B. One Answer: Biblical Behavior Modification

During the course of these philosophical arguments over mind and body and science and religion, science developed the field of psychology to study the brains and behaviors of both animals and humans. One of the major results was the discovery of numerous facts regarding human behavior, facts that in essence became principles or tools for behavior change. For example, in the area of behaviorism, science discovered that animals and people both respond positively to rewards: Animals will push a lever for food; young students will do their homework for a star. Social learning theorists discovered we can and do learn many (maybe most) of our behaviors by imitating others. This principle is used by therapists in any number of clinical settings (e.g., teaching appropriate social skills or helping people rid themselves of phobias).

Therefore, when therapists adopt these principles to help their clients, they do not develop them "from scratch." They, instead, adopt, adapt, and apply valid principles of human behavior to whatever setting or need they or their clients may have. As will be seen from the examples that follow, advocates of Biblical behavior modification do the same. In other words, the same principles of human behavior are inherent in Biblical teachings, and the fact that science (i.e., psychology) has now "discovered" them, helps to prove their universal and enduring nature.

II. THEORETICAL BASES

A. The Psychology: Behavior Therapy

Many people are skeptical of behavior therapies of all types because they equate them with B.F. Skinner's behaviorism. Those who are concerned about the fact that behavior can be conditioned often consider behaviorism a type of mind control, rather than a tool to promote positive behavior change.

In part, because of such fears, modern behavior therapy tends to focus more on social learning and cognitive techniques than on conditioning behavior. However, the basic foundation of behavior therapy is still behavioristic. Therefore, in order to understand Biblical behavior modification and the examples of it that will follow, it is important to understand the concepts of behaviorism, as well as numerous other foundational principles and techniques of clinical behavior modification. Unfortunately, they cannot all be discussed, so, for the sake of clarification and brevity, they are separated below into the following broad categories: behavioral techniques, social learning techniques, and cognitive techniques.

It must be noted, however, that one of the "special" underlying premises of Biblical behavior modification is that such separation is not truly possible. In other words, just as the mind and the body are distinct, but always influence each other, so does conditioning influence social learning, which in turn, influences thoughts. Behavior modification, therefore, is a continuing interrelated circle of behaviors influencing behaviors.

1. Behavioral Techniques

a) Respondent Conditioning Most people know about respondent conditioning because they know about Pavlov's dogs. That classic example shows that behavior change can occur when a particular stimulus (ringing a bell) is either coincidentally or purposely paired or associated with a second stimulus (feeding the dogs—the unconditioned stimulus). As a result of the association, the first stimulus (the bell—the conditioned stimulus), then comes to elicit a response (the salivating of the dogs—the conditioned response) it did not previously elicit. Eventually, the conditioned stimulus (the bell) elicits the conditioned response (salivation) without the presence of the unconditioned stimulus (in other words, even without the food, even when it is not time to feed the dogs). This type of conditioning is the one most often responsible for the phobias that plague so many: unreasonable fear becomes associated with an animal, place, or experience that normally would not cause that degree of fear.

Although therapists use numerous variations of respondent conditioning to effect behavior change, two forms are especially interesting. Aversive counterconditioning produces behavior change when a stimulus which elicits an undesired response is consistently paired with an aversive stimulus which elicits an incompatible response. The result is that, due to such pairing, the undesired response is eventually reduced or eliminated.

This technique is used quite often, for example, with smokers or obese clients. Smokers want to keep cigarettes from tempting them to smoke and the obese want to overcome their desire to eat too much; therefore, cigarettes and food are the stimuli that elicit the undesired response. Using aversive counterconditioning to control their behaviors, smokers might imagine cigarette smoke as fingers reaching to choke the air out of their lungs and the obese might imagine their most

tempting foods as spoiled or rotten. In other words, aversive stimuli are paired with the regular stimuli to rid them (the cigarettes, the food) of their normal "power" to influence behavior.

Desensitization is another variation of respondent conditioning often used to help clients overcome such things as the fear of public speaking or the fear of flying. After creating a hierarchy of behaviors that begins with those that cause no anxiety and ends with those that cause the most anxiety, the therapist gradually leads the client (visually and, finally, *in vivo*) through each behavior in the hierarchy. At each step the anxiety is counterconditioned with an incompatible response, such as relaxation, until the client can reach the top of the hierarchy (i.e., until the client can comfortably make a public speech or fly in an airplane). The amount of time it takes to "climb" the hierarchy varies with the person and with the situation causing the anxiety, but it usually ranges anywhere from a few hours to several months.

b) Operant Conditioning Operant conditioning, which occurs all day every day in all types of situations, causes behavior change by building in consequences to behaviors. In other words, everyone from parents and teachers to employers and spouses use it to either reward or punish particular behaviors of others and thus increase or decrease the probability of those behaviors being repeated. Operant conditioning takes many forms but the reward and/or punishment theme is common to all of them.

A specialized form of operant conditioning is contingency contracting. Contingency contracts are behavioral contracts between individuals (often parents or teachers) who wish to see changes in behavior and those (children or students) whose behavior is to be changed. The contracts, usually written out and signed by those involved, allow the rewards and punishments of various behaviors to be negotiated by both parties.

2. Social Learning Techniques

Although there are many social learning techniques and theories, the foundation principle of them all is modeling. Modeling causes behavior change when a person observes a behavior in one or more others and then imitates or learns that same behavior or behavior strategy. Parents use this technique every day as they teach their children to talk, ride a bicycle, make their beds, and use good table manners. Often, to their consternation, parents learn the true power of modeling when they see their children model their own behaviors (e.g., Mom's disorganization or Dad's shyness).

3. Cognitive Techniques

Cognitions are a person's thoughts, beliefs, perceptions, and images, and many would argue that these are not behaviors because they cannot be seen or measured accurately by others. The tendency in modern behavior therapy, though, is to accept all cognitions as covert behaviors, and if accepted as such, to also consider them candidates for change through the use of behavior modification techniques. It is also important to understand that, although cognitive therapy is often classified as a separate type of approach, cognitive elements are inherent to all therapies, and, as part of the mind/body conundrum, covert behaviors (those of the mind) and overt behaviors (those of the body) have a mutual influence on each other.

Semantic desensitization, a variation of respondent conditioning, is an example of a technique with a definite cognitive component. Unlike regular desensitization, which usually counterconditions feelings of anxiety, this process counterconditions the negative aspects of certain words, words related to unpleasant situations or a person's phobias, with more pleasant images or thoughts.

Covert assertion is a behavior modification technique that causes behavior change when a person says forceful or assertive things to himself or herself, things that often contradict the actual situation or problem. For example, a man avoiding a doctor's appointment because of a potential health problem might repeat to himself such statements as, "I am brave. I am strong."

B. The Theology: Judeo-Christian Teachings

Although hundreds of Judeo-Christian beliefs and teachings could be discussed to illustrate the theology of Biblical behavior modification, three major principles of Christian belief will suffice. Indeed, these three help define the interplay between behaviors (body) and belief (mind) that are so much a part of Biblical behavior modification.

1. Love

Love, one of the constants found in Christian teachings, begins with the love God has toward humankind. Christians then return that love and extend it toward others. Indeed, one of the requirements of Christian love is to reach out to others in order to show compassion and care. Therefore, Christians are expected to express love by engaging in certain types of behaviors: for example, participating in worship services, helping a friend or

neighbor in need, providing food and shelter for one's family, and so forth. In other words, one of the duties of Christians is to initiate such positive behaviors.

2. Self-control

The fact that God instituted laws and commands to be obeyed implies that there are both acceptable and unacceptable behaviors. Therefore, in the Judeo-Christian religions, the concept of self-control becomes an important issue. Therefore, the control of negative behaviors (usually called sins), which are in contradiction to the laws of God, becomes another important duty of Christians.

3. Inner Peace

Christianity, like many other religions, places a high value on a sense of inner tranquility and peace. The Christian believes there is no better way to gain that inner peace than by leading a life highlighted by two factors: love for God and others expressed by many positive behaviors and a sense of self-control that has helped eliminate undesired and negative behaviors.

C. The Focus: The Bible

When Christians have a question about what their behavior should be, they go to the Bible, which they consider the word of God, for guidance. They may go to other sources as well (e.g., ministers and counselors), but the "Good Book" is their primary source for answers. That is now the place to go for examples of Biblical behavior modification.

Although they are not always immediately evident, the Bible is replete with examples of respondent conditioning. In fact, Christians are to associate all kinds of good feelings, not only to the book itself, "his delight is in the law of the Lord…" (Psalm 1:2), but also to all the symbols and images of Christianity:

> May I never boast except in the cross… (Galatians 6:14)
>
> … for all of you who were baptized into Christ have clothed yourselves with Christ. (Galatians 3:27)
>
> …we, who are many, are one body, for we all partake of the one loaf [communion]. (I Corinthians 10:16, 17)

Christians are also taught to associate negative feelings with certain situations, in order that the negative becomes conditioned:

> Your enemy the devil prowls around like a roaring lion looking for someone to devour. (I Peter 5:8)
>
> Watch out for false teachers. They come to you in sheep's clothing, but inwardly they are ferocious wolves. (Matthew 7:15)

With aversive counterconditioning, Biblical behavior modification offers a more specific application of respondent conditioning, one that helps Christians avoid undesired behaviors by making the association with them very aversive:

> Do not join those who drink too much wine or gorge themselves on meat, for drunkards and gluttons become poor, and drowsiness clothes them in rags. (Proverbs 23:20, 21)
>
> For the lips of an adulteress drip honey, and her speech is smoother than oil; but in the end she is bitter as gall, sharp as a double-edged sword…. (Proverbs 6:24–35)

Desensitization for the Christian is not developed in specific hierarchy form in the Bible as it is with a therapist. However, the major component of desensitization, the training in relaxation under stressful situations, is evident in many passages: "So do not fear, for I am with you…" (Isaiah 41:10); "Do not be anxious about anything." (Philippians 4:6, 7); "Let not your heart be troubled, neither let it be afraid." (John 14:27).

Operant conditioning, like respondent conditioning, is found throughout the Bible. Unlike respondent conditioning, however, examples of operant conditioning are very obvious. The following passages indicate the prevalence in scripture of the concepts of rewards and punishment for behaviors:

> I praise you for remembering me… (I Corinthians 11:2)
>
> They sow the wind and reap the whirlwind. (Hosea 8:7)
>
> Now there is in store for me the crown of righteousness, which the Lord … will award to me on that day… (II Timothy 4:8)
>
> God is just: He will pay back trouble to those who trouble you and give relief to you who are troubled… (II Thessalonians 1:6–10)

In essence, the Bible exists as two major contingency contracts. The Old Testament is a contingency contract for the Jews and the New Testament is a contingency contract for Christians. In other words, the two major divisions of the Bible, contracted with two groups of people, offer a written behavior guide, complete with rewards and punishments, for each group.

Deuteronomy 28:1–64 is a lengthy, but excellent, example from the Old Testament. Examples for Christians from the New Testament, although not so lengthy, still show the contingencies of the behaviors: "If you want to enter life, obey the commandments." (Matthew 19:17); "To those who by persistence in doing good seek glory, honor and immortality, he will give eternal life. But for those who are self-seeking and who reject the truth and follow evil, there will be wrath and anger." (Romans 2:6–8).

The Biblical behavior modification version of modeling is also common in numerous Bible passages. The value and effectiveness of modeling is also illustrated in quite straightforward language:

> These commandments that I give you today are to be upon your hearts. Impress them on your children. Talk about them when you sit at home and when you walk along the road, when you lie down and when you get up. (Deuteronomy 6:4–7)
>
> … you shall read this law before them in their hearing so they can listen and learn… (Deuteronomy 31:10–13)
>
> … set an example for the believers… (I Timothy 4:12)
>
> You became imitators of us and of the Lord… And so you became a model to all the believers… (I Thessalonians 1:6–8)

Christians are taught from the time they become Christians that their thoughts, and the control of those thoughts, are important parts of their Christian life. Therefore, the cognitive portion of Biblical behavior modification has great value to them, especially if they can find ways to control the mind when it becomes unruly. Covert assertion is one method that helps in difficult emotional or physical circumstances:

> I have learned to be content whatever the circumstances. (Phillippians 4:11)
>
> I can do everything through him who gives me strength. (Phillippians 4:13)
>
> When I am afraid, I will trust in you. In God, whose word I praise, in God I trust; I will not be afraid. What can mortal man do to me? (Psalm 56:3, 4)

Although there are many others, one last cognitive therapy to examine here is semantic desensitization, the purposeful conditioning of pleasant thoughts or images to something that is not so pleasant. Christians make use of this technique to help keep the inner peace they desire, despite what is going on in their lives.

> For our light and momentary troubles are achieving for us an eternal glory… (II Corinthians 4:16–18)
>
> For my yoke is easy and my burden is light. (Matthew 11:30)
>
> … but we rejoice in our sufferings… (Romans 5:2, 3)
>
> Consider it pure joy, my brothers, whenever you face trials of many kinds… (James 1:2, 3, & 12)

III. EMPIRICAL STUDIES

Many questions remain. Does Biblical behavior therapy work? And if it works, is it effective enough? Does it serve its purpose? Should a counselor consider its use with his or her Christian clients? Because there are few empirical studies on the actual application of behavior modification techniques for spiritual purposes, the answers to the above questions have to be as integrated as the approach itself.

Years of research and study have shown the practical and valuable use of respondent and operant conditioning, modeling, and cognitive therapy to effect desired behavior change. For example, counselors have gradually helped their clients rid themselves of the fear of flying; teachers have shaped their students' behaviors by rewarding those students who listen in class; advisors have modeled the proper ways to initiate a conversation; and therapists have helped clients develop cognitive techniques to gain control over irrational thoughts and feelings. Medical journals, as well as psychology journals, have examples of these same behavioral techniques being used to do such things as reduce blood pressure, overcome obesity, and control obsessive–compulsive behaviors. In other words, behavior modification therapy and its varied techniques have proven successful across the years in a wide variety of applications with a wide variety of behaviors.

Relatively recent research has also shown as fact that a person's religious/spiritual beliefs can have a profound effect on their abilities to do all the above. In fact, studies have shown that the religious person often suffers less from stress, heals faster, is less susceptible to infection, and has fewer problems with mental disorders and social maladies (such as alcoholism). The reasons are not fully apparent at this time, although some have hypothesized that the social structure and support offered by a spiritual life is beneficial. This article, of course, has argued that Biblical guides for attitudes and behaviors, used consciously or unconsciously, are based on effective universal principles. At any rate, the

field for further applied research in Biblical behavior modification is certainly ripe.

IV. SUMMARY

A. The Synthesis: Biblical Behavior Modification

In essence, Biblical behavior modification is indeed a pathway to wholeness. While respecting all the individual parts, it makes a whole out of the mind and the body, out of thoughts and behaviors. It brings together science and religion. It blends the behavior therapies into effective means and strategies to address almost any behavior problem or need. Indeed, Biblical behavior modification values and treats the whole person.

B. Conclusions

Counselors and therapists need to acknowledge the religious/spiritual beliefs of their clients, as well as become knowledgeable enough about those beliefs to match them to effective behavior change techniques. They also need to followup with further research to see how these applications can become more effective and be expanded in use for other behavior problems.

See Also the Following Articles

Anxiety Management Training ■ Behavior Therapy: Theoretical Bases ■ Bibliotherapy ■ Classical Conditioning ■ Covert Positive Reinforcement ■ Covert Rehearsal ■ Operant Conditioning ■ Self-Control Desensitization

Further Reading

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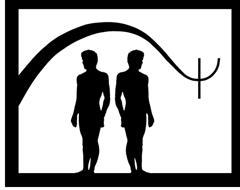

Bibliotherapy

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I. Introduction
II. Description of Treatment
III. Theoretical Bases
IV. Applications and Exclusions
V. Empirical Questions and Studies
VI. Case Illustrations
VII. Summary
Further Reading

GLOSSARY

attributions Causal factors assumed to be responsible for given events-perceived causality.

bibliotherapy Requesting or advising an individual to read written material to attain hoped-for outcomes.

contingencies Associations between behavior and related cues and consequences.

dispositional attributions Characteristics of the individual.

effect size A number that summarizes the strength of effect of a given intervention.

functional analysis A demonstration of the influence of certain cues and consequences on behaviors of interest. This is sometimes confused with a "descriptive analysis" that refers to a description of assumed cues and consequences related to behaviors of interest (rather than a demonstration of their effects as in a functional analysis).

fundamental attribution error Focusing on personality attributes and overlooking environmental causes.

generalization Occurrence of behavior in situations other than those in which it was established.

imaginal therapy The client is guided through imagery regarding feared situations, thoughts, and physical reactions.

maintenance Continuation of behavior changes over time.

meta-analysis Critical review of all experimental studies regarding the effectiveness of a specific intervention in achieving hoped-for outcomes.

randomized controlled trial Random distribution of participants to an experimental group and a control group to investigate the effectiveness of an intervention.

relapse prevention Interventions designed to maintain gains in spite of lapses.

self-efficacy Expectations regarding whether we can perform given behaviors and whether these will result in given consequences.

self-management Pursuit of hoped-for goals by rearranging related cues and consequences oneself.

self-monitoring Keeping track of some behaviors, thoughts, or feelings in real-life situations.

stimulus control Influencing behavior by rearranging antecedents of behaviors.

I. INTRODUCTION

The term bibliotherapy refers to reading written material to pursue valued goals. Surveys of counselors in a variety of professions indicate that they often assign (prescribe) specific readings to clients. Self-help material is available for a wide range of aims including enhancing parenting skills, sexual pleasure, social and study skills, and decreasing substance abuse, anxiety, depression, smoking, and excess weight. Aims include providing information about a concern including its prevalence, motivating readers to address it, describing

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a variety of change options, and helping readers select promising ones. The variety of aims addressed can be seen in guides to self-help resources such as those prepared by John Norcross and his colleagues. Reading has been used throughout the ages to pursue valued goals. Consider the Bible. This ancient manuscript was and is used as a guide to living and wrestling with life's problems and concerns. Steven Starker views self-help books as a modern-day oracle replacing older sources of guidance and advice. The United States has been particularly enthusiastic about the use of reading as a route to self-help; consider the attention given to the "self-made man" and, more recently, "woman." Possible benefits of bibliotherapy include attaining desired outcomes with little expenditure of time, money, and effort, and accessing accurate information about topics of interest (e.g., social anxiety, depression) and how to achieve valued outcomes (e.g., enhancing self-change skills and decreasing beliefs that hinder self-change). Another potential benefit is that we learn to rely on ourselves rather than on a therapist.

II. DESCRIPTION OF TREATMENT

Characteristics common to use of bibliotherapy in clinical practice include a request to read certain written material and instructions guiding the reader in the application of procedures described in real-life contexts. This may include self-monitoring (keeping track of particular behaviors, thoughts, or feelings in real-life situations) for assessment or to evaluate progress, as well as instructions on what to do given certain degrees of progress. Underlying assumptions on which recommendations are based are usually described and examples of applying methods given. Clinical use differs along the following dimensions: (1) extent of helper–client contact ranging from none to extensive; (2) use of individual or group format; (3) development of general versus specific skills; (4) the extent to which readers are requested to "interact" with the written material in terms of completing exercises to test their understanding of content; (5) whether bibliotherapy is used together with other methods; (6) whether access to additional written material is made contingent on reading and understanding more elementary portions; and (7) attention devoted to generalization and maintenance of positive effects. Inclusion of relapse prevention guidelines offers readers information they can review on an as-needed basis. Most programs using bibliotherapy are brief, for example 8 to 12 weeks.

Bibliotherapy materials differ in degree of attention given to helping readers to carry out an individualized assessment on which they would base selection of change methods. Some written material encourages readers to gather data (e.g., to observe and record the frequency of behaviors of interest and related circumstances). Data gathered during assessment or "self-diagnosis" are used to plan change programs. Let's say that a woman reads a self-help book in order to increase enjoyable social contacts. Possible reasons for unsatisfactory social contacts (either in frequency and/or kind) include a lack of social skills (e.g., initiating conversations), anxiety (perhaps due to fear of negative evaluation), unrealistic expectations (e.g., "I must always succeed."), poor self-management skills (e.g., in controlling anger following a rejection), and environmental obstacles (e.g., few places to meet people). Written materials differ in the extent to which guidelines help readers to identify how they can profitably change their behavior to achieve hoped-for outcomes. Common errors in searching for the causes of behavior include mistaking correlation for causation and overlooking environmental causes. To the extent to which data are informative (reduce uncertainty about how to attain valued outcomes) and assumptions about how valued outcomes can best be pursued are accurate, readers are more likely to make sound decisions regarding selection of self-change methods. Inaccurate data and assumptions may result in incorrect choices of self-change programs.

In totally self-administered bibliotherapy, the client receives or is asked to purchase material from a helper with no additional contact beyond an initial meeting. In minimal contact formats, the counselor may provide reading materials but takes a somewhat more active role such as arranging phone calls and infrequent meetings. Yet a third format consists of counselor-directed reading in a self-help book that the client obtains at the beginning of assessment followed by meetings with the helper on a regular basis. Here, written material provides a focus of discussion in relation to how this applies to the client. Last, in a counselor-directed approach, self-help books are used as a part of the counseling. In addition to reading, other formats include listening to tapes and computer-presented information. It is suggested that practitioners use books with which they are familiar, consider the length of the book as well as degree of extraneous material, and select books that are applicable to readers' concerns and reading ability. Requisites for successful use of bibliotherapy include reading skills that match the required reading level of the text.

III. THEORETICAL BASES

A basic premise is that readers can attain certain hoped-for goals by implementing material read (although, in some cases this may only be possible through relinquishing control over uncontrollable events). There is a built-in self-efficacy message, an expectation that readers can attain certain outcomes through reading and acting on what they read. The expectation is that readers will be able to successfully apply the instructions given in real life. For example, it is expected that parents who read a manual describing how to toilet train their child will be able to use the information to achieve this outcome or that readers of a self-help manual designed to decrease alcohol consumption will be able to use the information to decrease their drinking. That is, it is assumed that people can be their own agents of change with minimal or no counselor contact. A key step in behavior change is identifying and altering factors related to desired outcomes. Self-control or self-management involves a process in which we are the main agent in guiding and altering our behavior to achieved self-selected goals.

Bibliotherapy materials differ in views presented about how valued outcomes can be attained. Thus, self-help material not only implies a self-efficacy message but also describes a particular viewpoint as to how goals can be achieved. Different models of self-management include B. F. Skinner's operant model in which it is assumed that self-change behaviors consist of a repertoire of behaviors that are influenced by environmental contingencies (i.e., by the same behavioral principles that influence any behavior). If we ourselves use such methods to attain goals we have set for ourselves, we are engaged in self-management. One kind of self-management involves the rearrangement of antecedents related to behaviors of interest. This is known as stimulus control. For example, cues that encourage unwanted behavior can be removed or reduced, and those that encourage desired behaviors can be increased. We could for example use physical aids (written reminders) to encourage desired behaviors. A second involves rearrangement of consequences; positive consequences are provided for behaviors we would like to encourage, and negative consequences are removed. Negative consequences may be provided for unwanted behaviors, and positive consequences that usually follow such behaviors may be withheld. Reading about presumed sources of influence on behaviors of interest may help readers to alter behavior in valued directions by rearranging related cues and consequences (e.g, reminding ourselves to focus on positive thoughts in stressful situations to keep anxiety in check).

Some authors emphasize the role of self-monitoring of behavior and our awareness of choice points (e.g., what to do next), which they argue also involves self-evaluation of behavior. Research suggests that self-observation may alter behavior. When we observe our behavior, we attend to it more carefully and may identify and change cues and consequences that influence its frequency. Other writers emphasize the role of attributions (assumed causes for behavior) noting that research suggests that we can enhance maintenance of positive changes by emphasizing the control we have over our behavior (e.g., attributing self-change to our own efforts in contrast to viewing our behavior as under the control of environmental consequences over which we have little influence). Self-management skills that may be involved in self-change include the following:

- Self-assessment skills in using written material to clearly define desired outcomes and to plan how to achieve them
- Self-monitoring skills to gather helpful assessment information and to evaluate progress
- Skills in arranging cues and incentives so hoped-for reactions will increase and unwanted reactions will decrease
- Skills in choosing next steps when positive gains are made
- Troubleshooting skills to overcome obstacles when change methods do not work
- Skills in generalizing and maintaining positive changes

IV. APPLICATIONS AND EXCLUSIONS

Certain kinds of individuals are more likely than others to profit from self-help formats. Attributions may influence the extent to which different people make effective use of bibliotherapy methods. Research suggests that those who score higher on internal locus of control (they believe that they have a great deal of control over what happens to them) are more successful in altering their behavior compared to people who are more externally controlled (they attribute what happens to them largely to external events). People differ in their repertoire of self-change skills and in their history of using them to attain valued outcomes. For example, some readers may not know how to set

clear goals. Some may not know how to rearrange cues and consequences related to outcomes of interest. Contraindications to use of bibliotherapy include limited reading ability and small probability that the client will follow instructions, perhaps because of personal or environmental obstacles. Countervailing personal characteristics include high anxiety that may interfere with successful use of material. Written material may not address key related factors, for example, excessive alcohol drinking may be maintained by peer support and written material may not address this. Literature on behavior change suggests that practice is related to acquiring new skills. Thus, arranging such practice will be needed, and this will require related self-management skills. Effective use of bibliographic methods requires generalization and maintenance of valued behaviors. This also requires self-management skills. Many clients do not have the self-management skills required to make effective use of written material to change their behavior. Counselor guidance and support may be necessary. Support also could be provided by group members or "buddies" who are involved in group programs. Research suggests that acquiring different kinds of skills requires different kinds of learning programs. Consider learning to play golf. Will reading books about how to play golf produce skilled golfers? Probably not, as many disappointed readers have found. Learning such a skill involves a complex sequence of behaviors that may only be acquired through on-the-spot coaching and practice.

V. EMPIRICAL QUESTIONS AND STUDIES

Compared to the abundance of self-help books and manuals available, the evaluation of these materials is skimpy in terms of whether they do more good than harm. For example, do they really help people achieve what they promise? Self-help books differ in the clarity with which hoped-for outcomes are described. Promising self-fulfillment is vague compared to helping readers lose weight, get better grades, or make friends. Self-help books differ in the evidentiary base of their views about how self-change can be achieved ranging from material that appeals to will power in motivating change (notoriously ineffective), to those that rely on empirical findings regarding what has been found to contribute to self-change. Research on self-management and self-instruction suggests that some methods and formats are more likely than others to facilitate self-help efforts. Key to self-management is effectively dealing with the weak effects of delayed consequences (e.g., studying more today to avoid a bad grade on a test in 4 weeks). To what extent do self-help books build on knowledge about self-management? To what extent does a book help readers to take advantage of skills they already have? As with many other areas of psychotherapy, claims are often inflated. Gerald Rosen raised concerns regarding use of self-help materials and suggested guidelines for screening do-it-yourself-treatment books:

1. What claims are made in the book? What does it promise readers?
2. Is accurate information provided concerning the extent to which claims of effectiveness have been critically tested? Have the techniques described in the book been critically appraised in relation to claims of effectiveness and have the results been positive?
3. Can readers check whether they develop appropriate expectations as to what they can (and cannot) gain from reading the material?
4. Does the book describe methods readers can use for self-assessment to determine whether this book will be of benefit to them, and if so, in what way? Have these procedures been critically tested? A key question is the following: "Can the reader make an accurate assessment of what may be helpful in attaining desired outcomes?"
5. Has the book been evaluated in terms of clinical efficacy? If so, under what conditions, with what population, with what results? Some self-help books describe procedures that have empirical support but these procedures may not have been evaluated in a bibliotherapy format.
6. How does the effectiveness of one source of bibliotherapy compare to that of other manuals or formats? Have comparisons been made between the effects of reading a book with the effects of other self-help books on similar topics or use of other formats such as audiovisual material, and, if so, what are the results? (I am not aware of any study that compares client free choice of reading material with counselor-selected material in terms of effectiveness. This would be an interesting study.)
7. Is there any evidence that positive changes last? If so, over what period?
8. Has the possibility of negative effects been explored (e.g., a decrease in hoped-for outcomes and/or a worsening of disliked outcomes)?
9. Does contact with a therapist enhance effects?
10. Is bibliotherapy more effective for certain kinds of problems/people than with others?

As with any claim, we should carefully examine the extent to which it has been critically tested. For example, is there any evidence that reading a book about how to make and keep friends or how to improve your grades yields hoped-for outcomes? Many manuals have not been examined under conditions of intended use. In addition, subjects used in studies may differ from target populations, thus altering potential effectiveness. Follow-up studies are also vital—how long do positive effects last if they occur? In 1997 Cuijpers reviewed six small, short-term randomized controlled trials of bibliotherapy involving 273 participants recruited by ads who had mild depression. He reported a mean effect size of bibliotherapy of .82; 79% of participants in the control group had a poorer outcome compared to the average participant in the bibliotherapy group.

A meta-analysis of 70 bibliotherapy studies by Rick Marrs indicated a positive effect for bibliotherapy. This meta-analysis involved a total of 4,677 participants. Bibliotherapy was defined as "The use of written materials or computer programs, or the listening/viewing of audio/videotapes for the purpose of gaining understanding or solving problems relevant to a person's developmental or therapeutic needs." Only those studies were included that had a comparison group drawn from the same population as participants receiving bibliotherapy. The 79 studies included 2,315 subjects who participated in bibliotherapy, 455 who received a therapist-directed therapy (without bibliotherapy), and 1,907 who were in control groups. The studies averaged about 57 subjects each and retained 88% of participants through the posttreatment measurement. The average age of people involved in these studies was the mid-30s, and participants tended to be well educated. Problems addressed included anxiety (e.g., test anxiety), assertiveness, indecision about career, depression, impulse control (e.g., alcohol use, smoking), self-esteem–self-concept concerns, sexual dysfunction, study problems, and weight loss. The individuals in the bibliotherapy groups met with a therapist for an average of about 36 min per week, length of bibliotherapy averaged about 212 pages, and time spent in treatment averaged 6 weeks. Most studies (84%) used random assignment to a comparison group, and 80% used a book for the written material. Forty-eight percent of the studies used samples from a college population, and 39% used participants solicited from general adult populations. Thus, most of these studies did not involve clinical populations. The mean estimated effect size of the 70 samples analyzed was +0.565 indicating moderate effectiveness. The authors reported no significant differences between the effects of bibliotherapy and therapist-administered treatments and no significant erosion of effect size at follow-up. Bibliotherapy methods appeared to be more effective for certain kinds of problems such as assertion training, anxiety, and sexual dysfunction than for concerns such weight loss, impulse control, and studying problems. The amount of therapist contact during bibliotherapy did not seem to be associated with effectiveness. However there was an indication that increased counselor contact resulted in better effects for some problem types such as weight loss and anxiety reduction.

Other follow-up studies of the effects of bibliotherapy have also yielded positive effects. For example Nancy Smith and her colleagues examined the effects of cognitive bibliotherapy for depression and found that treatment gains had been maintained at 3-year follow-up. Positive effects were also found by Jim White in his 3-year follow-up of the effectiveness of STRESSPAC. STRESSPAC is designed as a self-help package for people with anxiety. It is a 79-page booklet that includes a four-page introduction, handout, and a two-sided relaxation tape—one for rapid relaxation and the other for deep relaxation. The booklet is divided into information and treatment sections. The former section contains information on the nature of anxiety, describes different kinds of anxiety disorders, gives case histories, as well as information related to the causes and maintenance of anxiety. The intervention section is divided into four sections including controlling your body (progressive relaxation), controlling your thoughts (cognitive therapy based on the work of Beck and Meichenbaum), controlling your actions (emphasizing the importance of exposure to anxiety-producing cues and other behavioral advice) and, last, controlling your future (a relapse prevention information section).

VI. CASE ILLUSTRATIONS

Robert Gould and his colleagues compared the use of bibliotherapy involving minimal counselor contact in the treatment of panic with guided imaginal coping and a wait-list group. Changes assessed included frequency and severity of panic attacks, perception of ability to deal with panic attacks, and level of depression and avoidance. Participants in the bibliotherapy group (n = 12) were requested to read *Coping with Panic: A Drug-Free Approach to Dealing with Anxiety Attacks* over a 4-week period at their own pace. This book includes information on educating readers about the causes and

nature of panic disorder; describes a variety of cognitive and behavioral strategies including relaxation, cognitive restructuring, breathing retraining, and exposure; and advises readers how to use these strategies. It describes cognitive strategies such as exploring faulty logic, reconsidering attributions, exploring alternatives, decatastrophizing, and hypothesis testing. Participants were informed that reading the book was designed to help them deal better with their panic attacks and that they would be contacted at weeks 2 and 4 by the researcher to assess their progress in reading the book. Calls lasted about 10 min; a written protocol was followed, and callers were coached not to answer questions about any particular reader's program. Rather, participants were questioned to see if they were reading the book and to check their progress. The authors reported that, overall, participants in the bibliotherapy group were more improved than were participants in the wait-list group and were not significantly different from those in the individual therapy group. Participants in the bibliotherapy group and the individual therapy group had greater self-efficacy ratings and improvements in confidence in coping at posttest than participants in the wait-list group and did not differ from each other. Seventy-three percent of the participants in the bibliotherapy group showed clinical improvement compared to 67% of those in individual therapy and 36% in the wait-list group. Clinical improvement was defined as at least a 50% decrease in all symptoms of panic attacks. However, the authors reported that anxiety sensitivity was still high on posttest and there were no statistically significant differences between participants in the wait-list group and participants in the other two groups in the frequency and average severity of panic attacks. The authors noted that participants in this study were well educated and highly motivated. Thus, similar effects may not be found with poorly motivated clients.

George Allen compared group and self-administered relaxation training and study counseling. Twelve participants used a programed text designed to enhance relaxation and effective study skills. The text described the same content as that discussed during the group meetings. In addition, readers of the text were asked to complete a check list of methods used during the week. One other contact was held with each individual in the self-help group. In this session participants were asked to discuss future applications of the material. In another self-administered condition, the same rationale was offered, however participants received a programmed study counseling text. Participants in both self-administered groups received instructions in carrying out a functional analyses of their study behavior and were given forms to carry this out on a daily basis. Results suggested that both self-administered programs were as effective as counselor-provided help. Both programs were equally effective in reducing anxiety and improving grades, and both were significantly better than no treatment.

VII. SUMMARY

Bibliotherapy has been used to pursue a wide range of goals including educating clients, decreasing anxiety and depression, enhancing social contacts, and developing study skills. There are different kinds of bibliotherapy. One utilizes self-help materials designed to guide the client through assessment and/or intervention in relation to hoped-for outcomes such as losing weight or developing more effective study behaviors. Another kind requests clients to read fictional materials or poetry to attain certain outcomes. Yet another encourages readers to read spiritual literature. Many different formats are used and Internet-based material is likely to increase in use. An advantage of bibliotherapy is allowing people to achieve desired changes on their own, although some writers point out that use of self-help manuals still ties consumers to therapists because therapy "experts" are often the authors. Potential positive effects of bibliotherapy include acquiring skills that can be applied to other areas. For example, if a parent learns to use positive reinforcement with one child, she may use this with her other children as well. In addition, positive effects found at follow-up (e.g., White's finding of the maintenance of effects over a 3-year period), suggest that clients who cannot obtain access to services right away can benefit from bibliotherapy material that can be provided immediately, and this may provide as much help as seeing a counselor.

Dangers of ineffective self-help materials suggested by Gerald Rosen include an increase in hopelessness and helplessness when desired outcomes do not occur, neglect of other methods that might be successful—such as consulting a clinician—and a worsening of problems. One potential negative effect of bibliography is encouraging the belief on the part of clients that change is impossible because bibliotherapy did not work, when, in fact, change would occur within another format, perhaps including more contact with a counselor. Programs that are successful when presented

by a counselor may not be effective when self-administered. Review of self-exposure treatment for anxiety indicates that brief initial contact with a counselor is an important motivator for some individuals. Another possible negative side effect is excessive discomfort in the process of change due to lack of expert guidance. Although prescriptive advice offers guidelines (which may be more or less clear) about what to do, it may not provide the motivation to act on this advice. For example, knowledge about helpful rules does not provide the motivation to act on these rules. Not carrying out instructions is a common problem in self-change programs.

Self-help books may foster incorrect views about self-change and how it can be accomplished. They may obscure sources of influence over valued outcomes which decreases the likelihood of attaining desired goals. Self-help books may encourage unhelpful views of "the self" (e.g., as the seat of all change). They may encourage a dysfunctional focus on the self and on one's problems or encourage the unrealistic view that life should be without problems. Encouraging a focus on the self may increase depression in people who already focus too much on themselves. Self-help focuses on the individual who is attempting to alter personal behavior, thoughts, or feelings to attain specific goals. Individual change, however, is but one level of intervention. Many other levels may be required to attain valued outcomes such as losing weight or decreasing anxiety or depression. The focus on self-help may obscure the role of political, social, and economic factors that influence many of our behaviors that we try to alter through self-change and thus exaggerate the potential we have to alter our behavior and related environmental influences on our own. Consider stress for example. Many stress-related factors are environmental such as a decrease in civility, high noise levels, and hours spent on crowded, smoggy freeways. The fundamental attribution error (overlooking environmental causes of problems and focusing on dispositional causes) is common and is encouraged by a focus on the self.

A key concern for future research is the rigorous testing of claims regarding the effectiveness of bibliotherapy in relation to particular outcomes. Given the possible rationing of counselor availability and indications that bibliotherapy can be effective and/or contribute to positive effects at low cost, it is certainly worthwhile to pursue research in this area. The effectiveness of bibliotherapy methods should be enhanced by taking full advantage of empirical literature describing components of effective self-change efforts and making sure other information provided is accurate.

See Also the Following Articles

Art Therapy ■ Assertion Training ■ Biblical Behavior Modification ■ Education: Curriculum for Psychotherapy ■ Functional Analytic Psychotherapy ■ Minimal Therapist Contact Treatments ■ Self-Help Treatment for Insomnia

Further Reading

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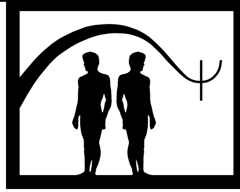

Bioethics

Everett K. Spees

Devereux Cleo Wallace

I. Background
II. Scope of the Article
III. Concepts of Ethics and Morality
IV. Case Analysis
V. Conclusion
Further Reading

GLOSSARY

agent A human subject capable of making and acting on a moral choice. Synonymous with "moral agent."

autonomy A question central to the work of Immanuel Kant. An independent and self-legislative stance taken in making moral judgments in the domain of justice. Emile Durkheim stated that autonomy requires the willingness to do one's moral duty because reason commands it, and not from any external constraint. The demands and ideals of morality are willingly complied with as necessary for participating in a desirable and fulfilling collective life. Teaching children rational autonomy by explaining the reasons behind social rules and obligations is more effective than educating through indoctrination or preaching. He considered it to be the third goal of moral education after discipline and attachment to the group. Heteronomy is the antonym of autonomy.

bioethics A formidable expansion of medical ethics dating to the 1960s when the introduction of new medical technologies such as hemodialysis, kidney transplantation, reproductive control techniques, life support equipment, and the definition of brain death, introduced new and difficult ethical choices for medical personnel, patients, institutions, managed care organizations, and at the level of social policy. The evolving role of bioethics has been to examine critically the moral ramifications of contemporary medical and scientific procedures, the criteria and responsibilities for decision-making responsibilities, and their implications on societal expectations and social policy. Since these contemporary medical and scientific procedures are widely publicized in the mass media, and may become generally available, the ethical discussions have involved a cross-section of the general public as well as physicians, scientists, journalists, philosophers, theologians, and sociologists.

collective norm Defines what is expected from group members qua group members in their attitudes and in their actions. For example, community group members care about each other and do not steal from each other. For a collective norm, the group members constitute its affiliative constituency. A universal affiliative constituency would include all of mankind. The typical collective norms of a community uphold the intrinsic value of community, and include caring, trust integration, participation, publicity, attachment to community, and collective responsibility.

ethics (Greek ethos—character) Often used interchangeably with morality, for example, professional ethics and personal morality. Ethics is generally accepted as being broader than morality, and includes some areas outside morality. Aristotle wrote that Ethics was a branch of politics because it was the duty of the statesman to create the best possible opportunity for the citizen (of a Greek *polis*) to live a good life. Ancient ethical theories all contained the understanding of obligation or moral duty, and this fundamental notion was reaffirmed in modern times by Kant (1724–1804), who held that virtue was secondary. He wrote, "By mere analysis of the concepts of morality we can quite well show that the principle of autonomy is the sole principle of ethics. For analysis

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finds that the principle of morality must be a categorical imperative, and that this in turn commands nothing more or less than precisely this autonomy."

moral reflection Re-visioning the environment or world as responded to by an ideal social system. When humans change their perception of the world or of moral quandaries through moral reflection, the process promotes favorable changing of their behavior. Assessment of moral reflection provides guidelines to classifying the level of moral sophistication of individuals and societies.

morality (Latin mores—character, custom, and habit) Morality concerns a narrower range of issues than ethics, focused on what we should do, and how we should live. A fundamental characteristic of morality is respect for oneself and others. Becker and Becker identify four specific characteristics that differentiate morality from the broader ethics term: First, morality makes a distinction of kind between moral and nonmoral reasoning. Second, morality makes a strict demand of responsibility, viz.; "ought" implies "can." Third, duty or obligation represents a major moral precept. Fourth, morality assumes an essential concept of the noninstrumental good of others.

rationalization The process of thinking by which something immoral becomes transformed into something plausible.

social conventions Arbitrary norms that coordinate the activities of individuals in a social system, thereby serving the organizational goals of the system.

virtue The Latin term *virtus* and the corresponding Greek *arête* referred to all kinds of excellence. In contrast under ethical theory the moral virtues are generally narrowed to include courage, justice, wisdom, and self-discipline. More recently Michele Borba, in discussing how to build moral intelligence in children, added to this list the basic virtues of empathy, conscience, respect, kindness, and tolerance, to make a total of seven. More than 200 other virtues have been described in the literature.

The life is short,
The art long
The right time but an instant,
The trial (of therapy) precarious,
The crisis grievous.
It is necessary for the physician to provide not only the
Needed treatment, but to provide the patient himself,
And those beside him, and for his outside affairs.

Hippocrates
Aphorisms I

I. BACKGROUND

Psychotherapists need bioethics on a number of levels in the pursuit of their healing professions. Like our North American society the psychotherapy disciplines are experiencing accelerated change unparalleled in human history. The last quarter century recorded vast changes in almost every area of life (communication, lifestyle, technology, social organization, physical and mental health, and religion) that have altered the perception of collective societal norms.

Behavioral health professionals and institutions have absorbed many seismic shocks as the tectonic plates of their paradigms have shifted. Shudders have been felt when the state mental hospitals were virtually emptied. This occurred as a result of national ethics debates about the rights of mental patients to autonomy and self-determination regarding hospitalization. The societal perception of mentally ill patients has radically changed. At the same time this movement overlapped the introduction of the first-generation tranquilizer drugs that largely replaced sedatives, hypnotics, and electroshock therapy. A new generation of psychoactive drugs was fully expected to one day permanently cure mental diseases. As a consequence of new drugs renunciation of paternalism toward the mentally ill occurred followed by the flight of the discharged state hospital patients to the streets, where they continue to form the core of the homeless. Few at that time grasped the notion that by rejecting paternalism this new social policy had actually caused harm (maleficence) while trying to effect social good (beneficence).

After this megashift in public policy the Darwinian economic rise and fall of private behavioral health facilities and private practices appeared, closely connected with the rise of bureaucratic restriction of behavioral health services and medications by managed care organizations (MCOs) that followed the Bentham-Mill utilitarian or consequential ethic. Psychotherapists had to rethink their accustomed psychotherapy practices under the harsh new scrutiny of MCOs' cost-conscious business rules. Meanwhile, second- and third-generation psychopharmacology agents appealed to the MCO utilitarian ethic as more economical than extended talking therapy.

As a result psychotherapists found themselves in an uncomfortable area between the conflicting imperatives of the patient and the MCO. Regardless of the therapist's theories and personal convictions about the care that was indicated for each patient, his or her treatment plans for patients could only be reimbursed if they were approved by the MCO. The developing theories of bioethics changed the perspective on the priorities of classical medical ethics and professional codes of conduct, giving the scientific and quantitative rational approach ascendancy over the prior humanistic and art-of-medicine approach. Subsequently the roles of the

psychotherapist have been forced to evolve to keep up with these new situations.

Changes in the practice of medicine and bioethics have also thrust the psychotherapist into newly reframed clinical ethics situations. During the 1960s many previously resolved issues were brought up for new public debate, including confidentiality, informed consent, truth telling, patient access to medical records, patient refusal of treatment, and end of life considerations. At the same time public debate engaged new technologies such as mechanical support of respiration, brain death, new reproductive technology, and organ transplantation. Psychotherapists regularly become involved in these bioethical issues in their practices. The dilemma in the field of psychotherapy involves the difficulty of defining and taking action on moral and bioethical issues that involve deciding between seemingly equally worthy conflicting values in mental health. But lest we feel overwhelmed, we might remember that the imposing twentieth-century ethicist W. D. Ross in 1939 cautioned against underestimating the natural value of our own moral character when he said, "The moral convictions of thoughtful persons are the data of ethics just as the sense-perceptions are the data of natural science. Moreover acts are either right or wrong, whereas motivation and character are either good or bad."

