. The money is meant as a gesture of gratitude, not as a means to induce a person to continue to find more lost pets. In the true psychological sense of the concept, a child who is rewarded with praise and congratulations from his parents for earning good grades at school is likely to continue to earn good grades so that he may continue to receive the positive parental reinforcement.

Extinction is often confused with punishment because it also involves the removal of a particular stimulus to weaken or decrease a behavior. However, extinction is the decrease of a behavior that had been previously learned. A rat could be trained not to press a lever if he no longer receives food pellets with every depression. The rat must have been originally trained to receive the pellets as positive reinforcers for this action to be interpreted as becoming extinguished. Had the action not been trained, it would more likely be interpreted as punishment when the pellets were not supplied.

Extinction is much more complicated in real-life situations than it is in the laboratory. The withdrawal of reinforcers tends to result in the immediate eruption of the undesired behavior. In addition, even if the original behavior has abated, other unexpected patterns of behavior may surface that prove equally problematic. For example, persons who are attempting to quit smoking may use nicotine gum to decrease the number of cigarettes smoked. Eventually, the use of the nicotine gum must also be eliminated, but it is quite possible that they will have uncontrollable nicotine cravings and smoke cigarettes because they no longer have the consolation of the gum.

Extinction is also difficult to implement in nonlaboratory settings because the stimuli that reinforce the undesired behavior are not always known, nor are they easily controlled. It is common for students to misbehave in class because of peer reaction. If a young boy sneaks a frog into the classroom, supportive students will applaud and others will most likely scream, but both reactions serve to reinforce the student for his deed by bringing attention to him. It would be possible although most likely difficult for a teacher to instruct students not to be supportive of such a disruptive act, but it would be even more difficult to tell others not to be afraid. Unless both forms of reinforcement are removed, the behavior cannot be extinguished.

The main problem with any form of punishment is that it does not teach a desired behavior. By definition, it only decreases an unwanted behavior; it does not increase the behavior that is wanted. If you are trying to teach your child to eat all his vegetables at dinner, scolding him when he hides his brussels sprouts in his napkin will not necessarily make him eat his brussels sprouts on a future occasion. Instead, he will find other means to avoid eating his vegetables. Similarly, punishing yourself whenever you eat junk food will not necessarily cause you to eat more healthily.

Punishment can be quite helpful when you are trying to decrease a particular behavior instantly. If you punish your child immediately after he has run into the street, it is likely that you have deterred that dangerous behavior from occurring again. It does not mean, however, that your child will angelically walk alongside you from that point forward. It simply means he will not run into the street again.

With all forms of reinforcement, and punishment, it is important for the ensuing action to be immediate, strong, and consistent. It is difficult to learn a new behavior or terminate an old behavior if the consequences are not easily discerned. It was quite common several decades ago for fathers to be the disciplinarian

of the household. When children misbehaved early in the day, they would often have to wait several hours until their father came home before they were punished for their bad behavior making it difficult for them to associate their punishment with their earlier misbehavior. Instead, they would probably associate their punishment with their father coming home, and learn to fear the return of their father, instead of learning not to misbehave.

Delayed or inconsistent self-punishment would yield similar results. Suppose you are trying to teach yourself not to skip classes. You could tell yourself that every time you fail to attend a class, you would punish yourself by having to spend an extra hour in the library studying. This form of punishment is not likely to be successful because the punishment would not be immediate. For example, because it is such a beautiful day you decide to go to the beach instead of attending class. As you reach that decision, you tell yourself that you will go to the library that night for 3 hrs instead of two because of your truancy. Not only would your punishment be far removed from the misbehavior, but you have also unintentionally positively self-reinforced yourself for missing class by enjoying yourself at the beach. The positive stimulus immediately followed the decision to be truant; therefore, you are more likely to have trained yourself to skip class more often, the exact opposite of your original intentions.

III. EMPIRICAL STUDIES

There is limited evidence that self-punishment, used alone, is an effective method to change one's behavior. In fact, some research even suggests that more harm than good tends to come from self-punishment. In her doctoral dissertation, Sister Mary of St. Victoria Andreoli, R.G.S. found a strong positive correlation between self-punishment and later propensities to be aggressive toward others.

Many therapists have tried to use self-punishment to stop clients from smoking or from overeating. Clients are often instructed to pay a fine (removal of positive stimulus) whenever they engage in the unwanted behavior. Although this form of self-punishment avoids the ethical concerns associated with the presentation of a negative stimulus, M. J. Mahoney, N.G.M. Moura, and T. C. Wade found in 1973 that forcing someone to give up something of value was not an entirely effective means to deter a behavior.

In a study by M. J. Mahoney in 1971, a client was instructed to snap a large rubber band that was worn around his wrist to decrease the target behavior. This form of self-punishment did prove effective but not because of the presentation of mild pain (aversive stimulus). The punishment interrupted the misbehavior, which then alerted the client to regulate his actions.

W. H. Morse and R. T. Kelleher found that punishment should supplement programs that utilize reinforcement. The punishment can decrease the acute problematic behavior while the reinforcement supports the desired behavior. For example, if parents are trying to convince their teenage son to wear his seatbelt when he drives his car, they should revoke his driving privileges (removal of positive stimulus) whenever he is caught without his seatbelt. They should also extend his curfew (positive reinforcement) whenever he does remember to buckle up without inducement. This theory can be extended to apply to self-punishment. Using self-reinforcement in lieu of or in conjunction with self-punishment punishment would prove more effective. In his study, "Coping with temptations to smoke," Saul Shiffman found that people who used strategies other than self-punishing thoughts resisted the urge to smoke more than their self-punishing counterparts.

IV. SUMMARY

Punishment in any form is not a completely ineffective method to change one's behavior. However, given that it can only decrease a particular action, also engaging in a form of reinforcement would prove more logical and efficient. Although not many studies have been done directly on the concept of self-punishment, it is not unreasonable to extend findings from studies on punishment and apply them to self-punishment. People interested in self-modification will have better results using forms of self-reinforcement than they would if they engage solely in self-punishment.

See Also the Following Articles

Aversion Relief ■ Conditioned Reinforcement ■ Extinction ■ Negative Punishment ■ Negative Reinforcement ■ Positive Punishment ■ Positive Reinforcement ■ Self Control Therapy ■ Self Psychology

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