Former United States President Lyndon B. Johnson captured the contemporary ethical challenge in a nutshell. According to White House advisor Joseph Califano, one of Lyndon Johnson's favorite sayings was, "It is not doing what is right that is hard for a President, it is knowing what is right."

II. SCOPE OF THE ARTICLE

This article will briefly address the development and ramifications of bioethics in the health sciences, with particular emphasis on the profession of psychotherapy. Brevity requires the perspective be restricted to that of the Western industrialized societies. A case example will illustrate some commonly encountered mental health bioethical problems. The glossary complements the text with definitions of terms and concepts that could not be fully developed in this brief article.

III. CONCEPTS OF ETHICS AND MORALITY

Ethics may be broadly defined as the principles of moral behavior by individuals and by society. What are one's duty to others and the duties of others to oneself? Many philosophers consider ethics to be a broader philosophical term than morality, to include political philosophy such as national and international policy making. Nevertheless some ambiguity exists in the current use of these terms.

Professional bioethical principles emphasize truth telling, client self-determination, and informed consent (autonomy), doing good for the patient (beneficence), avoiding harm (maleficence), and acting with justice (fairness). It is, however, deceptive to believe that every complex clinical ethical concern should be reduced to fit a narrow principled classification without sacrificing significant clinical issues of each case.

In 1996 a major conceptual breakthrough in the role of morality in bioethics was contributed by James Rest, who, after reviewing hundreds of contemporary professional publications on morality, concluded that all future discussions of morality should center around four intrinsic measurable components: moral sensitivity, moral motivation, moral judgment, and moral character. By separately weighing these four components it becomes possible to identify distinctive patterns of morality in and during the course of individual human development. Moral philosophy research allows these components to be accurately described at a certain point or even objectively scored, over a person's lifetime. Moreover, by using this method of assessment previously problematic historical personalities could be profiled in a more precise common language.

For example, one could assess the level of each of the four moral components of, let us say, Adolph Hitler, Lieutenant Calley of My Lai, or Mother Teresa. We might conclude that Mother Teresa possessed all four components at high levels, while Adolph Hitler and Lt. Calley possessed adequate potential capacity for moral judgment but were deficient in the necessary moral sensitivity, moral motivation, and moral character, to behave morally. In addition these four moral components could be used to reclassify the moral themes in Homer's epics and Aristotle's *Nichomachian Ethics* that have so profoundly affected Western civilization.

At a more contemporary pragmatic level, using James Rest's components can aid us in bioethical areas by making meaning of the diversity of moral visions, accounts of moral obligations, rights, and values that confront us in our increasingly pluralistic society. Different ethnicities, but also religion, class, socioeconomic status, education, gender assumptions, and language, affect the context and perspective of all four moral components defined by Rest.

In 1996 Marvin Berkowitz amended classical Aristotelian ethics by giving a new definition of "the complete moral person." His proposal is complementary to Rest's four-component model. Berkowitz's vision of "moral anatomy" included six elements or "objects":

1. Moral behavior
2. Moral character
3. Moral values
4. Moral reason
5. Moral emotion
6. Moral identity

In addition Berkowitz clarified the roles of self-discipline and empathy as metamoral characteristics that serve to support the moral life models that operate in the field of moral psychology. He wondered how we might best educate the moral person in our society. He asked the related question of how contemporary parents and teachers might best model for their children, and suggested they use well-known components of (1) the just community, (2) character education, (3) dilemma discussions, and (4) love of the good.

Despite the established principles of bioethics and the helpful recent moral clarifications of Rest and Berkowitz, there is no general universal theory of secular bioethics agreed to by all, although more consensus exists within religious and cultural subpopulations ("moral communities") that share values and moral assumptions. This diversity has been highlighted by the increasing internationalization of North American communities by the flood of new immigrants who share different ethnic and religious concepts of morality. As H. Tristram Englehardt states in *The Foundations of Bioethics, Second Edition,* "Bioethics is a plural noun … there is a swarm of alternative ethics ready to give rise to a babble of conflicting bioethics."

Nevertheless in the health sciences professions the four moral components of Rest, combined with bioethical principles, precedence, and careful case analysis, help facilitate our recognition, motivation, judgment, discussion, and action on moral and ethical issues we may personally encounter on a daily basis with patients, families, other professionals, and medical care policies, however different the moral backgrounds, assumptions, and communities may be.

Medical ethics relates to the classical fixed philosophical themes of the responsibilities of doctor and patient as generally perceived up until the 1960s, when a new cycle of technological advances such as dialysis, organ transplantation, and mechanical respirators gave medical professionals unprecedented control over extending life. Advances in reproductive technology such as contraception, *in vitro* fertilization, stem cell research, and surrogate motherhood created frightening new moral dilemmas, and brought to attention the value-laden nature of medical decision making.

Advances in medical diagnostic technology simultaneously made laboratory data more reliable and quantitative, and refocused medical diagnosis away from the bedside and toward the seductive computer video-display terminal. After all, was not high technology a way of providing the greatest good (beneficence) to the greatest number of patients at the lowest possible cost (utilitarianism)?

Health scientists found that new philosophical and ethical concepts were needed to deal with advances that put the tools and decisions affecting life and death into the hands of both patients and professionals in radically different ways. In 1970 the emerging new medical ethical philosophy that dealt with the dramatic technical advances acquired the name bioethics, borrowing a term that originally referred to the philosophy of social responsibility to preserve the biosphere. Bioethics concerns itself with much broader philosophical and public policy questions than traditional medical ethics, such as "What are the limits of science," or "What does it mean to be a human being." Bioethics stresses not a set of rules, like the Hippocratic Oath, but a better understanding of new and changing issues.

A. Uniform Ethical Standards

Despite the lack of a universal secular ethical theory, as the need for uniform ethical standards for government-funded medical research emerged, health department officials contracted with private groups such as the Hastings Center to develop a national consensus for bioethical principles and a National Bioethics Advisory Commission. These advisory groups helped set standards for the National Institutes of Health grant review process as well as for local institutional review boards in medical centers. The post–World War II Nuremberg trials documents provided important precedents for these bioethical deliberations.

B. The Dawn of Professional Ethics

Philosophers from Homeric times (about 700–800 BC) and from subsequent Socratic and Hebrew periods (after 500 BC) to the present have wondered how to define what is good and what is bad, striving to identify some

first principle and define universal rules that describe morality and virtue.

Homer's epic *The Odyssey* and *The Iliad* comprise the first widely adopted treatises on ethics. They contained an encyclopedic account of ethics, morals, politics, virtues, and vices of ancient Greek society encountered in daily life, medicine, commerce, politics, religion, and war. The epics provide numerous positive and negative examples of every important area of individual and group human behavior. These epics as well as subsequent classics such as *Aeneid, Beowulf,* and *Canterbury Tales,* became the standard tutoring literature for Western ethical and moral teaching for many centuries afterward and continue to enrich our culture even up to the present day. The Judeo-Christian and Islamic Scriptures and commentaries record the long enterprise of faith communities' attempts to understand and codify the moral life, the meaning of illness and insanity, and their relationship with God.

During the classical period (fifth century BC) while early Athenian philosophers were inquiring and teaching by dialectic, the early ethical commitments of the healing professions were formulated in the writings of Hippocrates, a revered physician who practiced and taught medicine on the Greek island of Cos. We have the solemn Oath of Hippocrates to attest to that. In fact, the etymology of the term "profession" derives from such oaths, which were required of physicians, priests, soldiers, temple virgins, and political leaders. Hippocrates asserted that the medical professional must be a model of unimpeachable ethical behavior. Physicians should honor and sustain their teachers, and should model honesty, morality, and integrity in dealings with patients, their families, and other health practitioners. The physician should avoid intentional harm, and act to benefit patients. The value accorded to life was exemplified by bans on euthanasia and abortion. The three basic principles of Hippocrates could be summarized as competence, caring, and commitment.

Hippocrates extracted the oath, sworn by Apollo, from each of his medical students that they would never abuse their trust by criminal practice, sexual immorality, or disclosure of medical secrets. The act of taking an oath was a solemn commitment.

Unaccountably the Hippocratic Oath, while clarifying the expected relationship between physician, teacher, and patient, fails to provide for the moral reasoning behind any of the elements of the Oath. Very likely the moral rationale was taken to be obvious, or else the documents were lost. Curiously, the commitment to teachers is listed before the commitment to patients. The Hippocratic Oath shows an unconscious paternalistic prejudice by failing to mention today's favored priorities of patient autonomy and justice. Nevertheless, the Hippocratic moral and technical prescription for physicians was unprecedented in Greek medicine, and it heralded a new course for the practice of medicine.

Subsequent medical professional codes have included at least six key concrete elements or rules of the Hippocratic Oath, including

1. Respect for the dignity of persons and life itself
2. Avoiding willful harm (maleficence)
3. Doing good (beneficence) to clients
4. Maintaining integrity in relationships (honesty)
5. Responsible caring (empathy)
6. Responsibility to society (good citizen, husband, parent)

Two additional elements appeared in modern times, including

7. Respect for patient self-determination (autonomy)
8. Respect for justice (fairness)

The modern Western terms "medical ethics" and "professional ethics," as well as "attending physician," were coined by the eighteenth-century Thomas Percival, an English physician trained in philosophy. Percival founded one of the first departments of public health, advocated the abolition of slavery, and near the end of his life wrote the first such book in English, *Medical Ethics: A Code of Ethics and Institutes Adopted to the Professions of Physic and Surgery,* based on his experiences heading a committee assigned to write rules of conduct for an infirmary where a medical scandal had occurred.

Each human society generates a different ethical structure. The Chinese have quite a different ethical vision, based to a great extent on Confucian thought. Similarly Buddhist, Hindu, African American, Native American, and other communities have distinctive philosophical and ethical traditions.

C. Meaning of Profession

Although the classical understanding of profession was associated with schooling and training that lead to taking a binding oath dedicating one's life and honor to a socially important vocation, in modern language the term "learned profession" preserves more accurately the classical concept of medicine, psychiatry, nursing,

law, and other vocations that assume rigorous selection of candidates, extensive formal education and training, difficult qualifying examinations, generous rewards, and a high degree of self-control through codes of ethics. Furthermore learned professionals are expected to work tirelessly for the good of society.

D. Ethical Standards after Completion of Professional Training

The new professional psychotherapist becomes aware that ethical concepts are embodied in the laws pertaining to many mental health professional and client matters. Bioethics often resides in an enigmatic extralegal gray area.

Ethical questions shadow almost every activity in psychotherapy. The psychotherapy disciplines including individuals practicing psychiatry, psychology, social work, nursing, and pastoral care subscribe to a body of ethical traditions making the benefit of the patient the top priority. As a member of one of the psychotherapy disciplines, each member must also recognize responsibility to society, to other health professionals, and to family and self. Each modern profession's membership is expected to adhere to a set of principles, called a "Code of Ethics."

As an example the following principles, adopted by the American Psychotherapy Association, are not laws but standards of conduct that define the essentials of honorable professional behavior of the therapist who has completed the journey of professional training. The American Psychotherapy Association's "The Psychotherapist's Oath":

> As a psychotherapist:
>
> I must first do no harm.
>
> I will promote healing and well-being in my clients and place the client's and public's interest above my own at all times.
>
> I will respect the dignity of persons with whom I am working and I will remain objective in all relationships with clients and act with integrity when working with other professionals.
>
> I will provide only those services for which I have had the appropriate training and experience and will keep my technical competency at the highest level in order to uphold professional standards of practice.
>
> I will not violate the physical boundaries of the client and will always provide a safe and trusting haven for healing.
>
> I will defend the profession against unjust criticism and defend colleagues against unjust actions.
>
> I will seek to improve and expand my knowledge through continuing education and training.
>
> I will refrain from any conduct that would reflect adversely upon the best interest of the American Psychotherapy Association and its ethical standards of practice.

This oath is a good starting point for the study of contemporary codes since it is the briefest of all the current psychotherapy codes. In comparison, the 1992 Ethical Principles of the American Psychological Association is more extensive, running to 32 pages.

For an even more comprehensive resource, the reader is directed to the American Medical Association's 1998 publication, *The Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry.* This reference includes an appendix on "Guidelines for Ethical Practice in Organized Settings" and "Questions and Answers about Procedures for Handling Complaints of Unethical Conduct." This document includes a statement of the skeletal AMA ethical code that is then fleshed out with explicit discussions of each point in the code as it relates to contemporary issues in psychotherapy. The appendixes include ethical standards and problems in health care organizations, as well as a detailed guide to the making and answering of allegations of unethical professional behavior. The full text of these and other codes for psychiatrists, psychologists, social workers, family counselors, school counselors, and social workers may be found through Internet links at the Canadian Counseling Association web site (http://www.ccacc.ca/coe.htm).

Although a code of ethics cannot guarantee ethical behavior, resolve all ethical issues or disputes, or fully develop the richness and complexity involved in working to make responsible choices within a moral community, it does set forth normative values, ethical principles, and ethical standards to which professionals aspire and by which their actions can be judged. The Hasting Center Reports, found in most medical libraries, are an excellent reading source for ongoing debates in bioethics.

IV. CASE ANALYSIS

The following case abstract and bioethical analysis illustrates considerations in working with an actual clinical bioethical scenario.

> Crystal (a pseudonym) is a 14-year-old white female only child who suffers from depression and oppositional defiant disorder. She is from a financially stable

middle-class family. She was admitted to an acute inpatient adolescent psychiatric unit for the second time in one month after making her fourth suicide attempt in 2 years. Crystal's mother is self-described as strict and controlling, and admits that consequences for Crystal's rule infractions at home may be excessive. Crystal's stepfather sides with her mother. There is gloom in the household about unusual multiple recent suicides by aunts and uncles. After 10 days, the maximum allowable inpatient time under her health care plan, Crystal voluntarily signs a discharge safety plan, and the unit staff team determines that she is ready to transition to an intensive step-down day hospital program, which she will attend from home. Unfortunately, the parents do not wish to have Crystal back home yet, and they angrily object to her discharge.

Shortly after Crystal arrives home she gets into an altercation with her parents. They call 911, the police arrive, and she is arrested and taken in handcuffs to jail. The mother then calls the attending psychiatrist, Dr. Barnes (a pseudonym), and asks whether Crystal can be readmitted as an inpatient. Crystal, her parents, and Dr. Barnes are suddenly faced with a number of uncomfortable bioethical issues.

A. Choosing a Case Analysis Method

Case analysis is a practical or "applied clinical ethics" method of identifying, analyzing, and resolving (if possible) the ethical values and issues in a clinical bioethics case. Bioethical problems arise when health care professionals, patients, and health care providers do not agree on values or actions, or when they confront dilemmas about the bioethically conflicting clinical choices available. Mental health care may present extremely difficult choices, as illustrated in this case history of an all-too-common scenario with adolescent clients. Each individual agent involved in the ethical encounter may be calling on the same or on different ethical principles, or on multiple conflicting principles.

The two case analysis approaches most often used in the United States are the principled ethics approach, also called the top-down or deductive; and the clinical ethics approach, also called the inductive, practical, or bottom-up approach.

B. Principled Ethics

The principled ethics analysis begins with an ethical principle such as autonomy or beneficence and then applies it to the case. This principleism is theoretical and can be rather abstract. For example, Tom Beauchamp and James Childress, in their *Bioethics* in 2001 emphasize the essential middle level ethical principles of (1) autonomy, the patient's independence in deciding what is best; (2) nonmaleficence, avoiding harm to the patient; (3) beneficence, doing good for the patient; (4) justice, fairness to the patient; and (5) professional-patient relationship.

Engelhardt in 1996 points out some limitations of the principled approach: "It is not possible to justify a canonical content-full morality, right-conduct, or bioethics, in general secular terms. … The appeal to middle-level principles may succeed in bridging the gulf between those who share a moral vision, but are separated by their theoretical reconstruction of that vision. But it will not bridge the substantive gulf between those separated by different moral visions or different moral senses."

C. Clinical Ethics

In contrast, the clinical ethics approach to applied ethics is a bottom-up or inductive approach. It provides a structured method to help psychotherapists identify, analyze, and resolve clinical issues in psychotherapy. This alternative approach facilitates thinking about the complexities of the data in actual cases in a clinical setting that therapists face, rather than looking up answers in a resource book and trying to match patients to standard models. A patient care situation is considered comprehensively in detail first, and then the ethical principles that best relate to the case are identified and discussed. Albert Jonsen, Mark Siegler, and William Winslade in 1998 use this approach in their *Clinical Ethics,* as do Mark Kuczewsi and Rosa Pinkus in 1999 in their *An Ethics Casebook for Hospitals*. Rather than beginning with ethical principles, these authors sort the facts and values of each case into an orderly pattern and then call on principles in order to facilitate the resolution of each bioethical problem. Their basic pattern includes four clinical topics and six or more conceptual subtopics that define the major elements from which the case ethics can be identified: (1) medical indications, (2) patient preferences, (3) quality of life, and (4) contextual features. They consider that these four topics provide adequate information to guide the clinician through the problem and that no case can be adequately discussed unless these topics guide the analysis. Jonsen and colleagues comment that this method helps clinicians understand where the moral concerns meet the clinical circumstances of the case.

The Beauchamp and Jonsen approaches are not incompatible, since each is an organizing device to ensure that the basic topics necessary for analysis are

fully considered in the process of pursuing a bioethically acceptable course of action. In fact, in the latest edition of their textbook, Beauchamp and Childress have come so far from principleism toward clinical ethics that one reviewer described it as "the beginning of the end of principleism."

While the previously espoused principled ethics approach of Beauchamp and Childress is traditionally used for funded research protocols and medical casework, the clinical ethics approach of Jonsen and colleagues may be more intuitive for mental health casework and professional training.

The reader should be aware of caveats that apply to theoretical approaches such as those discussed above. The theories are not able to provide full moral guidance unless one supplies them in advance with a particular moral content. In other words, although we may accurately portray the clinical case history, preferences, outcome, and context, and identify middle level principles, as we attempt to do in the following case, we may find ourselves divided about the case analysis conclusions because of conflicting moral visions of the participants in the discussion.

If we hypothetically assigned different moral vision and ethnicity labels to the participants, this inconclusivity might be even more inevitable. When that occurs, resolving concrete moral bioethics controversies must rely on peaceable negotiation and agreement among parties in order to reach a resolution.

On this issue Engelhardt in 1996 commented that

> Each theoretical approach recapitulates the challenge of post-modernity: a moral theoretical account must either beg the question with regard to moral content (i.e., incorporate particular moral content without justification) or give no substantive guidance. Each attempt to justify a particular moral vision presupposes exactly what it seeks to establish so that moral theoretical arguments are at best expository, not justificatory. Even if one attempts a defense of secular ethics or bioethics on the basis of arguments that are not reducible to intuitionist, consequentialist, hypothetical-choice, or hypothetical-contractor arguments, or analyses of the nature of rational choices or game theoretic rationality or natural law arguments or middle-level principles analyses, the arguments will fail as well. All concrete moral choices presuppose particular moral guidance.

D. Clinical Ethics Analysis of Case

1. Medical Indications

a. Medical and Psychiatric History. The developmental history given by Crystal's mother revealed that from about age 1 Crystal would behave normally and then have apparently unprovoked several-week-long periods of depression, oppositional behavior, irritability, and difficulty with relationships. These episodes occurred about every 2 months. Whether other family problems might have been occurring at that time was not yet fully explored.

When not in the abnormal moods, Crystal seemed to be a bright and happy child. She enjoyed playing the piano, singing, and dancing, and made friends easily. She was a straight-A 10th-grade student, described by her parents as artistic, outgoing, and active in her church youth group. During the prior 2 years she had twice secretly taken large doses of analgesic tablets from the family bathroom medicine cabinet and ingested them without telling anyone, and without apparent physical harm. These incidents occurred at a time when several relatives and a friend of the family were creating a climate of grief in her family by unexpectedly committing suicide, so that a posttraumatic stress phenomenon or grief and confusion might have been factors.

Crystal occasionally experimented with alcohol or marijuana. One month before the present admission Crystal got high on marijuana with a boyfriend, and according to her, he succeeded in sexual intercourse over her protestations (her first sexual encounter). That night she went home and ingested a large number of analgesic pills from the medicine cabinet and superficially cut her wrists. Then she told her mother what had happened, and her parents took her to an emergency room where she required a number of sutures to close the wounds. Her mother reported the alleged date rape to the police, and an investigation is ongoing.

Crystal was referred from the emergency room for admission to the same mental health unit as for the current hospitalization. Her admission evaluation led to the diagnosis of two Axis One disorders, depression and oppositional defiant disorder, that were confirmed by history, observation, and psychological testing. She was started on the antidepressant Paxil, and participated in multiple individual and group therapy sessions that were part of the inpatient program. She seemed to the staff to be intelligent and mature. Her assigned writing assignments about her family and personal behavioral issues seemed thoughtful and appropriate. She gave correct answers about the measures she needed to take to be safe and to reduce disputes and disrespectful conduct at home. She was discharged after her encouraging progress and after signing a safety contract. Her parents made arrangements for continued psychiatric treatment as well as outpatient rape counseling.

Because of the worrisome sexual incident her mother set strict new limits on her activities after she returned from the hospital, including restricting her dating or driving in a car alone with males, and severely restricting her socialization with her friends. The restriction on peer socialization was particularly disheartening to Crystal, since one of her most valued privileges in life was "hanging out with my friends and just laughing and playing music and being myself."

On the other hand, her mother perceived Crystal to be at risk because of "poor social skills," especially in setting safe personal boundaries. Her mother stated that Crystal was "not safe at home." These strictures and assumptions led to increasingly angry confrontations and more oppositional behavior on Crystal's part, more tension at home, and eventually to Crystal defying her parents and making threats to kill her mother. Her coping skills so much in evidence in the hospital had diminished as her despair increased. On the evening of the most recent admission she became angry when her stepfather would not permit her to invite her friends over to visit. After an angry confrontation Crystal went into the kitchen where she deliberately cut her wrists with a paring knife, and thereafter was brought by her parents to an emergency room, where she was transferred again to the adolescent psychiatric unit.

As on her prior admission Crystal was a model patient from the moment she stepped inside the unit. She took responsibility for her actions, but explained that she was hurting herself superficially so that "my parents will hurt," and not to kill herself. She knew that by cutting herself she would regain, from her viewpoint, the more tolerable and tolerant hospital environment.

Dr. Barnes, the attending child psychiatrist continued Crystal's Paxil medication for depression, and added Depakote for mood stabilization. He met individually with Crystal daily, and held one family conference. Crystal also participated daily in unit activities and group therapy. Once admitted Crystal was able to make a contract for safety and was a model patient. During the one family session there was much conflict and mutual blaming between Crystal and her parents.

Dr. Barnes expressed pleasure with the progress Crystal was making in treatment, and arranged a plan for her follow-up treatment in day hospital after discharge. He received a call from the MCO that she had used the maximum 10 days allowed under her insurance plan. Against the objections of her parents, who felt that she was not ready to return home, Dr. Barnes discharged Crystal. Her parents drove her home.

At home, her mother, who was still incensed about her "premature" discharge, icily informed Crystal of the strict new house rules including confinement to the house and no telephone or television privileges. Her mother hid all the telephones in the house, and disconnected the televisions.

When Crystal found there was no way to call her friends, shouts rang out. Fear and anger escalated. The parents phoned Dr. Barnes and blamed him for the altercation because he discharged Crystal against their objection. The mother threatened Dr. Barnes with a lawsuit.

While this phone conversation was going on Crystal became furious, grabbed a kitchen knife, and brandished it at her mother, who was talking to Dr. Barnes about Crystal on the phone. Crystal then put down the knife and began choking her mother. At Dr. Barnes' recommendation the stepfather called the police; they arrived in a patrol car and handcuffed Crystal, drove her to the police station, booked her, and placed her behind bars for the night.

b. The Goals of Treatment. In this potentially suicidal and homicidal scenario the first goal is physical safety for the patient and her parents (nonmaleficence, avoiding harm to Crystal or her parents), initially by placing Crystal in jail. Additional important goals of treatment are for beneficence, helping Crystal and her parents by referral to a structured treatment program to improve Crystal's anger management, and upgrade her coping, negotiating, and prosocial interactions with family members. The program should incorporate active family therapy work. Before returning home she needs to make a contract for safety and other mutual behavior with her parents (nonmaleficence, prevention of harm). She and her parents will need to arrange for an intensive treatment program to gain insight into and find a way to change the dysfunctional family culture (beneficence), seeing to the good of the family unit. The three family members need to restore mutual respect and find a degree of protection and personal boundaries for Crystal that do not unfairly restrict her freedom of self-determination, or autonomy, as she works to earn their trust. The parents need to recognize Crystal's good behavior with earned privileges, an exercise of parental justice.

c. Probabilities of Success. The probabilities of success with a course of treatment for Crystal depend on how well the goals can be realized. Because each case of this type is unique, and the endpoint for "cure" so vague, statistical data are not available to estimate the prognosis. At this point in the crisis, Crystal and her family have not yet had a comprehensive biopsychosocial evaluation by a multidisciplinary team including a social worker,

pediatrician, psychologist, chaplain, education specialist, psychiatrist, and occupational therapist.

Critical unknown areas in our information about Crystal may affect the possibilities of success, including psychosocial development history, family relations, history of neglect or abuse, peer support system, school history, preferred recreation, sexual orientation, sexual experience and practices, experience with drugs, and career aspirations. Without a thorough evaluation it will not be possible to develop an optimal treatment plan. The treatment team owes an ethical responsibility to evaluate comprehensively and accurately.

The best prognosis in cases like Crystal's is realized with clients who have adequate health insurance, are capable of making a therapeutic alliance with the psychotherapist and the mental health staff, are willing to participate in family therapy, are faithful in keeping mental health appointments, and are compliant with prescribed medications. The parental participation and sometimes individual or group parental psychotherapy may be necessary to work toward a more optimal home situation.

Treatment failure occurs when irreparable damage to the treatment program occurs, for example, by the client attacking treatment staff, family members, or peers; running away; or being incarcerated, which would undoubtedly increase the chance of maleficence or harm to her personal safety and possibility of recovery. Conditions like Crystal's are often chronic and can be self-perpetuating when the young person's potential is jeopardized through alienation from family, friends, and community. Treatment failure also occurs when financial arrangements break down or when custodians remove the minor child from treatment against medical advice, resulting in maleficence. In case of therapeutic failure clinical circumstances might indicate termination of parental rights. The new guardian could then arrange placement in a relative's home, a foster home, or a residential treatment center. Treatment failure in some cases would lead to court-ordered incarceration because of parole violation or a new offense.

In pediatric cases like Crystal's the psychotherapist's responsibilities are the same as with an adult, to save life, relieve symptoms, and restore health. However, since a minor child is under the supervision of parents or guardians, they, not the patient or psychotherapist, have the moral and legal responsibility and autonomy of acting in the child's best interests, termed paternal beneficence. Their decisions must take into account the family values and the needs of other members of the family, the family budget, and other paternalistic considerations. These may override some of the minor patient's preferences. Where the parent's or guardians' conduct or choices are apparently not in the best interest of the child, the courts, acting with paternalism, *in loco parentis,* may alter the extent of parental or guardian authority in order to provide remedial justice on the minor child's behalf. For the past few decades, the wishes and opinions of adolescents have been increasingly sought and taken into account for treatment decisions, since it is difficult to carry out a successful treatment plan without some cooperation and participation by the adolescent. A disgruntled adolescent might also bring a lawsuit after reaching majority in cases of disagreement about treatments and alleged harmful outcomes while a minor.

2. Patient Preferences

a. Crystal. Crystal is an intelligent and sensitive adolescent, a talented musician, and an outgoing, fun-loving social person. She says she would prefer to live at home, to keep her anger under control, and learn how to avoid escalation, thus ensuring nonmaleficence. She wants to continue to do well in high school and go on to college and a good career, eventually achieving autonomy. She would like to be able to recognize her dark moods and be better able to manage them. She would like to be able to negotiate with her parents, especially her mother, so that she could have a "win-win" home life and have plenty of socialization with her friends, which she sees as justice.

She realizes that she made a mistake in judgment with the boy who assaulted her, and she wants to keep wiser boundaries with boys and drugs in the future, ensuring nonmaleficence. Without question, the boy is accountable for his sexual misbehavior. The family has made a police report of the incident with no outcome as yet, practicing responsible paternalism, and seeking justice for their daughter.

Crystal is fully aware that if she fails to fully cooperate with a mental health program, receiving beneficence, she may end up a suicide, a murderer, or an inmate, thus experiencing unwanted maleficence and criminal justice. She appreciated what she learned about herself and others while hospitalized, and feels she could form a positive alliance and transference with Dr. Barnes if he is to treat her in the future, and help her realize autonomy. Crystal also knows that after her assault on her mother, her parents could press charges against her and have her put away for a considerable period of time, an unwanted criminal justice outcome.

b. Her Parents. Crystal's mother on behalf of both parents expresses the parents' preferences. The father

remains silent. They want Crystal to be respectful, to learn how to curb her anger and to obey the rules necessary for her safety and for their peace of mind, providing justice to each family member. They admit in retrospect that they may have erred by instituting rules the severity of which was excessive, and by doing so they vindictively conspired to make Crystal's misbehavior at home a self-fulfilling prophecy, resulting in maleficence, so that she had to be rehospitalized.

c. Dr. Barnes. Dr. Barnes preference is to play the Hippocratic deontological, or duty-based role. He wants to behave as the tactful, truth-telling, and competent child psychiatrist who skillfully helps his client and her parents gain insight and clarity about the psychodynamic and family issues, while respecting the dignity, worth, and ethnic and cultural values of each individual in the family. He wants to guide them into committing to an intensive and effective long-term treatment plan for Crystal that will make the most of her positive potentials, build her responsible autonomy, and make treatment failure as unlikely as possible, thus achieving clinical beneficence and nonmaleficence. Acting as an agent of change, he wants to help the family understand and take ownership in the big picture of what the benefits of a good outcome and the downside of a bad treatment outcome would mean for Crystal and for them, resulting in socially responsible self-determination, a well-informed family autonomy. He wants Crystal to share actively in the decision making about her therapy program and be accountable by taking her medications faithfully and for all the other intelligent cooperation of which he believes her capable.

d. Police. The police want to keep Crystal safe toward herself through paternalism and beneficence, and keep her from harming her mother or others (nonmaleficence), until it is safe to reduce the level of restriction when she demonstrates responsible autonomy.

e. Managed Care Organization. The MCO prefers to keep Crystal safe and optimize her psychiatric treatment (paternalism, beneficence) but wishes to obtain the best care for her at a cost-effective rate, preferably in outpatient or day hospital in a facility with which they have a discounted contract. They will remind the psychotherapist of the limitations of treatment under the parents' health plan under motives of paternalism and contract justice, but their in-house medical gatekeeper and appeal committee do have a process under which legitimate exceptions may be awarded if more expensive care is justified by submitted evidence (distributive justice). The MCO has to be financially prudent and accountable in order to stay in business, remain within budget, and make profits for the shareholders, exercising both autonomy and beneficence.

3. Quality of Life

a. Crystal and Her Parents. The quality of life for Crystal and her parents is poor at present, and will be until some resolution can be worked out to bring the family function and feelings under control. There may be biases that would prejudice the psychotherapist's evaluation of the patient's quality of life. This could relate to information not yet brought to light that may be necessary to fully understand Crystal's present and past behavior, and that of her parents. For example, what was the situation leading to her mother's divorce from Crystal's biological father, and how is that affecting all parties now? Have events or relationships at school or with friends added to her present difficulties? Might any of these factors jeopardize her recovery "from out of the blue?" Where is she to live, where will she go to school, and what will she do with her life? Both Crystal and her parents currently do not feel safe or peaceful.

If treatment succeeds, Crystal may still experience cyclic periods of depression and interpersonal conflict, unless a cause can be discovered and remedied. It is possible that adjustment of her medications could ease those problems, but there is no guarantee that she will not have to endure this instability the rest of her life, thus avoiding maleficence. There is also a high likelihood that she will continue to have conflicts with her mother in the future over control issues such as paternalism and autonomy.

Crystal's parents want to improve their quality of life by having a tolerable family interaction, and by seeing Crystal keep her personal boundaries with them, with her friends, and especially with boys. They know she is intelligent and talented, and their quality of life and peace of mind will be enhanced by her success in school and in society, realizing autonomy and beneficence. They would like her to eventually gain her independence and use it wisely so that they would no longer have to feel responsible for her daily welfare and future, once they have resolved issues of paternalism and autonomy. Overall they want to act responsibly in the best interest of their child to achieve beneficence.

b. Dr. Barnes. Dr. Barnes would like the family to start working more effectively to bring peace (beneficence) and so that he would not have to deal with these recurring crises on the telephone when he is at home with his family (nonmaleficence, autonomy, justice).

4. Contextual Features

a. Family Issues. Family issues may affect Crystal's treatment decisions, such as the parents' anger, resentment, assumptions, and fear about Crystal, and the obligatory paternalism. Their family finances are sufficient currently; however if her stepfather lost his job, his insurance might be lost at some point, and Crystal could lack funding for her treatment program and prescription drugs, which would be a serious maleficence for her. The present psychotherapist and adolescent psychiatric program might be unable to treat Crystal if her health insurance were to change or her stepfather were transferred out of state, or if she were to have a court-ordered incarceration.

There are no apparent religious or cultural factors with the family or treatment personnel that currently affect care, and in fact, Crystal's religious participation is a positive factor if it can be maintained and reinforced, providing beneficence. There is no compelling reason to breach confidentiality in Crystal's case, or refrain from truth telling, thus promoting beneficence and autonomy.

There are no current legal charges since Crystal voluntarily cooperates with treatment, and has apparently not yet been charged with violating any laws, aiding nonmaleficence for Crystal. This could change if her parents press charges for the assault incident, which would not be possible to rebut; however, they appear to want to put this incident behind them. No clinical research or teaching is involved at this point (autonomy).

There is no provider or institutional conflict of interest at this point in the case. Dr. Barnes is pleased with the cooperation he has received from the MCO on behalf of his patient, Crystal, resulting in beneficence and justice for her.

Because of limitations of space the role and perspectives of the social worker, chaplain, teachers, and unit mental health staff are not given separately in the brief case account; however, their professional participation has been essential in the management of these bioethical issues.

While winding up our thoughts about context in clinical ethics we might profit from reflecting on the larger philosophical societal questions. How would the contextual nature and ethical issues of this case be different if the child psychiatrist were a Palestinian or Afro-American Muslim or an Orthodox Jew? What if the client and her parents had been newly arrived Hindu or Ethiopian Coptic immigrants? What is the goal of mental health treatment in our society? What are the ends of technology and pharmacology, and where will they take us in the next decade? What is the future of bioethics? How much mental and behavioral pathology could we prevent by improving healthy attachment, security, and character building within the family, school, and peer social environment? (See Borba's work in 2001 and Lickona's research in 1983 on this important issue.) What are our special duties to adolescent sexual assault victims? (see American Academy of Pediatrics, Committee on Adolescence, 2001, and Care of the adolescent sexual assault victim, http://www.aap.org/advocacy/releases/juneassault.htm).

E. Case Analysis Summary

In the foregoing clinical case analysis procedure, although too condensed to include all the professionals involved, most of the known clinical details have been identified and discussed, and bioethical issues and principles have been identified. Areas of incomplete clinical information have been noted. In this complex polyethical problem-solving process the Solomonic challenge is to understand the interests, moral assumptions, and intensity of each party's issues, estimate the competency of each party, and keep focused on the optimal outcome for the client. The clinical ethics process attempts to resolve moral dilemmas without the use of force by seeking agreement among parties or peaceable negotiation.

The data can now be used for a variety of clinical needs. In any case the analysis is saved as a record in case of future need, discussed within the institutional professional staff's regular staff meetings, placed on the schedule for discussion in a periodic institutional ethics committee meeting, or submitted to the institutional risk committee or malpractice insurance carrier. An addendum should be added to the analysis to record the further use made of the analysis.

The case analysis may also be used as the agenda for an interdisciplinary meeting of all responsible parties. For example, if the client struggles with bioethical issues in the care given or the choices for future care, the clinical case analysis gives a framework for consideration and discussion, especially to help the client or other responsible parties to understand the ethical choices as well as the treatment choices, and who has the authority to make the choices of autonomy, beneficence, nonmaleficence, and justice. In the case of this adolescent the watchword of prudence is always to ask, "Who speaks for the best interests of the child?"

Three additional professional integrity issues not discussed in the text or case analysis should be mentioned. The first concerns ethics regarding colleagues such as co-workers, supervisors, and supervisees. In these relationships therapists should always be expected to keep the best interest of the client in mind, avoid boundary infringements, avoid personal conflicts of interest, and meticulously respect confidentiality. Such considerations are especially relevant to team relationships. This means keeping team roles clear, being mindful that a healthy milieu is the best treatment vehicle, being aware of transference, not acting out in colleague relationships in a way detrimental to clients, not exploiting supervisees, not "dumping" cases, keeping educational objectives in mind, keeping track of what may come up about being responsible for the training of students, and keeping track of the potentially unhealthy side of mentoring.

The second issue concerns the ethical use of the "special knowledge" of psychotherapy and the rhetorical power of expert language. The theoretical frameworks and special vocabulary of psychotherapy can be used to elucidate issues, and to teach important ideas and skills that are helpful to clients. Unfortunately they can also be used to enforce a power differential for the power/control/expertise/status needs of the therapist, which can be damaging and disabling for clients. The latter is a problematic, unethical use of our professional skills and status.

The third issue concerns the ethics of using the special intimacy of psychotherapy for personal gratification. It is safe to say that what makes a therapeutic relationship therapeutic is that it exists for the benefit of the clients, and for their growth and achievement of confident autonomy. The therapeutic relationship is not for meeting the personal needs of the therapist. The therapist uses aspects of herself or himself in service of the professional work, and that needs to be the priority. This is an area in which damage and retraumatization of clients can easily occur, and as professionals, psychotherapists need to set clear standards and hold one another accountable.

V. CONCLUSION

Bioethics and the clinical ethics case analysis approach presented here may help the psychotherapist to formulate and achieve the goal of every professional. That goal is to know what is right and to do what is right for the patient, even in complex and ethically conflicted cases. In order to know and do the right thing as often as possible, the professional not only needs to pursue competence in ethical philosophy and clinical bioethics, but the professional needs to be as complete a moral person as possible. The professional's personal moral anatomy needs to be intact so that ethical issues are seen with sensitivity and handled with beneficent motivation. This moral sensitivity and motivation focus keen moral judgment and reflection on the problem. In the final step the necessary moral action can be carried to its completion through the agency of virtuous character effecting agreement among members of controversies or peaceable negotiations as the way to resolve concrete moral controversies.

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See Also the Following Articles

Alternatives to Psychotherapy ■ Biblical Behavior Modification ■ Collaborative Care ■ Confidentiality ■ Cultural Issues ■ Documentation ■ Economic and Policy Issues ■ History of Psychotherapy ■ Informed Consent ■ Legal Dimensions of Psychiatry ■ Supervision in Psychotherapy ■ Working Alliance

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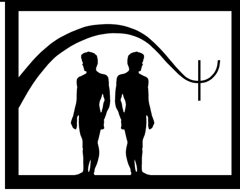

Biofeedback

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I. Description of Treatment
II. Theoretical Basis
III. Applications and Exclusions
IV. Case Illustrations
V. Summary
Further Reading

GLOSSARY

alpha wave activity EEG activity generally associated with an alert but relaxed state, usually defined as 8 to 12 Hz.

anal sphincters The anal canal is surrounded by a voluntary or external (EAS) and an involuntary or internal (IAS) anal sphincter.

autogenic phrases A series of phrases developed by Shultz and Luthe to induce a relaxed state. The phrases are directed toward three domains: relaxing the major muscles in the body, warmth and heaviness in the limbs, and quieting the mind.

autogenic training The application of a list of phrases to induce a self-generated state of relaxation. Typically lasts 10 to 20 minutes and used by the individual once or twice daily.

beta wave activity EEG activity associated with an alert state, often defined within the range of 16 to 20 Hz.

biofeedback A technique in which a biological process is measured and information about that process is provided to the person being measured. The information must be contiguous with the biological event.

biofeedback facilitated relaxation training (BFRT) A biofeedback technique where any of several physiological events are being fed back to the individual to help the person to learn deep levels of relaxation. The physiological events are usually one or more of the following: EMG, SCA, finger temperature, heart rate, or respiration rate.

bladder training A strategy used for urge incontinence whereby clients increase the intervoiding interval to normalize voiding frequency and increase functional bladder capacity.

diastolic blood pressure (DBP) Minimum blood pressure during relaxation of heart or during cardiac cycle.

dynamic EMG feedback Multichannel EMG feedback during different body postures and simulated tasks.

EEG biofeedback A type of biofeedback that measures the brain waves. Both the frequency and amplitude of the waves are of interest. There is also some interest in measuring the phase relationship between different sites. Most applications used for biofeedback are based on a quantitative analysis of the brain waves called QEEG. The most frequent used technique is the fast Fourier analysis.

electrodermal A general term for the electrical activity or potential of the skin. Includes skin conductance, skin resistance, and skin potential.

electroencephalography (EEG) The measurement of the electrical activity of the brain.

electromyography (EMG) The use of instruments to measure the electrical activity of skeletal muscles.

EMG biofeedback A type of biofeedback that measures the electrical activity of the muscles. The strength or amplitude of the signal is directly proportional to the degree of contraction of the muscles being monitored.

finger photoplethysmograph Instrument that measures the amount of blood flow passing through a finger.

finger temperature biofeedback This type of biofeedback measures the temperature of the fingers. Although finger temperature varies with many factors including air temperature, it

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has been shown that at typical room temperature finger temperature covaries with general arousal. The fingers are warmer when a person is relaxed and cooler when stressed. Finger temperature is a relatively slow changing event with typical changes being less then 2 degrees per minute.

frontal EMG A general and common term referring to EMG of the forehead and adjacent areas. Commonly used in biofeedback facilitated relaxation training (BFRT).

galvanic skin response (GSR) A form of electrodermal activity. Older term but still accepted.

GSR/EDA biofeedback A type of biofeedback that provides information about the activity of the sweat glands. Several different terms are used in the literature to describe this type of feedback. The most frequent are galvanic skin response (GSR) and electrodermal activity (EDA).

heart rate Number of heart contractions per minute.

heart rate biofeedback A type of biofeedback that measures the interval between heart beats and converts that time to a number representing the number of beats per minute if that time interval was maintained for a minute.

hertz (Hz) Unit of frequency equal to cycles per second (cps).

paretic muscles Slight or incomplete paralysis of a muscle.

power spectrum Advanced method of analyzing electrical signals, especially the complex waveforms of the EEG. Provides frequency and amplitude components.

progressive muscle relaxation (PMR) A common type of muscle and general relaxation developed by Edmund Jacobson. Starts with tensing and releasing specific muscle groups and progresses to discriminating between tension in selected areas and relaxation in others, and eventually to releasing muscle tension without tensing.

respiration biofeedback A type of biofeedback that measures the number of breaths taken per minute. Various instruments and sensors are used to determine the interval between each inhalation and/or exhalation to determine breaths per minute.

respiration rate Number of breaths per minute. Normal range is between 8 and 15. Slower rates (6 to 8) are associated with relaxation.

relaxation-induced anxiety (RIA) A state of apprehension, discomfort, or unease experienced by some who are trying to achieve a state of general relaxation.

sensorimotor rhythm (SMR) An EEG rhythm recorded from the central scalp, usually defined as 12 to 15 Hz.

systolic blood pressure (SBP) Maximum arterial blood pressure during cardiac cycle.

theta wave activity EEG activity generally associated with a drowsy, nonattentive state, usually defined as 4 to 8 Hz.

volar surface Palm side of fingers.

I. DESCRIPTION OF TREATMENT

The clinical application of biofeedback requires the accurate measurement of various physiological processes while providing the client with feedback that is sensitive to small changes in physiology. The feedback signal needs to be informative to the client. It is also important to provide instructions to the client about proper interpretation of the feedback signal. The clinician should emphasize the role that learning to change the physiology plays in the client's condition. There also needs to be generalization of the learning to the client's home, work, and social environments. In some instances, the feedback may even be entertaining. The entertaining type of feedback is often used when providing feedback, especially QEEG biofeedback, to children. In these instances, the feedback is not only informative but provides an incentive to the client to change physiology in order to "play" such games as putting puzzles together.

The utilization of biofeedback techniques is somewhat unique in psychology and psychotherapy as the techniques have applications that are used by several other health care specialties. The techniques are also used to treat conditions beyond those traditionally considered the domain of psychology. These conditions have been primarily the domain of medicine and rehabilitation. Some examples of these conditions are tension and migraine headaches, hypertension, urinary and fecal incontinence, muscle paralysis, and Raynaud's disorder.

A brief history of the development of biofeedback is warranted in order to appreciate the diversity of applications it presently enjoys. The early work in biofeedback stems from a controversy in learning theory. This difference is between instrumental, or operant, and classical conditioning, with classical conditioning occurring in the autonomic nervous system and instrumental conditioning in the skeletal muscle system. A student of Neal Miller's, Leo Di Cara, was in 1967 one of the first to publish research on the laboratory demonstration using an operant paradigm to alter heart rate. Miller and Di Cara used an elaborate procedure of injecting curare, to block skeletal muscular involvement of heart rate changes, and then rewarded the rat with electrical stimulation in the pleasure center of the brain when the heart rate reached a predetermined threshold, for either raising or lowering the heart rate. With this procedure, they were able to demonstrate shaping of the heart rate based on the change that was being reinforced. They also measured other autonomic responses, such as intestinal motility, to demonstrate that the changes were specific to the system being shaped, not general autonomic changes.

The other significant research effort that initiated the early systematic study of physiological self-regulation

(biofeedback) was the conditioning of the brain waves known as alpha and theta. These brain waves have been associated with low levels of arousal and it was thought that if individuals could be trained to increase the amount of these brain waves they would increase the feelings of relaxation.

This early research prompted the development of the professional group known as the Biofeedback Research Society (BRS). This organization's goal was to promote research in basic processes of physiological self-regulation and its possible applications. As the clinical applications of biofeedback became available, the organization changed its name to the Biofeedback Society of America (BSA). Then later, as general assessment of physiological processes became useful in various areas such as sports, the organization again changed its name and is now known as, the Association of Applied Psychophysiology and Biofeedback (AAPB).

In 1980, AAPB funded the development of the certification organization the Biofeedback Certification Institute of America (BCIA). BCIA initiated the establishment of the minimal requirements for certification in biofeedback. These requirements included a degree in a health care field, minimal didactic training in biofeedback, supervised self-regulation training, supervised clinical experience, and the passing of their written and practical examination. In addition to the general certification, in 1997, the organization started certification in the specialty of EEG biofeedback. The requirements for the specialty certification in EEG biofeedback differ from those of the general certification.

The fact that biofeedback fits into the general orientation of behavioral therapy and the field now known as behavioral medicine has allowed therapists who offer biofeedback training to take an increasing role in the treatment of what has traditionally been conceptualized as medical conditions. It is now common to find medical clinics and hospitals with a biofeedback clinic as part of their operation.

Another area of interest in the development of biofeedback is the concept of stress and the discovery that stress plays a major role in medical disorders as well as psychological disorders. This knowledge has initiated the search for techniques that manage stress. One of the major techniques currently used to manage stress is relaxation therapy. Relaxation techniques are usually based on muscle relaxation, autogenic training, or breathing techniques. For many applications, the relaxation strategy alone is sufficient, but some individuals have difficulty with the technique and therefore biofeedback plays a role in making relaxation a concrete, observable process. In this application, biofeedback is used to facilitate the relaxation response. The biofeedback training allows clients to observe objectively their physiological changes as they try to relax. Their physiological changes provide immediate information informing them when their strategies are inducing a relaxation response or an arousal response. Biofeedback is also often helpful because many people mislabel their physiological states. For instance, they may think they are relaxed when they are not or when they become relaxed, it feels strange and uncomfortable, so they tense up again until it feels normal and comfortable. As an example, the muscles in the neck might be held in sustained contraction while the individual thinks that the muscles are relaxed. This sustained contraction will often lead to a tension headache. For these situations the biofeedback provides concrete, observable information that can help therapists educate clients about their misinterpretation.

The other major development that moved biofeedback forward was advances in biomedical engineering, with the major contributor to the miniaturization of the equipment being the National Aeronautics and Space Administration (NASA). The physicians working for NASA wanted to measure astronauts' physiology in space. In order to do so, they needed reliable and stable pieces of equipment that required minimal electrical energy to operate; therefore, they developed low power requirement equipment that is durable, reliable, small, and light in weight.

NASA has also benefited from biofeedback as one of the successful applications of biofeedback has been the prevention of "space motion sickness." Space motion sickness is similar to motion sickness here on earth. As the vestibular system becomes adjusted to the sensation changes from near zero gravity, most of the astronauts have feelings of nausea, light-headedness, and often vomiting. Medications are available to reduce the symptoms of motion sickness but there are side effects such as drowsiness and slowed reaction times. These side effects cannot be allowed since astronauts can take 2 to 3 days, or longer, to adjust. In the early 1970s Patricia Cowings, as reported by Cowings, Billingham, and Toscano in 1979, started working on a series of studies to determine if she could raise the motion sickness threshold. She used a chair, which could be rotated at controlled rates with varying degrees of tilt. With this chair, she could take anyone, spin him or her, tilt the chair back, and demonstrate the symptoms of motion

sickness. Although the speed and degree of tilt necessary to induce motion sickness will vary, everyone will become symptomatic. She carefully assessed motion sickness thresholds and then began using biofeedback combined with autogenics phrases to train subjects to raise their threshold for motion sickness. Her research demonstrated successful raising of the threshold and she was allowed to train some astronauts. The results of her training with astronauts were successful and the individuals she trained were able to control their symptoms without medication.

Biofeedback is unique among types of psychotherapy in that it requires the use of instrumentation and knowledge of anatomy and physiology; therefore, it is necessary to briefly present the basic aspects of the types of instruments used and the physiological processes measured by these instruments. This article is organized by a presentation of the instrumentation often utilized along with the basic physiology, followed by a presentation of the diagnostic categories treated by biofeedback. The major instruments to be discussed will be the electromyography (EMG), finger temperature, sweat gland activity (GSR/EDA), electroencephalograph (EEG), and pelvic floor disorder sensors.

A. Electromyography

The EMG is the electrical energy generated by the muscles when they contract. The EMG utilized in most biofeedback applications is not the same as the traditional medical EMG used to determine damage to the nerves of the skeletal muscles. The medical EMG typically uses indwelling electrodes and measures latency and amplitude of muscle activity following nerve stimulation, whereas the EMG used in biofeedback applications is usually measured by using electrodes placed on the surface of the skin over the muscles of interest. When specific muscle activity is of interest, concern must be given to placement of the electrodes because research by Lawrence and De Luca in 1983 has shown that the amplitude of the surface EMG is highly correlated with the level of contraction of the muscles when the electrodes are appropriately placed. The EMG is measured with three electrodes by a differential amplifier, which is designed to reduce unwanted electrical signals. With this type of amplifier, one electrode is a reference and the other two are active electrodes. The strength or amplitude is measured in microvolts and is averaged over some time period to provide a running average of the amount of muscle tension detected. This running average is then provided to the individual being monitored as information about the amount of tension of a muscle system from moment to moment. (See Peek's 1995 research for further details). In many, but certainly not all biofeedback applications, the focus of the therapy is not specific muscles but muscle activity in a specified area such as the face.

When EMG biofeedback is used for general relaxation therapy, most therapists use the frontal placement. In this placement, the electrodes are placed parallel to the eyes, above the eyebrows, with the reference electrode in the center and an active electrode over each eye. The electrodes detect the activity of the muscles from all of the face when in this placement, according to Basmajian in 1976. When specific facial muscle activity is of interest, the use of small electrodes with proper placement will allow specific muscle activity to be measured. However, in the frontal placement, the interest is in general facial muscle activity because in order to facilitate general body relaxation, most people relax all of the muscles in their face. The rationale for this placement is based, in part, on the hypothesis that we tend to express our emotions in our facial musculature. Darwin provides us with some of this rationale in the 1965 version of his book *The Expressions of the Emotions in Man and Animals.*

Other applications of EMG biofeedback are to reduce specific muscle activity in the treatment of tension headaches, back pain associated with skeletal muscle hyperactivity, and other conditions of inappropriate muscle activity such as writer's cramps. EMG biofeedback is also used to recruit muscle activity, to aid in the rehabilitation of muscle paresis resulting from injuries such as strokes.

Because EMG biofeedback is frequently used to facilitate general relaxation, this procedure is presented as an application. The client is selected for this procedure based on a clinical interview. When the clinical interview indicates that the client would benefit from general relaxation, the rationale for frontal EMG biofeedback is provided to the client and permission to place the electrodes is obtained. The skin is properly prepared, the electrodes are attached, and the nature of the feedback is explained. It is proper procedure to then conduct what is referred to as a "behavioral test." The client is asked to tense a facial muscle such as the frontalis, by raising the eyebrows, or by gently biting down on their teeth. If the system is working properly, it will respond. For instance, when you say, "lift your eyebrows" and the client does so, the signal should increase in level, indicating that the person is properly attached and the system is working.

During the first session and if necessary in later sessions, it is good practice to conduct what this author calls facial muscle discrimination training (FMDT). This is a behavioral test in which the client is asked to tighten and relax the major muscles in the face. This is an effective training strategy as the client can see the EMG increase as the muscles are tensed and then decrease when relaxed. The clinician should then sequentially instruct the client in the following activities: frown and then relax, squint the eyes then relax, bite down just hard enough to feel tension in the jaw and relax. With each of these maneuvers, the client will see the EMG feedback signal increase and then decrease as he or she tenses and then relaxes the specific muscles. Having the client press the tongue against the teeth can also show the muscles of the tongue. The client is then asked to take one hand and make a fist. There should not be any increase in the EMG levels in the face and if an increase is observed, then displaced effort or dysponsis is occurring. This means muscles that are not involved in performing the task are being contracted. If an increase in activity is noted, it is a good opportunity to educate the client about the displaced effort. The clinician can explain to the client that the electrodes on the forehead do not detect muscle activity in the arm, and therefore activity should not be noted when clinching the fist. Then, instruct the client to concentrate and relax the facial muscles while at the same time clenching the hand. If any activity is detected, have the client repeat this procedure. FMDT allows the therapist to teach the client about muscle activity and helps the client recognize that he or she may be using muscles that do not need to be used. This exercise also allows the client to feel a sense of control, that he or she can "do" biofeedback and change physiology. It is also good to point out to the client that the instrumentation detects muscle activity from all the muscles in the face but is unable to discriminate which muscle or group of muscles is causing the increase. Therefore, it is the client's role to become aware of the muscles he or she tends to tense and to learn how to relax all the facial muscles when trying to achieve a state of general relaxation.

B. Finger Temperature

Finger temperature is measured by using an electrical device called a thermister. The thermister is an electrical component, selected because it changes its resistance to an electrical current proportionally over the range of temperatures of interest. Therefore, the temperature-monitoring equipment is designed to generate a small electrical potential that is passed through the cables, leading to and from the thermister. The device measures the change in current flow as the thermister changes its resistance due to temperature changes. The amount of current is calibrated in degrees and most systems label the degrees in Fahrenheit. It is to be noted that unlike skin conductance systems, which pass a small electrical current through the skin between the electrodes, this system only passes electrical current through the thermister. The thermister is then placed on the surface of the area with the temperature of interest.

Because the thermister measures the temperature present at its surface, care must be exercised in its proper placement on the area of interest. For most biofeedback relaxation training applications, the thermister is placed on the surface of the hand, specifically the fingers. Although there is no research indicating a particular finger or place on the hand as a superior location for the thermister, most clinicians have a preference. The location of choice for this author is the volar tip of the little finger. The rationale that it is the smallest finger and therefore can gain and lose temperature faster than other fingers or areas of the hand. Because skin temperature is determined by blood flow and heat lost to the environment, the smaller the area, the quicker changes in blood flow will be reflected in temperature changes. The thermister has its own mass, so it too must be cooled and heated. Thermisters are available in various grades and sizes. The most desirable thermister is one small in size, so it can readily lose and gain temperature as the skin cools and heats. Most biofeedback equipment manufacturers will offer a choice in the quality of the thermister. Although there is no research available on the value of the quality of the thermister, there is research indicating that the more accurate the measurement and feedback, the better the learning of finger temperature regulation. Therefore, it seems prudent to use the best thermister available.

A consideration regarding the placement of the thermister is that it needs to make contact with the skin, without the holding device cutting off the blood circulation. The method of choice is to use paper tape. Tape the thermister to the skin by pressing down on the tape around the thermister. If using the finger tip, gently wrap the tape around the finger to keep the thermister in contact with the skin, without forming a tourniquet on the finger. The wire leading to the thermister needs to be taped along the finger, keeping the wire the same temperature as the skin. Otherwise, what is referred to as the stem effect will allow temperature changes of the

thermister to be determined by changes in the wire leading to the thermister. Once the thermister is in place, care must be used to make certain that the hand is not moved to a position where the thermister comes in contact with furniture, such as the arm of the chair or a desktop, as the temperature will then be altered by the temperature of the object that comes in contact with the thermister.

Finger temperature is thought to reflect general stress levels or relaxation levels. The stress response of the cardiovascular system is to reduce blood flow to our organs, so blood will be available to our striated muscles. Because the skin is an organ, when we are stressed, finger temperature will decrease and when we relax, finger temperature will increase. Finger temperature can vary in individuals in a normal room environment, usually around 70°F, from the high 60s to the middle 90s. Finger temperature is not the same as core body temperature. Very seldom will finger temperature be above 96° or 97°F because as the blood leaves the core of the body and goes out to the skin, it will cool from the core body temperature. The physics of heat is such that when blood is flowing into the skin, it takes time for that heat to permeate through the skin tissue and warm it and if you have reduced blood flow in the skin, then it takes time for the skin to lose the heat to the environment. There is usually a delay, 5 to 15 seconds, between blood flow changes, as measured by a finger photoplethysmograph, and the temperature changes detected by the thermister. Thus, finger temperature is a relatively slow-changing phenomenon.

Because finger temperature is a slow-changing event, its interpretation is best used as an indicator of general relaxation level, not as a measure of instantaneous physiological events. Finger temperature monitoring has been used as a treatment modality in several autonomic nervous system related disorders, such as Raynaud's, hypertension, and migraine headaches, because warming the hands through relaxation strategies has a powerful effect on the cardiovascular system.

C. Sweat Gland Activity

There are two types of sweat glands located in the human skin, the apocrine and eccrine glands. The apocrine sweat glands primarily respond to thermal regulation and the eccrine sweat glands tend to respond to emotionality or arousal level. Therefore, the eccrine glands are of interest in most psychophysiology and biofeedback applications. Eccrine glands have the greatest density in the palm of the hands, the volar surface of the fingers, the bottoms of the feet and toes, under the arms, the groin area, and between the lip and the nose. The skin on the palms of the hands contains as many as 2000 eccrine sweat glands per square centimeter. This physiological response has one of the longest and largest research histories in psychophysiology. It is of interest because it is a measure of the activity of the sympathetic nervous system uncontaminated by the parasympathetic nervous system. With only a few exceptions, dual intervation of the sympathetic and parasympathetic nervous systems provides control over body organs, such as the heart, stomach, and salivary glands. One system increases activity while the other decreases activity, and thus the level of functioning is the difference in balance between the two systems. Through stimulation and lesion studies, the areas of central activation of sweat gland activity have been shown to be the brain stem, limbic system (involved in emotional regulation), basal ganglia, and Brodmann area 6 of the temporal lobe, according to Boucsein in 1992. The involvement of these neural anatomical sites provides users of electrodermal activity (EDA) with confidence of the basis of cortical and emotional influence on the eccrine sweat glands.

The eccrine sweat glands have a tubular that travels upward from the gland, through the tissue to the surface of the skin. This tubular has smooth muscle surrounding it and the sweat glands are activated when the smooth muscle opens this tube. Most biofeedback systems measure sweat gland activity by passing a very small electrical signal through electrodes placed on the skin. The opening and closing of the sweat gland causes changes in the resistance of the skin to the electrical current passing through the tissue. The strength of this electrical source is far below that which would cause tissue damage or be felt by the participant. Opening the sweat gland tubulars, which are filled with sweat (primarily a saline solution and good conductor of electrical current) causes a reduction in the resistance to the electrical current, so an increase in the amount of current will be observed. The amount of current flowing is normally measured in micromhos. The number of micromhos increases as emotionally or arousal increases. This technique is called skin conductance activity (SCA). Therefore, the measurement of SCA is actually the measurement of the opening and closing of the sweat glands.

The sympathetic nervous system controls the number of sweat glands opened. During low arousal levels a few sweat glands are open, whereas many sweat glands are opened at high arousal levels. It is speculated that this is an adaptive response as it allows better gripping

and reduces tearing of the skin under moderate to high arousal conditions. The relationship between the skin conductance level and the number of sweat glands activated is linear. For a more detailed presentation on the technique of sweat gland activity see Montgomery's 1998 work or Boucsein's 1992 research.

There are two methods used to measure sweat glands; both were discovered in the late 1800s. One method involves measuring the electrical potential generated by the smooth muscles that surround the tubulars when they depolarize, thereby opening the tubulars. This technique is called skin potential activity (SPA). Most biofeedback systems do not use this technique, so it will not be discussed further. The other method used to measure sweat gland activity is to pass an electrical current through the skin. This is called skin conductance activity. SCA used to be called the galvanic skin response or GSR. The term GSR is still found in current literature, but most use the term skin conductance activity. Skin conductance activity has two terms associated with it, skin conductance level (SCL) and skin conductance response (SCR). SCL is the average ongoing level or tonic level of sweat gland activity that decreases as you relax. If an arousing stimulus is perceived, it will cause a shift in arousal and a skin conductance response. The SCR is a momentary increase in conductance usually lasting a few seconds to a minute.

The sweat glands can change their activity based on a multitude of factors, but there are some interpretable ranges. The range of SCL readings for most biofeedback systems is from 0 to 100 micromhos, with the typical level being observed between 1 and 20. Although there is no conclusive data indicating an optimal level, the usual range for most "normals" is between 1 and 10 micromhos when the individual is relaxed and resting, or involved in a nonstressful conversation. Although the above ranges are helpful for interpretation, there are many factors that determine the SCA. Therefore, the clinician needs to know the individual being recorded and what is "normal" for that person. It is important to be aware that at the extremes of sweat gland activity, the SCA may be attenuated. If the skin is very dry, SCRs may be difficult to monitor and if the skin is very moist, SCRs may be reduced. In the clinical setting if dry electrodes are being used, and if the skin is very dry or callused then it is usually helpful to add a small amount of electrode gel to the electrodes. It is important to remember that the greatest clinical value of SCA during clinical biofeedback is not in comparing individuals, but in observing an individual's changes during sessions.

In summary, the manner in which the sweat gland activity can be conceptualized is that a gradual decline in skin conductance level will be observed as the person relaxes, until an asymptote is reached. The rate of decline varies from person to person and from time to time, but is generally related to how quickly the person is recovering from an arousing event. The decline in level is interrupted by curvilinear increases in conductance, which usually last a few seconds and are called skin conductance responses. These increases in conductance are associated with evoking stimuli, whether external or internal. External stimuli are stimuli that have arousing properties or are novel to the individual, whereas internal stimuli are thoughts that have arousing aspects associated with them. Although the amplitude of the SCRs is not typically measured in biofeedback applications, psychophysiologists measure them and there is an abundance of literature on the interpretation of them. A large body of literature clearly demonstrates that the response amplitude is proportional to the intensity of the stimulus that evokes the response, and this is important in biofeedback applications. For example, if a small electric shock is presented, a small response will follow. If a moderate electric shock is presented, a moderate response will be observed, and so forth. This relationship is very clear across various stimuli and under most conditions. This is important in biofeedback applications because if a SCR is observed, it can be inferred that something happened to change the individual's arousal level. If this change is not related to an external stimulus, such as talking, then the change in arousal level was likely the result of the individual's thoughts. When several SCRs are observed, it can be inferred that the individual is having trouble with intrusive internal dialogue. The idea that skin conductance responds to thoughts or internal dialogue, and not just to the presentation of external stimuli, allows the therapist and the client to observe the impact that internal dialogue has on physiological processes. However, it is necessary to emphasize that the skin conductance level cannot be overly interpreted because many factors influence the observed level. For example, food and medications that are sympathetic agents or central nervous system agents can change skin conductance levels.

D. Electroencephalogram

EEG biofeedback is the fastest growing area in biofeedback today. Part of this interest is due to the fact that changes in instrumentation hardware and software have provided the means to quickly perform mathematical

analysis of brain waves so that feedback about the EEG characteristics can be provided within fractions of a second after they are detected. However, recording the EEG is of great technical difficulty because the electrodes must be placed in the correct location while maintaining acceptable levels of impedance. Impedance is the electrical resistance between the electrodes and the skin and must be kept to a minimum in order to reduce unwanted electrical activity. The electrode placements are based on what is called the 10–20 international system, as described by Jasper in 1958. The 10–20 international system identifies positions on the scalp, which are directly over structures of the cortex. The details of electrode placement are beyond the scope of this article, but must be learned before attempting this biofeedback.

Neurologists interpret the EEG to determine abnormal brain function, as certain wave patterns are associated with brain disorders such as seizures. The EEG is also used to determine sleep stages. In most biofeedback applications, the use of the EEG is based not on the interpretation of the raw or unaltered EEG, but on the quantitative analysis of the EEG, called the QEEG. Mathematical analysis of the frequencies of brain waves determines the amount of each frequency occurring within a period of time or epoch. The mathematical analysis used in most applications is the technique based on the theorem developed by Joseph Fourier in 1822, called the fast Fourier transform (FFT). This is a mathematical routine or algorithm that takes each wave, determines its length in time as well as its amplitude, and then determines the average amount of energy in all the frequencies of interest. Computer systems today are capable of providing feedback about the QEEG characteristics within about 3/10 of a second after it is monitored. The results of this analysis can then be displayed on a computer monitor, allowing the individual to become aware of the nature of his or her brain waves. This occurs fast enough for the brain to alter its activity, according to its ability and the instructions provided the person.

The brain waves have information of interest in their amplitudes and frequencies. The frequencies were categorized into different bandwidths in the 1920s by Berger, and reported in 1929. He recorded the EEG activity from his children and labeled the EEG frequencies that he observed. These labels are still being used today although many are starting to abandon them, as they may be too restrictive. Four bandwidths (theta, alpha, sensory motor rhythm [SMR], and beta) are used extensively in clinical applications. Thus, they will be briefly described. Researchers are inconsistent in the frequency definitions of these bandwidths, so the reader must determine how each author defines them in an article. However, they are usually defined as follows: Theta is 4 to 8 Hz, alpha is 8 to 12 Hz, SMR is 12 to 15 Hz, and beta is 16 to 30 Hz. Beta has been used to define a wide range of frequencies, so it is extremely important for the reader to determine the definition of this bandwidth in an article. The reason these bandwidths have been identified is that they are loosely associated with psychological states: Theta with drowsiness, alpha with nonfocused attention, SMR with muscle activity inhibition, and beta with focused attention. Although these associated states have some heuristic value for adults, they are not consistent across individuals or age ranges. The other important characteristic of the QEEG is its amplitude, measured in microvolts or picawatts. This is a measure of the amount of energy within each frequency or bandwidth. Presently, there are a few databanks available for normative and abnormal values of the QEEG.

The methods presently used in most clinical QEEG biofeedback applications are based on determining which frequency or bandwidth is of interest and then providing the individual with information about its activity either via a shift in frequency or amplitude. There are other techniques used to provide information about the EEG, such as hemisphere asymmetries and average evoked potentials, but their use, at this time, is not as widespread as amplitude or frequency-based applications. The clinical protocol for QEEG feedback for the treatment of attention deficit disorder/attention deficit – hyperactivity disorder (ADD/ADHD) will be presented later in the section Case Illustrations.

E. Pelvic Floor Disorders

The primary biofeedback applications in pelvic floor disorders are the treatment of urinary and fecal incontinence through the use of EMG biofeedback and specially designed sensors. This section will briefly cover biofeedback for urinary and then fecal incontinence.

Urinary incontinence is the inability to maintain control over urinary functions. The goal of biofeedback treatment is to alter both smooth and striated muscle activities related to bladder control. The following methods are employed: reinforcement of bladder inhibition, pelvic muscle recruitment, and stabilization of intra-abdominal and bladder pressures during the recruitment of pelvic floor muscles. In order to accomplish these goals, bladder pressure is manipulated and measured while simultaneously measuring pelvic floor muscle activity with EMG sensors. The EMG sensors are specially designed vaginal and anal probes.

Fecal incontinence biofeedback is similar, yet different from urinary incontinence biofeedback. Fecal incontinence is the inability to maintain control over bowel movements. During normal anal functioning, when a bolus of feces moves into the rectum, two sphincters are involved in keeping the feces internal. The internal sphincter, which is smooth muscle and controlled by the autonomic nervous system, relaxes. The external sphincter, which is striated muscle and controlled by the somatic nervous system, constricts. The constriction of the second sphincter is a conditioned response and prevents the feces from being eliminated. The internal sphincter along with the puborectalis muscle normally maintain the stored feces by staying contracted. During elimination, both sphincters and the puborectalis muscle are relaxed and the contraction of the smooth muscles around the large colon and rectum provides the force to move the stool through the anal canal. Muscle weakness, injury to muscles in this area, or loss of temporal conditioning can cause fecal incontinence.

A medical examination is necessary to determine if biofeedback treatment is appropriate. If the results of the examination indicate that biofeedback is appropriate, then a probe that uses balloons is used in the biofeedback treatment.

The commercially available probe has three balloons attached to it. The pressure in the balloons is displayed on a monitor or polygraph record so the individual can observe changes in the pressure, as the manipulation of the walls of the rectum is accomplished by inflating the most internal balloon with air, causing a pressure wave that simulates feces moving into the rectum. The two other balloons are positioned on the probe to measure the contraction and relaxation of the internal and external sphincters. When proper sequencing of the internal and external sphincters occurs, the internal sphincter will relax, causing a decrease of pressure in the middle balloon, and the external sphincter will contract, causing an increase in pressure in the external sphincter balloon. When an inappropriate sequence is observed on the display, this is pointed out to the individual and instructions on what the display should look like is explained so the individual can then try to exert deliberate control of the sphincters. This feedback combined with instructions has proven effective in changing the patterns of sphincter contraction, allowing the individual to regain control over elimination. This technique usually requires only a few sessions for the individual to recondition a natural sequence so that no further symptoms are manifested.

II. THEORETICAL BASIS

Although some have conceptualized biofeedback as a technique without a theoretical basis, it is plausible to conceptualize the biofeedback process within a learning model of classical and operant conditioning. As mentioned earlier, one early development of biofeedback was based on a controversy between classical and operant conditioning. A parsimonious way of explaining clinical biofeedback is to postulate that both classical and operant processes are evoked in most clinical applications.

The operant portion of clinical biofeedback is that the information provided by the system is a consequence of the behavior. With proper instructions, individuals will perceive the feedback signal that changes with the physiology as reinforcement and will perform to bring the reinforcing stimulus into their environment. This is especially clear when a signal is contingent on the individual obtaining a predetermined level of the physiology. An example is when temperature feedback is being provided and a tone is turned on when the finger temperature reaches a defined temperature. The operant model is also obvious in QEEG feedback applications with children, where it is common for the biofeedback system to accumulate points when specific criteria are met. These points may be converted into reinforcements such as money or the opportunity to participate in a desired event.

The classical model is being utilized when clients are asked to imagine previous events that have a relaxing emotional memory associated with them. In this case, the relaxing imagery is the unconditioned stimulus (UCS) and the present situation is the conditioned stimulus (CS). This may seem like backward conditioning, but it is not in that the present situation is ongoing and the imagery is then placed temporally into the ongoing event, which places it, in time, after the ongoing event.

III. APPLICATIONS AND EXCLUSIONS

In order to present the disorders treated with biofeedback techniques, Table I was developed. Any listing of disorders must be taken as only a guideline as it is always biased by the interpretation and experiences of the author. The presentation should not be taken as all-inclusive or exclusive of any particular application. Although some applications appear well established by controlled outcome studies of clincial effectiveness and

cost-effectiveness, others are based on repeated single-case studies or multiple studies with relatively small sample sizes. Additionally, some applications are based on the clinical literature and the clinical experience of the author. For ease of interpretation, in Table I the listing of disorders treated with biofeedback is divided into three categories. The categories are A = well established; B = multiple research support, but not enough to firmly substantiate the application; and C = promising but not established at this time.

This section will present the biofeedback techniques used to treat the disorders listed in the category of well-established treatments. For information on the disorders in the other categories, except seizure disorders, see Schwartz's 1995 work.

TABLE I
Selected Disorders Treated with Biofeedback Techniques

A	*B*	*C*
ADD/ADHD	Dyschezia (anismus)	Dysmenorhea
Anxiety disorders	Esophageal spasm	Hyperfunctional dysphonia
Asthma	Forearm and hand pain from repeated motion syndrome	Mild to moderate depression
Chronic back pain	Hyperhidrosis	Phantom limb pain
Diabetes mellitus	Insomnia	Tinnitus (associated symptoms)
Essential hypertension	Nocturnal enuresis	
Fecal and urinary incontinence	Specific seizure disorders	
Fibromyalgia	TMJ or MFP	
Irritable bowl Syndrome	Writer's cramp	
Motion sickness		
Muscle rehabilitation		
Raynaud's disorder		
Tension and migraine headaches		

Note. A: well-established; B: multiple research support, but not enough to firmly substantiate the application; C: promising but not established at this time.

A. Attention Deficit Disorders (All Types)

There are multiple studies that have shown QEEG biofeedback to be a successful treatment for attentional problems. These studies are based on the rationale that individuals with attentional problems generally have more slow waves in their EEG than individuals who do not have attentional problems. Therefore, the protocol requires the reduction of slow waves, either theta or alpha, while increasing faster waves, such as SMR or beta. The protocol for EEG biofeedback treatment of ADD/ADHD will be presented in the section Case Illustrations.

B. Anxiety Disorders

The biofeedback techniques primarily used in the treatment of anxiety disorders are frontal EMG, finger temperature, SCA, and heart rate feedback. These modalities are used to train a deep state of relaxation. The clinician can then use the deep state of relaxation as an incompatible response to the anxiety state. Although specific biofeedback such as heart rate might be used for a cardiac phobic, the most widely used technique is to train on the most active modality, based on the individual's ability and the clinician's experience.

C. Asthma

The asthmatic attack is caused by the constriction of the upper bronchial tubes, which restrict the passage of air in and out of the lungs. These tubes are dilated by the sympathetic nervous system and constricted by the parasympathetic nervous system. The link between biofeedback and this disorder is through facial muscle relaxation and correct diaphragmatic breathing. Facial muscle relaxation has been shown to reduce resistance of airflow in both asthmatic children and healthy adults. The rationale is through a demonstrated link between facial muscle relaxation and the trigeminal-vagal nerve. Following facial muscle relaxation training, reduced resistance to airflow has been observed for several hours. It is believed that this effect can be generalized and sustained over days.

D. Chronic Back Pain

The use of biofeedback facilitated relaxation training (BFRT) and specific muscle retraining have been shown to be successful in treating chronic back pain. When BFRT is used, it is often combined with specific

muscle feedback. The specific muscle feedback therapy is based on the finding that some chronic back pain is caused by hyperactivity in specific muscles of the back and neck. This pain may be the result of a unique learning history, in which hyperactivity was inadvertently reinforced, or after an injury in which protective muscle activity becomes maladaptive and the hyperactivity results in pain.

E. Diabetes Mellitus

Diabetes mellitus is caused by the disregulation of insulin produced by a malfunctioning of the pancreas. Because insulin regulates the amount of glucose available to cells, this disorder has serious consequences for life expectancy. The traditional management of diabetes is lifestyle changes through education, diet, and physical exercise along with hypoglycemic medication. The role biofeedback plays in the management of diabetes is through stress reduction techniques with biofeedback-facilitated relaxation training. The BFRT techniques reported in the literature have been frontal EMG training and finger temperature training, usually combined with some form of general relaxation training such as PMR or autogenic phrases. This application helps to stabilize and reduce insulin demands.

F. Essential Hypertension

There is substantial research on the treatment of essential hypertension with biofeedback. Studies show that frontal EMG, finger temperature, SCA, and direct blood pressure feedback have all been used successfully. Most of the research supports combining the biofeedback with some relaxation strategy such as progressive muscle relaxation, or autogenic training. Although direct blood pressure feedback might seem superior because it is straightforward, the research does not support it as a treatment of choice, as the other techniques generally reduce blood pressure more than direct blood pressure feedback.

G. Fecal and Urinary Incontinence

Biofeedback treatment of this disorder is presented in the section Case Illustrations.

H. Fibromyalgia

Fibromyalgia is characterized by generalized muscle pain, fatigue, headaches, and insomnia. Although there is debate about the nature and diagnosis of this condition, it will be assumed it is a unique disorder and that after its diagnosis there are treatments that have been helpful. The biofeedback techniques used to reduce the symptoms of this disorder have been frontal EMG biofeedback and in some instances, specific muscle biofeedback training.

I. Irritable Bowel Syndrome (IBS)

IBS is manifested in about 8 to 19% of the population and is associated with symptoms of abdominal pain, constipation and/or diarrhea, and gas. About 85% of those with IBS have an increase in symptoms when experiencing stress. Therefore, the treatment of choice is relaxation therapy and research has shown that relaxation therapy combined with finger temperature biofeedback is the most effective. Although more direct forms of feedback have been tried, such as colonic motility sounds, rectal feedback using rectal balloons, and feedback of the electrical activity of the lower gut, these techniques have not proven effective and at this time are not used in general practice. The biofeedback is usually combined with client education about the relationship between stress and symptoms.

J. Motion Sickness

Motion sickness was discussed earlier, but will be briefly presented here as well. Cowings and her colleagues, starting in the 1970s, conducted the early work in this area. They used physiological feedback of SCA, finger temperature, and heart rate along with autogenic training to train individuals to increase their threshold for motion sickness. She published many controlled outcome studies and was finally given permission to train some astronauts. The individuals she trained were capable of preventing space motion sickness during their space flights without medication. She successfully extended this work to high-performance jet pilots.

K. Muscle Rehabilitation

EMG biofeedback is used to monitor specific muscle activity in order to facilitate recruitment of muscle activity in hypoactive muscles and to reduce muscle activity in hyperactive muscles. The primary role of EMG biofeedback in paretic muscles is to allow the individual to know that some recruitment of muscle activity is being generated even though it may not be

enough to cause movement. EMG biofeedback therapy allows the individual to know he or she is correctly activating the muscle but not enough to cause movement, as then the slightest increase in effort is detected by the instrumentation. Any minor successes can be used to build further recruitment until enough activity is generated to cause observable changes, which can then be built into functional movements. For hyperactive muscles, the technique uses specific muscle feedback to reduce inappropriate and sustained muscle contractions.

L. Raynaud's Disorder

There are several outcome studies that demonstrate that the biofeedback treatment of choice for this disorder is finger temperature combined with autogenic training. Along with biofeedback, lifestyle changes are also recommended. These changes include avoidance of sympathetic nervous system stimulants, such as caffeine and nicotine; stress management techniques; and the avoidance of low-temperature experiences, such as holding ice drinks and picking up frozen objects.

M. Tension and Migraine Headaches

There is a wealth of outcome research demonstrating that these two disorders can be effectively treated with biofeedback techniques. For tension headaches, BFRT, with placements of the EMG sensors in the frontal location, combined with general relaxation techniques, such as PMR has been shown to be effective. Utilization of specific muscle feedback of the muscles of the face, neck, and cervical area has also proven effective. This author recommends the combination of frontal EMG feedback, PMR, and specific muscle feedback of the face, neck, and cervical area. The muscles selected for the feedback are determined by a dynamic EMG assessment.

For biofeedback treatment of migraines the treatment of choice is finger temperature feedback combined with a relaxation technique, such as autogenic training. For those clients unresponsive to the finger temperature feedback, usually frontal EMG feedback will be effective. Based on the outcome research, biofeedback should be the treatment of choice for children who suffer from migraines.

N. Exclusions

When considering clinical biofeedback for an individual, the following basic requirements must be met: The individual must be able to tolerate the application of the sensors; the individual must be able to understand the instructions regarding the relationship between his or her physiology and the feedback signal; the individual must be motivated to change physiology, using the feedback signal to facilitate this process; and finally, the individual must be motivated to practice what he or she has leaned in the clinic in his or her everyday world.

There are also cautions and contraindications for the use of clinical biofeedback. First, a determination must be made that a more appropriate intervention, such as an immediate medical treatment rather than biofeedback therapy, is not warranted. An example of this is that an individual may be suffering from the recent onset of headaches caused by an aneurysm. In this situation, providing biofeedback as the only treatment would not be sensible, as a surgical intervention may be needed. Although there is little literature on contraindications for psychological states, logic indicates that in certain psychological conditions, biofeedback should not be considered the treatment of choice. These conditions include psychological states such as severe depression, uncontrolled schizophrenia, delirium, and depersonalization. Caution or special considerations should be employed when the client has the following conditions: impaired attention, dementia, mental retardation, or if the client is taking medications, as the medications may need to be adjusted as therapy progresses.

Therapists should also be aware that some individuals might experience what is being referred to as relaxation induced anxiety (RIA). Although little systematic information is available on the incidence of this in clinical practice, it is of concern as some individuals feel a strong sense of apprehension when a deep state of relaxation is induced. These individuals often report disturbing cognitions, feelings of loss of control, depersonalization, and strange body sensations. For these individuals, it is necessary to gradually train them in moderate levels of relaxation until they can tolerate and enjoy the benefits from deep states of relaxation. For further information on cautions and contraindications see *Standards and Guidelines for Biofeedback Applications* published by AAPB in 1992, and Schwartz's 1995 work.

IV. CASE ILLUSTRATIONS

Because of the diverse areas of applications of clinical biofeedback, instead of case examples, two general clinical protocols will be presented. The two clinical protocols selected for presentation will be the protocol for biofeedback facilitated relaxation training (BFRT) and for QEEG feedback for ADD/ADHD. These protocols reflect the two

major strategies of clinical biofeedback applications: biofeedback for relaxation purposes and a specific biofeedback training technique based on specific physiological levels that are related to the diagnostic category.

A. Example of a BFRT Protocol

When using BFRT, it is first necessary to determine if the client would benefit from such therapy. General relaxation may be helpful in a variety of conditions and it may also be useful as an incompatible response during such procedures as systematic desensitization. BFRT normally takes between 8 and 20 sessions, depending on the acquisition skills and the distress level of the client before and during therapy. After determination of the need for BFRT, the therapist must explain the rationale for biofeedback therapy, outline the basic aspects of the physiological processes that will be trained, and discuss the potential benefits and risks of the training. This author recommends conducting the first BFRT session with frontal EMG feedback, while monitoring other modalities such as finger temperature, SCA, and/or heart rate. The therapist may also find it beneficial to monitor additional physiological events that are connected to the specific conditions being treated. During the first biofeedback session, facial muscle discrimination training should be demonstrated and the client should be provided time to use his or her relaxation techniques to reduce frontal EMG levels. The therapist should monitor the other modalities during the session to observe the changes that occur as the client tries to reduce frontal EMG levels. An example of the value of monitoring other modalities is that by observing SCA, it can be determined if the client is engaging in arousing internal dialogue by noting if several SCRs are observed. If so, the therapist can interrupt the session and suggest a change in strategy by the client. During the interruption, the therapist should ask the client what strategy he or she is using and then encourage him or her to select a different strategy, such as diaphragmatic breathing or changes in imagery. The most responsive modality is usually selected as the target of therapy after frontal EMG levels are acceptable.

B. Example of a QEEG Feedback Protocol for Treatment of ADD/ADHD

One of the applications of QEEG biofeedback is with children who are diagnosed with ADD/ADHD. These children have been shown to have more slow waves, such as theta and alpha, and fewer fast waves, such as SMR and beta, in their EEGs than non-ADD/ADHD children of comparable age, according to Monastra and colleagues in 1999. The biofeedback technique provides QEEG therapy for ADD/ADHD children and trains for a decrease in theta or alpha and an increase in beta or SMR, while simultaneously keeping facial EMG levels at an acceptable level. The specific protocol requires a QEEG assessment to determine which specific bandwidth and microvolt levels will be trained. Several studies have been published that clearly demonstrate that the EEG patterns change according to the direction of training and that clinical improvements are observed with successful training. The number of sessions necessary is usually 40 to 60, depending on how quickly the EEG changes and the amount of behavioral improvements observed. It takes the brain longer to learn to control its own processes than body organ systems; therefore, the number of sessions needed for this protocol is greater than that typically required in most biofeedback applications. An additional reason for the greater number of sessions needed in QEEG biofeedback may be that we do not know how to best train the brain to change its functioning.

V. SUMMARY

In order to be effective in the clinical application of biofeedback, there must be a measurable physiological process that can be monitored with existing technology and feedback about the process must be provided with enough resolution and speed to allow the individual to obtain volitional change of the physiological event. Then, this change in physiology must alter the physiological processes causing the targeted disorder. In some instances the relationship between the monitored physiological event and the disorder is obvious, such as finger temperature for Raynaud's disorder; for others, such as BFRT for asthma and IBS, the relationship is less obvious. In some instances, training a physiological event indirectly related to the physiology of interest has proven superior to treating the event itself. An example of this is frontal EMG for the treatment of essential hypertension. Therefore, the clinician must be aware of the physiology underlying the disorder and of the literature that relates to the different biofeedback treatments used to treat that disorder. This information must then be combined with the individual's characteristics such as his or her unique physiological levels and the ability to benefit from the various types of biofeedback techniques available. The clinician must also be skilled in helping the client generalize the control acquired in the clinic to the individual's life situations.

Constant advances in computer technology and developments in bioengineering, which provide new sensor technology and signal processing, make the future of clinical biofeedback look very promising.

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See Also the Following Articles

Alternatives to Psychotherapy ■ Multimodal Behavior Therapy ■ Neurobiology ■ Post-Traumatic Stress Disorder ■ Retention Control Training ■ Relaxation Training

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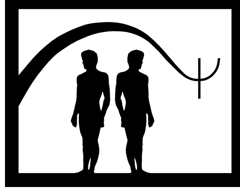

Breathing Retraining

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I. Description of Treatment
II. Theoretical Bases
III. Summary
Further Reading

GLOSSARY

breathing retraining A self-control strategy used to regulate breathing behavior.

gas transference Delivery of oxygen to support metabolism and removal of carbon dioxide as a byproduct and maintenance of systemic acid-base balance.

I. DESCRIPTION OF TREATMENT

Breathing retraining refers to methods used to modify breathing behavior. Because breathing is essentially a self-regulatory process that marks the beginning of life with its initiation and the end of life with its termination, it is clear that one does not have to learn how to breathe. Thus, the word retraining is not entirely appropriate and may cause confusion because it implies that training has occurred prior to "retraining." Although the term breathing training is coming into more popular usage, the bulk of the literature on the topic refers to "breathing retraining."

Preliminary to a discussion of breathing and its modification the reader should also keep in mind that while the words breathing and respiration are often used synonymously, "breathing" refers primarily to the mechanical process of moving air in and out of the lungs whereas "respiration" would include the exchange of blood gases at the cellular level. Thus, by holding one's breath, breathing (the mechanical means of moving air in and out of the lungs) is temporarily inhibited voluntarily but respiration (the exchange of blood gases in cells) continues involuntarily.

Although the techniques of breathing retraining are essentially an art that depends on the therapist, patient, and other factors, there are in general two approaches. In one approach the therapist addresses the disordered breathing directly by explaining to patients some rudiments of basic respiratory physiology so that they can understand the relationship between their disordered breathing and the symptoms they present. The therapist then proceeds to teach patients how to control breathing (and thus reduce excessive ventilation) by means of relaxation of the abdominal muscles, contraction of the diaphragm, and relaxation of the intercostal muscles. The goal here is to teach the patient how to suppress thoracic breathing and thus restore slow rhythmic diaphragmatic breathing, that is, how to breathe in a manner that eliminates complaints or reduces their intensity.

In the other approach the therapist addresses the disordered breathing indirectly by deemphasizing breathing performance and instead emphasizing relaxation and encouraging self-awareness of interoceptive cues from all muscles involved in breathing. Whichever approach followed, the purpose of breathing retraining is to help the

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client learn how to gain voluntary control of breathing in the short run and to establish habitual patterns of salutary breathing in the long run. In psychotherapy the specific goal of the adjunctive procedure of breathing retraining is to help the patient learn to reduce ventilation so that it is consonant with metabolic demand for oxygen, thus facilitating relaxation and clear receptive thinking while reducing anxieties.

II. THEORETICAL BASES

The principles of learning that underlie the methods of modifying breathing are essentially those that underlie behavior therapy. The specific breathing behaviors that are the targets of programs of breathing retraining include (a) frequency, (b) volume, and (c) patterns. Breathing frequency (respiration rate) refers to the number of breaths per minute or the number of respiratory cycles completed in 1 min, where a respiratory cycle consists of one inhalation followed by one exhalation. Breathing volume is measured in terms of either volume of air breathed in one respiratory cycle (tidal volume) or the sum total of air breathed per minute (minute volume); volume is expressed by expansion of the thoracic cavity caused primarily by contractions of the diaphragm, intercostal, and clavicle muscles. Pattern refers to combinations of respiratory frequency and contractions of particular muscles or groups of muscles, for example, fast contractions of intercostals and clavicles with little or no discernible contraction of diaphragm versus slow contraction of diaphragm with little or no discernible contraction of intercostals and clavicles.

Although breathing is the only vital function under direct and immediate voluntary as well as involuntary control, the limits of voluntary control, the limits to which breathing can be modified, are fairly narrow. The breaking point of breath holding marks one extreme; loss of consciousness by means of overbreathing marks the other. Involuntary control of breathing, especially during sleep, is maintained by a self-regulatory system governed primarily by neural pathways with origins in the medulla and pons. This self-regulatory system has been studied extensively.

While the physiological–vegetative role of respiration in gas transference, namely, the delivery of oxygen (O_2) to support metabolism and removal of carbon dioxide (CO_2) as a byproduct and maintenance of systemic acid-base balance (pH), is fairly well understood, the psychological effects of breathing on emotion and cognition has received relatively little scientific attention until about the middle of the 20th century. Although programs of breathing retraining have been applied only recently in the treatment of psychological–psychiatric complaints and breathing-related somatic complaints, it should be noted that breathing retraining has been used through the years to modify breathing and thus facilitate speech, singing, playing wind instruments, swimming, running, as well as relaxing and reducing emotional reactivity in general. Breath control is at the heart of yogic exercises.

The relationship between disordered breathing and psychological–psychiatric disorders is not broadly understood. Part of the reason for this probably harks back to the separation of body and mind or corpse and spirit: life begins with inspiration (the body incorporating the spirit) and ends with expiration (the body giving up the spirit). Although few scientists would openly support the Descartian notion of body–mind dualism, some would argue that there is a clear distinction between psychology and physiology beyond that of a convenient dialectic convention within biology. A simple example from respiratory psychophysiology that demonstrates how breathing provides a bridge between psychology and physiology is volitional overbreathing. Self-initiation of rapid and strong contractions of the diaphragm and intercostal muscles while resting (i.e., low metabolic demand for oxygen) will lead quickly to hyperventilatory hypocapnia (diminished arterial CO_2 and consequent rise in pH) and produce an almost immediate increase in heart rate, decrease in parasympathetic activation (i.e., sympathetic dominance), decrease in respiratory sinus arrhythmia, increase in electrodermal conductivity, and decrease in blood flow to the brain combined with a rise in pH and consequent decrease in dissociation of oxygen from hemoglobin to brain cell tissue. The immediate consequence of these reactions are acute cerebral hypoxia and a host of psychological, somatic, visceral, and neuropathic complaints. If some psychiatric disorders are a manifestation of faulty cognition that results from an inadequate supply of oxygen to the brain (cerebral hypoxia) then disordered breathing (viz., hyperventilation) can be a significant factor that contributes to the production or exacerbation of psychological–psychiatric and/or behavioral disorders.

Another part of the reason for the narrowly understood relationship between disordered breathing and psychiatric disorders may lie in problems of measurement. Although hyperventilation is correlated with both respiration frequency and tidal/minute volume, variables that are relatively easy to measure reliably, respiration frequency and/or volume can only be used as rough estimates of hyperventilation. The problem lies in fluctuations in metabolic demand for

oxygen. Changes in skeletal muscle tension or autonomic nervous system arousal (e.g., changes in mentation/emotion) will alter metabolic demand that in turn will effect changes in breathing. There are direct and indirect means for measuring hyperventilation (a reduction in partial pressure of arterial CO_2 and consequent rise in pH), independent of metabolic demand for O_2.

The direct means of determining hyperventilation is to assay samples of arterial blood for CO_2, an invasive and hazardous technique. The indirect means for estimating arterial CO_2 is the capnometer, an infra-red gas analyzer that samples expired air for its content of CO_2. This technique, which is neither invasive nor hazardous, uses a small tube attached just inside a nostril through which a vacuum pump relays air to the gas analyzer. The capnometer can provide both a continuous analogue readout of the percentage of CO_2 or a digital display of momentary readings of percentage CO_2 in expired air. The percentage of CO_2 at the end of a respiratory cycle (end-tidal CO_2) is richest in CO_2 because it contains a proportion of CO_2 that best represents the level of CO_2 at the point of diffusion of CO_2 from the arterioles to the lungs.

Although the determination of the proportion of CO_2 in the end-tidal peak of expired air by means of a gas analyzer (capnometer or capnograph) provides an accurate and reliable noninvasive estimate of partial pressure of arterial CO_2, this method seems to have escaped the attention of many psychotherapists. The reason for this may lie, in part, in tradition: psychotherapists study the mind, and physiologists study the body. Perhaps the time has arrived for a rapprochement; perhaps respiratory psychophysiology provides a bridge.

Recently, however, reports from patients suffering panic attacks and reports of laboratory findings, especially the occurrence of adventitious panic attacks during physiological assessments, have shown (1) the occurrence of hyperventilation in panic attacks, (2) the relatively low resting level of CO_2 in the arterial blood of patients who suffer panic disorder, and (3) the high incidence of complaints of severe dyspnea reported to occur in panic attacks. As a consequence of this connection between aberrant breathing and panic, programs for the treatment of panic disorder include breathing retraining in an attempt to reduce ventilation. Programs of treatment that do not directly address breathing either prescribe a drug, unwittingly or by intention, that reduces ventilation (e.g., benzodiazepines) or a method (e.g., relaxation) that indirectly reduces ventilation thus preventing hyperventilation and concomitant panic or terminating an attack soon after its onset. Recognition of the role of breathing in panic places panic disorder in the realm of clinical respiratory psychophysiology.

The study of panic attacks in the laboratory has been confounded by four major factors: (1) inadequate criteria for the selection of subjects, (2) absence of a reliable panic challenge, (3) inadequate measures of psychophysiological functions, and (4) inadequate criteria for the determination of the occurrence or nonoccurrence of a panic attack. The criteria for the selection of subjects for experiments have typically been those of the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association. Although these criteria may be adequate for clinical diagnosis, they are not sufficiently specific for the purposes of scientific experimentation because they allow for the inclusion of several distinctively different categories or types of panic attacks. Challenges used in attempts to elicit panic attacks cover a wide range (e.g., lactic acid, caffeine, yohimbine, CO_2, false heart-rate feedback, forced voluntary hyperventilation, false information on effects of breathing compressed air). All studies on the effects of challenges report some success in eliciting panic attacks, but none have demonstrated high reliability. Inadequate measurement of psychophysiological factors (especially end-tidal CO_2) prevents an adequate evaluation of the effects of challenges and the detection of changes that occur concurrently with panic attacks. Criteria for the determination of the occurrence of panic attacks typically rely on self reports by the patients or judgments by experimenters; objective physiological criteria are usually not used. To date, the most valuable information on psychophysiological processes in panic attacks in the laboratory have been adventitious panic attacks that occurred in the absence of any intended challenge.

Because breathing retraining in the treatment of panic disorder and other psychophysiological complaints aims “to prevent” hyperventilation by training patients to reduce their ventilation, it is essential for both the patient and the reader to have a clear understanding of the meaning of “hyperventilation.” Hyperventilation is often confused with tachypnea (fast breathing—rapid cycles of inspiration and expiration) or with hyperpnea (voluminous ventilation—large volumes of air inhaled and exhaled per breathing cycle). While tachypnea and hyperpnea are types of breathing that can produce hyperventilation, they are not hyperventilation. Hyperventilation can only be understood in terms of the magnitude of ventilation with respect to the metabolic need for oxygen. Thus, while climbing stairs or running one might be engaged in tachypneic and/or hyperpneic breathing but not be hyperventilating if breathing does

not exceed the amount of oxygen required by the muscles for the task. Alternatively, a sedentary person watching an emotionally arousing television drama or sports event (or the evening news) might be hyperventilating (breathing an amount of air that exceeds metabolic demand for a recumbent musculature) even though there are no apparent signs of either tachypnea or hyperpnea.

Given that hyperventilation is any breathing beyond metabolic demand for oxygen, the issue of the deleterious effects of hyperventilation is not simply a matter of its occurrence or nonoccurrence. Everyone hyperventilates throughout the routines of everyday life. Deleterious effects of hyperventilation depend on the degree of overbreathing in conjunction with a number of other variables: intensity, duration, speed of onset, frequency of occurrence (acute or chronic), the internal and external conditions under which it occurs (e.g., intense emotion in an unfamiliar or threatening environment), and the extent to which one experiences a sense of control over the hypocapneic effects produced (e.g., dyspnea/breathlessness, tachycardia). Hyperventilation is complicated because the consequences of its occurrence depend on such a complex interaction of so many physiological and psychological factors.

III. SUMMARY

Although breathing retraining (the modification of breathing behavior) has been briefly discussed in the context of panic and related anxiety disorders, mention should be made that breathing retraining is applied in the treatment of a broad range of complaints. The salutary effects of breathing retraining can be found in the treatment of noncardiac chest pain, as an adjunctive procedure in stress management programs and cardiac rehabilitation programs, and in the reduction of intensity of symptoms of chronic lung disease (asthma, bronchitis, and emphysema).

See Also the Following Articles

Anxiety Disorders ■ Panic Disorder and Agoraphobia

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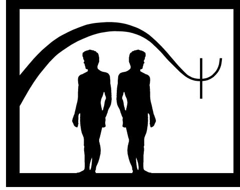

Brief Therapy

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I. Overview of Brief Therapy
II. Theoretical Underpinnings of Brief Therapy
III. Research Findings
IV. Summary
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GLOSSARY

brief therapy Psychotherapy, typically of short duration, where efficiency in achieving change is an explicit aim. Sometimes referred to as time-effective or short-term therapy.

common factors Treatment ingredients shared by the different models of therapy that can account for the similar outcomes achieved by those models.

contextual models Approaches to therapy that seek change by shifting the situational contexts that are associated with the enactment of problem patterns. Examples include strategic-systems and solution-focused therapies.

learning models Approaches to therapy that seek change by teaching coping skills and rehearsing these in situations that have been problematic. Examples include cognitive-behavioral and cognitive-restructuring therapies.

relationship models Approaches to therapy that seek change by introducing powerful emotional experiences within the helping relationship that challenge maladaptive interpersonal patterns. Examples include interpersonal and brief psychodynamic therapies.

time-limited therapy Brief therapy in which duration is capped at the outset of treatment.

I. OVERVIEW OF BRIEF THERAPY

Brief therapy, sometimes also referred to as short-term therapy, is a generic label for any form of therapy in which time is an explicit element in treatment planning. There is no uniform dividing line between brief and nonbrief therapies. Rather, the range of interventions described as brief range from single session therapies in the strategic and solution-focused literature to episodes of 20 or more sessions in the short-term psychodynamic tradition. It is not at all unusual, for example, to find models of cognitive restructuring therapy that last for 12–15 sessions. This might be viewed as very brief treatment for a client with a personality disorder, but not one with an adjustment problem. Clearly brevity is relative to the accustomed duration of treatment and the objectives undertaken by the therapist.

Defining brief therapy becomes even more difficult when considering the range of extant models. Some brief therapies, for example, are "time limited," allocating a fixed number of sessions for clients. Such limits often are dictated by administrative policies, such as benefit limits among insurance plans or service restrictions within clinics or counseling centers that have limited professional resources. Other approaches seek to be "time effective," maximizing efficiency in change processes, but not laboring under a fixed duration of care. "Intermittent" models are especially difficult to categorize, as in the case of monthly therapy sessions that continue for a full year. Such interventions may be

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long term, yet still "brief" in their consumption of therapeutic resources.

Finally, there is Simon Budman and Alan Gurman's important distinction between therapies that are brief by design and those that are brief by default. A hallmark of all brief treatments is their planned nature. Many clients drop out of therapy for a variety of reasons, including a lack of resources, low motivation, disenchantment with the therapist, or satisfaction with a small number of visits. Indeed, approximately one-half of all terminations appear to be unilateral, initiated by the client. Although such cases turn out to be of short duration, they are not brief in the planned sense. True brief therapy makes an active effort from the outset to streamline change processes. Defined in this manner, brief therapy is not a separate school of treatment, but an approach that is applicable to any school.

There are several elements common to brief therapies that distinguish them from treatments that do not explicitly address the component of time. These include the following:

- *Focus:* Brief therapies typically target specific patterns rather than attempt broader personality changes. Such a focus is explicitly addressed in treatment planning and generally is part of a mutual understanding between therapist and client.
- *Activity level of the therapist:* Brief therapists characteristically adopt active methods to maintain the focus of treatment and promote self-understanding and change. The role of the brief therapist is more akin to a catalyst than to the blank screen described by Freud.
- *Activity level of the client:* The efficient utilization of time requires that clients be absorbed in change efforts between sessions, as well as during them. Brief therapies, therefore, generally make use of explicit tasks, homework exercises, and between-session efforts to apply skills and insights obtained during meetings.
- *Client selection:* The great majority of brief therapists recognize that brief therapies are not appropriate for chronic and severe mental illnesses, although techniques borrowed from brief approaches may be of value. Accordingly, therapy typically begins with an assessment to determine the appropriateness of brief treatment for a particular client.
- *Enhanced experiencing:* People appear to be more receptive to change when they are in altered and enhanced states of experiencing. Many methods utilized by brief therapists, including hypnosis, relaxation techniques, introspection, confrontation, exposure, and role playing, enable individuals to experience themselves and their problems in new ways.
- *Emphasis upon readiness for change:* Following the work of James Prochaska and Carlo DiClemente, brief therapists typically target changes for which clients are ready. When clients are not aware of changes that need to be made or committed to making these, brief therapy goals will typically focus on advancing readiness for change rather than working through long-term resistance.
- *Emphasis on impact of intervention:* Brief therapists typically regard the emotional power of interventions, rather than their absolute duration, as critical to change. Accordingly, they tend to emphasize the promotion of corrective emotional experiences rather than exhaustive insight into past conflicts.

By actively maintaining focused efforts at change and maximizing the involvement of both parties within and between sessions, brief therapists attempt to make optimal use of time in treatment. There are, however, a range of persons and problems for which brevity is not feasible and, indeed, can even exacerbate problems. Among the dimensions that are important in determining whether or not treatment can be brief are:

1. *Duration:* Although there is no one-to-one correspondence between the duration of a presenting problem and treatment length, it is fair to assume that chronic, long-standing patterns have been overlearned and may require more intensive and extensive work on discrepancy and consolidation than recent, situational adjustment problems. Chronic problems pose a particularly significant risk of relapse, significantly extending the time that must be spent in consolidation work. Indeed, therapists specializing in substance abuse work and the treatment of the severely and persistently mentally ill view relapse as an integral part of change, not as a treatment failure. To the extent that clients must pass through iterations of change, relapse, and renewed change, treatment cannot be highly abbreviated.
2. *Interpersonal history:* A precondition of brevity is the formation of a quick, positive, and durable therapeutic alliance. This is most likely to be possible among clients who have not experienced significant interpersonal traumas. When clients have grown up within abusive, neglectful, or highly inconsistent homes, the capacity for trust and bonding may be impaired. Such individuals may need many months of meeting before they can feel sufficiently comfortable to open up about their true concerns. This greatly extends the time needed to effect change. In such cases, the formation of a positive alliance may itself comprise the bulk of the therapy, allowing clients to modulate their needs for closeness

and distance and establish consistent and caring relationships with others.

3. *Severity:* When presenting problems are so severe and complex that they greatly impair emotional, vocational, and interpersonal functioning, it may be difficult to maintain the singular focus that is the hallmark of brief treatments. Indeed, highly depressed, psychotic, and anxious clients—as well as those in the throes of drug or alcohol dependence—may require medical attention before being able to focus on targeted therapy. It is not unusual in such circumstances for therapists to conceptualize what would otherwise be a lengthy course of treatment as a modular series of brief therapies, each addressing a particular facet of the client's concerns.

4. *Understanding:* As suggested earlier, clients are most appropriate for brief work when they are aware of a problem in their life and committed to doing something about it. Many clients, however, are at a lower level of change readiness. Some realize that their lives are not going well but possess little or no insight into their patterns. Others may be aware of their shortcomings, but ambivalent about changing them, as in the case of someone who remains in a familiar but unsatisfying romantic relationship. In the absence of insight and commitment, therapy is apt to become elongated, helping clients explore problems and their costs prior to taking remedial action.

5. *Capacity to tolerate discomfort:* Much of the brevity of therapy is accomplished by provoking client patterns within sessions and creating active opportunities for new learning. Such corrective experiences may be highly threatening to a client with poor coping ability and/or one who is in a state of crisis. Habib Davanloo's notion of a "trial therapy," in which highly emotional techniques are attempted on a limited scale during an initial session, is quite useful in assessing the degree to which a vulnerable person can benefit from accelerated efforts at change. Indeed, the entire notion of brevity may be overly anxiety provoking—and hence inappropriate—for clients who are struggling with long-standing issues of attachment and rejection.

II. THEORETICAL UNDERPINNINGS OF BRIEF THERAPY

There are many specific schools of brief therapy and numerous variations within each school. It has been suggested that all these approaches may serve a common function: helping therapists and clients achieve a common understanding of patterns and the means by which patterns can be altered. Each approach, from this perspective, may be seen as a distinctive translation system that transforms a bewildering array of presenting problems into a meaningful set of patterns. To the extent that this is so, it may be less important to ask which approach to brief therapy is more effective than its alternatives than to find approaches that can serve as useful translation frameworks for particular therapeutic dyads.

In the broadest sense, there are three overarching models of brief therapy: contextual, learning, and relationship. These make different assumptions regarding the scope and genesis of problem patterns, the role of the therapist in addressing these patterns, and the techniques to be utilized in effecting change. As we see, these assumptions play a crucial role in determining the ultimate brevity of treatment.

A. Contextual Therapies

The contextual therapies owe their genesis to the pioneering work of Milton Erickson and the subsequent elaboration of his therapy in strategic-systems and solution-focused therapies. These are among the briefest of the brief therapies, sometimes addressing change in a single session.

Common to the contextual brief therapies is the notion that problems are constructed and not intrinsic to the individual. Once people construe a set of life outcomes as problems, they typically attempt solutions to these problems, sometimes making the initial difficulties worse in the process. The result is a circular difficulty in which problems and solutions become self-reinforcing and amplifying. A common and simple example of this is the insomniac client who tries as hard as he can to fall asleep, only to find that repeated trying keeps him awake.

Contextual brief therapy proceeds from the recognition that relatively small shifts in the context of the client's problem can be sufficient to interrupt these self-reinforcing cycles and set the client along a new trajectory. The emphasis is thus not on analyzing problems or their historical roots, but in finding contextual parameters that no longer sustain the unwanted behavior patterns. The insomniac client who is instructed to laboriously clean his floors whenever he cannot sleep is thus prevented from enacting his prior efforts at solution. The prescribed task becomes so monotonous that anything—including sleep—becomes an easier course of action.

In the solution-focused variant of contextual brief therapy, efforts are made early in the treatment process to discover exceptions to the problem patterns associated with presenting complaints. Problems rarely occur all the

time, and even troubled individuals possess significant coping resources. This allows the solution-focused therapist to help clients identify patterns of solution—that is, regularities in their ability to *not* experience problematic responses. Once people are able to identify what they are already naturally doing when they avoid falling into old patterns, they are encouraged to rehearse these "solutions" both within and between sessions.

An essential assumption behind the strategic and solution-focused approaches is that clients already possess the resources needed to shift their patterns. Indeed, contexts that can disrupt problem patterns and foster new, more desirable actions are generally available to clients. Because clients are so locked into their constructions of problems and solutions, however, they are unable to escape from their difficulties. From this perspective, spending significant time delving into client recitations of problems is counterproductive, as it reinforces the notion that these problems possess an existence apart from the client's system of construals. The goal of therapy is less to solve a problem than to help clients see that there wasn't really a problem at all; that the presenting complaints were artifacts of their particular context.

Accordingly, the contextual brief therapies are among the briefest of the short-term therapies. They do not actively discuss the relationship between client and therapist, and they move quickly from the initial presentation of problems to an action-oriented exploration of solutions. Indeed, an explicit goal of the solution-focused modalities is to construct solutions that can be self-amplifying, creating large developmental impacts from relatively modest interventions.

In terms of technique, several elements distinguish the contextual brief therapies. These include the following:

1. *An avoidance of resistance:* Resistances to interventions are viewed as signs that a particular construction offered by the therapist is not user friendly for a client. Accordingly, the therapist is apt to shift to a different construction rather than delve into the resistance. An underpinning of the literature in strategic therapy is the role of interpersonal influence in change processes. Efforts are made to maximize this influence by maintaining a positive, nonthreatening relationship between therapist and client. Indeed, strategic therapists sometimes adopt a "one-down" stance, disavowing their status as experts, as a way of minimizing distance between themselves and those seeking their assistance.

2. *The creative use of language:* Many of the interventions used by contextual brief therapists help clients reframe patterns in ways that create cognitive flexibility and open new behavioral alternatives. Such strategies include the use of metaphors and stories that can stick in clients' minds and help them see their problems in a different light. Many times, clients will provide their own language to describe incidents in which problems were not sustained. This language may be adopted by the therapist to anchor future discussions of solution patterns.

3. *The use of prescribed tasks:* The goal of many of the contextual brief therapies is to provide clients with a first-hand experience in which the constructed problem does not occur. Prescribed tasks are an effort to create such experiences in a vivid manner that can serve as the basis for new construals. For example, a therapist may prescribe a paradoxical task in which couples are instructed to hold their arguments at a given hour in the evening while standing in a ludicrous and unaccustomed setting, such as a walk-in clothes closet. The absurdity of standing in the closet—and the cooperation needed to make the argument occur at the appointed time and place—make it impossible for the couple to summon their normal rancor. With the anger defused, the couple can engage in a different mode of communication, more likely to constructively address their concerns.

4. *Shifts in states of consciousness:* Milton Erickson's realization that much of therapy involves a process of interpersonal influence led him to work with trance induction as a strategy for accelerating change. Many of the prescribed tasks offered by strategic therapists have a novelty or shock value that maximizes their emotional impact. The goal is to facilitate the deep processing of new information, bypassing the normal critical awareness that helps to sustain problem constructions.

B. Learning Therapies

The learning models begin with a different set of assumptions, defining problem patterns as learned, maladaptive responses to situations. The goal of therapy from this perspective is to unlearn these self-defeating responses and replace them with more constructive alternatives. This places the client in the role of student and the therapist in the role of teacher. Instead of affecting client constructions with novel framings and experiences, the therapist engages in active instruction. These nascent skills can then be rehearsed in situations that have led to problems in the past, eventually becoming part of an established repertoire.

In the approaches derived from operant and classical conditioning—often designated as cognitive-behavioral therapies—treatment begins with an extensive behavioral analysis of the situational determinants of problem

patterns. Such an analysis can be undertaken through direct observation in school, hospital, or other structured settings or might be conducted through homework exercises involving self-monitoring. The key idea is that problem patterns are elicited by a limited set of internal and environmental cues. Once these triggers are identified, they can be targeted as opportunities for introducing, rehearsing, and reinforcing skills. The goal is to introduce an element of self-observation into behavior patterns that have been automatic, creating flexibility in response. In behavioral modification, for example, when trigger situations are encountered, efforts are made to withhold any reinforcement of problematic behaviors and systematically reward approximations to new, desired actions—including those that have been modeled for the client. The creation of incentives, such as those found in a token economy, can be especially effective in sustaining awareness of skill-based responses in problem situations. This is often undertaken in structured environments, such as school classrooms, where professionals possess a high degree of control over environmental and interpersonal variables and can observe clients on an extended basis.

The idea of enacting new patterns in contexts that have generally fostered problematic behaviors is a hallmark of brief therapies that derive inspiration from classical conditioning. These exposure-based methods, well exemplified in the work of Edna Foa and David Barlow, actively provoke problem patterns, such as anxiety episodes, while the client engages in cognitive and behavioral coping efforts. Through repetition, clients learn to control responses previously viewed as out of control, gaining a sense of mastery. Such exposure can be gradual, as in systematic desensitization, or it can be undertaken all at once, as in flooding methods. Many times, the exposure is first tackled through the use of vivid imagery (imaginal exposure), in which clients invoke anxiety by imagining themselves in stressful situations. Later, the work can proceed to *in vivo* exposure, as clients tackle actual situations within and between sessions.

The exposure-based therapies generally follow a sequence of steps that are common to the learning modalities. These steps include the following:

1. *Monitoring:* Clients are encouraged to become aware of situational precursors of problematic responses and internal cues that precede these responses. Many times these cues are fairly subtle, as in the case of bulimic clients who may become overly sensitive to interoceptive stimuli of bloating or fullness during menstrual cycles or following meals. The use of journals or self-rating forms can be especially helpful in these efforts, requiring clients to exercise self-awareness between sessions.

2. *Skill introduction and modeling:* Before a skill, such as a relaxation technique, is actually taught to a client, it is first introduced and explained in detail. Its rationale is described, and client questions are addressed to facilitate compliance. The skill is also modeled by the therapist for the client, with a step-by-step explanation of how it is performed. The goal is to help a client understand and feel comfortable with a skill before attempting it directly.

3. *Skill rehearsal:* Learning models emphasize the role of rehearsal in generating new and lasting behavior patterns. Rehearsal is first undertaken within the session, with copious feedback offered by the therapist. Only when the skill is mastered within the session is it assigned as between-session homework. Often such homework encourages repetition of the skill in nonthreatening situations to maximize the probability of early success.

4. *Pairing of skill enactment with problem cues:* Once a person has mastered a coping skill, therapy attempts to actively invoke cues that provoke problem patterns. These challenges are utilized as opportunities to rehearse and apply the coping skills, with the idea of extinguishing anxiety and preventing unwanted behavioral responses. By invoking stresses on a graduated basis, therapists can help to ensure client successes, building the sense of mastery. The intensity of repetition with which the pairing is undertaken is adjsuted to the client's tolerance level, with special care taken to avoid traumatizing vulnerable individuals.

5. *Generalization:* Once a person can successfully invoke coping in a former problematic situation, the situation may be rehearsed many times—in and and out of session—to promote the internalization of the skill and its application to new situations. Daily homework makes maximum use of time between sessions, allowing clients to benefit from regular experiences of self control.

The classical conditioning paradigm has been extended to the treatment of trauma by Francine Shapiro in her work on eye movement desensitization and reprocessing (EMDR). In this approach, clients are asked to relive emotionally upsetting episodes in their lives while rehearsing repetitive patterns of eye movemnt or other bodily action. Shapiro postulates that change is accelerated when clients can actively reprocess painful emotional experiences that have not been properly assimilated. EMDR appears to benefit individuals by eliciting their emotional memories in a relatively

nonemotional context. Most of the EMDR tasks are routine and even somewhat boring. By pairing traumatic memories and fears with the performance of emotionally neutral tasks, EMDR may extinguish anxiety in much the same way as exposure-based behavioral therapies, allowing clients to experience stressors in a less aroused state and build a sense of mastery.

Cognitive restructuring approaches, popularized by the work of Aaron and Judith Beck, apply principles of learning to the modification of problematic thought patterns. The key idea behind this work is that patterns of construal underlie emotional responses. If these schemas are altered, individuals can respond to situations in new, healthy ways.

Many of the schemas that individuals draw on to make sense of the world embed information processing distortions. For example, people may engage in a process of selective abstraction, focusing on the most negative aspects of a life event and generalizing these to themselves. These distortions have become overlearned to the point where they now are automatic. In essence, the client mistakes his or her faulty processing of the world for reality. The automatic thoughts thus affect both feeling and behavior, creating problem patterns as distorted as their underlying schemas.

Brief therapy with a cognitive-restructuring model tends to be somewhat longer term than the exposure-based therapies largely because of the time devoted to identifying and understanding these information processing distortions. Exposure-based work often targets a very narrow behavioral pattern for change—phobic responses being a common example—while cognitive-restructuring methods are frequently employed to deal with broader problems of depression and personality disorders. Because the underlying distortions of thinking manifest themselves in multiple arenas for clients—emotional, interpersonal, vocational, etc.—the generalization process often takes more time. As a result, cognitive restructuring therapy can be expected to last 10–20 sessions, instead of the 5–10 sessions often associated with other cognitive-behavioral work.

The first step in cognitive-restructuring work involves psychoeducation. Clients are introduced to the cognitive model, drawing on examples from everyday life and specifics from the client's past. A particular point of emphasis is the linkage between thoughts, feelings, and behaviors and the ways in which our construals of events mediate responses. Individuals are much more likely to undertake the in-session and homework demands of therapy if the rationale of the treatment makes sense.

As with the aforementioned exposure-based modalities, self-monitoring is also a key initial phase of short-term cognitive work. Clients are encouraged to think about their thinking, often by keeping a written record of emotional events in their lives and the thoughts surrounding these events. A review of these journals within the initial therapy sessions helps clients identify distortions and appreciate the emotional and behavioral consequences. Once participants become adept at identifying their distortions in the sessions, they are encouraged to use their journals to become aware of their problematic thoughts between meetings, as they are occurring. With consistent practice and feedback, clients can build their self-observation skills and increasingly catch themselves in the act of engaging in problematic interpretations of events.

The core of cognitive-restructuring work occurs when clients learn to dispute their automatic thoughts with more rational, constructive ways of construing their lives. Once again this is first modeled within sessions by the therapist, using examples elicited from clients wherever possible. It may be possible, for instance, for individuals to reflect on how other people might interpret similar situations, or they might be aware of situations in which they would make very different interpretations. It is often helpful to encourage people to identify how they would respond to a best friend or significant other who was facing a similar situation. Interestingly, given such a scenario, many clients will spontaneously generate constructive construals that completely bypass their automatic, self-relevant schemas.

When these alternative interpretations are generated, they are rehearsed in a Socratic fashion within sessions, first with the therapist challenging the client and then with clients challenging themselves. The objective is to interrupt the automatic thoughts by initiating an internal dialogue in which one distances from one's schemas and evaluates them for accuracy. It is not unusual for therapists to suggest small experiments to be conducted between sessions in which clients test their automatic thoughts as if they were hypotheses in a scientific study. Such experiments can provide a powerful firsthand confirmation that the negative schemas are not accurate depictions of the world.

The extension of written journals to embrace efforts at disputing troublesome automatic thought patterns is another common technique employed in cognitive-restructuring therapies. The process of writing down negative thoughts and generating more constructive alternatives helps clients rehearse their thinking skills in

real time under controlled conditions. At first, such written work may require considerable time and effort. With practice, however, the skills themselves become automatic, and clients find themselves naturally questioning their old thought patterns as they are occurring. This generalization is aided by targeting challenging events between sessions and rehearsing ways of using the journal to respond to the challenges.

C. Relationship Therapies

Whereas the learning-based brief therapies rely heavily on skills-teaching and homework-based rehearsal, the relationship brief therapies emphasize interpersonal experience as a change vehicle. Central to these approaches is the idea that individuals internalize their interpersonal experiences, cementing their identity in the process. When these experiences have been conflicted, the person internalizes a fragmented, negative, and/or inconsistent sense of self. This disrupts mood and action and potentially impairs future relationships. Unlike the contextual therapist, the relationship therapist emphasizes the internal experience of clients and its social origins. Unlike the learning therapist, the relationship therapist stresses the curative impact of the helping relationship, rather than didactic instruction.

The brief relationship therapies differ from their longer-term siblings—client-centered and psychoanalytic treatment—in their focus on specific relationship patterns and relative emphasis upon the present. The Interpersonal Therapy for Depression (IPT) introduced by Gerald Klerman and colleagues links the depressive syndrome to several core issues, including delayed grief reactions, interpersonal role disputes, role transitions, and interpersonal deficits. Clients are helped to appreciate the interpersonal sources of their feelings, making their depression more understandable and less threatening. Sessions then focus on addressing the interpersonal challenges, interrupting the client's negative focus on self and promoting constructive action.

The psychodynamic brief therapies make particular use of in-session events between therapist and client to facilitate change. Like their longer-term counterparts, the brief dynamic therapies emphasize that problem patterns in the client's life will be replayed within the therapeutic relationship. This transference offers an opportunity for clients to see their patterns as they are occurring, to appreciate the costs of these patterns, and to initiate efforts to engage the therapist in a more constructive mode. Once clients are able to become better observers of their patterns within the sessions and initiate efforts at change, their successes can serve as templates for shifting those patterns in other, extratherapeutic relationships.

The underlying model of problem creation and maintenance is also shared between the brief and longer-term analytic approaches. Early childhood conflicts are defended against through a variety of mechanisms. If these conflicts are repressed or otherwise left unresolved, they tend to resurface whenever the individual faces similar challenges in later life. At such times, people are apt to regress to their prior, less mature modes of coping. Whereas these defensive modes may have worked in the past, they are no longer adaptive for the current, adult context and yield new, painful consequences. For instance, a child who was abused may have warded off her anxiety by learning to dissociate. This no longer proves adaptive, however, in coping with conflict in mature working and loving relationships.

The brief and longer-term dynamic therapies differ in three crucial respects:

1. *Therapist activity:* In longer-term analysis, interpretation is a gradual process that is only undertaken after considerable work has been done to resolve resistances (defensive patterns that interfere with the therapy). The interpretive stance of the brief dynamic therapist is much more active, emphasizing present-day manifestations of patterns rather than their historical roots. Such practitioners as Lester Luborsky, Hans Strupp, and Hanna Levenson narrow their focus to specific cyclical interpersonal patterns that lead to maladaptive outcomes. Instead of waiting for clients to recognize these patterns on their own, brief dynamic therapists are much more likely to actively interpret their presence and associated consequences.
2. *Use of confrontation:* Longer-term analytic therapies emphasize interpretation as a primary intervention mode in dealing with resistances. Such brief dynamic therapists as Peter Sifneos and Habib Davanloo replace this interpretative work with a more direct confrontation of defenses, vigorously pointing out their maladaptive nature. This tends to heighten clients' anxiety level, placing them in greater touch with the thoughts, feelings, and impulses being defended. The brief analytic therapist largely abandons the analytic blank screen and instead acts as a catalyst for change by strategically heightening anxiety and bringing conflicts to life within sessions.
3. *Corrective emotional experiences:* The goal of traditional analysis is to foster insight into unconscious interpersonal conflicts and their consequences and support novel, adaptive efforts to deal with these. The

brief dynamic therapist, building on the framework first offered by Franz Alexander and Thomas French, attempts to speed this process by offering immediate relationship experiences that challenge the client's repetitive patterns. Davanloo's work, for instance, derives much of its power by goading repressed patients into expressions of anger against the therapist. By responding to this anger constructively, the therapist actively disconfirms the client's expectations of rejection and abandonment, making it easier to deal with conflict openly. This strategic use of the therapeutic relationship in brief dynamic therapy draws significant inspiration from interpersonal therapies, including the work of Sullivan. Providing powerful emotional experiences that challenge client patterns is more important than offering verbal insight into these patterns.

Although briefer than traditional psychoanalysis, many short-term dynamic therapies are longer term than other brief modalities. Indeed, it is not unusual for a brief dynamic therapy to extend for 20 sessions or longer, falling well outside the utilization guidelines and benefit limits of many managed healthcare plans. Once again, this is typically a function of the breadth of change being sought. The brief dynamic therapies generally target long-standing conflicts that have interfered significantly with emotional functioning. Because of the time required for these conflicts to play themselves out in the transference, for the therapist to earn the trust of an interpersonally troubled individual, and for adaptive efforts to take root, it is difficult to imagine brief dynamic work of only a few sessions. In summary, it appears that the term brief therapy actually masks a variety of interventions of differing scope and duration, with highly directive and focused modes at the shortest end of the continuum and more exploratory and broad treatments at the opposite end.

III. RESEARCH FINDINGS

A great deal of what we know about the effectiveness of therapy and the processes that contribute to favorable outcomes is derived from investigations of treatments that are brief. For this reason, researchers have noted that the outcome literature in therapy actually is a literature on brief therapy outcome.

Reviewers of the literature on brief therapy outcome have generally concluded that short-term treatments are effective in helping people who are suffering from situational and less severe disorders, such as anxiety and grief. There is also ample evidence that brief therapy is helpful in the treatment of trauma and stress-related disorders. More chronic disorders, such as major depressive and psychotic conditions, appear to be more refractory to brief intervention.

A number of methodological factors appear to mediate brief therapy outcomes, generating several important conclusions:

- *Outcomes are a function of the time of assessment:* As the large National Institute of Mental Health (NIMH) study of depression found, outcomes tend to be more favorable at the end of treatment than at longer-term follow-up periods. The phenomenon of relapse is especially acute for disorders with long-term, chronic courses, such as major depressive disorder, compared with more situational anxiety problems.
- *Outcomes are a function of the criterion being measured:* Change in therapy appears to not occur all at once, but in phases. Symptom relief—reduced depression, anxiety, anger—tends to precede functional improvements in work, home, and interpersonal spheres. A brief therapy is most likely to look successful if symptom relief is the criterion. More interesting, clients appear to draw on different criteria in assessing change than their therapists, stressing symptom relief measures. They thus rate brief therapy outcomes more highly than their therapists, who place greater emphasis on measures of functioning.
- *Outcomes are a function of the client population:* Research by Kenneth Howard and colleagues found that, overall, change occurs relatively quickly—within the first few sessions—for the majority of neurotic clients. Adding sessions beyond the first 10 brings sharply diminished returns. Clients with personality disorders and severe psychopathology, however, continue to benefit from sessions beyond brief parameters and display only modest change within the first 10 visits.
- *The achievement of a rapid alliance is crucial to brief therapy outcome:* Howard's work also suggests that successful clients tend to experience a rise in well-being early in treatment, as they bond with their therapists and perceive the possibility of change. The failure to reach a working alliance early in therapy is a poor prognostic indicator of brief therapeutic outcome.

An important finding of the aforementioned NIMH study is that different forms of therapy conducted within brief parameters, including cognitive and interpersonal, did not produce unique changes among clients. That is, therapies with different explanatory models and intervention techniques may produce very

similar types of outcome, as well as similar magnitudes of change. This supports the notion that common factors may be the most important effective ingredients in short-term work. Indeed, therapy may be brief to the extent that it can harness these common ingredients and apply them intentionally and systematically to targeted problem patterns.

Studies of change processes in brief therapies tend to support this common factors hypothesis. It appears that brief therapy is not so much different from time-unlimited treatment as an intensification of longer-term modalities. The brief therapist emphasizes the effective ingredients in all therapies and attempts to maximize these in a planned, deliberate manner so as to catalyze desired changes. This can be described as a several-step process, an overarching, integrative model of brief therapy that can account for the shared elements among the contextual, learning, and relationship approaches:

1. *Engagement:* The earliest phase of therapy features a vigorous encounter between therapist and client in which the dimensions of the presenting problems are explored. Very often, this features a ventilation of the emotional upset that has brought the individual for help. By listening attentively, inquiring actively, and responding sensitively, the therapist facilitates a building of rapport and trust.

2. *Pattern search:* Bernard Beitman has emphasized the importance of pattern searching in the earliest phases of treatment. Presenting problems such as depression, anxiety, and relationship conflicts frequently arise under specific conditions. By asking for many examples of presenting problems, it is possible for therapist and client to identify the similarities among these instances and the conditions that serve as contexts for the generation of distress.

3. *Translation:* Clients typically enter therapy only after they have unsuccessfully attempted other means for solving their problems. As a result, by the time they sit for their first session, they are typically somewhat frustrated and discouraged. Not infrequently, the ways in which they have defined their problems—and hence the possible solutions to these—have led them to a dead end. When a brief therapist translates presenting problems into the new terms of a pattern—helping clients see this pattern for themselves—the result is often a sense of relief and hope. If the brief therapist has been effective in building trust and rapport and successfully identified outstanding patterns, the translation can serve as a mutual focus for therapy, engaging the client's readiness for change.

4. *Discrepancy:* A key process feature across the brief therapies is the attempt to elicit problem patterns within therapy sessions. This helps to heighten emotional experiencing and more deeply process efforts at change. It also speeds the change process by allowing clients to work directly on targeted patterns. Because the brief therapist takes an active role in eliciting problem patterns, brief therapies can be anxiety provoking for clients. Indeed, the heightened anxiety may serve as a spur for change. Many of the techniques specific to the brief therapies—exposure methods in behavioral desensitization, journal keeping in cognitive restructuring approaches, confrontation in the short-term dynamic methods, directed tasks in strategic work—allow clients to experience their problem patterns in a controlled and safe context. This allows for the possibility of responding to these patterns in a discrepant and adaptive manner, generating true corrective emotional experiences.

5. *Consolidation:* Once new, constructive patterns have appeared, the task of the brief therapist is to aid in their internalization. Although initial change can bring meaningful symptom relief, clients remain at significant risk of relapse if they have not truly made a new pattern part of their cognitive, behavioral, and emotional repertoire. Accordingly, the latter phases of brief therapy feature significant efforts at rehearsal and generalization, encourging clients to extend their in-session changes to out-of-session contexts. Frequent feedback from therapists and rehearsal of anticipated future challenges facilitate generalization, as the focus comes full circle, from the identification of problem patterns to the facilitation of adaptive responses. Not infrequently, therapy moves to an intermittent basis of meeting as clients develop the capacity to sustain this consolidation on their own.

IV. SUMMARY

The term brief therapy subsumes a variety of treatment approaches derived from different models of change and spanning a range of treatment durations. Brief therapies share a number of procedural elements, including criteria for inclusion and exclusion, the maintenance of a sharp treatment focus, a high degree of therapist activity and client involvement, and concerted efforts to elicit and rework client patterns within and between sessions. Brief therapies range from very short-term strategic and solution-focused modalities to cognitive-behavioral and cognitive-restructuring models and more extended short-term dynamic approaches. All appear to be effective in helping people deal with situational problems and less severe anxiety and stress

concerns but may be limited in sustaining change among clients with chronic and severe disorders.

See Also the Following Articles

Economic and Policy Issues ■ Relapse Prevention ■ Single Session Therapy ■ Termination ■ Time-Limited Dynamic Psychotherapy

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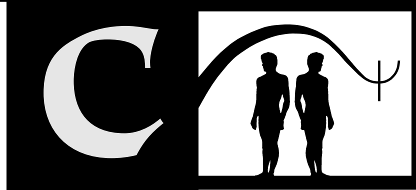

Cancer Patients: Psychotherapy

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I. Description of Treatment
II. Theoretical Bases
III. Outcome
IV. Summary
Further Reading

GLOSSARY

active coping Finding some aspect of a stressor that one can do something about and formulating a plan of action to respond to it.

affective expression The direct ventilation of emotion.

hypnosis A state of relaxed, attentive, focused concentration with a reduction in peripheral awareness.

personalization Bringing discussion of problems into the "here and now" by discussing problems as reflected by issues among group members rather than involving others outside the group.

social constraints Aspects of a social network that discourage open expression of feelings and thoughts.

As treatment for cancer has become more effective, it is better thought of as a chronic rather than a terminal illness. However, given the progressive nature of the disease, and the fact that approximately half of all people diagnosed with cancer will eventually die of it, a readjustment in the medical approach to cancer is needed. Currently, we focus almost exclusively on cure, despite the fact that cure is often impossible. We pay far less attention to "care," the process of helping ill people live with cancer as well and as long as possible. That latter perspective is the focus of this article.

I. DESCRIPTION OF TREATMENT

A. Content

1. Social Support

Psychotherapy, especially in groups, can provide a new social network with the common bond of facing similar problems. Just at a time when the illness make a person feel removed from the flow of life, when many others withdraw out of awkwardness or fear, psychotherapeutic support provides a new and important social connection. Indeed, the very thing that damages other social relationships is the ticket of admission to such groups, providing a surprising intensity of caring among members from the very beginning. Furthermore, members find that the process of giving help to others enhances their own sense of mastery of the role of cancer patient and their self-esteem, giving meaning to an otherwise meaningless tragedy.

2. Emotional Expression

The expression of emotion is important in reducing social isolation and improving coping. Yet it is often an aspect of cancer patient adjustment that is overlooked or suppressed. Emotional suppression and avoidance are associated with poorer coping. At the same time,

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there is much that can be done in both group and individual psychotherapies to facilitate the expression of emotion appropriate to the disease. Doing so seems to reduce the repressive coping strategy that reduces expression of positive as well as negative emotion. Emotional suppression also reduces intimacy in families, limiting opportunities for direct expression of affection and concern. Indeed, there is evidence that those who are able to ventilate strong feelings directly cope better with cancer.

The use of the psychotherapeutic setting to deal with painful affect also provides an organizing context for handling its intrusion. When unbidden thoughts involving fears of dying and death intrude, they can be better managed by patients who know that there is a time and a place during which such feelings will be expressed, acknowledged, and dealt with. Furthermore, disease-related dysphoria is more intense when amplified by isolation, leaving the patient to feel that he or she is deservedly alone with the sense of anxiety, loss, and fear that he or she experiences. Being in a group where many others express similar distress normalizes their reactions, making them less alien and overwhelming.

3. Detoxifying Dying: Processing Existential Concerns

Death anxiety in particular is intensified by isolation, in part because we often conceptualize death in terms of separation from loved ones. Feeling alone, especially at a time of strong emotion, makes one feel already a little bit dead, setting off a cycle of further anxiety. This can be powerfully addressed by psychotherapeutic techniques that directly address such concerns.

Exploring and processing existential concerns is a primary focus of supportive-expressive therapy. Irvin Yalom has described the ultimate existential concerns as death, freedom, isolation, and meaninglessness. Rather than avoiding painful or anxiety-provoking topics in attempts to "stay positive," this form of group therapy addresses these concerns head-on with the intent of helping group members better use the time they have left. This component of the therapy involves looking the threat of death right in the eye rather than avoiding it. The goal is to help those facing the threat of death see it from a new point of view. When worked through, life-threatening problems can come to seem real but not overwhelming. Following a diagnosis of cancer, a variety of coping strategies come into play, including positive reappraisal and cognitive avoidance. However, denial and avoidance have their costs, including an increase in anxiety and isolation. Facing even life-threatening issues directly can help patients shift from emotion-focused to problem-focused coping. The process of dying is often more threatening than death itself. Direct discussion of death anxiety can help to divide the fear of death into a series of problems: loss of control over treatment decisions, fear of separation from loved ones, anxiety about pain. Discussion of these concerns can lead to means of addressing if not completely resolving each of these issues. Thus even facing death can result in positive life changes. One woman with metastatic breast cancer described her experience in this way:

> What I found is that talking about death is like looking down into the Grand Canyon (I don't like heights). You know that if you fell down, it would be a disaster, but you feel better about yourself because you're able to look. I can't say I feel serene, but I can look at it now.

Even the process of grieving can be reassuring at the same time that it is threatening. The experience of grieving others who have died of the same condition constitutes a deeply personal experience of the depth of loss that will be experienced by others after one's own death.

4. Reorganizing Life Priorities and Living in the Present

The acceptance of the possibility of illness shortening life carries with it an opportunity for reevaluating life priorities. When cure is not possible, a realistic evaluation of the future can help those with life-threatening illness make the best use of remaining time. One of the costs of unrealistic optimism is the loss of time for accomplishing life projects, communicating openly with family and friends, and setting affairs in order. Facing the threat of death can aid in making the most of life. This can help patients take control of those aspects of their lives they can influence, while grieving and relinquishing those they cannot. Having a domain of control can be quite reassuring. Previous studies by Roxanne Silver, Phillip Zimbardo, and colleagues of the sequelae of past traumatic events indicate that long-term psychological distress is associated with a temporal orientation that is focused on the past rather than on the present or future. For cancer patients who are experiencing the traumatic stressor of anticipating their imminent death and its impact on their loved ones, adjustment may be mediated by changes from past- or future-focused orientation to a present-focused orientation that is more congruent with the reality of

their foreshortened future. In addition, progress in life goal reappraisal, reorganization of priorities, and perception of benefits of cancer may also mediate improvement in symptoms and enhance quality of life.

5. Enhancing Family Support

Psychotherapeutic interventions can also be quite helpful in improving communication, identifying needs, increasing role flexibility, and adjusting to new medical, social, vocational, and financial realities. There is evidence that an atmosphere of open and shared problem-solving in families results in reduced anxiety and depression among cancer patients. Thus facilitating the development of such open addressing of common problems is a useful therapeutic goal. The group format is especially helpful for such a task, in that problems expressing needs and wishes can be examined among group members as a model for clarifying communication in the family.

In addition to enhancing communication, group participants are encouraged to develop role flexibility, a capacity to exchange roles or develop new ones as the pressures of the illness demand. One woman, for example, who became unable to carry out her usual household chores, wrote an "owner's manual" to the care of the house so that her husband could better help her and carry on after her death. Others wrote letters to friends asking them to cook an extra bit of dinner one evening a month to share with them to relieve them of the pressure of cooking.

6. Improving Communication with Physicians

Support groups can be quite useful in facilitating better communication with physicians and other health care professionals. Groups provide mutual encouragement to get questions answered, to participate actively in treatment decisions, and to consider alternatives carefully. Research by Lesley Fallowfield has shown that cancer patients are more satisfied with the results of intervention, such as lumpectomy versus modified radical mastectomy, to the extent that they have been involved in making the decision about which type of treatment to have. Such groups must be careful not to interfere with medical treatment and decisions, but rather to encourage clarification and the development of a cooperative relationship between doctor and patient. The three crucial elements are communication, control, and caring: improving communication, enhancing patients' sense of control over treatment decisions, and finding caring physicians and other health care professionals who are interested in the patient as a person.

7. Symptom Control

Many treatment approaches involve teaching cognitive techniques to manage anxiety. These include learning to identify emotions as they develop, analyze sources of emotional response, and move from emotion-focused to problem-focused coping. These approaches help the patient take a more active stance toward the illness. Rather than feeling overwhelmed by an insoluble problem, they learn to divide problems into smaller and more manageable ones. If I don't have much time left, how do I want to spend it? What effect will further chemotherapy have on my quality of life?

Many group and individual psychotherapy programs teach specific coping skills designed to help patients reduce cancer-related symptoms such as anxiety, anticipatory nausea and vomiting, and pain. Techniques used include specific self-regulation skills such as self-hypnosis, meditation, biofeedback, and progressive muscle relaxation. Hypnosis is widely used for pain and anxiety control in cancer to attenuate the experience of pain and suffering, and to allow painful emotional material to be examined. Group sessions involving instruction in self-hypnosis provide an effective means of reducing pain and anxiety, and consolidating the major themes of discussion in the group.

B. Treatment Process (see Table I)

1. Personalization

Leaders are taught to bring group discussions "into the room" by keeping the focus on interactions occurring among group members, rather than directing discussion toward people and events outside the group. Although some discussion of family, friends, and outside events is inevitable, the processing of issues raised on the "outside" is best done on the "inside." Thus when one patient discusses how she feels that she is a burden to her husband, the discussion is better directed toward the question, "Do you feel like a burden to the group?" or "Do other group members feel you are a burden?"

2. Affective Expression

Leaders should "follow the affect" in the room rather than the content. If a silent group member shows signs of emotion, the leader should respectfully direct attention toward her: "You seem upset now—what are you feeling?" Expression of emotion produces vulnerability, and it is important to make sure that those who express feelings are heard and acknowledged.

TABLE I
Group Process Goals for Leaders

Personalization
Facilitating an examination of personal and specific cancer-related issues.
Affective expression
Facilitating the expression of here-and-now feelings
Supportive group interaction
Facilitating supportive interactions among group members
Sharing group time and access to group attention
Avoiding scapegoating
Maintaining boundaries
Active coping
Facilitating the use of active coping strategies

3. Supportive Group Interactions

The leader is responsible for starting and ending the group on time, and seeing that there are few interruptions of the group time. Each member should be made to feel that her problems are as important as anyone else's. It is necessary to inquire about missing members, and to make sure that very silent members have a chance to talk. Also, avoiding scapegoating—the group's "fixing" one patient as a displacement of dealing with their own problems—is critical. Leaders must remember that their "patient" is the group, not just a series of individuals.

4. Active Coping

As problems are discussed, it is helpful for the leader to direct the group toward means of responding to them, rather than merely accumulating a series of unresolved difficulties, or avoiding discussing them. Finding a means of addressing problems reduces the helplessness engendered by them.

II. THEORETICAL BASES

No one is well prepared by life to deal with a life-threatening diagnosis and the rigors of treatment, and yet medical treatment has focused almost exclusively on the necessary problems of undergoing diagnostic tests, surgery, radiotherapy, chemotherapy, hormonal treatments, and other biomedical interventions. Far less attention has been paid to educating patients about their illness and its effects on their lives, processing emotions inextricably intertwined with the disease, and enhancing social support, which is often damaged by the presence of the disease.

There is strong evidence that social contact has not only positive emotional effects, but that it reduces overall mortality risk as well as that from cancer. In a major review James House showed that social isolation is as strongly related to age-adjusted mortality as serum cholesterol levels or smoking. Indeed, being married predicts better medical outcome with cancer, while social stress such as divorce, loss of a job, or bereavement is associated in some studies with a greater likelihood of a relapse of cancer. Thus, constructing new social networks for cancer patients via support groups and other means is doubly important: It comes at a time in life when natural social support may erode, and when more is needed.

A. Social Constraints

The social-cognitive processing model of adjustment to trauma developed by Stephen Lepore contends that it is not merely the act of thinking about trauma-related information that facilitates processing, but it is disclosure and active contemplation of meanings, feelings, and thoughts with supportive others that is pivotal. A social environment that inhibits such disclosure may cause patients to avoid thinking and talking about the stressful experience and interfere with cognitive processing, resulting in prolonged distress and a failure to come to terms with the cognitive and emotional information in question. These social constraints cause cancer patients to feel unsupported, misunderstood, or otherwise alienated from their social network and have been associated with greater cancer-related intrusive ideation and avoidance. A similar construct, aversive emotional support put forward by Lisa Butler, has been found to amplify the impact of past stressful life events on current traumatic stress symptoms in cancer patients. Treatment-related changes in patients' perception or elicitation of social constraints should therefore result in greater processing of the cancer experience.

Living with the traumatic stressor of cancer creates an unending series of existential challenges. The threat to life is continuous, and reminders are constant, through symptoms such as pain, treatments and their side effects, loss of social roles, and the response of others to the condition. Thus the successful treatment of symptoms and the enhancement of quality of life for cancer patients requires interventions that focus on emotional and cognitive processing of the cancer experience and addresses the themes and issues that are specific to living with cancer. Successful treatment of cancer-related symptoms and improvements in quality

of life are mediated by engagement of cancer-related fears and other aversive emotions, increases in patient emotional self-efficacy for coping with the challenges of living with the illness, the degree of processing of existential cancer-related concerns and stressful cancer-related events, reduced social constraints that inhibit processing, the degree to which patients can reorganize their life priorities and live more fully in the present, and utilization of techniques such as self-hypnosis for pain and anxiety control.

Many of the psychotherapies that have shown promise in improving emotional adjustment and influencing survival time involve encouraging open expression of emotion and assertiveness in assuming control over the course of treatment, life decisions, and relationships.

III. OUTCOME

Psychotherapeutic treatments for cancer patients, both group and individual, have been shown to have a variety of positive effects, ranging from reduction in anxiety and depression to several recent studies suggesting increases in survival time.

A. Beneficial Effects of Group Interventions on Psychiatric Symptoms and Mood

Group interventions are of proven benefit in improving quality of life for cancer patients. For example, research on university- and hospital-based group interventions by Catherine Classen, David Spiegel, Fawzy Fawzy, and others has shown that they reduce traumatic stress symptoms and other psychological distress, improve coping skills, enhance disease knowledge, improve quality of life, and reduce pain.

B. Effects of Social Support Interventions on Health Status

Recently, a provocative literature has emerged indicating that group psychotherapy may affect the quantity as well as the quality of life. Our research group found that the metastatic breast cancer patients in our original randomized trial who had undergone supportive/expressive group therapy lived, on average, 18 months longer than did the randomly assigned control sample. By 48 months after the study had begun, all of the control patients had died, but a third of the treatment sample were still alive. There is now a larger and divided literature on this survival effect. Four other studies have shown an effect of psychotherapy on cancer survival time of cancer patients: two involving lymphoma, one with melanoma, and one with gastrointestinal cancers. All of the psychosocial interventions were effective in reducing distress. Some involved supportive-expressive interventions, while others emphasized more cognitive-behavioral approaches and training in active coping. However, five others studies show no effect of psychotherapy on survival time. All but one involve breast cancer patients; the other lung and gastrointestinal cancers. Only two of these five studies were able to demonstrate psychological effectiveness in reducing distress. One study conducted by Pamela Goodwin was a major multicenter trial using the supportive-expressive model. This program was quite effective in reducing distress, but there was no treatment effect on survival time. Clearly further evidence is needed to resolve the provocative question of whether or not group psychotherapy affects cancer survival time. The mechanisms underlying such an effect may involve influence on daily activities such as diet, exercise, and sleep, or on adherence to medical treatment, or may involve changes in endocrine and immune function as well. Thus there is growing evidence that psychotherapy for the medically ill is a powerful and important treatment, with marked psychological and possible physical effects. The medicine of the future would do well to take these psychosocial effects into account. When we rediscover the role of care as well as cure in medicine, we will help patients and their families better cope with disease, and may also better mobilize the mind and body's resources to fight illness.

IV. SUMMARY

Group therapy for cancer patients involves attention to enhancing social support; encouraging emotional expression and processing; confronting existential concerns; improving relationships with family, friends, and physicians; and enhancing coping skills. These include taking a more active stance toward disease-related problems, and learning techniques such as self-hypnosis for pain control. Group leaders emphasize the here-and-now, personalizing discussion by making the group interaction itself the focus of discussion. Thus group relationships, feelings, and coping experience intensify learning and solidarity. Such group therapy approaches have been shown to reduce distress, enhance

coping, and ameliorate symptoms. There is some evidence that they may even enhance the quantity as well as the quality of life.

See Also the Following Articles

Collaborative Care ■ Comorbidity ■ Informed Consent ■ Integrative Approaches to Psychotherapy ■ Medically Ill Patients: Psychotherapy ■ Neurobiology ■ Self-Help Groups

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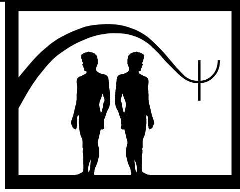

Chaining

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I. Description of Treatment
II. Theoretical Bases
III. Procedures for Establishing Chains
IV. Empirical Studies
V. Summary
Further Reading

GLOSSARY

conditioned reinforcer A previously neutral stimulus that acquires its reinforcing properties through its pairing with an unconditioned reinforcer or another conditioned reinforcer.

discriminative stimulus Stimulus in the presence of which a response is reliably reinforced.

fading The systematic removal of prompts or other supplementary discriminative stimuli so as to facilitate independent responding.

prompt A supplemental discriminative stimulus that is presented to facilitate the emission of a correct response, but is gradually removed so as to encourage independent responding.

reinforcement A contingent relationship between a behavior and a behavioral consequence, in which that consequence causes the behavior to increase in frequency.

stimulus generalization The spread of the effects of reinforcement to stimuli not correlated with reinforcement, but that are similar along some dimension to a stimulus or stimuli that are correlated with reinforcement.

task analysis Breaking a complex task or skill down into its correct sequence of components.

I. DESCRIPTION OF TREATMENT

Chaining is an instructional procedure used to teach complex skills or tasks that are made up of several individual discrete components, which must occur in a specific sequence in order for the skill to be correctly performed. Such a sequence of responses is defined as a chain. Many daily living skills can be conceptualized as chains of responses. Preparing a bath, for example, is a task that requires the emission of several responses in a specific sequence in order to be performed correctly. In order to identify the individual responses comprising a chain, a task analysis must be conducted, in which the skill or task is broken down into a detailed listing of its component subtasks or subskills. For preparing a bath, a task analysis may include securing the plug in the drain, turning on the faucet, testing the water temperature, adjusting the water temperature, and stepping into the tub. When performed correctly, there is no break from the completion of one response of the chain to the next, and the final reinforcer of a warm bath becomes available only after the completion of the entire chain. Cooking a meal, getting dressed, and setting a place-setting are similar examples of chains.

In order to establish new behaviors via chaining, several variables will enhance the likelihood that a procedure is successful. First, it is imperative that an accurate task analysis be completed before instruction begins. Each response in the chain must not only be identified, but the correct order in which each response

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occurs must also be specified. Observing the demonstration of a skill by a person who has mastered that skill will help ensure the accuracy of a task analysis. Second, only complex skills that include responses that are already in the individual's repertoire should be taught; this will be much easier than attempting to establish a complex skill that includes responses that are difficult for the individual to perform. Third, over the course of instruction, it may be necessary to prompt the individual to respond correctly. Prompts can be modeled, verbal, gestural, or physical, and will facilitate acquisition by ensuring that the individual is successful. Prompts will be particularly beneficial in helping the individual transition between each response of the chain. However, because the ultimate goal of chaining is for the individual to perform the task independently, it is important that the degree of assistance with which an individual is provided is gradually faded or reduced over the course of teaching. Fourth, reinforcing or providing verbal feedback for the correct emission of each response in the chain will also facilitate acquisition. But because outside of the context of instruction reinforcement is not made available until the entire chain has been completed, it will be necessary to gradually fade or reduce feedback that is provided during the chain.

II. THEORETICAL BASES

Chains that an individual has mastered are performed fluently; each individual response is performed with ease and the individual demonstrates a smooth transition from one response to the next. Because reinforcement does not occur until the end of the chain, it may be difficult to understand how responding during the chain, particularly one that is made up of many individual responses, can be maintained. Delayed reinforcement is seldom as effective as reinforcement that is delivered immediately following a response. We can understand how delayed reinforcement maintains responding during the chain if we acknowledge that with the emission of each response of the chain, new stimuli are introduced into the environment that may come to have both discriminative and conditioned reinforcing properties. For example, turning on the faucet introduces a new stimulus into the environment, the sight of running water. This stimulus may now occasion the next response of the chain, the response of testing the temperature of the water. This response also introduces a new stimulus into the environment, the feeling of water of a certain temperature on the finger. This stimulus may now occasion the next response of the chain, the response of adjusting the temperature of the water, and so forth. Thus, response-produced stimuli may be established as discriminative for the next responses in the sequence of responses making up a chain. In addition, because those stimuli are temporally paired with the delayed reinforcer that becomes available at the end of the chain, they may be established as conditioned reinforcers, which maintain the responses that produce them. For example, the sight of running water may come to reinforce the response of turning on the water, and the feel of water on the finger may come to reinforce the response of touching the running water to test its temperature. It seems, then, that chains need not only be regarded as complex tasks made up of a series of individual responses, but as sequences of response-produced discriminative stimuli and conditioned reinforcers. Very lengthy chains can thus be easily executed and maintained by the stimuli that are produced as the chain is completed, despite the fact that the final reinforcer is delayed.

III. PROCEDURES FOR ESTABLISHING CHAINS

Chains that are frequently performed or for which individuals have had a great deal of practice are often performed with ease. Although persons with developmental disabilities may prove capable of demonstrating the individual components of a skill or task, they may experience considerable difficulty executing the entire sequence of responses consistently and accurately. Special instructional methods must be employed in order to ensure an individual's acquisition of a response chain, as well as his or her completion of a chain in the absence of adult instruction or intervention. There are three methods that are typically used to establish new behaviors via chaining. These include forward chaining, backward chaining, and total task presentation (also sometimes referred to as whole, concurrent, and simultaneous task presentation).

A. Forward Chaining

The first procedure for establishing new behaviors by chaining is forward chaining. In this procedure, the first response of the sequence is taught to an individual. When he or she has mastered that first response, the first and second responses of the chain are linked together,

and are then taught until the link has been mastered. Next, the first three responses of the chain are linked together, and are then taught until that link has been mastered, and so forth, until the individual eventually masters the entire chain. Thus, forward chaining is used to teach chains by constructing longer and longer links and adding one response at a time, starting at the beginning of the chain and working forward. The individual's success determines when each next response is added to the most recently taught link. An advantage of forward chaining is that it is conducted according to the natural order in which the individual responses comprising skills or tasks occur in everyday situations.

B. Backward Chaining

A second procedure for establishing behavior by chaining is backward chaining. As the name suggests, in this case the chain is constructed by teaching response links in the opposite order from which the skill will eventually be performed. In other words, the last response to be emitted before the chain is completed is taught first, then the second-to-the-last response and the last response are linked together and taught next. The third-from-the-last response is then linked to the second-to-the-last and the last responses, and that link is taught next, and so on, until the first response of the chain has been linked. Thus, like forward chaining, new behaviors are established by constructing longer and longer links and adding one response at a time, contingent on the individual's success. In this case, however, instruction starts at the end and proceeds backward through the chain. Backward chaining may seem to be counterintuitive, for in no situation would we wish for an individual to actually perform a skill backward. However, backward chaining is a very effective procedure for establishing new behaviors in the repertoires of persons with developmental disabilities. By beginning at the end of the chain, the stimuli that are produced by each response of the chain are more proximal with reinforcement than is the case for the stimuli that are produced by responses at the beginning of the chain. For a neutral stimulus to be established as a conditioned reinforcer, it must be highly correlated, or closely paired temporally, with another conditioned reinforcer or an unconditioned reinforcer. When a new behavior is taught via backward chaining, the discriminative stimuli that are produced by responses near the end of the chain are thus established as highly effective conditioned reinforcers, which maintain the responses emitted earlier in the chain as instruction proceeds backward. Likewise, as training continues, the discriminative stimuli produced by each preceding response in the chain is then temporally paired with already established conditioned reinforcers, thus establishing new conditioned reinforcers that maintain the beginning responses of the chain. Hence, backward chaining may be desirable when one wishes to establish lengthy response chains, and for individuals who have trouble tolerating delay-to-reinforcement intervals.

C. Total Task Presentation

The third procedure for establishing a new behavior by chaining is total task (also known as concurrent, simultaneous, or whole task) presentation. This procedure requires that the individual attempt to correctly emit all of the responses from the beginning to the end of the chain on one training trial, and the trial is not considered complete until the individual has worked through the entire chain. In other words, unlike forward and backward chaining in which single response units are gradually linked together until the entire chain is mastered, total task presentation requires that the individual attempt the entire chain from its onset. As was the case with forward chaining, an advantage of using total task presentation is that the skill is taught in the natural sequence in which it occurs outside of the context of instruction. For very lengthy chains, however, it may prove challenging for an individual with a developmental disability to work through the entire chain on one trial.

IV. EMPIRICAL STUDIES

A. Forward Chaining

In 1987, John LaCampagne and Ennio Cipani used forward chaining to teach four adults with developmental disabilities the complex task of paying bills. Specifically, check-writing was defined as the occurrence of a sequence of six discrete responses: (1) Payee recorded on check, (2) date entered on check, (3) amount of payment entered in numerical form, (4) amount of payment entered in written form, (5) check signed, and (6) account number from bill entered on check. The first response of this chain was taught until the individual demonstrated the response correctly and independently five to eight times consecutively, after which the second response was added. The first two responses were then taught until the individual demonstrated this

link correctly and independently on five to eight consecutive trials, and so forth. Verbal instructions, modeling, and rehearsal were used to prompt correct responses as the links of the chain were mastered, and verbal feedback was provided for correct and incorrect completion of each response link. Prompts were gradually faded until the particular links of the chain could be successfully performed independently, and feedback was gradually faded until it was eventually only presented following the correct execution of the entire chain. This procedure was effective in establishing check-writing skills for all four participants; moreover, these skills were maintained over a 2-month period during which instruction was not provided. The established chain of responses was also shown to generalize to bills that were unfamiliar to the individuals or had not been used during the original training.

B. Backward Chaining

In 1996, Louis Hagopian, Debra Farrell, and Adrianna Amari used backward chaining as a treatment for liquid refusal that was demonstrated by a developmentally disabled child with severe gastrointestinal problems. The authors hoped to teach the individual to independently drink water from a cup, using a preferred activity as a reinforcer. The task analysis consisted of the following: (1) Bringing a cup of water to the mouth, (2) accepting water into the mouth, and (3) swallowing the water. On each trial that the child responding correctly, he was reinforced with the opportunity to cut paper with scissors for 90 seconds. Each teaching session consisted of five trials, and the child was required to perform with 100% accuracy on two consecutive sessions before a new response was added to the link. First, reinforcement was delivered contingent on the child's swallowing, in the absence of water in the mouth, after being prompted. When the child demonstrated this response to criterion, reinforcement was provided contingent on swallowing after a syringe of water was depressed into his mouth. When this response link was demonstrated to criterion, reinforcement was then delivered contingent on accepting and swallowing water placed into his mouth from the syringe. When this response link was demonstrated to criterion, the amount of water that the child was required to accept and swallow from the syringe was gradually increased. Next, reinforcement was provided contingent on the child's bringing a cup of water to his mouth, accepting it, and swallowing the water. This chaining procedure was thus successful in establishing water consumption, and the child's drinking of water was shown to generalize to settings different from that in which the original training had been conducted.

C. Total Task Presentation

In 1988, John McDonnell and Susan McFarland used total task presentation to establish laundromat skills in the repertoires of four high school students with severe developmental disabilities. The task analysis for the operation of the washing machine consisted of the following six steps: (1) locating an empty washing machine, (2) adding soap, (3) loading the clothes, (4) setting the wash cycle, (5) inserting the four quarters into the coin slide, and (6) activating the machine. The students were required to complete all of the responses in the chain in order on a given trial, and were provided with verbal feedback for the correct, independent emission of each of the six individual responses. Students received three training trials on the entire chain during a given session. A response was considered correct if the student completed the response accurately and independently. A response was considered incorrect if the student did not initiate the response within 5 seconds from the time the last response was completed, performed the response incorrectly, or was physically or verbally prompted to complete the response. Probe trials were inserted into the sessions of training trials, in which the students' ability to complete the entire task without assistance or feedback from teachers was assessed. The procedure was successful in establishing laundromat skills for all four participants.

D. Effectiveness of Each Procedure

It may not always be easy to discern under what conditions each of the three chaining procedures may be the most effective. The nature of the task at hand, the individual, and the amount of instruction time available are all variables that must be taken into consideration when deciding which procedure to use. As mentioned previously, an advantage of forward chaining and total task presentation is that the instruction occurs in the natural sequence in which the skill will be performed in everyday situations. However, some individuals may have difficulties tolerating the delay interval before which the reinforcer at the end of the chain is made available. This may be particularly problematic when establishing very lengthy chains, and when using total task presentation. When establishing a new behavior that consists of a number of individual responses via total task presentation, it may be wise to divide the chain into smaller segments, and teach one smaller segment at a time.

The challenges posed by the length of the delay-to-reinforcement interval in forward chaining and total task presentation make backward chaining seem like a desirable option to use in teaching persons with developmental disabilities. As was stated previously, the response-produced stimuli may serve as more effective conditioned reinforcers with this approach. In 1981, Thomas Zane, Richard Walls, and John Thvedt compared the amount of instruction time that was required to teach adults with developmental disabilities to assemble nine-part assemblies, using both backward chaining and total task presentation. Interestingly, total task presentation resulted in substantially less instruction time than did backward chaining. Similarly, in 1984 Fred Spooner demonstrated a higher acquisition rate for vocational tasks established via total task presentation than for backward chaining for persons with developmental disabilities. However, in 1989, John McDonnell and Brent Laughlin discovered no differences in the acquisition and maintenance of skills established by total task presentation or backward chaining. Moreover, in 1981 Richard Walls, Thomas Zane, and William Ellis showed that forward and backward chaining resulted in substantially fewer errors than did total task presentation when teaching vocational assembly tasks to persons with developmental disabilities. Thus, there is no unequivocal answer as to which is the best chaining procedure to use; the decision must depend on the specifics of the situation at hand. An appropriate resolution would be to base one's decision on data, and attempt all three procedures and select that which suggests the most success.

V. SUMMARY

Chaining is a procedure used to establish complex skills that are made up of several responses, which must be performed in a particular sequence for the skill to be executed correctly. Reinforcement does not become available until the end of the chain. The responses constituting a chain may be maintained by response-produced stimuli, which function as conditioned reinforcers. Such stimuli may also have discriminative properties. Forward chaining, backward chaining, and total task presentation are all procedures for establishing new behaviors by chaining. There are different advantages associated with each of the three types of chaining, and research has provided different answers. Which procedure to use depends on the particular situation. Chaining will be most effective if a thorough and accurate task analysis of the skill is completed, if the chain includes responses already in the individual's repertoire, and if prompts and reinforcers are provided for individual responses within the chain, but are gradually faded.

See Also the Following Articles

Backward Chaining ■ Competing Response Training ■ Fading ■ Forward Chaining ■ Habit Reversal ■ Home-Based Reinforcement ■ Omission Training

Further Reading

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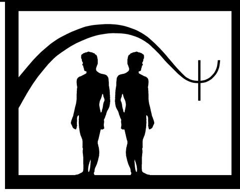

Character Pathology

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I. Introduction to the Concept of Character
II. General Issues in the Treatment of Character Pathology
III. Psychodynamic Psychotherapy and Psychoanalysis
IV. Cognitive-Behavioral Therapies
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GLOSSARY

conflict (intrapsychic) When requirements or elements are opposed to each other within a person's mind, such as a wish being judged internally as wrong or unacceptable, or two contradictory emotions.

countertransference Defined most broadly, the therapist's internal reactions—thoughts and feelings—both conscious and unconscious, to the individual patient.

defense mechanisms Mental operations unconsciously directed toward internal states of mind that a person desires to keep out of awareness because of threatened distress. For example, if someone is very angry with another but unintentionally behaves in an overly friendly or solicitous manner because experiencing the anger would be too threatening, it might be said that the defense mechanism of reaction formation is being used.

drives Internal pressure arising from innate patterns of experience such as aggression or sexual attraction.

major depression A sustained period of at least 2 weeks during which a person has a substantial lowering of mood or loss of interest or pleasure in normal activities, accompanied by changes in appetite or weight, sleep disturbances, difficulty with mental tasks, feelings of worthlessness or guilt, or possible thoughts or plans of suicide.

psychosocial functioning Ability to perform in psychological, social, and occupational realms.

psychotic Psychosis is characterized by significant disruptions in thought patterns due to intrusions by hallucinations, delusions, or gross disorganization of speech or behavior.

transference Childhood prototypes for interacting with significant others are unconsciously applied to figures in one's adult life; that is, old wishes, expectations, and conflicts may unwittingly shape current relationships.

I. INTRODUCTION TO THE CONCEPT OF CHARACTER

The construct of character is a complex one, with a long and illustrious history. Robert Liebert has aptly articulated the conundrum we face when considering the meaning and significance of character:

> It has become customary that any paper on character begin by emphasizing the confused conceptual status of the term—a term that comes down to us from ancient Greece. Its etymological roots, significantly, refer to that which is carved or engraved. Character has been a subject of concern for Aristotle, the Stoics, and every theologian, dramatist, gossip, Boy Scout leader, and psychoanalyst ever since. Our exploration of character is further complicated by the fact that the term has technical meaning in our discipline and also has varied connotations that are established in common parlance.

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We must, then, at the outset define what we mean when we talk about character—a person's typical ways of perceiving and thinking, forms of emotional experience, and behavioral and activity patterns—what we generally think of as personality. Although specific proclivities may wax and wane, most individuals are recognized by others as having a style of approaching the world, even if that might be predictably unpredictable. For instance, we might use more commonplace terms such as easygoing, odd, or high-strung to describe various types of people. However, because we are considering character within the context of treatment, our discussion is focused more on trait clusters, enduring conflicts, and pervasive coping deficits that cause significant impairment and distress. The general term we use is character pathology, but specific "personality disorders" are mentioned, as well. Finally, it is important to note that the phenomena described exist on a continuum, with most of the pathological traits representing exaggerated versions of traits seen in normal personality.

Nearly four decades ago, David Shapiro proposed a collection of "neurotic styles" to capture a range of character pathology: obsessive–compulsive, paranoid, hysterical, and impulsive. The obsessive–compulsive character is associated with more stable interpersonal relationships than some other styles, but typical defenses are centered on the repression of instinctual sexual and aggressive drives, with patterns of highly regulated gratification and ongoing denial of interpersonal and intrapsychic conflicts. Self-willed and obstinate, with a constant eye toward rules and regulations, and a never-ending list of "shoulds," people with obsessive–compulsive attributes guard against any meaningful consideration of their impulses toward others. Maintaining control over internal experience and the external world is a top priority, so rigidity is often a hallmark of this character type. Except in its most severe manifestations, obsessive–compulsive character pathology is less impairing than some of the others and more readily ameliorated by treatment.

First written about at length by Sigmund Freud, the hysterical style conjures up images of dramatic scenes staged by people who are impressionable and highly distractible. When asked to describe themselves, others, or daily situations, people with this style will produce global and diffuse portraits. Because of associated inhibition in cognitive functioning and memory due to internal conflict, individuals with the so-called hysterical character may appear to be deficient in intellectual knowledge and shallow in emotional experience. It has been traditionally more associated with women.

Considered to be more severely pathological than the others discussed, the paranoid style is associated with pervasive suspiciousness. Others' motivations are constantly called into question, with diligent surveillance for evidence to confirm these assumptions, making the individual guarded and tense. Although this type of personality must be distinguished from schizophrenia and other primarily psychotic disorders, the paranoid dynamic may, at times, become severe enough to cause lapses in the ability to grasp reality. The potential for difficulty in treating people with such traits should be readily apparent.

The impulsive label relates to a group of styles sharing the common characteristics of lack of control and impairment in deliberateness, leading the individual to act on a whim, being unable to delay gratification or tolerate frustration. There is a disjunction between taking action and any understanding of the motivation behind it. Shapiro attributed impulsive character pathology to a diverse range of problems and behaviors ranging from those of psychopaths, to alcoholics and drug addicts, to people with narcissistic issues.

Narcissistic character traits have received considerable attention in the clinical literature. Andrew Druck has described individuals for whom there is a fundamental deficit in the ability to regulate self-esteem without resorting to omnipotent strategies of overcompensation or overreliance on admiration by others. Some people who are narcissistically vulnerable have difficulty in maintaining a cohesive sense of self because of ubiquitous shame, resulting from a notion that they fundamentally fall short of some internal ideal. They look for constant reinforcement from others to bolster their fragile self-images. On the other side of the narcissistic "coin" are people who are intensely grandiose, seeking to maintain self-esteem through omnipotent fantasies and defeating others. They defend against needing others by maintaining fusions of ideal self, ideal other, and actual self-images. Thus, there is an illusion maintained whereby this type of narcissistic person has a sense that, because he or she is perfect, love and admiration will be received from other "ideal people," and so there is no need to associate with inferiors. This character type has been called the malignant narcissist by Otto Kernberg and is one of the most daunting treatment challenges because the patient's psyche is both disorganized and potentially disorganizing to the analyst.

Kernberg has also written extensively on the borderline character, which is characterized by instability in the areas of mood, interpersonal relationships, self-image,

and impulse control. John Gunderson and Mary Zanarini have done extensive work with such patients and have identified central characteristics of what has come to be specifically called "borderline personality disorder": quasi-psychotic thought, self-mutilation, suicide gestures and attempts, abandonment and engulfment fears, a sense of entitlement, and unstable identity. Patients with more severe forms of this disorder may be frequently hospitalized because of life-threatening behaviors. Kernberg's concept of borderline personality organization emphasizes a fragile and shifting sense of self, use of primitive defense mechanisms, and temporary lapses in awareness of reality. This is a broader formulation than that of borderline personality disorder and subsumes other personality traits such as narcissistic, antisocial, and schizoid.

The antisocial personality is associated with ongoing violation of society's norms, manifested in such behaviors as theft, intimidation, and violence to people and animals, or making a living in an illegal fashion such as by fraud, selling drugs, or stealing, for example. Clearly, this style would be found extensively within the prison system. Michael Stone has suggested that there are gradations of the antisocial style, with the milder forms being more amenable to treatment. However, within the broader label of antisocial is a subset of individuals who are considered to be psychopathic. These people, sadistic and manipulative, are pathological liars, show no empathy or compassion, no remorse for hurting others, and take no responsibility for their actions. The most extreme form is manifest by individuals who torture or murder their victims. This represents the extreme end of the spectrum of antisocial behavior and would be the most difficult to treat.

One system for more specifically describing different character pathology is the *Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition* (DSM-IV). Specific diagnostic criteria have been established for ten personality disorders, characterized within three broader clusters. The Cluster A disorders are associated with odd or eccentric presentations and include schizoid, paranoid, and schizotypal disorders. Cluster B disorders are of an erratic or dramatic nature and include borderline, antisocial, narcissistic, and histrionic disorders. The Cluster C group, characterized as anxious or fearful, includes obsessive–compulsive, avoidant, and dependent personality disorders. This is a categorical approach to the classification of character pathology, and it has been widely noted that many people meet criteria for several of these personality disorders, either within the same cluster or across clusters.

II. GENERAL ISSUES IN THE TREATMENT OF CHARACTER PATHOLOGY

Regardless of the system used to describe the phenomenology of character pathology or personality disorder, it is clear that these are long-standing, problematic and rigidly held patterns of organization. As such, patients with character pathology are likely to present for treatment with impaired coping strategies, troubled or nonexistent relationships, and related difficulties, such as anxiety, substance abuse, and depression. Thus, transcending diagnosis and treatment approach, the fundamental goal is to assist patients with character pathology to develop more flexible thought and behavior patterns to replace their maladaptive ways.

To accomplish this broad goal, the clinician must be able to engage the patient in a constructive therapeutic endeavor. Although establishing an alliance is important in all types of treatments for patients with all types of presenting problems, it is of fundamental importance in working with individuals with character issues. Forming an alliance is often extremely difficult, particularly in work with patients with severely narcissistic, borderline, or paranoid proclivities, as troubled interpersonal attitudes and behaviors will also infuse the patient's engagement with the therapist. Narcissistic patients may not be able to allow the therapist to be a separate, thinking person for quite a long time, whereas someone with borderline issues may exhibit wildly fluctuating emotions, attitudes, and behaviors, thwarting the potential helpfulness of the treater.

Countertransference on the part of the therapist must be monitored closely, as interactions with difficult patients may often be provocative, inducing reactions that must be carefully managed. Treatment approach and technique must also be flexible, so that interventions can be made appropriate to the individual patient's style. One-size-fits-all treatment is inappropriate and ill advised. Otherwise, the alliance may be jeopardized, the patient will not benefit or may leave treatment altogether. Furthermore, it can be expected that noticeable improvements in symptoms and functioning will likely require a significantly longer period of treatment when compared to patients with no character pathology.

III. PSYCHODYNAMIC PSYCHOTHERAPY AND PSYCHOANALYSIS

A. Description

The practice of psychodynamic psychotherapy and psychoanalysis is based on a collection of perspectives that have evolved since Freud's original work began over a century ago, and the basic concepts and techniques are explicated elsewhere in this volume. However, it is important in setting a context for the discussion of the treatment of character pathology to reiterate that the psychodynamic/psychoanalytic approach, most generally speaking, utilizes the relationship between patient and therapist as a primary vehicle for change and focuses on enduring patterns of thoughts, emotions, and behaviors that may or may not be in conscious awareness. Psychodynamic psychotherapy is informed by psychoanalytic theory, and psychoanalysis is considered to be a more intensive form of treatment compared to psychotherapy, because it most often entails four or more sessions per week.

The therapist's stance toward the patient and the kinds of interventions chosen should be based on the particular types of character issues most salient for the individual patient, and the approach may vary according to the patient's needs in any given session or during different phases of the treatment. Glen Gabbard has stressed the importance of understanding that there is usually a mixture of expressive and supportive elements in every analysis or psychodynamic psychotherapy. That is, the expressive, insight-oriented mode of assisting patients in uncovering unconscious conflicts, thoughts, or affects through interpretation or confrontation may be appropriate at times, while a more supportive approach of bolstering the patient's defenses and coping abilities is preferable in other circumstances.

For instance, the severely narcissistically impaired patient may not be able to tolerate the analyst's interpretations of his or her unconscious motivations for quite a long time, so that supportive, empathic communications may be more effective interventions in building an alliance by helping the patient feel heard and understood. Similarly, it may be difficult to focus on more insight-oriented interventions with a patient with borderline impairments until that patient is assisted in achieving a safe, more stable working relationship in treatment. Conversely, a patient who is characterized by obsessional difficulties may benefit earlier in treatment by interpretations of the repressed conflicts that may underlie the symptoms.

B. Theoretical Bases

Therapeutic work is also guided by the clinician's utilization of various theoretical models about the nature of the etiology of character pathology. Although psychoanalytic theories abound about the nature of psychopathology and its treatment, we focus on several main schools of thought that relate directly to character: object-relations theory, self psychology, and ego psychology.

1. Object Relations

The object-relations (the term "object" refers to person) perspective views the individual's earliest relationships with primary caregiving figures as focal points for understanding the salient features of how he or she relates to others as an adult. Explaining this phenomenon from the perspective of internalized object relations, Fred Pine described the psychology of the individual as "coming about through the laying down as memories and fantasies of early interactions (or imagined interactions) between the person and significant caretakers, so that behavioral expectancies, longings for particular gratifications, knowings of behaviors that will produce expectable responses are recorded and can be repeated." Clearly, central to this way of thinking is that all people construct mental representations of self in relation to others that become influential entities in both the conscious and unconscious mind.

Character pathology, within this framework, may result from disruptions at various points of development causing the child to internalize relationships as "bad," leading to maladaptive psychic constructions. The more primitive the level at which the early representations remain, the more distorted later representations are likely to be. Object-relations theory posits a model of treatment, then, that is based on modifying pathological images of self and others.

2. Self Psychology

Originally formulated by Heinz Kohut, and elaborated on by others, the self psychology paradigm focuses on the role of external relationships in the shaping and maintenance of self-concept and self-esteem. Kohut developed this approach while treating severely narcissistically disturbed patients who appeared to require certain kinds of responses from others in order to be able to function. Although everyone has the need throughout life for a certain amount of affirmation from others, people with narcissistic problems require excessive ongoing validation and confirmation to maintain any equilibrium. Kohut suggested that there may not have been appropriate "mirroring" of self by

caretakers who could not empathize with the child's experience when exhibitionistic behavior was a phase-appropriate part of development, consequently impeding the child's formation of a stable identity. As a result, an adult person with narcissistic difficulty cannot internally regulate his or her sense of self and so may feel required to be perfect, or to perform for others to gain adequate attention, constructing a grandiose self. Others do not exist as separate individuals, but merely as objects for gratifying needs.

This dynamic for need gratification might be manifest in treatment in the form of a "mirroring transference," whereby the patient is compelled to act in various ways to try to gain the therapist's admiration and approval. At the same time, Kohut also described an "idealizing transference" in which the therapist is seen as the powerful and perfect figure who can protect and heal, and the patient's status is boosted merely by association. The self psychology approach has been influential in informing therapists about the nature of narcissistic issues, and the important role of empathy in helping patients with character pathology to develop more cohesive and stable self-identities.

3. Ego Psychology

Freud, in *The Ego and the Id,* proposed the structural model of the mind with its three components: the id, ego, and superego. In his earlier work, he described a conscious aspect of the mind, responsive both to external stimuli as well as to intrapsychic events relating both to the natural impulses and wishes residing with the id, and to the directives and prohibitions issued by the superego, the residence of societal and parental values. This mediator between internal and external was designated as the ego, and from here ego psychology arose. The concept has been studied and greatly elaborated on as psychoanalytic thinkers realized the complexity of the ego's functions.

As the discussion continued, two branches of ego psychology and structural theory eventually arose. The first, which emerged in the 1930s and was most closely associated with Anna Freud, was oriented toward the defensive functions associated with the ego—those unconscious operations that occur in response to instinctual drives and fantasies that must be tempered to accommodate social demands in the real world. Pathology arises from conflicts among structures, id versus superego, ego versus superego, id versus ego. Therefore, the role of the analyst is to address the patient's unconscious conflicts by making these dynamics conscious.

However, as psychoanalytic discourse continued to evolve during the 1940s, there were others such as Heinz Hartmann who shifted the emphasis to the ego as an entity primarily concerned with adaptation. That is, the importance of understanding patients' ways of dealing with reality became the emphasis, which helped to expand psychoanalytic theory's explanation of normal as well as pathological psychology. While Anna Freud's approach focuses on conflict (although she recognizes adaptive functions as well), Hartmann underscored the ego's functioning in nonconflictual spheres as well.

Within the ego psychology model, a system of unconscious defenses was elaborated. When there is conflict among structures, id versus superego, for example, painful anxiety may arise that the person may not want to experience. Therefore, various kinds of compromise formations occur as the result of defenses such as repression, projection, reaction formation, and splitting. Defenses are pertinent for understanding character pathology, as different styles are associated with different emphasis on the types of defenses typically employed.

To illustrate, as described earlier, a person with an obsessional style may be prohibited in some ways by his or her superego from expressing anger and aggression, leading to the repression of these emotions to keep them from conscious awareness. The price of repression, however, from a character standpoint, may be ongoing unemotionality, rigidity, and anxiety. The person who is predominantly paranoid uses projection as a defense, that is, he or she ascribes his or her own aggressive impulses to someone else. One of the key features of borderline personality is the use of the splitting defense, whereby ambiguity that cannot be tolerated because of the emotional turmoil it creates leads the person to see the world in black-and-white terms, vacillating between all good or all bad. This picture can be very disruptive to treatment, as there is often a pattern of alternative idealization and denigration of the therapist.

C. Case Example

Consider a vignette from the treatment of a 26-year-old female patient, whom we will call T. T. is a graduate student, recognized as quite promising in her field. She came to session wanting to talk through a recent incident occurring at a conference where she presented a paper. She was the only member of the panel who had not yet obtained a Ph.D., and the others, and many in the audience, were already professors. T. described how she had taken a stand in her paper that sounded reasonable but was apparently considered iconoclastic. Thus, although she took a risk in asserting herself in this way in this forum, she did so knowing she usually had no problem discussing her intellectual ideas. T.

was upset, partially because she was attacked by the discussant and various audience members for her position, but mostly because she found herself capitulating and not making much of an attempt to defend her argument, cheerfully accepting their comments. (T. often finds herself avoiding conflict.) Furthermore, as is typical for her, she had subsequently become depressed because her talk was not uniformly praised and lauded by all present. She wanted assistance in understanding her behavior and ensuing reaction.

There are various ways to conceptualize T.'s dynamics, but we suggest one possibility using the three approaches of object relations, and self and ego psychology. First, from the perspective of ego psychology, we might view T.'s capitulation and putting on a positive face, frequent behavior that could be considered characterological, as stemming from the id-generated aggressive and competitive strivings that were met, not only with external opposition, but also with superego prohibitions against challenging her elders. Her solution was a passive surrender to the authority figures as a defense against her unconscious wishes. The defense mechanism used in this case would be considered a reaction formation, meaning she responded in the opposite manner to the way she really felt. She wished to attack back, but instead, was cordial and friendly. This would be a more traditional conflict–defense way of understanding her behavior, and the therapist would most likely interpret this dynamic by drawing the patient's attention to how she staved off undesirable impulses.

The fact that she became depressed because she was not responded to as a superstar reflects ongoing narcissistic issues. From a self psychology standpoint, it is apparent that T. needs a great deal of validation and admiration from others or her self-esteem collapses into depression. The object-relations piece might be that she has an internal model of herself needing to be perfect or she will be rejected as bad by others. The interventions that would follow from formulating this aspect of the case in this manner might be to empathize with how difficult it must have been for her to get the reaction she did, and to try to help her reflect on her tendency to condemn herself for not being perfect, ending up becoming depressed.

IV. COGNITIVE-BEHAVIORAL THERAPIES

The cognitive-behavioral tradition, generally speaking, focuses predominantly on consciously available thoughts and observable behaviors. Compared with psychoanalysis and psychodynamic psychotherapy, cognitive-behavioral treatments tend to be shorter in duration, more specifically goal oriented and skills focused, with more directive interventions by the therapist. There are several treatment variations from within this paradigm that have been developed specifically for character pathology.

A. Cognitive Therapy for Personality Disorders

1. Description

Aaron Beck and his colleagues originally developed a cognitive approach for treating depression and subsequently extended its application to problems associated with personality disorders. Fundamental to this approach is assuming a stance of "collaborative empiricism," that is, the therapist and patient together collect information about the patient's typical and troubled ways of thinking, feeling, and behaving, particularly in the context of problematic situations. An explicit profile of the patient's problems is proposed, goals for the treatment are agreed on, and treatment is focused on modifying maladaptive thoughts and behavior patterns. Because of the nature of character pathology, particularly those with more severe problems such as borderline personality, certain modifications were made to the cognitive approach. First, it is assumed that treatment will take longer, that the collaborative approach between patient and therapist must occur within clearly established boundaries, and that more pervasive and entrenched patterns of thinking and activity will be the focus of therapeutic work. In addition, the therapy relationship in and of itself may be the focus of attention at times because character pathology often serves to make an ongoing collaboration difficult to sustain.

2. Theoretical Bases

Cognitive therapy rests on the assumption that people are information-processing beings who develop characteristic ways of thinking about and interacting with the environment. Psychopathology arises when maladaptive responses are developed stemming from perceptions and beliefs that became distorted because of innate sensitivity, early social learning, and, in certain cases, traumatic events. People are thought to respond to the environment based on their established "schemas," which include intrinsic assumptions about how the world works and how one should respond. Behaviors become programmed based on the individual's

particular collection of schemas. In most cases, patterns have become automatic and so are outside of the person's immediate awareness.

When cognitive therapy is applied to character pathology, it is assumed that broader core beliefs, rather than merely selected processing errors, are at the root. Character pathology is seen as resulting from dysfunctional "pervasive, self-perpetuating cognitive-interpersonal cycles" in which experiences often end up confirming longstanding maladaptive schemas. Beck believes that personality traits evolved originally as a set of stereotyped, but adaptive, strategies for responding to the environment. Personality disorders arise when traits are no longer appropriate to environmental circumstances.

B. Schema-Focused Cognitive Therapy

1. Description

As an extension of Beck's cognitive therapy for personality disorders, Jeffrey Young and his colleagues formulated the concept of an "early maladaptive schema," defined as "a long-standing and pervasive theme that originates in childhood; defines the individual's behaviors, thoughts, feelings, and relationships with other people; and leads to maladaptive consequences." Applied specifically to characterological issues, the goal of schema-focused therapy is to help patients to identify cognitive distortions and challenge underlying beliefs that routinely result in impaired psychosocial functioning. For example, one might hold to a maladaptive schema centered on the fear of being abandoned, which results in excessive jealousy and clinging in relationships. The therapeutic approach would be to assist the patient in uncovering his or her assumption that significant others will inevitably leave and the connection of that assumption to particular behavioral and emotional responses. Over time, the patient is encouraged to develop other ways of relating to replace the counterproductive modes, accompanied by shifts in thinking and affective reactions.

2. Theoretical Bases

Maladaptive schemas arise as deeply entrenched patterns of response that developed as the child tried to organize personal experience of himself or herself and others in a world that may have been filled with abuse, instability, or neglect. Although they may have served as logical solutions in childhood, they remain in play in adulthood as ineffective means for meeting basic security and intimacy needs, and, thus, are associated with negative emotions and impaired functioning. David Bricker, Jeffery Young, and Catherine Flanagan have proposed three domains, or groupings, of schemas: instability and disconnection, impaired autonomy, and undesirability.

C. Dialectical Behavior Therapy

1. Description

Dialectical Behavior Therapy (DBT), developed by Marsha Linehan, is a method developed specifically for the treatment of borderline personality disorder, particularly for those patients with chronic problems with suicide gestures and attempts. Combining techniques from cognitive, behavioral, and supportive approaches, the goals of the therapy are to reduce life-threatening behaviors, behaviors that interfere with the treatment process itself, and behaviors that significantly impair quality of life. DBT is based on a manual, and patients participate in both weekly individual and group therapies for 1 year. During this time, individual therapists are accessible by telephone between sessions, and the groups focus on skills training targeting interpersonal, distress tolerance, and emotional regulation issues.

2. Theoretical Bases

Within the DBT paradigm, the nature of borderline disturbance is thought to revolve around impaired regulation of emotions, stemming from biological sensitivity interacting with an early environment lacking in emotional validation. Linehan has defined the term dialectics as "the reconciliation of opposites in a continual process of synthesis." This applies most broadly to the notion that treatment must provide an environment of acceptance of the ways patients currently are while also trying to help them change. That is, because of the presumed roots of borderline issues, the patient's current experiences are validated by the therapist, while at the same time, problem-solving efforts are aimed at modifying maladaptive thinking patterns and information processing, and teaching new ways of coping. The therapy relationship is considered central as the laboratory for change, but also because, at times, it is the only thing that is keeping seriously suicidal patients alive.

D. Case Example

The following is an application of various aspects of the cognitive-behavioral models presented to a particular case. K. is a 30-year-old unemployed woman who sought treatment because of difficulties holding down a

job, problems getting along with people in general, frequent outbursts of temper, and intermittent suicide gestures. Initial evaluation confirmed that K., along with symptoms of major depression, suffered from borderline personality pathology. Although highly intelligent, with an advanced degree, K. described how she would always get into struggles with her supervisors because they were envious of her ability and highly critical of her. Both in professional and personal relationships, she would become enraged over perceived minor slights, either blowing up at the other person, or injuring herself with a knife or a razor blade.

If K. found her way to DBT, she would be assigned an individual therapist and join a group. The individual therapist would help her learn how to manage emotional trauma through establishing a hierarchy of issues. Problem-solving techniques would first target those issues at the top of the hierarchy, such as her self-harm behaviors and emotional reactions that may jeopardize the treatment. K. would be assisted in reconstructing in detail the series of events that led to a self-harm incident, so that alternative solutions may be explored. From week to week, her hierarchy would be revisited to determine what issue was of highest priority for intervention. Once safety issues were adequately addressed, the treatment would be able to focus more directly on the nature of K.'s troubled interactions with others. The therapist would be diligent in attempting to avoid reinforcing any of K.'s maladaptive patterns. At the same time, in group treatment, K. would receive skills training, such as improving social tactfulness, which helps to enhance and reinforce the work in individual treatment.

In cognitive therapy, K. would collaborate with her therapist in developing a list of goals, with changing self-harm behaviors as top priority. In general, the focus would be on identifying maladaptive thoughts and behaviors so that alternative approaches could be developed. Given K.'s interpersonal sensitivity, the therapist would also be attentive to her engagement or resistance to cooperating in the therapeutic endeavor. If Young's specific schema-focused view were applied, K. would be assisted in identifying specific internal scripts that were not serving her well. For example, K. most likely has some form of an "abuse/mistrust" schema whereby she expects that others will hurt her or react negatively to her in some way. Using the therapy relationship as a model of safety and trust, K. could begin to examine and challenge her assumptions that others always approach her with ill intent.

V. EMPIRICAL STUDIES

In 1999, J. Christopher Perry published an analysis of 15 studies of the effectiveness of psychotherapy for patients with personality disorders. The studies reviewed were the most rigorous of their kind in that the investigators used systematic methods to diagnose the disorders, along with validated outcome measures. 4 of the studies focused on borderline personality disorder: there was one on borderline and schizotypal disorders, one each on avoidant and antisocial personality disorders; and 8 examining mixed types of personality disorders. 6 studies evaluated psychodynamic psychotherapy: three evaluated cognitive-behavioral psychotherapy, and three compared the psychodynamic and cognitive-behavioral treatments. Treatment duration varied, with a median of 28 to 40 sessions. The frequency of sessions ranged from daily in an inpatient study to once or twice weekly for outpatient therapy.

Despite wide variation in patient type, treatment type, and duration and frequency of sessions, an overall pattern emerged indicating significant improvement in psychopathology for patients with personality disorders receiving psychotherapy. In studies reporting the proportion of patients no longer meeting criteria for a personality disorder at follow-up, 52% had "recovered" after a mean of 78 sessions over a mean of 67 weeks. This corresponded to a recovery rate of 26% per year of treatment, seven times greater than the rate observed when the course of these disorders is followed when no treatment is received.

There have also been a number of other research endeavors, such as the Menninger Psychotherapy Research Project, that have employed a variety of methodologies targeting different aspects of psychotherapy treatments of character pathology. Separate review articles highlighting many of these other studies have been written by Mary Target and Glen Gabbard. In addition, a very recent study by Anthony Bateman and Peter Fonagy demonstrated significant reductions in symptoms, including self-mutilation and suicide attempts, and notable improvements in functioning for patients with borderline personality disorder who received intensive psychodynamic psychotherapy over 18 months in a partial hospitalization program. Benefits increased or were sustained at a follow-up evaluation 18 months after discharge. Thus, although some would hold that those with more severe character pathology may not be treatable, empirical work has shown that psychotherapy can be quite effective.

VI. SUMMARY

Character pathology is associated with a long-standing and rigid set of personality traits that cause impairments in a person's ability to adaptively function in interpersonal and occupational realms. Because there are many types of character pathology, or personality disorders, any psychotherapy addressing such problems must take into consideration the salient features of the particular patient's personality so that an effective therapeutic partnership can be formed and appropriate interventions can be applied. There is a range of therapies available from psychodynamic/psychoanalytic treatment that utilizes insight-oriented and supportive elements and the therapeutic relationship as vehicles for change, to cognitive-behavioral strategies that focus on consciously available thoughts and observable behaviors. Regardless of the type of psychotherapy chosen, it should be expected that enduring changes in personality pathology will require an extended period of treatment.

See Also the Following Articles

Beck Therapy Approach ■ Cognitive Behavior Therapy ■ Control-Mastery Theory ■ Countertransference ■ Dialectical Behavior Therapy ■ Object Relations Psychotherapy ■ Psychodynamic Group Psychotherapy ■ Self Psychology ■ Transference

Further Reading

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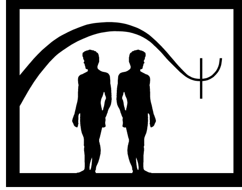

Child and Adolescent Psychotherapy: Psychoanalytic Principles

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I. Developmental Frames of Reference
II. Aims of Dynamic Psychotherapy
III. Therapeutic Tasks
IV. Transference
V. The Therapist–Child Interaction
VI. The Interview Setting
VII. Developing the Therapeutic Process
VIII. Working with Parents as an Adjunct to Treatment
IX. Child Psychoanalysis
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GLOSSARY

conflict Refers either to psychic conflict, which is a struggle between incompatible or opposing forces within the mind or external conflict. Psychic conflict may be between incompatible wishes (e.g., the child's wish to please a parent and his wish to be in control) or between different psychic structures or aspects of the mind (e.g., a wish to make a mess might be opposed by the individual's conscience that upholds values of cleanliness and order). Sometimes psychic conflict may become externalized in the individual's effort to avoid anxiety or other uncomfortable feelings. In this situation a conflict that originates within the individual is experienced as originating from outside forces (e.g., the adolescent who is ambivalent about his sexual wishes may experience himself as unconflicted by imagining that his parent is opposed to his developing sexuality). External conflict describes essential conflicts that arise between the individual and aspects of the outer world, when there are incapacities in either the individual or the environment to meet the other's needs and expectations.

countertransference A complementary term to transference and refers to the therapist's experiencing thoughts and feelings toward the patient that are derived from an earlier period and earlier relationships in the therapist's life. Countertransference is usually mobilized in response to a particular transference of the patient and reflects the therapist's unconscious reaction to aspects of the patient. It may be manifested in the therapist's identification with the patient, by intense emotional reactions both positive and negative to the patient or particular material. When countertransference is unrecognized it can create significant blind spots for the therapist compromising, his or her ability to work clinically by impairing objectivity and empathy. In contrast, when the therapist is able to recognize and analyze his or her own countertransference, he or she may gain significant clues to the patient's thoughts and feelings.

representation Usually refers to a psychic representation, which is an image or configuration of images within the mind. This may be an image that roughly corresponds to a figure or experiences that an individual has had in real life. Representations are very often based on a composite of memories, affects, impulses, and wishes associated with important figures and interactions with those figures that have been experienced in an individual's life. Representations also refer to the images of oneself that are also based on a range of experiences, especially those involving the earliest and most significant relationships.

transference Refers to the displacement of feelings, thoughts, and behavior about significant childhood figures (usually the parents) onto another person. Transferences are thought to be ubiquitous, occurring in and coloring any individual's important current relationships. When the term is used in the context of psychotherapy transference refers to the displacement of thoughts, feelings, and behavior originating

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in relation to the individual's parents (or other emotionally significant figures) at an earlier point in time (usually childhood) onto the therapist. Transference is unconscious and involuntary, the sources being unrecognized, and may be experienced by the individual as rational or may feel inappropriate and be a source of internal distress. There is disagreement within child psychoanalysis whether young children are capable of transference since the young child is actively involved with his or her parents in reality. A young child may behave toward his therapist in much the same way he behaves with his parents but this may be less an issue of transference and more the result of habitual ways of interacting with others. For example, a 3-year-old who is imperious and demanding with his parents may be equally so with his therapist, but this is less likely to be transference and much more likely to be the way this child treats any important adult. Latency-age children in the course of psychotherapy may exhibit behavior or feelings that more closely fit the definition of transference in that the behavior can be understood as referring back to an earlier time and relationship with the parent. Adolescents readily exhibit transference and indeed this may form a significant resistance to psychotherapy as the adolescent experiences the therapist as the all-powerful, controlling parent from very early childhood. When transference is understood it can provide clinically useful material that can be used to help the patient better understand himself.

unconscious Used both as a noun to describe hidden aspects of the mind and as an adjective to describe mental content that is not available to conscious awareness. Freud originally believed that the unconscious was a dynamic system within the mind that contained contents and activities representative of the drives that had never been conscious. Characteristics of the unconscious are that there is no negation, contradiction, or ambivalence and that unconscious thought follows idiosyncratic associative paths rather than logical connections. Although the unconscious is not available to direct inspection, derivatives can be seen in dreams, in slips of the tongue, and disconnected thoughts. Current psychoanalytic theory argues that aspects of psychic structure involving adaptation to reality, defenses, and moral judgement are unconscious. Mental content may also become unconscious through the operation of defenses against the experience of intrapsychic conflict.

Psychoanalytic theories of human functioning begin with a focus on the interplay between the child's fantasy world, the organization of mental life and functions, and the experience of the real world. How these domains are elaborated and interact over the course of development is central to psychoanalytic inquiry. Psychoanalysts and psychoanalytically oriented psychotherapists are especially interested in the most personal of emotions and thoughts and the ways in which individuals reveal or conceal their longings, wishes, fears, pleasures, and dreams to and from themselves and others. Psychoanalytic clinicians are interested in the way children behave and in the interaction between children's inner experiences and their actions in daily life. Of particular concern for analysts and analytic therapists are the ways in which the child comes to understand and represent his or her own inner life and the minds and behavior of others. As such, psychoanalytic theory is primarily concerned with the dynamics of mental processes and individual experience that are influenced by biological, social, and environmental contributions. With psychoanalytic theories as a conceptual frame of reference, psychodynamic psychotherapy attempts to observe the rich details of children's individual experiences as a way into understanding the origins and functions of symptomatic behavior that brings them into treatment.

Psychodynamic interventions are based on the notion that symptoms and problematic behavior that have not yielded to time or changes in the external world derive from a complex matrix of constitutional, developmental, and environmental factors that find representation in children's fantasies and theories about themselves, their expectations of the world, and their adaptation to it. In this context, symptoms are seen as a result of children's best efforts both to resolve and to express in disguised form solutions to conflicts among their wishes, the demands of external reality, and developmental capacities. What distinguishes a psychodynamically oriented intervention from other types of clinical intervention is the therapist's conviction that children's behavioral difficulties have as their source the complex interplay between the wishes and fears inherent to children's inner world; the status of biologically driven, maturational capacities; the pressures of progressive development; and the demands of external reality. Psychodynamic interventions may be employed in varying forms, including psychoanalysis, intensive psychotherapy with several sessions per week over a long period of time, weekly psychotherapy, brief psychotherapy, structured sessions, and parent–child guidance. The guiding principle of psychodynamic intervention is that throughout development, there is a complex interaction between internal and external demands and children's unfolding capacities to meet these demands. The goal of psychodynamic psychotherapy is to help children find alternative solutions to conflicts that have given rise to symptoms that interfere with current functioning and progressive development.

Essential to psychodynamic interventions is the recognition that defenses against danger—whether experienced as emanating from the inner or external world—are felt by the child to be necessary, regardless of how disruptive these defensive maneuvers may be. On that basis, the central task of intervention is to learn in what way symptoms serve to protect children from and help them adapt to unconscious conflict aroused by the demands of development and of everyday life. The therapist's capacity to understand meaning in the child's presentation in play, activity, and discussion occurs in the context of a relationship that provides a safe forum for the communication of feelings, impulses, and ideas that children have about their life, self, and others. As the relationship between a child and therapist deepens, the child becomes better able to tolerate and be curious about his or her inner life and the multiple ways internal conflicts may compromise development and daily functioning.

The clinician's choice of dynamic psychotherapy may be made when considering a range of presenting clinical situations. In addition to being the treatment of choice for children suffering internal conflict, a dynamic perspective also informs treatment considerations for a diverse range of clinical presentations in which internal conflict appears to be absent, such as conduct disorders. In conjunction with pharmacological, educational, and behavioral management interventions, psychodynamic psychotherapy may be the treatment of choice in working with a child who is coping with chronic illness or a matrix of constitutional, cognitive, and developmental deficits or with a child who has experienced acute or cumulative trauma. In each of these clinical situations, the dynamic psychotherapist's primary tasks are to learn the language of the child and to develop a relationship that provides a forum in which the child can explore his or her experience of self and others while trying on new solutions to difficulties that have blocked the path to optimal development.

I. DEVELOPMENTAL FRAMES OF REFERENCE

Conceptualizations about unconscious conflicts are central to any psychodynamic approach to intervention. Here, "unconscious" refers to the dynamic interaction of thoughts, feelings, memories, bodily experiences, and thought processes that operate outside of an individual's conscious awareness. These unconscious configurations of experience exert influence on patterns of behavior, interactions with others, perceptions of the world, and feelings about the self. Many behavioral symptoms of childhood reflect children's defensive efforts to ward off dangers that they experience as originating in the intensity of their urges and wishes; in the severity of internal, superego judgment of those wishes and feelings; or in the limitations and demands imposed by the environment.

A. Case Example

Five-year-old Jerry was referred by his kindergarten teacher because of his aggressive attacks on the other boys in his class. Jerry's attacks appeared to be unprovoked: He might be playing in an apparently cooperative way with another boy and suddenly become quite angry, accusing the other boy of having tried to grab something from Jerry or of having somehow insulted him. Following these outbursts, Jerry appeared unremorseful, adopting a swaggering, somewhat threatening stance. At times Jerry could be heard bragging loudly to the other boys about his athletic accomplishments as well as his many possessions; some of these tales seemed to reflect reality, albeit with a bit of exaggeration, but others were quite clearly false. Jerry got along very well with his female teacher toward whom he was quite affectionate and whom he sought out frequently for special attention. On the playground Jerry often raced around wildly, drawing attention to himself, declaring dramatically that he was Batman or the fire chief or some other heroic figure. After a careful evaluation, Jerry was referred for once a week psychodynamic psychotherapy. Gradually, in talking and playing with Jerry, his therapist began to understand that Jerry's braggadocio and swagger masked an intense underlying anxiety that he was not big enough or adequate enough in comparison with his classmates. Jerry had anticipated starting kindergarten with some trepidation, worried that he did not know enough academically. His dreams of being a big successful grade school boy were accompanied by fears that he would instead be humiliated by not knowing enough. His attacks against the other boys were Jerry's attempt to restore his precarious self-esteem by appearing aggressively manly at those moments when he felt most threatened by another child's accomplishments, whether real or imagined. Jerry was still quite dependent on his teacher's affection and interest to sustain feelings of self-worth. When he was in situations with his classmates that were more competitive and in which he could not count on his teacher's ready attention, Jerry's self-esteem was

more fragile and more easily threatened by perceived slights. At those moments, Jerry felt in danger of being overwhelmed by feelings of humiliation brought on by his own age-appropriate but quite intense wishes for success that he felt were eluding him. His hitting out and swaggering involved an underlying compensatory fantasy that he was not a little boy who did not know enough but that he was a big, powerful man who would win the admiration of others, especially his teacher, through force.

Children's struggles with basic conflicts between their desires and the limitations imposed by reality and internal moral prohibitions motivate their exploration of alternative forms of expression that both satisfy strong urges and meet acceptable internal and external standards. This compromise solution is shaped by the specific age-typical wishes in conjunction with the child's capacities as set by endowment as well as by opportunities available in the environment. Children's unfolding intellectual and physical resources; opportunities afforded in the social realms of home, school, and the community; and ability to tolerate delay and accept substitute gratification all contribute to their ability to create compromise between competing demands of their inner worlds and external reality. As such, symptoms may also reflect children's efforts to negotiate developmental conflicts as they seek mastery, independence, and pride in midst of increasing demands and dangers.

At each phase of development there tend to be nodal conflicts that inevitably give rise to crises and symptoms of childhood that evoke concern in the adults who are most involved with children. Although the disruption of sleeping and eating behavior and separation anxiety typical in toddlerhood are troublesome to caregivers, they do not necessarily indicate deviation from normal trends in development. These developmentally expectable symptoms are especially salient during the time of children's emerging recognition that they are individuals, separate and different from their parents, whom the children wish to please. Similarly, the nighttime fears, transient phobias, and defiance of 4- to 6-year-old children do not automatically represent psychopathology but, rather, reflect their active attempts to negotiate conflicts between normal feelings of love, hate, jealousy, and competition. Older preschoolers or early grade school children have ambivalent feelings about establishing a greater sense of autonomy. These mixed feelings may be expressed in testing rules, tattling on others, social difficulties, rapid shifts in mood, or heightened concerns about bodily changes; they do not automatically signal the need for clinical intervention.

Additionally, above and beyond the symptomatology of normal development, children's behavior or mood may change in direct response to clear external precipitants, such as moving to a new house, changing schools, parental discord and divorce, acute illness, or exposure to exceptional, traumatic incidents, or it may reflect the stress of coping with cognitively based learning difficulties. Children undergoing such external stressors may require supports or interventions that are informed by an appreciation of the dynamic interaction of multiple contributions, but they do not necessarily warrant extensive individual psychotherapy. When conflicts and attendant symptoms are primarily reactive in nature, work with parents and teachers to alter a child's environment or to increase adult appreciation for the nature of developmental struggles may be sufficient. Such intervention, when based on psychodynamic principles, can help a child mobilize adequate resources to achieve a more adaptive set of responses and so resolve the immediate crisis. Alternatively, at times, a careful evaluation reveals a history of a child's failure to successfully negotiate previous developmental tasks.

When presenting difficulties have not yielded to environmental manipulation, the severity and persistence of symptoms may reflect a relatively intransigent adaptation to internalized conflict that the child experiences as protective but that actually exacts a high price for both the child and those around him or her. In this situation, the adult's logic, suggestions, and admonitions are at exasperating odds to the child's counterproductive, albeit best attempts to resolve the internal conflicts that seem to elude conscious recognition and rational response. In such a case, the psychotherapeutic task with the child is to provide a new, different setting in which the therapist and patient can develop a language for exploring what has heretofore been unknown to both. A therapist should decide to engage a child of any age in dynamic psychotherapy based on a careful evaluation of the patient's presenting difficulties, developmental history, and family and environmental circumstances. Dynamic psychotherapy is called for when the child's difficulties reflect a failure to negotiate conflicts that are at once an essential part of every phase of development and at the same time have become elaborated, and fixed, requiring an expenditure of psychic energy that impedes rather than promotes developmental progression. As such, children may adopt and rigidly adhere to defenses that help them to ward off the danger while constricting the development of new defensive strategies that might provide more flexible adaptation to both internal and external demands.

The adolescent's tasks are negotiating parental emancipation and the sexual and aggressive drives. It has also

been noted that adolescents in some ways recapitulate tasks faced in the first few years of life. During that early age, children must learn to control their volitional outflow. The preschooler, for example, becomes aware that his or her sexual attributes are not sufficient "in that way" to attract the parent of the other gender and that his or her fortitude is not sufficient to fend off the jealousy of the same gender parent. With puberty the adolescent now feels sexually ready and available. A true oedipal victory becomes actually possible. At this time the universal incest taboo comes into play and the adolescent must learn to control the associated emotional outflow. Although adolescents possess the strengths of greater experience and the cognitive ability to think abstractly, their task of becoming an adult is hampered by both the upsurge of their drives and the developmental need to individuate from parents. This latter change partly removes the primary sources of stability and support counted on during childhood. Oedipal feelings suppressed with the advent of the superego often reemerge. The adolescent feels the need to increase the emotional distance from both parents. Not only are parents avoided as people, but also their parental prohibitions internalized within the superego may be distanced. Although unacceptable aggressive or sexual behavior often brings an adolescent into treatment, inner conflicts between progressive and regressive urges are the chief foci of psychodynamic psychotherapy.

II. AIMS OF DYNAMIC PSYCHOTHERAPY

As trial action in thought, fantasy is a testing ground that serves as a refuge from the disappointment of wishes that cannot be fulfilled by reality. When the child is not yet able to give up certain wishes and has been unable to find acceptable alternatives for satisfying the underlying urges, fantasy may serve as both a retreat and as a means of titrating their intensity as new solutions are sought. Thus, fantasy can serve as a respite and as a staging ground on which new responses to internal and external demands and new solutions to conflicts can be practiced. Fantasy solutions themselves may prove to be enormous sources of anxiety and guilt. While serving as a retreat from conflicts aroused by disappointment and/or by frightening reality, fantasy solutions for conflict can also become a distorting lens through which the child now perceives his or her world. These phenomena may best be demonstrated in the case of a child whose experience of real danger invokes fantasy solutions that also contribute to the patient's difficulties.

A. Case Example

Annie was 6 years old when she was involved in a traffic accident while riding on her school bus. She was unhurt, but a classmate suffered serious head injuries after he was slammed against a bus window. Annie entered two times a week psychotherapy when, 6 weeks following the accident, she continued to be symptomatic. She had difficulty sleeping and eating, had multiple new fears, and needed to remain close to her mother at all times. Annie's previous school functioning was good, as was her adaptation in an intact family that included mother, father, and a 10-month-old brother. Her developmental history was unremarkable.

In her individual sessions, Annie repeatedly returned to the scene of the accident, reviewing an increasing array of details in both play with toy figures and in her drawings. Each narrative was ended with Annie looking and stating that she felt scared or "bad." Over time, the therapist probed these feelings further—either within the action of the play or the narrative that accompanied the pictures. Annie would elaborate that she felt scared she might have been injured in the accident and very bad because her friend had been hurt. In one session, she drew a picture of herself and her friend on the bus. Although the two children had in fact been sitting in different sections of the bus, in her drawing, they both sat on the same seat. She pointed out that even though they were together only one of them was hurt. She then grew quiet and looked forlorn. With the suggestion that there was a connection between her feelings and the story that lay behind the picture, Annie revealed a secret whose telling spanned many sessions and was accompanied by a dramatic reduction and final resolution of her presenting symptoms.

The first part of the secret was that for several days before the accident, Annie had been reprimanded by the driver for bad behavior on the bus. She thought that perhaps she should have been the one injured, as a punishment. Later, she told the therapist that her "bad" behavior had really been about her teasing and poking at the very classmate who was hurt in the accident. The third part of the secret was about her baby brother. With great anxiety, Annie reported that she teased the baby on numerous occasions and that, in fact, she often wished the brother was no longer around. With this, the pieces of her worry and guilt became clearer. She was able to articulate her fear that somehow her bad wishes about pesty brothers had come true in the injuries sustained by her schoolmate in the accident. Annie was terrified that her wishes would be discovered and severely punished. The therapist was able to

point out that Annie was punishing herself as if the reality of the scary events had somehow been under her magical control.

Annie's hostile wishes toward a rival baby brother and their displacement onto a schoolmate was not at all unusual. However, for Annie, the realization of these wishes—if only in the displacement—constituted the central source of her overwhelming anxiety and traumatization. In addition, her sense of magical control reflected age-expectable phenomena but was relied upon for the purposes of restitution and recovery. That is, a belief in magical control would revise the original experience of traumatization or "absence of control" in the accident, even if the belief in magic might also lead to a tremendous sense of responsibility for and guilt about the real and imagined events. Annie's presenting symptoms resolved as play and discussion with the therapist revealed the connection between the traffic accident and her age-expectable wishes and conflicts. When no longer unconscious, the distorting and anxiety-laden solutions to Annie's conflicts became clear to her. Symptoms were no longer necessary as Annie's fear and guilt were replaced by her tolerance of her own feelings. She could recognize that being frightened in the face of an external danger was not a permanent state of infantile helplessness, that hostile feelings about family members did not obliterate loving ones, and that whatever the benefits, a belief in magic does not make wishes come true.

As suggested in the case of Annie, the use of fantasy as refuge from conflict and anxiety may not always be successful or may evoke its own set of problems for the child. While unable to give up the original aims, fantasy configurations may themselves become a source of internalized conflict. Clinging to the solutions found in these fantasies may block more reality-based compromises between wishes and consequences that might be developed. In the face of challenges the child faces in the present, he or she may return to earlier configurations of wishes, unable to utilize new developmental competencies to mediate as well as express current feelings. Retaining their original force, these developmentally regressive fantasies are also experienced as unacceptable; the conflicts that ensue may only find expression in disguised form in symptoms and age-inappropriate behavior. For all of these reasons, Freud's guiding principle of "making the unconscious conscious" remains central to the psychotherapeutic task of alleviating symptomatic presentation and helping children return to the path of optimal development. Psychodynamic treatment attempts to provide a setting in which the child and therapist can observe the different manifestation of their feelings and fantasies and their representation in symptoms and behavior. With the therapist's help, the child achieves a greater appreciation of the conflict between wishes and the demands of external reality and internal moral judgments. Through play, discussion, and interactions in the consulting room, children have the opportunity to try out new solutions in an effort to find a compromise that permits some realization of their wishes while simultaneously adapting to the limitations imposed by reality and by internalized moral values.

Regardless of the unconscious, conflictual sources, academic difficulties; constant fights with peers, siblings, and parents; soiling; enuresis; disturbed sleep and eating; social isolation; drug and alcohol abuse; avoidant behavior and phobias; and depressive withdrawal may cause a great deal of discomfort to patients themselves and to their families. However, from a psychodynamic perspective, these symptoms represent the individual's best attempts to simultaneously defend against conflictual wishes and to give expression to them in a disguised form. While attempting to avoid or modulate threats to well-being, symptoms are highly condensed modes of communication that parents, teachers, or patients themselves have been unable to translate fully and understand. In making the unconscious conscious, dynamic psychotherapy aims to provide a setting in which the patient can safely explore previously "unknowable" aspects of their inner world that give rise to conflict, defense, and maladaptive ways in which they negotiate daily life.

Threats to self-esteem arise from internalized conflicts involving the guilt and shame associated with internal moral judgment as well as with failures of achievement in the external world. For example, by the late preschool years, children recognize that their destructive wishes toward parents or siblings are incompatible with their intense loving feelings and need for these same people. The little boy who wants to destroy all of his competition from the field, particularly his father or older brother, also loves his father, wants to be like him, and needs to feel that his father loves and approves of him. The child may experience so much pain about this struggle between his loving and hating feelings for the father, or other loved figure, that they are pushed out of consciousness, only emerging now in highly disguised or displaced forms. Such conflicts between intense feelings, wishes, and aims occur naturally in development. However, they may be complicated by multiple and interweaving contributions from children's lives, such as (1) a history of risk, or realization

of attack, either emotional or physical, by parents or other caregivers in response to the child's expression of developmentally appropriate needs; and (2) the failure of age-expectable capacities to regulate impulses and needs that lead to feeling flooded and overwhelmed. Children may also fear being overwhelmed by impulses and needs when (1) their capacities for self-regulation are compromised by constitutional hypersensitivities, inadequate visual-motor apparatus, chronic illness, disordered language and cognitive development, skeletal or neuromusculature abnormalities; (2) the mental capacities that are in place are not able to reduce the level of environmental overstimulation—for example, interpersonal violence in the home and in the neighborhood; the absence of external order as represented by consistent parental rules and expectations; exciting exposure to parental nudity or sexual activity; or (3) a history of repeated failure of satisfaction of children's basic needs—such as poor bodily and physical care—with the associated somatic distress, discontinuous and unreliable presence of the caregiver, or inconsistent and unpredictable communication of affection. However powerful the specific stressors or risks might be in the child's life, his or her capacity to mediate their impact is determined by a combination of endowment, available defenses, and countervailing external supports. Optimally, an increasingly broad and sophisticated array of mediating activities, and the background of experience that needs will be met in a timely fashion, allow children to achieve satisfaction, pleasure, and mastery.

Seeking safety and securing pleasure are the most central of human endeavors that guide children's attempts to guard against danger and helplessness. When the dangers and threats are based in current experiences, interventions first must focus on remedying or alleviating the most immediate and persisting risks to the child's development (e.g., mandated referrals to protective services when a child is neglected, abused, or sexually exploited; intensive work with parents, educators, and social services in altering the child's milieu). Similarly, when neuropsychological and other impairments of the physical and cognitive apparatus can respond to pharmacological interventions or remedial assistance, these approaches need to be considered as central to the overall treatment plan. Often, the history of environmental failures or inherent problems of affect regulation or cognitive processing will have had an impact that changes in the environment, educational and pharmacological interventions alone will not ameliorate maladaptive attempts at conflict resolution. At the point that children need to enter psychotherapy, their attempts to defend against internal pain and discomfort are at too high a price. Their symptoms, effects, and behaviors reflect both the child's best efforts, and failure to negotiate the challenges, demands, and conflicts that are essential components of progressive development.

Unlike adults, children and adolescents rarely are the ones who request or make decisions about entering into psychotherapy. Children are often told that they are going to see a special kind of doctor who helps get rid of worries and difficulties in order that the child is able to feel happier and more successful in life. It is essential that therapists remember that seeing a therapist does not magically or immediately relieve children of their suffering or decrease the need for the defenses and symptoms that have brought them to the consulting room. In fact, many children feel particularly guarded in the treatment situation, believing that their inner thoughts and feelings will leak out or be readily discernible to the therapist who is invested with intrusive and dangerous "mind-reading" powers. Engaging in an evaluation or entering into psychotherapy is especially difficult for most adolescents. Referral usually stems from the desire of a parent or other authority figure whom the adolescent does not fully trust, and may be in outright conflict with. The aim of the therapy to make the unconscious conscious does not vary from the aim with younger children or with adults, but patient–clinician trust is often more difficult to establish with adolescents than at any other developmental phase.

If the patient is to give up current, maladaptive attempts at resolving conflicts, a new setting, a new relationship, and a new language will be required. It is in this new situation that the patient and therapist have an opportunity to explore—through themes and consistent patterns of play, discussion, modes of expression, and ways of engaging—the dynamic interaction between what is internal and what is experienced in daily life. The psychotherapeutic intervention provides a stage on which, over time, the language of the unconscious fantasies, conflicts, defenses, and symptoms can become observable, translatable, and gradually understood. To this end, the psychotherapist engages in the process as an observer, a participant, and an anchor in reality, helping children clarify what they are thinking and feeling as well as noticing repetitive themes and patterns, making connections between themes and feelings for children. Interpretations assist children in understanding and mastering thoughts, feelings, and behaviors of which they previously had been unaware and that have given rise to the current difficulties. The

therapist uses verbalization, clarification, and interpretation in the context of a relationship that includes elements of transference, displacement, and therapeutic alliance.

III. THERAPEUTIC TASKS

For psychodynamic psychotherapists, children's play in the context of the clinical setting provides an important window into the inner life. The play themes, materials chosen, and the child's affects and verbalizations are viewed by the clinician as revealing complex aspects of the child's internal life of which he or she may be unaware and unable to verbalize directly. In the course of treatment and in the context of a developing therapeutic relationship, the clinician makes observations about the unfolding narratives that emerge in the play activities and what they reveal about children's conflicts, defenses, and consequent behaviors and modes of relating. The clinician does not comment on everything that is observed. The therapist chooses the material to be interpreted based on his clinical judgment about what is uppermost or closest to consciousness in the child's mind at that particular point in time. The clinician's goal in interpreting this material is to increase the child's conscious awareness of and insight into the relationship between unconscious conflicts, defenses, and manifest behavior and symptoms. For other clinicians the child's capacity to play and talk freely in the presence of another and to develop multiple narratives that give expression to underlying conflicts, interests, and concerns is therapeutic in and of itself. Particularly with regard to young children, this latter conceptualization emphasizes the action of play as serving the function of mastery through repetition and elaboration of central themes in their lives, trying on new solutions to problems as well as practicing and expanding the modes of representing them. In this model, the goal of interpretive work is not to create or enhance children's insight per se but rather to decrease the anxiety and defensive operations that disrupt or interfere with the expansion and unfolding of the play and/or discussion itself.

IV. TRANSFERENCE

Transference is the term used to describe or characterize the patient's attitude toward the therapist. The term derives from psychoanalytic treatment with adults and refers to the ways in which a patient's perceptions of and relationships with significant figures from childhood are expressed in current perceptions, thoughts, fantasies, feelings, attitudes, and behavior in current relationships. In the clinical situation, transference refers specifically to the ways in which these experiences from the past are organized around and expressed within the relationship with the therapist. A major difference in considering this phenomenon in work with children lies in the fact that, unlike adults, children continue to live with and rely on parents. Much of what children bring to the treatment situation reflects not only a transference of aspects of relationships from the past but significant aspects of current experiences, fantasies, perceptions, feelings, and attitudes from current relationships, particularly those with parents and other family members.

The attitudes that children direct toward the therapist are one of the central markers of the transference relationship. These attitudes are also an essential ingredient in considering the child's ability or inability to play or engage in discussion with the therapist. This is especially the case at the beginning of a treatment, when children's expectations of what will occur in the sessions are not determined by specific past experiences with the therapist, but rather by expectations that derive from habitual modes of relating, current relationships, and past experiences with others.

In an attempt to clarify the phenomena of transference, particularly as it is observed in the treatment of children, Anna Freud and her colleagues developed a topology of transference of (1) habitual modes of relating (2) current relationships, (3) past experiences, and (4) transference neurosis. The first type refers to fixed ways of relating to others that, while deriving from earlier relationships, have now been applied to the world at large or to whole categories of people with whom children have contact. The second category refers to the transfer or displacement of current preoccupations with real situations in children's lives or with aspects of current developmental challenges. The emphasis here is on the distinction between a revival of past experiences versus the displacement of current ones that can be observed in children's relationships with the analyst. The third category involves children's attitudes, fantasies, and memories from the past that were previously repressed and that are now manifested in the current relationship with the therapist as it develops during regular contact over a sustained period of time. In the last category, there is a "very special intensification of the transference involving an externalization of a major pathogenic internal conflict

onto the therapist, so the conflict is felt by the patient to be between himself and the therapist, according to Sandler and colleagues in 1980 (p. 92). In child psychotherapy, it is much less common to see as much evidence of the transference neurosis as occurs in the analysis and psychotherapy of adults. When this form of the transference does emerge, the child's attention, interests, and preoccupations shift toward his or her interactions and relationship with the therapist.

Narrowly defined, the child's attitudes to the therapist are based solely on the internal configurations of experience, urges, feelings, and fantasies that are, in the main, a reflection of life outside of the consulting room. This notion assumes that the therapist's presentation and modes of relating to children have no or only minimal bearing on the ways in which the children present themselves in this particular setting. The opposite view suggests that the therapist's demeanor is always determining the child's attitude to the clinical encounter. Therefore, the child's attitude to the therapist cannot be used as a prominent source of data or window into the inner world. These two views reflect the extremes in considering the extent to which children's manifest attitudes toward the therapist are a pure reflection of their inner life or of their day-to-day experiences outside of the consulting room. That is, children's attitudes in isolation from other aspects of the fuller presentation of themes and emotional presentation may, in fact, tell the therapist very little about the children's central interests, fantasies, concerns, and modes of regulating and communicating them. In addition, even when considering children's attitudes in the broader context, initial impressions may not be borne out as the fuller picture of the children emerges over the course of the psychotherapy treatment. Rapid shifts in children's presentation may occur, from friendly, positive engagement to attitudes of hostility, disappointment, and fear. It is important to remember that children's attitudes to the therapist develop in the context of a unique setting and special relationship. As such, the clinical data emerge from observations of two people in the consulting room who set the stage for understanding the patient's experiences of themselves in relations to the many others who have and have had significance in both inner and daily life.

Transference issues with adolescents in psychodynamic psychotherapy are often very intense and threaten the formation or continuation of a therapeutic alliance. The aims of adolescence and psychodynamic psychotherapy are, at times, essentially hostile to one another. In structural terms, the ego's defenses are already tenuous because of the pubertal upsurge of drives. Probing by a clinician of resistance and transference may seem to the patient too threatening to endure. This is particularly the case during early adolescence from approximately age 12 to 14 or 15. The transference reaction is often negative and that of a parent with whom the patient is having conflicts. The therapist can also represent an other-than-parent-adult transference that is positive in the way of a cult leader. This presents the difficulty of the patient's expectation of "cure" coming almost magically from the guru rather than from the patient's therapeutic work. Adulation of the therapist can also raise hostility on the part of the parents who must support and pay for the treatment.

A. Case Example

Mark was a 14-year-old who entered twice-weekly psychodynamic psychotherapy because of a drop in his grades in school and arguments with his father, which had transcended from only verbal interchanges to physical pushing and shaking. Both males were worried about this escalation. The referral was made by the boy's pediatrician. Mark did not want his parents involved with his therapist, and they as a couple began seeing another clinician. Mark was immediately impressed with the therapist, based on what his pediatrician had told him and because of various certificates and plaques on the office walls. Mark's father was an extremely successful attorney, not only locally but also nationally. In the almost instant transference, the therapist became the "good" father who was even more powerful than the biologic "bad" father. It was very difficult for the boy to acknowledge any good in his father or bad in the therapist until the transference took on an erotic component. As the homosexual urges became apparent to him, the patient struggled with whether to stay in treatment or flee. Remnants of the nonerotic positive transference allowed him to continue therapy. Now fearful of submitting to the clinician's control, Mark began working in therapy. He challenged the therapist's power, declaring it was not so much due to the therapist's excellence, but because he was part of an excellent university. Mark became more interested in flirting with girls in school and in improving his grades. He also came to appreciate his father's accomplishments, and the love the father must have for him in order to support and pay for the psychotherapy. The tussling between father and son undoubtedly also had a drive-defense sexual component for the boy, but after working through erotic feelings for the therapist, the son–father love also lost its overt sexuality.

Countertransference is an entity that all therapists must keep in mind. Countertransference is the unconscious influence that a therapist's past needs and conflicts have on his or her understanding, actions, or reactions within the treatment situation. James Anthony was the first writer to assert that because of the regressive pull inherent in working with children and the fact that child therapy is more primary process activity than secondary process talk, that countertransference is more commonly experienced in therapy with children than with adults. Burlingham in 1935 noted that in work with younger children, therapists may drift into a wishful role of being a superior parent. With the sexual and hostile proclivities of adolescents, therapists have a particular challenge not to be seductive or counteraggressive. The therapist's narcissistic concerns may also cloud his or her listening carefully, regardless of the patient's age.

V. THE THERAPIST–CHILD INTERACTION

A central focus of the clinician's observations is the way in which children relate to him or her, from the first introduction in the waiting area to the myriad shifts in attitude presented in the consulting room throughout the course of psychotherapy. From a psychodynamic perspective, ways of relating to the therapist reveal a great deal about children's attitudes to the most important people in their daily lives and suggest observable surface markers for a range of internal configurations involving their fantasies about those people. Children's attitudes toward the therapist suggest their feelings about being with an adult other than the parent. At most, the attitude children present in this particular setting may reflect a generalized set of expectations and modes of relating that have referents outside the consulting room, in the children's daily lives—from the present or the past. At the very least, the attitude presented may reflect aspects of children's expectations of the current situation in the consulting room itself.

Children's comfort in the room and their experience of their interaction with the therapist will be a key determinant of the play, discussion, and activities that occur in a given hour. Representations of self and others as reflected in play and discussion reveal the organization of the variety of composite images of self and others that children have constructed on the basis of experiences, urges, and feelings. These representations of the self and others, although never fully conscious, are reflected in children's ever-changing conscious fantasies, attitudes, and behavior. In other words, the children's attitudes, suggested by the way they relate to others, reveal an internal frame of reference that draws on (1) their experience of interacting with similar figures and their awareness of an expectable set of social conventions; (2) the status of specific urges and the relative balance between the pleasure gained from their expression versus fear of potentially negative consequences in the form of shame, guilt, anxiety, or actual danger that might result from a clash with either internal or external expectations; and (3) the developmental status of a sense of self, that is, an appreciation for personal abilities that are now experienced as autonomous in relation to the parents.

Unlike other approaches to clinical interviews with children, psychodynamic technique eschews structured questions that aim at eliciting "mental status" on the basis of verbal responses and verbal information regarding attitudes and interests. It is assumed that children are most likely to reveal their interests, attitudes, and capacities in a situation that can become familiar and comfortable. This sense of familiarity and comfort can best be established by children themselves as they become acclimated to the therapeutic setting. The therapist is in the best position to observe what children bring to the sessions if the therapist's questions, suggested activities, direction of play narratives, and the like are kept to a bare minimum. When the session is not directly shaped by themes that the therapist introduces, children will bring to therapy their own versions of personal experiences that are configured and represented in play, activities, and discussion. This does not mean that the therapist must remain inactive, silent, or vacant in his or her presentation, but rather that he or she should convey a friendly interest and respect for children by attending to what children themselves introduce in the session.

VI. THE INTERVIEW SETTING

At the beginning of any treatment, the therapist's knowledge of children's phase-specific concerns contributes to his or her ability to set the stage for a therapeutic atmosphere in which therapist and child can learn about and work on the dynamic intersection between inner life and the external world of the child.

In the clinical situation, the child psychotherapist has the task of introducing the consulting room and the psychotherapy as a safe situation in which the therapist and child together have an opportunity to explore and

work through the difficulties that have been brought into the treatment. Children's sense of safety is influenced by the ways in which the therapist conveys appreciation for the dangers children confront throughout the process. The child's comfort level during the session will also vary according to what is uppermost in the patient's mind at any given time.

Preschool children experience the sense of safety in the familiarity and pleasure of the imaginative play with a friendly adult who can follow their lead while maintaining effective limits on potentially dangerous or overly exciting behavior. Safety also will be experienced in the comfort or confidence the parents convey in their attitude toward the therapist and by their availability before, after, and at times during the session. Children will begin to develop a sense of safety as they discover that the therapist will do no harm—whether in response to provocative behavior or to any thoughts, fantasies, or feelings that may emerge.

These same issues may be equally prominent for school-age children. However, there is now an additional burden for these children. They are invited to reveal aspects of their inner life at a time in development when the need to renounce the open expression of infantile longings is paramount. School-age children's increased interest in privacy and secrets, games with rules, cause-and-effect thinking, engagement with peers and activities outside the home, curiosity and learning, and bodily self-care are products of newly emerging mental structures made possible by advances in both cognitive and physical capacities. These interests reflect children's ability and need to move away from their earlier dependence on parents as well as from a fantasy life in which the parents figured prominently as direct objects of sexual and aggressive impulse. In many ways these new developmental acquisitions add additional challenges to the usual ones of establishing a psychotherapeutic relationship. For school-age children, anxiety is aroused from the intimacy of the relationship with the therapist to reawaken old, now-unacceptable dependent longings as well as stimulate the emergence of wishes and fantasies experienced as dangerously regressive.

For adolescents, the dangers of yielding to a resurgence of longings and interactions that resonate with earlier phases of development are now intensified by biological maturation. Asking for or being sent for psychotherapy may confirm the adolescent's worst fear that his fluctuations in mood, preoccupations with sexual and aggressive fantasies and feelings, and anxiety about negotiating aspects of daily life are indications that he is crazy, infantile, and incompetent.

In therapeutic work with each of these age groups, the child's sense of safety will, in large part, derive from the therapist's appreciation of the specific dangers that are evoked for this particular child by the introduction of the psychotherapeutic situation as well as from an understanding of the developmental importance of the defenses that are called into play.

VII. DEVELOPING THE THERAPEUTIC PROCESS

The first meeting with children usually is preceded by meetings with the parents in which the presenting difficulties and developmental and family history are discussed. These meetings with the parents are conducted either by the child therapist or by a colleague. This background information will provide a context for direct observations made by the therapist over the course of two or three evaluative sessions. In the context of these meetings, it is suggested to parents of young children that the child be told in simple terns that they will be meeting with someone who helps children who are having worries. The parents can introduce their child to the idea of meeting with the therapist by saying that they know that the child has been having troubles and that they would like to help so the child will feel happier and free of the worries that are making life so difficult. Additionally, parents may briefly describe the nature of the contact with the therapist by telling the child that they will have a chance to play and talk, get to know the therapist over time, and slowly figure out worries with the help of the therapist. Although the details of what parents tell their child may vary, parents of children younger than 5 years of age are counseled to keep the explanation brief. Parents should be helped to understand the importance of following the child's lead regarding how elaborate the explanation about the consultation should be. For example, in response to the child's questions, parents may distinguish the difference between the kind of doctor who does examinations and gives shots and the doctor who helps children through play activities and/or words.

Children under 6 may feel most comfortable if a parent accompanies them and the therapist into the consulting room for the initial meeting. Young children frequently make verbal and nonverbal requests—by holding onto a parent's hand, climbing onto the parent's lap, or leaning up against the parent's body—that the familiar adult remain in the consulting room for some

time. The therapist's initial communications are meant to demonstrate that the setting and the therapist are free of external demands or threats that might prove overwhelming. These opening communications should be kept simple but should include a verbal introduction of herself and her intentions (i.e., "We are going to a room where we can play and talk"); an awareness of the child's wishes about the timing of separating from the parent; and a friendly but low-key invitation to the child to explore the contents of the playroom and to use the toys and drawing materials. Just as the parents have introduced their child to the idea of seeing the therapist, the clinician also may tell the child that he or she is there to help them with their worries. Some psychotherapists prefer to say more, describing in greater detail the schedule as well as the nature of their work; others say very little, preferring initially to learn from the child his or her initial ideas about treatment.

The choice of play materials should invite the child's imaginative use of them as well as be appropriate to the child's level of developmental functioning. For younger children, the use of small animal and human figures, puppets, a doll house, toy cars, and paper and markers all serve as relatively neutral objects that they can use in developing play themes and narratives. In contrast, using toys that derive from television shows may evoke scripts that even when personally elaborated by children were originated in the imagination of someone else and therefore confuse and diminish their projective and communicative value in the therapeutic process. Similarly, too many toys or activities that increase the potential for regression and direct enactment of impulses—play with water, paints, swords, and guns with projectiles—may succeed in engaging children in the room but may be overstimulating for many children who come to experience the consulting room and the therapist as dangerous.

A. Case Example 1

A psychotherapist just beginning her work with a 5-year-old girl expressed surprise and some anxiety as she reported in supervision on the first 3 psychotherapy hours with the girl. The therapist reported that the girl, Yvonne, had been referred because of chronic battles with her mother, frequent nightmares, fights with kindergarten classmates, and obstinate refusal of her teacher's requests to join in-group activities. There were no immediate external precipitants to these difficulties, which had been apparent in varying degrees for the previous 18 months. Her history was unremarkable except for her mother's acknowledgment that both she and her husband were perhaps overly strict, demanding compliance to their expectations that, from age 2, Yvonne should behave like a "little grown-up." Mother reported that prior to the current difficulties, both she and her husband as well as other adults frequently had commented on how well-behaved and mature their daughter seemed—"she was such a sweet, good little girl … maybe too good."

The therapist went into some detail in describing the first three sessions and her consternation about the dramatic fluctuations in Yvonne's presentation. In the first hour, the girl had separated easily from her mother, was friendly, and seemed comfortable accompanying the therapist into the consulting room. However, once in the room, Yvonne stood in one corner, finger in her mouth, eyeing the therapist and the contents of the room quietly. After several minutes the therapist invited her to explore in sequence, the dollhouse, human figures, and finally the crayons and paper. Yvonne stood her ground and quietly shook her head. The therapist posed several questions about favorite toys and activities, to which Yvonne gave brief responses. After 30 minutes in the room, Yvonne walked over to the dollhouse and explored it for the next several minutes. She ignored or did not respond to any of the therapist's attempts to engage her but remained seated in front of the dollhouse fingering the figures and furniture inside. Suddenly, 40 minutes into the session, Yvonne looked up at the therapist and announced, "I'm done," and walked out of the room with the therapist trailing behind her. She was not interested in the suggestion that perhaps it might feel more comfortable to have Mom in the room with them and instead informed both therapist and mother that it was time to go home.

The second session began in a similarly quiet fashion. However, the therapist had decided to become more active in this meeting and to bring more play materials that might be of more interest to the girl. She equipped the room with an easel, paints and brushes as well as several cans of Play-Doh, and several different size dolls. The therapist described her demeanor as more upbeat, for example, greeting Yvonne with a buoyant announcement that she had a number of surprises waiting for her in the room. Yvonne declined the offer to have her mother in the room. Again she stood for several moments surveying the room as the therapist began unpacking Play-Doh, mixing paints, and describing what fun they might have playing with these items. After several moments, Yvonne did engage in painting, at first slowly and carefully on the paper and then with

less care, which then culminated in a frenzy accompanied by wild giggles as she flung paint onto the paper, the walls, and the floor. Before the therapist had any time to comment, Yvonne went to the Play-Doh, which she rolled in balls and excitedly threw against the wall while darting about the room, glancing in a challenging way at the therapist. And so the session continued as the therapist spoke of the need to keep her patient safe, the rules for being able to continue to use the materials, and so on—all accompanied by the therapist's frozen smile and strained attempts to retain her composure. The session ended abruptly when Yvonne gleefully ran out of the room screeching her way down the hall until she reached her mother and again grew quiet as she looked out from behind her mother's dress, gazing at the therapist who had finally caught up with her.

The third hour presented yet another picture of Yvonne and a new set of challenges for the therapist as her young patient was now terrified of entering and then remaining in the consulting room. Yvonne insisted on having her mother in the room and sat quietly on her lap for the entire session. The therapist hypothesized that her eagerness to engage Yvonne in exciting activities was an attempt at seduction that had been too overwhelming for a child whose threshold for excitement and retaining self-control is especially low. The therapist and the sessions themselves had become the focus of fear as they represented the invitation to give full rein to impulses that Yvonne found both exciting and dangerous. In subsequent hours, the therapist verbalized how excited and frightened Yvonne had become and how important it was for her to feel safe again. In addition to inviting the mother into the room, the therapist eliminated the more stimulating paints and Play-Doh while assuming a more low-key and patient approach to Yvonne. After several sessions Yvonne was again comfortable being alone with her therapist and continuing, at her pace, the exploration of this new setting and the struggle over expression of impulses that brought her into treatment.

In contrast to the younger child, many school-age children are well aware of the troubles that have prompted their referral for treatment. With children of this age, the therapist will need to discuss more directly the children's and therapist's ideas about why children are coming for psychotherapy. When appropriate, the therapist may want to negotiate directly with older school-age children such issues as the scheduling of sessions and elicit their interest in helping with the therapist's choice of materials available in the room. The goal here is to create a bridge, or neutral ground, in which children can begin to describe directly or in displacement their experience of themselves internally and in relation to others in day-to-day life. Although school-age children may choose the same materials as younger children, such as play figures, puppets, a doll house, and markers and paper, older children may prefer activities less clearly associated with their younger selves. A deck of cards, checkers or chess, and models to be constructed may all play a role in the psychotherapy of older school-age children. Children may employ such activities as "something to do" while they talk, or children may use them in the service of representing their difficulties around aggressive, competitive, and superego conflicts.

B. Case Example 2

John was a 10-year-old, highly constricted boy who shied away from engaging with peers or attending to his schoolwork when referred for evaluation and subsequent psychotherapy. Over the course of his 18-month treatment, the theme of competition became increasingly linked to danger as he developed play and written stories about armies fighting over a country and the affections of its ruler, the queen. The sessions often would end with each of the armies being decimated. As the therapist eventually commented on how dangerous the battles seemed for both sides. John replied outside of the play, "Well, that's what can happen when you want something too badly." During the work, John could reveal through play and discussion the extent to which his wish to be the best at everything preoccupied him. This longing was accompanied by intense rivalrous and destructive fantasies that were directed toward his father and siblings whom he felt were competitors for his mother's exclusive attention and, by extension, toward peers for the teacher's. Equally intense were John's sense that his wishes were morally unacceptable and in direct conflict with the positive attachments he felt to his rivals. For John, any competitive strivings engendered the same massive superego repudiation, guilt, and accompanying anxiety that greeted his unconscious fantasies and the conviction that his destructive wishes would come true. As John became more conscious of the link between his fantasies and his symptomatic avoidance of any show of competence and competition, his academic and peer involvement significantly improved. Exploring the origins of intensely rivalrous feelings through play and talk led to a greater tolerance for himself and an increased sense of safety in

the fact that, as he put it, "Wishes are only wishes, you know."

The use of elaborate board games, while reflecting age-appropriate interests, often narrow the focus of the therapeutic work to the task of mastering specific rules and strategies, thereby closing off other avenues of representation and communication that might be expressed and observed more easily in a less demanding game. The repetitive and circumscribed nature of elaborate games may, in fact, serve the defensive function of avoiding conscious awareness of fantasies and associated troubling feelings. In addition to the tasks of listening, observing, and exploring the contents of the imaginative play, games, or discussions, the therapist must be able to appreciate the importance of children's defensive operations in order to assist in developing a safe enough forum in which fantasies and feelings can be elaborated. In some treatments, such as John's, the original use of displacement (or the expression of conflictual themes and feelings via characters in play, narratives accompanying drawings, or discussion of the lives of "others") may lead to greater insight, conscious recognition, and verbalization of the links between inner life and patterns of behaviors. In many other treatments, however, the use of displacements themselves may provide just the opportunity children need to work through new solutions to conflicts that have given rise to the symptoms and troubles that have brought them into psychotherapy. Verbalizing formulations that reflect hard-won insight into the presenting problems may be more of a need for the therapist than for such children.

Similarly, the developmental tasks of adolescence demand a very different approach from preschool and school-age children, usually from the moment of referral. Although young and mid-adolescents may come for treatment primarily at the instigation of parents or school, usually they have a very clear idea of why others think they are in trouble. It is important in the beginning work for the therapist to recognize that adolescents' protests that it is parents or others who have the real problems does not determine or predict the extent to which they will be able to engage in the psychotherapeutic process. Instead, adolescents may have a very different agenda concerning psychotherapy from the adults who have encouraged, or required, them to seek help. Although the therapist may want to make some effort to negotiate with adolescents the differences between their agenda and that of the adults, if adolescents are to be engaged successfully in their own treatment, the therapist must acknowledge and, when possible, accept their agenda as the central psychotherapeutic task.

With adolescents whose feelings of mistrust, displays of negativism as a defense against fears of passivity, and a negative transference are common, it is important for the therapist to ally with those parts of the patient's ego that strive for harmony. An initial focus on the adolescent's strengths is often the best way to foster a therapeutic alliance. Adolescents, even more than adults, find it easier to fight external conflicts than internal ones. Helping the patient put the former in better perspective often builds confidence in the therapist that allows for later exploration of the latter. The therapist's ability to use language that stretches the patient's awareness, but does not talk down or sound autocratic to him, is crucial for the patient to hear what the therapist is conveying. Two other aspects of psychoanalytic psychotherapy with adolescents must be kept in mind. One is that adolescents frequently have a confused sense of time. It is not uncommon that only the near future is recognized. The past is what as soon-to-be-adults they want to put behind them, while adulthood beyond the 20s is too much like their parents' lives to comprehend. This concentration on "now" may leave a feeling of rapid movement and of being in a hurry to go they know not where that requires understanding by a therapist. Another aspect of adolescence that may intrude into the therapeutic interaction are the paradigms of love and mourning, which may intrude to take the patient's mind off the therapy. These are typical of the age and, rather than resistance, are usually short-lived and can be learned from.

Unlike preschool or school-age children, adolescent patients may be much more comfortable sitting and talking "like an adult" rather than playing. However, the psychodynamic developmentally informed therapist understands that the operative word here is "like," not "as." Young to mid-adolescents, although wishing to appear adultlike, often are not able to sustain for long the sort of introspective, self-reflective stance that characterizes many adults seeking treatment. Adolescents may feel most comfortable talking about their life with peers or about the failings of their parents. On the other hand, they may be very reticent to engage in or reveal the self-reflection and troubling affects that may accompany such "neutral" topics that are seemingly so distant from internal experiences. It is the therapist's task to introduce adolescents gradually to a more self-reflective stance and to help them to sustain such a stance during sessions. Because it is the central developmental task of the young to mid-adolescent to achieve greater psychological independence and separation from parents, adolescents experience any thoughts, fantasies, or feelings that they associate with earlier

developmental levels as a dangerous move backward toward earlier childhood feelings (i.e., regression); therefore, they go to great pains to avoid them. When adolescents experience the psychotherapeutic process as exerting a regressive pull toward psychological reengagement with the parent of childhood, they are most likely to flee psychotherapy in the service of reestablishing what they are convinced is a developmentally necessary separation and attainment of greater autonomy. For these reasons, it is the therapist's task to approach the inner conflicts of adolescents, which inevitably carry with them this regressive valence, with great tact and developmental understanding. Young to mid-adolescents may be most comfortable "chatting" during their hours about sports, apparently superficial peer relationships, or television shows and characters. During the early phase of treatment, the therapist may have to work almost exclusively through the displacements afforded by such seemingly bland topics, which, over time, may help both to establish a feeling of control and safety in sessions as well as to provide his or her version of the bridge to discussing more directly increasingly relevant personal material.

In attempting to make adolescents feel comfortable, the therapist may make the mistake of trying to present himself or herself as a "hip" pal by initiating conversation that adolescents experience as dangerously seductive or intrusive (e.g., presenting as knowledgeable and "up" on culturally current topics, such as the latest sports or cultural figures and popular music). Adolescents in treatment are most comfortable with a therapist who is clearly an adult, but one who is an especially careful and thoughtful listener. Young adolescents often will become more comfortable as they feel confident that the therapist will not intrude on their burgeoning sense of psychological autonomy by moving to intolerably "deep" levels too quickly or making interpretations that they experience as "wild" and tactless. For adolescents who have the greatest difficulty in tolerating any verbal engagement or face-to-face contact that increases the sense of being scrutinized, the offer of simple games (e.g., card games, checkers, chess) may provide a more neutral basis of interaction. Again, adolescents' experience of control and of the therapist as nonintrusive may allow them to feel safer revealing themselves in their own good time and guided by their own wish to feel relief from struggles that have brought them to treatment.

The choice of materials, scheduling, and frequency of meetings is crucial in setting the tone of the therapeutic relationship. These decisions should be informed by the therapist's understanding of the patient's developmental level. For preschool children, a minimum of twice-a-week appointments usually is necessary to provide the continuity in which psychodynamic lens can be employed usefully. Although older children may be able to develop a sense of therapeutic continuity in a once-a-week treatment, here, too, more frequent weekly appointments help therapist and children to cultivate a sustained "therapeutic atmosphere" in which the material of sessions can be understood by both participants to reflect the children's inner world with its conflicts and defenses. This therapeutic atmosphere, which includes the even, observing attention of the therapist to children's underlying conflicts and defenses as they are revealed in their play, behavior, and talking, permits children and therapists to develop a shared therapeutic language.

More so than with younger patients, the possible use of psychopharmacological agents arises increasingly with age. If medication is prescribed by someone other than the psychotherapist, this can affect the patient–therapist relationship. Up until the past 10 to 20 years, there was also much debate as to whether medications negatively affected the therapeutic relationship even if the pyschotherapist was also the prescriber. It is now clear that if the patient has a disorder for which medication is helpful, alleviation of symptoms make psychotherapy more effective. At the beginning of the 21st century, there is more concern that psychoactive medications are given without psychotherapy, than the reverse. For the psychodynamic psychotherapist, the important aspect of medications, often overlooked in other types of psychotherapy, is the monitoring of the patient's fantasies and/or symbolic meanings of, and expectations, appreciation, and/or disappointment with, the medication.

VIII. WORKING WITH PARENTS AS AN ADJUNCT TO TREATMENT

Collaborative work with parents can be a crucial component when working psychodynamically with children under the age of 13. Children, even of grade-school age, are not able to present a full picture of their daily lives and behavior. In particular, children may wish to avoid reporting external events for fear of the critical judgment of the therapist. Meetings with parents during which they can report on events in children's daily lives are important for filling out the therapist's understanding of the children. Here we offer a few guidelines and warnings.

Collaborative work with the parents is critical to the psychodynamic treatment of children age 6 and under.

Unless parents share information concerning a child's daily life and behavior with the therapist, his or her capacity to understand the referents of the child's play may be severely compromised. In addition, parents of young children in treatment frequently are quite anxious or confused about how to handle their children's behavior. Developmental child guidance attuned to the needs of the specific family and child can be extremely useful in ensuring the parents' continuing support of the treatment. When necessary, helping the parents understand why they should alter their approaches to the child and in helping them develop new strategies may be an important factor in supporting gains the child may be making within the treatment hours. Children younger than age 5 have not yet developed a firm cognitive understanding of privacy or secrets and expect that the significant adults in their life share a mutual concern for their well-being; for these reasons, children under 5 usually are quite comfortable with the idea of meetings between parents and therapist.

Children over age 5, however, have begun to develop a strong sense of privacy and secrets and may be much less comfortable with the notion that material from their sessions might be shared with parents. For this reason, the therapist of school-age children must not only assure the children of the confidentiality of material from sessions but must in fact be careful during parental child guidance sessions that the material children wish to have kept private is not revealed.

Parental meetings should be scheduled often and regularly enough that parents understand their importance in conveying significant information about their child's ongoing life. Frequency and regularity of contact between parent and therapist also helps parents recognize that they have a critical contribution to make to the success of their child's treatment; under such circumstances, parents are less likely to retain the magical notion that they can turn their child over to the therapist to be "fixed." In addition, parental meetings underpin the development of sufficient trust in the therapist for the parents to utilize any development child guidance that is offered. Finally, such meetings permit the therapist to gain adequate understanding of the parents' personalities to know whether it would be useful to the success of the child's treatment to refer one or both parents for their own treatment. If such a referral is indicated, the therapist who has developed a collaborative relationship with the parents will have an adequately informed working alliance so that he or she can decide how to best approach the question.

Although it is usually the parent of the adolescent who initiates the contact with the therapist and undoubtedly pays for any treatment undertaken, collaboration with parents of children of this age is more difficult. Because adolescents are moving toward greater psychological independence and autonomy from their parents, they may experience any collaboration with their parents as threatening; collaboration thereby runs the risk of compromising the usefulness of the treatment to the adolescents. In general, adolescents are also better reporters of their daily lives and behavioral difficulties than younger children. For these reasons, parental contacts should be infrequent in the treatment of adolescents and in most cases they should not occur without the adolescent being present. Often, however, parents of adolescents feel most confused and upset about how to handle their child's behavior; they may express the need for increased contact with the therapist as a way of allaying their own anxieties and of developing new ways of handling their child. During the initial contact with the parents, the therapist must make clear the developmental reasoning behind the necessary restriction of contact between parents and therapist. Often treatment of adolescents is enhanced or successful only when the parents are seen on a regular, or as needed, basis by a colleague. With information about the parents and their contributions to family interactions alongside of reports from the adolescent's therapist, the collaborating clinician will be in a good position to help parents develop and assess new ways of understanding and responding to their adolescent more effectively while helping to maintain the confidentiality of the adolescent's treatment itself.

IX. CHILD PSYCHOANALYSIS

The principles we have described for psychodynamic psychotherapy have been derived from child psychoanalysis. The differences between psychoanalysis and psychodynamic psychotherapy lie in the frequency of appointments, the analyst's more consistent focus on defense and transference issues, and the relative abstinence of the analyst's stance toward the child patient. Children in analysis are generally seen four or five times a week. This frequency allows the analyst to be more patient for material to emerge; he or she can be confident that important psychic material will appear over and over again in different forms. As a result, the analyst does not need to rush to understand or to make what may well be premature interventions based on limited material. The frequent sessions also make the child's characteristic modes of defense against conflict much more clear and the child's attention can be more

easily drawn to his or her defensive activities. In a similar way, it becomes easier for the analyst to sort out what aspects of the child's relationship with him or her are being driven transferentially and what aspects may constitute the "real relationship." Finally, the analyst's confidence that significant clinical material will emerge in a context that both analyst and child can understand allows the analyst to be somewhat less active, or relatively more abstinent, in the clinical setting, counting on the interpretation of conflict, defense, and transference to carry the primary therapeutic action.

The intensity and details of the treatment relationship and material that can emerge in a psychoanalysis require additional training for the clinician who engages in this specialized area of clinical practice. Graduate psychoanalysts have had a rigorous and extensive clinical training following completed graduate education as a psychiatrist (M.D.), psychologist (Ph.D.), or clinical social worker (M.S.W.). Psychoanalytic training consists of three parts. Candidates attend a multiyear sequence of courses on development, psychoanalytic theory, and technique. They undergo a personal analysis. They conduct a number of psychoanalyses under close clinical supervision. Usually child psychoanalysts have completed training in adult psychoanalysis as well as child and adolescent psychoanalysis. The latter training involves an additional sequence of courses and the supervision of the psychoanalysis of children and adolescents. There are a small number of training programs that train candidates in the practice of child and adolescent psychoanalysis without training in the practice of adult psychoanalysis. There is no federal or state accreditation for psychoanalysts, but the standards of training are maintained by two major professional organizations: The American Psychoanalytic Association and the International Psychoanalytic Association. Training programs are affiliated with either or both of these organizations, which establish, accredit, and maintain the affiliated training programs.

When, then, is psychoanalysis the recommended treatment for a child as opposed to once or twice weekly psychodynamic psychotherapy? Why would a child analyst make the decision to recommend analysis for a particular child and when would it be appropriate for a nonanalyst to make a referral of a child to an analyst?

A child would be an appropriate candidate for psychoanalysis if (1) he or she is strongly defended against acknowledging the severity of his or her problems; (2) if the relationship with the clinician is dominated by transference dynamics that have not yielded to a less intense form of intervention; and, (3) at times, when the severity and intractability of the child's symptoms have resulted in a developmental arrest that seriously impedes the child's ability to move forward developmentally. This latter situation may, at times, include children with ego vulnerabilities.

Some children, particularly latency-age children, are quite resistant to being able to recognize the severity of their problems. Grade-school age children in once-a-week treatment may use board games to ward off the encroachment of reality outside the clinician's office, the reality in which they are most symptomatic. Attempts on the part of the clinician to confront the child with his or her symptomatic behavior outside the office are met with staunch denial and an insistence that "everything is fine." Such a child is well able to maintain the comforting fiction that whatever problems he or she may face are really someone else's problems. When externalization successfully deflects the patient's capacity for self-observation, psychoanalysis may yield a great deal more data and opportunity for joint scrutiny of the sources of internal conflict and discomfort and the counterproductive ways in which unwanted struggles are characteristically jettisoned.

A. Case Example 1

Ten-year-old Amy had a history of sabotaging her friendships by her passive-aggressively expressed critical stance toward others; she would roll her eyes mockingly, make a low-voiced angry comment, or fail to interpret correctly the social cues given by other children. Amy experienced herself as endlessly falling victim to the meanness of others, whether it was to her classmates' "cattiness" or to her parents' "unfairness." When her attention was forcefully drawn to these reported problems, she would respond at first with denial and then would sadly insist that she "couldn't help" being so angry "because my parents are divorced." Amy's relationship with her therapist was dominated by her need to present herself as a nice cheerful girl who enjoyed coming to therapy to play cards. A year of once-weekly psychodynamic psychotherapy had not allowed Amy to make any real progress; she remained as insistent as ever that the world had dealt her a bad hand of cards and that other people should change. A recommendation for psychoanalysis would be appropriate for Amy. The frequency of sessions would make it more difficult for Amy to sustain her "niceness" with her therapist; it would be expected that her symptomatic critical, hostile behavior would come more directly into the relationship with the analyst, even if her mode of communication continued to be to play cards. In addition, the frequency and intensity of the clinical hours would allow the analyst to scrutinize more carefully the defen-

sive aspects of Amy's pleasant facade with him. Amy's attention could then be drawn to the defensive aspects of her "niceness," her underlying fear that she was a stinky, nasty girl whom nobody could really like, as well as provide a better understanding about what drove her aggressive conflicts.

Similarly, the intransigence of symptomatic behavior may be an important indication that too little about the nature of the underlying internalized conflicts has been revealed, understood, or worked through. This may be especially the case when the child has, in fact, been well-engaged in a psychotherapy and the parents have been able to alter life circumstances of and responses to the child based on their full involvement in parent guidance work.

B. Case Example 2

Five-year-old Joey was referred for treatment because of his provocative, combative stance toward people in authority, not only his father, but his female kindergarten teacher and the playground monitor. Parental child guidance had helped the father and mother change their handling of Joey, recognizing that much of his provocative behavior was driven by an underlying anxiety. The parents had also intervened with his classroom teacher who responded by making the rules and structure of her classroom clearer and praising Joey for his academic success. In his once-weekly treatment, Joey continued to play out stories of knights stealing beautiful princesses, fighting the king for the castle, and stories of motorcycle daredevils who took life-threatening risks to great acclaim. Joey's relationship with his male therapist was at times provocative, but when his therapist attempted to draw Joey's attention to his behavior, Joey quickly "settled down," turning from his dramatic play to some sort of "busy work." His behavior outside the classroom continued to be very problematic, with Joey hitting other children, disrupting playground games, and seeming to invite a punitive response from those in charge. Joey's analyst hypothesized that if Joey were in analysis, his attention could be drawn to the ways in which his occasional provocative behavior within his sessions was driven by his underlying fantasy that his "kinglike" analyst was out to take away Joey's power, making him feel once again helpless and little as he had so often in the past with his exciting and powerful father.

Psychoanalysis may also be indicated when symptoms and age-inadequate functioning derive from vulnerabilities in ego functioning that intensify the intransigence of internalized, neurotic conflicts. Difficulties involving poor impulse and affect regulation, deficits in capacities for synthesis and integration of stimuli, or paucity or primitive nature of defenses may only be observed, understood, and addressed fully in the context of an intensive, long-term analytic relationship.

C. Case Example 3

Six-year-old Betsy was referred for psychoanalysis because of her inability to adapt to many age-appropriate expectations. Her parents, though loving, had had little ability to set any appropriate limits for Betsy: She was not expected to go to bed at any particular time, she watched unlimited television, she ate only what she wanted and when she wanted. Weekly meetings with the parents helped the clinician understand the severity of the parents' own conflicts around aggression; the parents experienced any limit setting as dangerous and cruel. They recognized that their daughter was ill-prepared for life outside the family but felt quite helpless to do anything about it. Clinical evaluation revealed that Betsy was a bright child who was unusually comfortable at retreating into her own fantasy world of happy, magical fairies whenever reality made a demand on her. Betsy expressed a high level of anxiety about how dangerous the world outside the family was; she found it hard to concentrate in school because of her preoccupation with the idea that a fire might break out. She was equally concerned with the idea that the weather might suddenly and inexplicably turn seriously bad; in her mind there was a constant possibility of tornadoes or catastrophic storms. When she had such thoughts, Betsy quickly turned away from reality and withdrew into her magical fantasy world. The evaluating clinician viewed Betsy as a child with clear ego vulnerabilities, particularly in the realm of tolerating frustration, delaying gratification, vulnerability to ego regression under the press of her anxiety, and a reliance on a retreat from reality as a primary mode of defense. The clinician felt that once- or twice-weekly psychotherapy would prove inadequate to addressing the severity of these vulnerabilities because of the comfort Betsy experienced in withdrawing from the demands of reality. It was felt that only with the development of an emotionally significant relationship with the analyst would Betsy be able to tolerate the level of anxiety she experienced and become able to relinquish her reliance on such primitive modes of defense.

As suggested earlier, adolescence may be the most difficult period of development in which to engage a youngster in a close therapeutic relationship that involves

self-revelation. Although the diagnostic indications are similar to those described for younger children, there must be a particular urgency, either from the adolescent himself or herself or from his family or community that is necessary to sustain an analytic treatment in this phase of development. The analyst's recognition of the normative developmental demands that pull the adolescent away from an intensive therapeutic process require a level of flexibility with regard to frequency and continuity of treatment even when the adolescent has agreed in principle to its necessity.

D. Case Example 4

Having been involved in a series of delinquent acts, Dean was 15 years old when he was referred for treatment by the state run group home to which he had been remanded as a condition of probation. Dean had a long history of outpatient and residential treatment for a range of depressive, antisocial, and anxiety symptoms that had made it impossible for him to live at home from the age of 9. With an extensive traumatic history that included exposure to domestic violence between his parents, their subsequent divorce, witnessing his mother's suicide attempts, and leaving his mother to live with his father and stepmother, Dean frequently provoked fights with peers, teachers, and family members. His use of alcohol and drugs, like his involvement in burglaries and vandalism, were exciting refuges from feeling sad, abandoned, frightened, and helpless. While he entered psychotherapy as an adolescent under duress, Dean enjoyed regaling the therapist with excited stories about illegal and dangerous activities. He eagerly agreed to the suggestion that he might have a great deal on his mind and that once-a-week meetings were insufficient. Dean was eager to meet more regularly and agreed to the suggestion of four sessions per week.

In the context of the frequent contact, Dean was able to sustain the treatment even when furious with the analyst about his suggestions of a possible link between Dean's unhappiness and provocative behavior. Missed appointments occurred most predictably when Dean experienced his increasing longings for an idealized mother most keenly in the transference. At these times, Dean needed to reassert his independence at precisely the time when he felt most like a helpless infant. However, the analyst's continued availability combined with sanctioned expectations of probation forced and allowed Dean to sustain his treatment. In the context of reliable and intensive engagement with his analyst, Dean was able to tolerate his intense longings as he explored, and increasingly understood their early origins. Behavioral, academic, and social symptomatology diminished significantly when he could appreciate that the ways in which he defended against feeling small, helpless, and enraged also invited the rejection that confirmed bad feelings about himself and the sanctions that restricted his freedom and autonomy. The regularity, frequency, and relative flexibility of contact allowed Dean to sustain a treatment experience that replaced the dangers of infantile regression with mastery that accompanied insight. The intensity of the therapeutic relationship provided an opportunity for Dean to locate the sources of his current difficulties in the disappointment, fear, and rage of the past. As a result, he was more able to relinquish hope of recovering what could not occur in the past, in favor of seeking relationships and accomplishments that could be gratifying in the present.

X. CONCLUSION

All psychodynamic interventions focus on the dynamic interplay between internal agencies of the mind, the inner life of fantasy, cognitive abilities and neurophysiologic regulatory capacities, and how the demands of external reality are experienced. Psychodynamic treatment may take a variety of forms: psychoanalysis, intensive long-term psychotherapy, weekly play therapy, brief treatment, semistructured sessions, and consultation with parents. The multiplicity of methods employed in psychodynamic interventions are linked by a set of shared principles:

1. The individual has an "inner world" that includes representations of central wishes and fears, associated feelings, characteristic modes for avoiding discomfort, displeasure, and tension (defenses) as well as for obtaining pleasure.
2. Aspects of the inner world are unconscious.
3. Conflict is inherent within the inner world between wishes, within and between psychic structures, and between the inner world and the demands of reality.
4. Conflict within the inner world may either stimulate or impair developmental progression.
5. The inner world unfolds developmentally, supported, enhanced, or compromised by constitutional givens and environmental responses.
6. Behavioral symptoms reflect the child's efforts at finding a compromise solution to conflict.
7. The nature of the child's inner world can be understood through observations of play, verbalizations,

behavior, and relationship to the therapist and significant others.

The data that inform clinical decisions are derived from observations of the child in the consulting room—modes of relating, thematic content, regulation of emotions, activity levels, and self-observation capacities—as well as what is reported about the child's life outside of the consulting room. The form of the psychodynamic intervention is determined by the child's developmental level, the nature of environmental stresses and supports, and the child's constitutional endowment. The fundamental techniques employed are influenced by the child's level of developmental organization but are likely to include imaginative play; discussion; observation of behavior and feelings; and exploration, verbalization, and clarification of wishes, fears, and feelings.

See Also the Following Articles

Correspondence Training ■ Family Therapy ■ Home-Based Reinforcement ■ Parent–Child Interaction Therapy ■ Primary-Care Behavioral Pediatrics ■ Therapeutic Storytelling with Children and Adolescents

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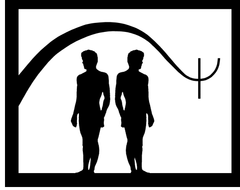

Cinema and Psychotherapy

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I. History of Commercial Films and Psychotherapy
II. Teaching Films
III. Use of Films in Therapy
IV. Summary
Further Reading

GLOSSARY

teaching films Use of films for demonstrating clinical pathology.

Modern psychotherapy and movies were invented at the same time. In 1895, Lumiere first publicly demonstrated the new motion picture system, and, in the same year, Freud and Breuer published *Studies in Hysteria*. The histories of the two inventions have been strikingly parallel. Both started humbly and in their long, early development were seen as dangerous or immoral. The pioneers in both endeavors were largely outsiders or members of minority groups. After a period of increasing respectability, intellectual acceptance, and popularity, both became powerful cultural forces but then began to wane under pressures from competing systems, TV and medications. Both inventions responded with modification and experimentation and are now fighting for survival in a changing world.

From the beginning, both psychiatry and the movies have borrowed themes and terms from each other. Dreams, madness, and old motivations have been the subject of countless movies; dream screens, frame analysis, and flashbacks have infiltrated psychological discourse. But beyond this, the movies and psychiatry have always demonstrated a special affinity for each other, because to an uncommon extent they share an interest in human behavior in general and deviations from the norm in particular. Movie stories and psychiatric case histories have always drawn their content from the same reservoir of heightened emotions and unusual motivations.

As early as 1900, 5 years before the proliferation of nickelodeons, Clifford Beers testified to the psychological power of the new medium in his groundbreaking *A Mind That Found Itself* when he described his psychotic break in these terms:

> I imagined that these visionlike effects, with few exceptions, were produced by a magic lantern controlled by some of my myriad persecutors. The lantern was rather a cinematographic contrivance. Moving pictures, often brilliantly colored, were thrown on the ceiling of my room and sometimes on the sheets of my bed. Human bodies dismembered and gory, were one of the most common of these.

As therapy and cinema developed, they have interacted in three major directions: the commercial film has depicted psychiatry and psychotherapy in various ways; teaching films have been developed to illustrate psychopathological states and treatments; and movies have been used in therapy to highlight themes of troubled patients.

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I. HISTORY OF COMMERCIAL FILMS AND PSYCHOTHERAPY

Early movies, apart from a variety of trick and fantasy subjects, were mainly depictions of real-life events, and real or faked historical occurrences. A number of physicians, intrigued by the new invention, used it as a teaching tool to photograph an array of neurological and psychiatric pathological states. Only a year after the first public showing of a motion picture in 1897, Paul Schuster of Berlin filmed patients with a variety of neurological disorders. A year later the Romanian clinician, Georghe Marinesco, filmed the gait in hemiplegia and paraplegia. About 1905, Emil Kraepelin in Munich began to make films of psychiatric cases. In 1908, Camillo Negro of Turin made a number of medical films of neuropathic disorders. The first attempt to use movies to depict neurological patients in the United States was made by Dr. Walter Chase of Boston. It was a film demonstrating characteristics of epileptic seizures. On a sunny day in 1905, he assembled on the lawn 125 naked patients, covered only with blankets, and waited. A fixed movie camera stood in readiness. As soon as a patient began to have a seizure, the blanket was removed, and the patient was placed in front of the camera. On that one day, 21 grand mal seizures were filmed.

By the middle of the first decade of the century, story films began to predominate. These were one reelers, about 10 min in length, leaving little room for character development or subtlety. The first treatment of psychiatric patients consisted mostly of comic chases in which asylum patients, dressed as Napoleon in some films, outwit their attendants in escaping from the hospital, lead them a merry chase through the countryside, tormenting them along the way, and then return to the asylum. *The Escaped Lunatic, The Maniac Chase,* and *Dr. Dippy's Sanitarium* are examples of these films. Other films of the period featured such titles as *The Kleptomaniac, What Drink Did,* and *A Drunkard's Reformation.* More serious and dramatic treatments of mental illness appeared in D. W. Griffith's 1909 *The Maniac Cook* and *The Reformation.*

The 1906 chase film *Dr. Dippy's Sanitarium* depicted the first psychiatrist, an asylum doctor, to appear in films, and the 1909 Griffith one reeler *The Criminal Hypnotist* featured the first outpatient psychiatrist. However, these movies are interesting for another reason. These two crude films present, at the very outset of movie depiction of psychiatrists, the three dominant models of mental health workers that would recur throughout film history. First, a brief synopsis of the films.

Dr. Dippy's Sanitarium opens with Dr. Dippy hiring a new attendant. The employee is introduced to four patients who are to be in his care, one of whom is a woman. The four inmates perform comic "lunatic" routines and then begin to harass him. Finally, the three male patients escape from the hospital, closely followed by the corpulent, frantic Dr. Dippy and excited attendants. As was characteristic of other maniac chase films, the escape ends up back at the hospital where the goofy doctor distracts and soothes the increasingly violent patients by giving each a pie (is this the first major tranquilizer in the movies?).

The Criminal Hypnotist tells the story of a party hypnotist who puts a young woman under his spell and instructs her to steal money from her father's desk drawer. He absconds with the money and leaves her in her home still in a trance. Her father sends for a "mind specialist," a term apparently more meaningful in that era than psychiatrist or alienist. The large, stocky, bearded specialist quickly responds. He immediately recognizes the problem and lightens her trance, preserving enough of it to enable the young woman to lead him, her father, and a policeman to the hypnotist's lair. As the policeman takes the villain away, the "mind specialist" fully clears the young woman's mind, and she falls happily into her father's embrace.

What appears in these films is the emergence of three distinct types of mental health specialists (when the hypnotist is included as a mental expert), essentially archetypes. Irving Schneider has named them Dr. Dippy, Dr. Wonderful, and Dr. Evil. All movie depictions of therapists can be seen as featuring one or another of these types. Dr. Dippy is the typical comical movie psychiatrist, the one who is crazier or more foolish then his patients. Some classic films in which he has appeared are *Mr. Deeds Goes to Town* (1936), *Bringing Up Baby* (1938), *Carefree* (1938), *What's New Pussycat?* (1965), and *High Anxiety* (1977).

Dr. Evil, as he appears in so many movies, has an urge to master or control, often for criminal purposes, but just as often for the sheer pleasure in power. He is willing to experiment without regard to human consequences, and those who come under his control are often driven to murder, suicide, or crime. When he treats patients, he is likely to use methods seen as coercive: ECT, lobotomy, drugs. Examples of his appearance are *The Cabinet of Dr. Caligari* (1919), *Nightmare Alley* (1947), *I, the Jury* (1982), *Dressed to Kill* (1980), and *Frances* (1982).

Dr. Wonderful is all that Dr. Evil is not. He is humane, earnest, modest, and deeply caring. He is always ready to come to the patient's rescue, whatever the time or circumstance. He is gifted at improvisation, especially when necessary to uncover traumatic events, and thereby achieves instant cures. His treatment is almost always the talking cure, seldom drugs or procedures seen as coercive. Some classic examples of these films are *Secrets of a Soul* (1926), *Now, Voyager* (1942), *Spellbound* (1945), *The Snake Pit* (1948), and *Ordinary People* (1980).

Throughout movie history the Dr. Dippys and Dr. Evils have outnumbered the Dr. Wonderfuls, which is either a commentary on movie plots or a reflection on how the profession is viewed by much of the public. Some typical movies of the decades since the 1930s that are examples of each of the three archetypes follow, representing a Dr. Dippy, a Dr. Evil, and a Dr. Wonderful. The 1930s had few psychiatric movies, but among them were *Mr. Deeds Goes To Town, The Testament of Dr. Mabuse,* and *Private Worlds*. In the 1940s, *Miracle on 34th Street, Nightmare Alley,* and *King's Row.* In the 1950s, *Harvey, I, the Jury,* and *The Three Faces of Eve*. The 1960s saw *Three On a Couch, A Fine Madness,* and *Pressure Point*. The 1970s featured *Deep Throat, One Flew Over the Cuckoo's Nest,* and *I Never Promised You a Rose Garden*. The 1980s had *Lovesick, Dressed To Kill,* and *Ordinary People*. The 1990s, *What About Bob?, Basic Instinct,* and *Good Will Hunting*. A complete filmography of psychiatric movies appears in the Krin Gabbard and Glen O. Gabbard book *Psychiatry and the Cinema.*

The very first film to depict psychotherapy was made in Germany in 1926. An executive of UFA, the principal German film company, suggested to Karl Abraham that he participate in making a film that would illustrate some of the mechanisms of psychoanalysis. Freud was not happy with the project but did not actively discourage it, so it proceeded with Abraham and Hans Sachs (who was increasingly involved because of Abraham's fatal illness) acting as consultants. The resulting film, directed by G. W. Pabst, was the famous *Secrets of a Soul (Die Geheimnisse Einer Seele),* subtitled *A Psychoanalytic Playlet.*

The story, taken from life according to the credits, tells of a chemist who develops a knife phobia, impotence, and homicidal impulses and is cured by psychoanalysis. Dream analysis plays a significant role in the treatment, with somewhat sophisticated visuals and interpretations.

The film is prefaced by the following statement:

> There are desires and passions which are hidden beneath our conscious minds. These unconscious desires come to the surface especially in moments of mental conflicts and depressions. At such times, mysterious sickness can develop which are part of the field of psychoanalysis. The progressive teaching of the university professor Dr. Sigmund Freud showed doctors trained in psychoanalysis the way toward healing such sickness.

As it turned out, psychoanalysis has become the principal theory and method of movie psychiatry. Sometimes wacky and sometimes serious portrayals and explanations of psychotherapy have taken off from the psychoanalytic model. Consider how psychoanalyst Fred Astaire explains his profession to reluctant patient Ginger Rogers in *Carefree* (1938):

> Miss Cooper, you understand the principle of psychoanalysis, don't you? … You do know that you have two minds, the conscious and the subconscious? The conscious mind is the ego; that's a thing that says, "I am I and you are you" … let me put it this way. [Hand to back of head] Back here is a jungle full of the most noble and horrible things. … That's your subconscious mind. It works all the time, even when you sleep. It dreams. It never forgets anything. Your conscious mind lies here [Hand to front of head] It doesn't dream. It thinks. What we try for is perfect coordination between the two. Do you understand? … To psychoanalyze you, I have to interpret your dreams. What sort of things do you dream?

A somewhat more sophisticated statement appears in the 1945 film *Spellbound*. By that time, psychoanalysis had become popular in the movie colony. The producer, David Selznick, had been in personal analysis with May Romm who became consultant to the film, and the screenwriter, Ben Hecht, had done his homework interviewing several analysts. Here is how European analyst, Michael Chekhov, explains his work to amnesiac patient, Gregory Peck:

> I'll explain to you about dreams so you don't think it is hooey. The secret of who you are and what has made you run away from yourself – these secrets are buried in your brain, but you don't want to look at them. The human being very often doesn't want to know the truth about himself because he thinks it will make him sick; so he makes himself sicker trying to forget. You follow me? … Here is where dreams come in. They tell you

> what you are trying to hide, but they tell it to you all mixed up like pieces of a puzzle that don't fit. The problem of the analyst is to examine this puzzle and put the pieces together in the right place and find out what the devil you are trying to say to yourself.

In recent years, such explanations of psychodynamic principles have not been necessary. Both Hollywood and the movie public have grown more sophisticated about psychotherapy. The treatment course in movies, however, remains stereotyped and elementary. It follows a typical path. As doctor and patient get to know each other, sometimes with initial conflict, they begin to explore the patient's life. At a critical moment, perhaps as a result of some outside event, the Dr. Wonderful makes a crucial intervention, and the causative traumatic event is unveiled. The patient is cured; often patient and doctor fall into each others' arms, and they all live happily ever after. To achieve this outcome, drugs or invasive treatments are almost never used. Examples of this include *Home of the Brave* (1949), the first modern film about race; *Ordinary People* (1980), *Good Will Hunting* (1998), and *Analyze This* (1999).

In contrast to this felicitous but uncommon outcome, real therapy requires patience and attention and yields occasional, but not so dramatic, breakthroughs. Probably the most realistic therapy scene depicted in the movies occurs in Paul Mazursky's *Bob & Carol & Ted & Alice* (1969). It features Don Muhich, a real-life psychiatrist, as the therapist, and Dyan Cannon as the patient. As Muhich sits stonefaced in his chair, she sits on the couch talking animatedly about her marriage. At one point, she makes a significant slip of the tongue, which he points out to her. She is startled about what the slip may mean, but as she starts ruminating about it the hour comes to a close. The doctor's problem now becomes how to get the reluctant patient out of the office in time for his next patient, while at the same time not closing out her new insight. The scene is played for comedy, but most therapists will immediately recognize the genuineness of the scene, as they might in some other realistic portrayals in *Blume In Love* (1973), *An Unmarried Woman* (1978), and *Lovesick* (1983).

Many of the rules for Dr. Wonderful do not seem to apply to female therapists. The career path for female therapists is quite different from their male counterparts. As Glen Gabbard has pointed out, no film in Hollywood history has ever shown a satisfying personal life and a successful analytic career co-existing in the same woman. Female therapists are either single, unhappily married, divorced, childless, or otherwise unfulfilled. And in their work there is almost no example of the female therapists effectively and ethically treating the male patient. The most glaring boundary violations occur in the area of romance. In real life, the most frequent occurrence of patient–doctor sexual violations takes place between male therapists and female patients. In the movies, however, female therapists frequently and approvingly fall in love with a male patient. The female side trumps the therapist's side. Consider Ingrid Bergman in *Spellbound,* Barbra Streisand in *The Prince of Tides* (1991), Lena Olin in *Mr. Jones* (1993).

Another difference between movie therapy and real-life therapy is manifest in the mental conditions being treated. Rather than the more common cases of depression, anxiety, bipolar illness, schizophrenia, and just plain unhappiness that therapists treat most often, movies, although including these, that is schizophrenia with *David and Lisa* (1962) and *The Snake Pit* (1948), have concentrated on the more dramatic diagnoses. The list of disorders overly represented in the movies includes dissociative reaction, especially amnesia and multiple personality (*Spellbound, Three Faces of Eve* 1957); homicidal mania, especially when combined with dissociative identity disorder (*Psycho* 1960, *Dressed To Kill* 1980, and *Halloween* 1978); substance abuse (*The Lost Weekend* 1945, *Days of Wine and Roses* 1962); disorders of impulse control; hysterical paralysis (*Home of the Brave);* phobic disorders (*Vertigo* 1958 and *High Anxiety* 1977); paranoid disorders (many action and horror movies); and no mental illness, with or without greater wisdom. This last category has been the terrain in which Dr. Dippy reigns supreme. Many of the Woody Allen movies are examples of this category. A popular version is *What About Bob?* (1991) in which a patient pursues his pompous psychiatrist to his summer home, ingratiates himself with the doctor's family and colleagues, and proceeds to take over his practice.

Psychological conflict and heightened emotion have been the dramatic material for commercial movies since the industry started. From the beginning and all through the years, psychotherapists and psychotherapy have periodically appeared to add a professional identity to the plot. This juncture at which therapy and dramatic content meet has been the subject of the first part of this article.

II. TEACHING FILMS

As already noted, the use of films for demonstrating clinical pathology began early in motion picture history. This effort has continued, but because of problems with sound reproduction and other technical

issues, this endeavor has tended to concentrate on neurological problems, and studies in infant and child behavior rather than therapy. The most famous of these were Arnold Gesell's films at the Yale Clinic of Child Development, Kurt Lewin's Iowa State University studies of social behavior, Rene Spitz's films of emotional starvation in infants, and Margaret Fries's studies of the effects of different maternal attitudes on the child's development. Though not directly dealing with therapy, these films had an effect on therapeutic theory and practice.

World War II led to John Huston's famous *Let There Be Light* (1945), which depicted the sodium pentothal treatment of various combat-related neuroses. However, the use of actual patients limited the showing of the films, ostensibly to protect the identity of the patients. Parenthetically, a similar fate befell Frederick Wiseman's *Titicut Follies* (1967), filmed in a Massachusetts prison hospital for the criminally insane with actual inmates.

After the war, the National Film Board of Canada made one of a series of mental health films, *The Feeling of Rejection* (1947). This was intended as an aid to group therapy, but like many of the Board's films it received a response from all audiences. By 1949, there was a heightened demand for films on mental health. The National Institute of Mental Health of the U.S. Public Health Service participated in establishing the Mental Health Film Board. This group supervised the production of many mental health films, including *Angry Boy* and *Fears of Children*.

In the late 1940s and early 1950s, the Veterans Administration produced a series of mental health films, including a group titled Psychotherapeutic Interviewing Series. Carl Rogers conducted a group of therapy sessions on film for teaching purposes. Several pharmaceutical companies sponsored films for therapists. The National Institute of Mental Health in the 1960s filmed a complete psychoanalysis, lasting for years. This film required extra-long reels of film, special projectors and cameras, and a room with a one-way mirror. There were high hopes for the research gains from this project, but very little was accomplished. Hundreds of film cans are stored somewhere but never seen.

From 1960 through the 1990s, Edward A. Mason, a psychiatrist/filmmaker at Harvard University Medical School produced a well-made series of teaching films. The subjects include consultation techniques, interview methods, street corner research, and above all, children's issues. His Wediko Series featured residential treatment of a group of conflicted adolescent boys. Unlike many of previous mental health films, his films are not acted; they depict real people in real-life situations.

Filmmaking is an expensive undertaking. Filmmakers like Mason are always concerned with budget and fund-raising. With the advent of video, it suddenly became possible with a small investment in equipment to become a moviemaker. Film and processing costs were no longer a problem. Many therapists began making films at centers all over the country. Two pioneers in this endeavor were Milton Berger on Staten Island and Ian Alger in New York City. The video revolution deserves notice but cannot be dealt with here.

III. USE OF FILMS IN THERAPY

The use of commercial films as a stimulus to therapy has become popular, but it also has a history. In the late 1930s, the Commission of Human Relations of the Progressive Education Association used material from 30 feature films for group discussion. However, given the costs and practical requirements of renting that many films, the effort had little influence.

Similarly, when Steven Gressitt in the 1970s compiled a catalogue of films dealing with a variety of mental traits and diagnoses for teaching psychiatry students and laypersons about varieties of human behavior, getting that many films was a problem in cost and accessibility. Harvey Greenberg avoids that drawback. In his book, he advocates asking patients about their favorite movies. He has found this to be a useful device, almost a projective test for highlighting patients' dynamics.

With the advent of videocassettes, all the problems of accessibility have been resolved. A spate of books has been published that describe the use of video in therapy. Typically in these books, commercial movies are catalogued according to theme. This may involve a diagnosis, a dominant feeling, or a painful event. All are generally available in the local video store. According to what the therapist sees as the patient's problem, the appropriate video is assigned for home viewing. The resulting experience is then discussed in the therapy session that follows. The claim is that this process illuminates the issues and frees the pent-up emotion. One example of this approach is included in the Further Reading section.

IV. SUMMARY

Movies are one of the principal inventions of the 20th century. Whole populations have been educated

in the ways of dress, manners, vocations, romance, sex, criminal behavior, and history. Censors have forever fought to limit access to one or another of these influences. Throughout the history of movies, one theme has remained prominent, the vagaries of human behavior. This, too, has been the realm of psychotherapy. Inevitably, cinema and psychology have found common ground. Some aspects of this interaction have been presented in this article.

See Also the Following Articles

Art Therapy ■ Bibliotherapy ■ History of Psychotherapy ■ Virtual Reality Therapy

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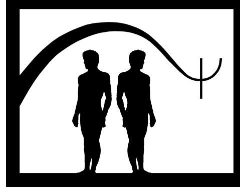

Clarification

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I. Meaning of Clarification
II. Recounting and Reconstructing
III. Clarification of the Self
IV. Clarification and the Transference
V. Therapeutic Contexts
VI. Summary
Further Reading

GLOSSARY

clarification Technique for gaining clearer understanding of the meaning of a patient's conscious (manifest) behavior and experience.

confrontation Technique of directing a patient's attention to inner experiences or perceptions of outer reality of which he or she is conscious or is about to be made conscious.

interpretation Verbalized understanding of meaning, conscious or unconscious, of patient behavior or experience.

introjection Form of internalization by which properties or functions of another person in a relationship are assimilated to the self-structure but remain partially integrated, instinctually motivated, and defensively organized. Introjective structure is reflected in self-representations.

reconstruction Recovery and formulation of past events to gain understanding of hidden meanings.

I. MEANING OF CLARIFICATION

The concept of clarification is centered on the basic idea of helping the patient to see more clearly, to differentiate meanings more accurately, and particularly to gain clearer and more accurate differentiation of self-organization and the relationship to the world he or she lives in. Earlier views saw clarification as consisting in restating the patient's feelings or thoughts in clearer or more precise terms. A fundamental distinction lay between clarification and interpretation: Interpretation involved conveying meaning or some form of explanation, however hypothetical, whether of meaning or causality. The general consensus was that clarification did not refer to unconscious (repressed or otherwise warded off) material but to conscious and/or preconscious processes, of which the patient was not sufficiently aware or which escape attention, but which can be recognized more-or-less readily when clearly presented to the patient. In contrast, interpretation may deal with conscious or unconscious content and processes and typically focuses on unconscious rather than conscious material.

Clarification is also distinguished from confrontation, which, along with clarification, provides another technical channel for dealing with conscious content in the patient's ongoing behavior. Although clarification has the function of making clear or of bringing about recognition, it does so in a more neutral and dispassionate fashion; confrontation adds the note of activity on the part of the therapist, emphasis, even forcefulness, and the overcoming of resistance. Clarification does not target resistance, but unclarity or lack of awareness. There may be defenses behind these

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obscurities, but clarification goes no further than calling attention to them when apparent. But even more subtle differences may come into play. There is a difference between accusing the patient of wasting time versus observing that the patient is still reacting as if his or her work with the therapist were doomed to be unproductive. The former is confrontative of resistance and renders a judgment, the latter provides merely a translation. The latter statement is more in the order of directing the patient's attention to a subsequent line of interpretation. The difference has to do with the presence of the therapist in the intervention. The patient's assent to the first intervention necessarily involves accepting both the fact and the role of the therapist, whereas assent to the latter requires only acceptance of the fact. In a sense, then, confrontation involves the therapist's forcing of the self on the patient, an intrusiveness involving real activity on the part of the therapist beyond transferential considerations.

In these approaches, clarification is treated as a form of intervention aimed at clarifying something in the patient's mind. But before that can be done, clarification has to take place in the therapist's mind. Clarification, then, is involved in the inquiry directed to understanding for both patient and therapist. Its objective is seeking information. The focus of clarification can be something the patient tells us about his or her experience outside the consulting room, something related to activities or relations with other people. What we want to find out are the details, the specifics of action and interaction to whatever extent the patient can remember or reconstruct them. The basic tactic is to encourage the patient to tell us more about the event or events in question, to convey interest, to ask questions to elicit more information. The point of course is that the devil is in the details—the more we can know about the specifics the better purchase we can get on the meanings and motives embedded in the account, the more opportunity we have of hearing the subtle reverberations of repetitive themes and transferential enactments. Among the more important details are whatever affects or feelings the patient can recount; the closer one gets to the concrete details of the situation, the more available are the relevant affects. In addition, the closer one gets to the specifics, the greater the likelihood that the material in the current event will reverberate with comparable events in the patient's network of associative material, and that parallel or comparable material from the patient's life history will become available, thus facilitating the process of free association.

II. RECOUNTING AND RECONSTRUCTING

Fundamental to the therapeutic role of clarification is the fact that as the patient develops his or her account of the events, whether that be some recollection of past, even childhood, events, or events occurring in recent or current experience, the patient subjects the material to a process of objectifying in constructing the narrative material, first in his or her own mind and then in telling it to another listener. In so doing, the patient reviews the material in his or her own mind, objectifying it in the process of reconstructing details. In this way, patient and therapist take the first steps along the path toward interpretation. Not only does the therapist gain a better understanding of what was involved in the event and why, but the patient does also—not by reason of any input from the therapist, but solely by reason of personal objectifying review and reconstruction.

As has been noted from the time of Freud, the patient's reconstruction, whether of a memory, fantasy, dream, and so on, is not necessarily a veridical recounting of actual events, but a rendering conducted through the lenses of retrospective construction (Freud's *Nachträglichkeit*), screen functions, selection, defensive distortion, and so on. These introjectively derived fantasy-related phenomena and their role in early object relations as well as current transference relations can be further clarified, helping to specify the patient's introjective configuration and progressively delineate it from reality. The interpretive process aims ultimately at maintaining a distinction between fantasy and reality: this issue, the clarification of the boundaries between the patient's fantasy life and its derivatives and reality is one that pervades the interpretive process from beginning to end. Even at the earliest stages of interpretive work with many patients, the therapist's effort is also directed toward beginning to establish the rudiments of a working alliance, which may require some clarification and at least phenomenological interpretation of the patient's experience in the therapeutic relationship as reflecting more therapeutic misalliance than therapeutic alliance.

Drawing the account closer to the concrete specifics does not eliminate these factors but does modify their impact to a degree. We are consequently forced to accept a degree of partiality or probability in any such account, that will usually yield to further elaboration or correction as the therapeutic inquiry continues, but never allows us the consolation of achieving an assuredly factual narrative, that is we may never get beyond narrative truth. If we do not arrive at the certitude of a factual account, however, neither do we necessarily have to settle for an

historical fiction. I would question the assumption that the truth generated in the course of therapeutic inquiry is either exclusively narrative or historical; the account of the past rather shares to some extent in aspects of both. The account of the past reconstructed from the patient's memories and associations is basically a subjective account that may or may not approximate to some degree the veridical historical events. However, the therapist is not directly interested in establishing such a veridical account but is concerned with finding the meaning of the reconstructed events in the patient's mind. If the account is not based in some degree on historical truth, that is based on data that bear the stamp of real happenings in the patient's memory and thus have a verifiable factuality, the reconstruction remains a fiction or illusion lacking credibility and impact for the patient. Thus, I would argue, not any reconstruction will do, but only that reconstruction that conveys a sense of factuality and resonance with the patient's experience and achieves a level of consensual acceptance for both therapist and patient.

From this point of view, then, clarification can be seen as integral to the interpretive process. Even more tellingly, clarification emerges as a process involving therapist and patient in a dialectic of inquiry, each enacting a contributory role in the process—the patient remembering, reconstructing, and recounting, the therapist listening and inquiring. This emphasis on the interactive quality of clarification process moves beyond early views of clarification in a one-person paradigm and locates the therapist's clarifying activity in a two-person process without changing the essentials of what the therapist does or what it means. In the classic view, the therapist clarifies by presenting a clarifying comment for the patient's consideration; but in the present view such an active intervention is only one dimension of clarification that reflects an underlying process of seeking for clearer information and understanding.

III. CLARIFICATION OF THE SELF

Clarification has another and even more important focus, namely what is involved in the patient's experience of self in whatever context of action and reaction or interaction encountered. We are concerned here with clarification with respect to the patient's self-introspection, that is the subjective experience of self as object. Clarification in this respect involves the same attention to specifics and detail as described earlier with regard to external events, but here the focus in on the patient's subjective self-experience, with special attention to affective states and feelings. The supposition here is that the configuration of qualities the patient attributes to himself as a person plays a crucial and central role in the patterns of maladaptive, self-defeating, and pathogenic action and experience that lie at the root of the neurotic difficulties or character faults. This aspect of the subjective inner world can be described phenomenologically in terms of pathogenic self-images or self-representations, that is of the patient's self- and object representations and their relation to self- and object roles in the therapeutic interaction, or in more structurally oriented terms as introjective configurations.

The introjects are derived from internalizations of significant objects in the patient's developmental history, but in distinction from identifications, are based on instinctual motivations, largely aggressive and narcissistic, and reflect corresponding defensive organization and expression. The introjective configuration can be schematized along the lines of aggressive and/or narcissistic derivatives distributed in polarized components. The aggressive components are centered in the aggressor introject versus the victim introject; narcissistic components find expression in the superior versus inferior introjects. These introjective configurations are all present and active in all forms of psychopathology, but with varying patterns of expression and emphasis. One component may dominate the structure of the self as object, while the rest are repressed or left operating more subtly in the background. In masochistic patients the victim introject may hold sway and determine the patient's self-experience, but not without contributions from the other components. In shame-prone patients, the narcissistic inferior introject is prominent, while the others remain in the background. Moreover, where one component dominates, the polar opposite is always in one way or other operative and will in time and with continuing inquiry and clarification come into play. Where the aggressor introject predominates, there is always a corresponding sense of the self as victim; where the narcissistic inferior introject is on display, the superior introject (grandiose self) is not far behind.

The clarification of these pathogenic introjects, including the gradual delineation of the component elements, identification of the polarized aggressive and narcissistic dimensions, awareness of their reciprocal defensive involvement, and the manner in which they form an integral whole within the subject's experience of himself, as well as progressive differentiation between elements of fantasy and reality, all contribute to the gradual delineation and undermining of the embeddedness and investment in the introjects. This much of the process is rarely sufficient for effective therapeutic intervention but leads to a further step of exploring and establishing their derivation.

The introjects are internalized derivatives of relationships with important others, so that exploration of their derivation requires clarifying the specific ties to past and/or present individuals in the patient's experience. How to accomplish this is a matter of clinical judgment and technique. With some patients exploration of this area of their experience can be done fairly actively, but this is not often the case. More frequently, the exploration must be more indirect and subtle and requires a considerable degree of self-discipline and patience on the part of the therapist. Little by little, the picture of the patient's past relationships, particularly with parental figures, becomes clearer. The pitfalls are familiar enough, and it often takes a considerable amount of time and work before more reliable information about the patient's past experience becomes available. Early reminiscences or even the first or second rendition of the patient's past experience cannot be taken as having unquestionable validity. The picture that the patient paints in the first rough sketching of his or her past will be progressively filled in, resketched, refined, and recast as the therapy progresses. It is not simply a matter of recapturing a past reality. Rather, what is in question is the recapturing of the patient's experience, which may be overladened and permeated with elements of fantasy, wish, desire, and defense. The task is to retrace the patient's experience, to establish the links between the present organization and structure of the introjects and the patient's past experience of personal relationships. The critical persons in this context are, of course, the parents, though not exclusively. Other important figures may enter in, depending on the peculiarities of the patient's life experience. Siblings may play a vital role, or other relatives such as aunts or uncles, or even nonfamily figures.

Likewise, the clarification of important relationships can only be usefully undertaken in the context of a reasonably good therapeutic alliance; it may not be useful to try to clarify or confront the patient's convictions about important objects, because disruption of such object connections may be more damaging than helpful. Patients can be brought gradually to a point of recognizing and understanding the more realistic aspects of their relationships, but this comes as the fruit of therapeutic effort and can be achieved only in the context of a solid therapeutic alliance.

IV. CLARIFICATION AND THE TRANSFERENCE

Nonetheless, confrontation along with clarification may have an important role to play, especially early in the course of the therapy. Interpretation is not possible or useful until the patient has developed some degree of at least a working alliance. As long as the therapist's interpretations are caught up in the vicissitudes of the patient's projective distortions and negative transference reactions, they will be heard as either threatening or destructive, or if reflecting a more idealized transference situation as unempathic reinforcements of the patient's transference views. Consequently, a relative focus on the patient's daily life experience and a process of gentle and gradual clarification can lead not only to the establishing of a better alliance but can also gradually clarify and delineate the pathological patterns of interaction that the patient generates both within the therapeutic interaction with the therapist and in important relationships outside the therapy. Success with many more severely disturbed patients is a function of the accuracy, empathy, and timeliness of the therapist's gentle and understanding clarifications and confrontations that lay the basis for later interpretations and to a degree contribute to unveiling transference. Especially, gentle confrontation and clarification of the patient's feelings about the therapist can open the way to clarification of therapeutic alliance issues and further catalyze transference reactions.

Part of the process of clarification of the introjects depends on their display in the transference. The clarifying process tries to link aspects of both aggressive and victim introjects and superior and inferior narcissistic introjects, as discovered in the other aspects of the therapeutic work, with the patterns emerging in the transference, as deriving from a common root. Recognizing and acknowledging these patterns in the ongoing interaction with the therapist can often make a powerful impression on the patient and add conviction and vividness to the basic patterns.

In the interest of maintaining the therapeutic alliance, the therapist must pay careful attention to negative transference elements. A consistent element in many therapies is the patient's efforts to defeat the therapist, to make the therapy into a meaningless and ineffectual game as well as to destroy whatever there is in the experience that may be positive and constructive. Behind this lies the inner necessity on the part of the patient to maintain the introjective configuration that provides the core of the often-fragile and unstable self-organization. As I have already suggested, the projective elaboration underlies and induces a transference–countertransference interaction, the underlying motivation for which is preservation of the pathogenic introjective organization. Thus, a constant attention to focusing, clarifying, and eventually interpreting negative transference elements is of particular

importance in the interest of establishing and maintaining a therapeutic alliance.

Therapeutic clarification is particularly useful when the patient adopts the victimized position, reflecting the underlying victim introject. The need for some patients to preserve the sense of victimization (victim introject) forces them to provoke aggressive or devaluing responses from the therapist, often in the form of acting out around the dimensions of the therapeutic structure, forcing the therapist, for example, to take remedial limit-setting measures. It is essential for the therapist to set limits to maintain the parameters of the therapeutic situation, but the risk of being drawn into a transference–countertransference interaction cannot be ignored. A clear statement of the patient's victimized position, or of the potential victimizing effects of a projected course of acting out, can serve as a useful way of focusing on the underlying dynamics and the motivations related to them and of bringing into focus their effects on the therapeutic work and particularly the therapeutic alliance. Such clarifications, and where necessary, confrontations with the patient's potential self-destructiveness, and need to assume the victimized position carry with them a reassurance that the patient is not on this account abandoned or rejected, and undercut the pull in the countertransference reaction to playing into the patient's victimization, thus reinforcing it.

The risk of acting out of the transference can be dealt with by a combination of clarification, confrontation, and interpretation. The extent to which these interventions can be usefully employed in such situations depends on the degree to which the therapeutic alliance is effectively intact. Where the alliance is disrupted or significantly distorted, interpretive efforts are liable to yield little fruit. Nonetheless, active confrontation and clarification of the issues, particularly in alliance terms, and a clarification of the possibly harmful consequences for the patient and the role of the patient's intended acting out in undermining the work of the therapy is often sufficient to short-circuit the patient's impulse.

These experiences have considerable potential value in that they immediately involve both patient and therapist in the process. The therapist does not have to rely on a secondhand account with all its potential for distortion and obscurity but is himself engaged in the process with the patient, so that the elements that enter into the patient's need to act out can be more directly and effectively identified and dealt with. In a mild form, for example, the patient may act out around the issue of coming to the appointments on time. Usually, this reflects some distortion in the therapeutic alliance and may or may not reflect underlying transference dynamics. Yet the contributing factors lie ready at hand for examination as a part of the ongoing therapeutic interaction and can be clarified, explored, and dealt with in those terms. The patient who comes late following the therapist's vacation is usually expressing some degree of resentment or anger at abandonment by the therapist. Clarification and interpretation of the feelings of abandonment can usually effectively modify the patient's behavior.

For some patients in whom the impulse to act out is inconsistent with their self-image and creates anxiety, the therapist's effort to clarify, and even at times interpret the basis of the impulse and the possible consequences are enough to forestall the behavior and enable the patient to reestablish reasonable control. Often, the clarification of the patient's feelings, particularly what the feelings may be about and against whom they would be directed, or a clarification and exploration of possible consequences of the actions envisioned by the patient, or even clarification and interpretation of the patient's impulse by comparing it to similar impulses in other contexts, whether in the patient's current life situation or in the past life experience, to whatever extent that is available, enables the patient to gain some perspective and objectivity about the projected course of action and allows him or her to bring resources to bear to forestall a self-destructive or potentially detrimental course of action. At times substitute actions can be discussed, which would be in the long run more adaptive and even effective for the patient. At times it is also useful for the therapist to anticipate patterns of acting-out behavior, especially when the previous experience of the ways in which the patient has dealt with similar stimulus situations would lead the therapist to expect that some parallel pattern of behavior might evolve. The classic example is the exploration of a patient's projected behavior during the therapist's vacation. The exploration of these possibilities and the comparison of the anticipated pattern of behavior with similar previous experiences can be both clarifying and extremely helpful.

One young man who was given to impulsive rage attacks became furious during an argument with his girlfriend and put his fist through a wall. The consequences were that not only did he have to pay for the damage to the wall, but he also broke his fist, which had to be put in a cast, which meant that he could not work and subsequently lost his job. In subsequent therapeutic work with this patient, it was extremely helpful to anticipate situations of conflict and tension in which his impulse to act out in some self-destructive way could be discussed, clarified, the feelings explored and connected with a variety of similar and previous contexts, and some sense of

adaptive options developed that might provide more mature and even constructive outlets for his anger.

Extending the exploration and clarification to include the derivation of the introjects has the additional benefit of clarifying that the patient's experience of self and the world around—and particularly relationships with other important figures—is dependent on experiences and patterns of responding deriving from the patient's own infantile past. The disparity between that past and the present experience reinforces insight into the fantasy quality of the experience generated from the introjects and clarifies the distinction between elements of that experience and the real world of the patient's present life. In the transference neurosis, of course, this understanding and realization are borne in on the patient with particular force, because it allows him or her to see most clearly and vividly how the patterns of infantile relating play themselves out in inappropriate and unrealistic ways.

V. THERAPEUTIC CONTEXTS

There is some differentiation in the role of clarification with respect to expressive versus supportive approaches to therapy, although the climate of opinion has shifted somewhat to seeing psychotherapy for the most part as combining supportive and expressive techniques. More expressive approaches seek to bring about structural change by way of clarifying and interpreting the patient's distortion of self and the object world primarily through analysis of transference. More supportive approaches, in general, recommend focusing on current events and recent sources of stress in the patient's life and tend to focus away from transference elements, particularly where they seem regressive; attention is directed to clarifying feelings and reinforcing a sense of reality. The therapist takes a more active stance in supporting and reinforcing the patients adaptive capacities, supporting useful defenses, and generally acting as an auxiliary ego. Thus, supportive approaches tend to rely more extensively on techniques of clarification focused on current conscious manifest experience, whereas expressive approaches seek to go further and deeper to interpret psychogenetic, dynamic, and unconscious implications of the patient's behavior. If therapy shifts more in the direction of an expressive modality, interpretation comes to play a more prominent and central role. When the therapy is more supportive, interpretation is by no means ruled out but tends to assume a more modest role in favor of a more prominent use of other more supportive techniques, including clarification, confrontation, giving support, encouragement, advice, and so on.

Clarification has a special role to play in family therapy. In dealing with the family, the therapist must be clear about the nature of the relationship to the patient and how that interdigitates with the relationship to the family and what his or her purpose and role is in each of those related contexts. Ultimately, the desire for all parties involved must be taken as seeking the well-being of the patient as connected with the better- and healthier functioning of the family system and ultimately to the benefit of all parties involved. This clarification and stance must be maintained in the face of continual pressures from all sides, on the part of both the individual patient and the family, to undermine this position, to draw the therapist into one or other transferential position, and to elicit from him or her some form of countertransferential response that will serve to undermine the therapeutic alliance, destroy the therapeutic position and make him or her in-effectual as a therapist, and thus preserve the underlying fantasies and narcissistic and aggressive distortions that are an integral part of the neurotic family system.

Often enough treatment of adolescents involves work with the family. The difficulties in maintaining a therapeutic alliance with a disturbed adolescent patient are monumental enough, but when the therapist moves into the realm of family therapy, in addition to the work with the patient, the situation inevitably becomes more complex and difficult. There is a kind of cost-benefit analysis involved—the cost in terms of the jeopardy to the alliance and the individual therapeutic effort versus the gains to be gotten from the work with the family. That analysis is not always negative. Where the therapeutic alliance with the adolescent is sufficiently stabilized, where the therapeutic interaction is such that the potential difficulties in the alliance that may arise from the involvement with the family system can be explored and clarified and understood, and where the therapist is able to maintain a sufficiently balanced position in the dual role as individual and family therapist, the process can often be gratifying and successful.

VI. SUMMARY

This article discusses the nature of clarification as an integral component of the interpretive process, and as distinct from both confrontation and interpretation. Clar-

ification concerns inquiry and seeking for understanding, thus providing the basic material essential for further interpretation. Clarification focuses not only on the patient behavior and experience with others in external interactions, present or past but includes consideration of the person's inner subjective experience of self as acting and experiencing, especially aspects of the affective experience. Clarification of both aspects of the experience provides the basis for clearer and more meaningful understanding both of self and of his or her behavior.

See Also the Following Articles

Confrontation ■ Differential Attention ■ Interpretation ■ Resistance ■ Transference ■ Working Alliance

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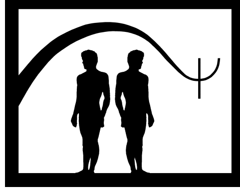

Classical Conditioning

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I. Description of Treatment
II. Theoretical Bases
III. Exposure Therapies: Applications and Exclusions
IV. Empirical Studies
V. Case Illustration
VI. Summary
Further Reading

GLOSSARY

classical conditioning A form of associative learning in which a neutral stimulus is paired with an unconditioned stimulus. After a sufficient number of trials the neutral stimulus comes to elicit responses similar to those originally evoked by the unconditioned stimulus.

counter-conditioning A classical conditioning procedure in which a stimulus that formerly elicited one response (e.g., pleasure) is conditioned to elicit a different response (e.g., nausea). Sometimes used in the treatment of paraphilias and substance use disorders.

exposure A group of methods commonly used to treat phobias and other anxiety disorders. Exposure involves presenting the person with harmless but fear-evoking stimuli until the fear response is extinguished.

extinction Reduction of a learned response by presenting the conditioned stimulus in the absence of the unconditioned stimulus.

operant conditioning A form of associative learning in which a given behavior is shaped by its consequences. In the case of phobias, for example, avoidance and escape from feared stimuli increases in frequency because these behaviors are reinforced by short-term fear reduction.

Classical conditioning, as conceptualized in early work and in contemporary theories, provides a way of understanding the occurrence of a range of maladaptive emotional and behavioral responses. Although there are multiple ways in which these responses can be learned, classical conditioning appears to represent an important pathway. Classical conditioning theories provide a basis for understanding how such responses can be treated. Exposure therapies for treating fears are among the most useful interventions to arise from these theories. Exposure therapies also are effective for reducing fears arising from other forms of learning.

I. DESCRIPTION OF TREATMENT

A. Overview

Treatments based on classical conditioning fall into two broad categories: aversion therapies, which are designed to reduce appetitive responses, and exposure therapies, which are designed to reduce aversive or unpleasant responses. Aversion therapies have been vividly portrayed in novels and films such as *A Clockwork Orange.* The focus is on reducing maladaptive responses that the patient might find enjoyable, such as the elimination of excessive alcohol consumption or, in the case of Little Alex, the protagonist of *Clockwork Orange,* the elimination of his passion for "ultraviolence." Classical conditioning methods for reducing alcohol consumption include emetic treatments, where the person ingests

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a nausea-inducing drug and then is asked to sample his or her favorite alcoholic beverage. Over a series of trials, the person learns to associate drinking with immediate nausea. Thus, the former association between drinking and pleasure is replaced by an aversive association, thereby reducing alcohol consumption. Similar treatments have been devised for treating self-injurious behavior in children and paraphilias in adults.

Aversion therapies are not commonly used today. This is because of ethical concerns about inflicting harm on patients, and concerns about patient welfare. The efficacy of aversion therapies is also debatable. Some critics argue that these treatments are short-lived in their effects, and that they only suppress maladaptive responses without teaching the patient more adaptive alternatives. Aversion therapies are widely regarded as interventions of last resort, to be used only when more benign methods have failed. If used, aversion therapies should be administered by a trained professional, with the approval of the institution in which the professional is working. Informed consent should be obtained and regional laws should be considered, because aversion therapies have been outlawed in some jurisdictions.

A more popular application of classical conditioning is the exposure therapies. These treatments are used to help people overcome specific phobias and other anxiety disorders in which excessive fear plays a prominent role, such as agoraphobia, social phobia, posttraumatic stress disorder, and obsessive–compulsive disorder. Given that exposure therapies for treating phobias are the most widely used applications of classical conditioning, these treatments and their theoretical bases will be the focus of this chapter.

The treatment of fears is not a trivial undertaking. Severe phobias can produce extreme distress and can severely impair a person's functioning. Driving phobia, arising after a motor vehicle accident, for example, may prevent the person from earning a living and may lead to social isolation if the person lives in a remote area. Even common phobias such as spider phobias can be debilitating. One patient reported being too afraid to enter rooms of her house in which she had seen spiders, and experienced intense panic attacks whenever she unexpectedly came across a spider. She lived in an area in which spiders were commonly encountered, and therefore was chronically hypervigilant for spiders, and worried about encountering them. This was associated with persistent tension and irritability. Her fear, avoidance, and preoccupation significantly interfered with her marital relationship. Fortunately, even severe phobias such as this one can readily be treated by exposure therapies.

During exposure therapy, the person is presented with fear-evoking stimuli in a controlled, prolonged fashion, until the fear diminishes. Patients are encouraged to focus on the stimulus and to notice their anxiety, without engaging in distraction or other forms of avoidance. Treatment is collaborative, with the patient and therapist working together to decide how and when exposure will take place. Exposure duration depends on many factors, including the type of feared stimuli and the severity of the person's fears. Typically, an exposure session lasts 20 to 90 minutes, and sessions are repeated until the fear is substantially reduced. Sessions may be either therapist-assisted or completed by the patient as a homework assignment. Antianxiety drugs such as benzodiazepines should be used sparingly or not at all with exposure therapies, because these drugs can interfere with the effects of exposure. Sources of perceived safety, such as the therapist or significant others, are also faded out during exposure therapy, so that patients can overcome their fears in the absence of safety cues.

There are several ways that exposure can be conducted. The person may be exposed to real stimuli or may simply imagine the stimuli. Exposure may be to intensely fear-evoking stimuli, or may be gradual, working up a hierarchy of feared stimuli. Type of stimuli (real vs. imagined) and intensity of exposure (gradual vs. highly fear-evoking) are the variables distinguishing the four main types of exposure therapy: graded in vivo exposure, flooding, systematic desensitization, and implosion.

B. Graded *in Vivo* Exposure

This is the method most commonly used to reduce fear. It has two components. First, the patient is instructed how to rate the intensity of discomfort using a Subjective Units of Distress Scale (SUDS). This measure of fear and distress ranges from 0 to 100, where 0 = none, 50 = moderate, and 100 = extreme. Second, the therapist and patient devise a hierarchy of real-life fear-evoking stimuli, ranging from stimuli that evoke little or no fear or distress, to extremely frightening or upsetting stimuli. Table 1 shows an example of a hierarchy used in the treatment of agoraphobia.

Typically there are 8 to 10 stimuli in the hierarchy, separated by SUDS increments of approximately 10 points, so that the stimuli are not too discrepant in the levels of fear or distress they evoke. Patients begin by exposing themselves to items lowest on the hierarchy. Exposure to a given stimulus is repeated until the fear or distress abates. When fear of a given stimulus is

TABLE 1
Sample Exposure Hierarchy for Agoraphobia: Fear of Traveling Far from Home

Exercise: Walking to … and then returning	*SUDS*[a]
1. End of street (2 blocks away from house), accompanied by spouse	10
2. End of street, unaccompanied	25
3. End of street and one block around the corner (so house is not visible), accompanied	35
4. End of street and one block around the corner, unaccompanied	50
5. To the nearby park (6 blocks from house), accompanied	60
6. To the nearby park, unaccompanied	75
7. To the grocery store (8 blocks from house), accompanied	80
8. To the grocery store, unaccompanied	90

[a] Subjective Units of Distress Scale, ranging from 0 (no fear or distress) to 100 (extreme fear or distress).

reduced, the other stimuli on the hierarchy also tend to become less fear evoking. The patient gradually works up the hierarchy; once the fear of one stimuli is diminished, exposure to the next stimulus is attempted. This continues until all the stimuli on the hierarchy no longer evoke fear or distress.

Sometimes it is necessary to develop more than one hierarchy to reduce all the patient's fears. For a person with generalized social phobia, a patient might work through a public speaking hierarchy, a hierarchy of situations involving one-to-one conversations with people of the opposite sex, and a hierarchy involving asserting oneself to authority figures. The disadvantage of graded *in vivo* exposure is that it is slower than the more intensive flooding method. The advantage of graded exposure is that it teaches patients a skill for overcoming their phobias in a simple, step-by-step fashion. By progressively working up a hierarchy, patients can overcome their phobias gradually, without enduring extreme fear or distress. After a formal course of therapy ends, patients can continue to devise hierarchies on their own for overcoming any remaining fears.

C. Flooding

Flooding involves exposure to real-life fear stimuli that are at the top of the person's hierarchy. A person with a dog phobia might be exposed to a large boisterous dog until the person is no longer afraid. The advantage of flooding is that it is the most rapid method for reducing phobias; four 2-hour sessions are often all that is required. Sometimes phobias can be successfully reduced within a single 3- to 4-hour session.

There are several disadvantages to flooding. First, it requires the person to tolerate a great deal of distress. Some people, particularly those with severe phobias, are unable to do this. Second, flooding can produce temporary but intense side effects such as irritability and nightmares. Third, flooding is often too difficult for patients to conduct alone, and so this treatment does not teach patients a skill they can readily use on their own. A further concern is that patients may be more likely to refuse or drop out of very intensive programs, compared to less demanding programs. When used, flooding is typically implemented with the support and encouragement of a therapist. It is most often used when there is some pressing need for the rapid elimination of the fear. If a person had a phobia of hospitals and medical staff, for example, flooding might be used if the person were to be admitted to the hospital for an urgent medical procedure.

D. Systematic Desensitization

Systematic desensitization consists of gradual, imaginal exposure to stimuli organized on a hierarchy constructed using SUDS ratings. The stimuli in Table 1, for example, could be used in systematic desensitization by having the patient imagine each stimulus. Typically, systematic desensitization is combined with some form of relaxation training. The patient is asked to sit back in a comfortable chair and practice a relaxation exercise. Once a state of deep relaxation is attained, the patient is asked to imagine the least upsetting stimulus on the hierarchy. Exposure duration might be only for a few minutes, alternating relaxation with imaginal exposure until the imagined stimulus no longer evokes fear or distress. The procedure is then repeated with the next stimulus on the hierarchy. The disadvantage of systematic desensitization is that it is slow, and that it is

often necessary to eventually implement some form of real-life exposure in order to fully reduce the fears. The advantage is that it is easily tolerated and is therefore a good place to start when treating patients with extremely severe fears.

E. Implosion

Implosion involves exposing the person to intensely fear-evoking imagined stimuli, which lie at the top of the fear hierarchy. Often exposure is embellished by having the patient imagine extremely terrifying forms of the stimuli. Implosion is often used in the treatment of posttraumatic stress disorder, where the goal is to reduce the fear and associated distress associated with traumatic memories. More often, however, the feared stimuli are simply imagined in great detail, with the person imaging all the sensory aspects of the stimulus (e.g., sights, sounds, smells), along with any bodily sensations, emotions, and thoughts that might occur when the stimulus is encountered. A person who developed posttraumatic stress disorder as a result of being in a motor vehicle accident, for example, would be asked to repeatedly imagine the traumatic experience, typically for 30 to 45 minutes per treatment session over several sessions. The narrative of the experience might be spoken into a tape recorder or written down, and the person would be encouraged to repeatedly go over the tape or transcript until the memory of the traumatic event no longer evokes distress.

The advantage of implosion is that by reducing the distress associated with traumatic memories, the other symptoms of posttraumatic stress disorder also tend to abate. In other words, implosion can lead to reductions in reexperiencing symptoms (e.g., nightmares, flashbacks), hyperarousal symptoms (e.g., irritability, increased startle response), and avoidance and numbing symptoms (e.g., avoidance of reminders of the traumatic event). A further advantage is that implosion enables the patient to overcome fears for which live exposure is impossible or impractical. Fear of thunderstorms, for example, can be reduced by having the patient repeatedly imagine such events.

The disadvantage of implosion is that it can be demanding on patients; they must be able to tolerate intense distress. A further problem is that implosion does not teach patients a skill that they can readily employ by themselves at home, simply because it is often too difficult because of the degree of emotion generated. Even if a patient is able to complete a course of implosion, it is often necessary to add some form of real-life exposure in order to completely reduce the fear. A person with a thunderstorm phobia might need to actually experience a thunderstorm in order to fully overcome his or her fear.

II. THEORETICAL BASES

A. Two-Factor Theory

During the 1960s and 1970s the most influential conditioning model of fear was O. Hobart Mowrer's *two-factor theory,* which has its origins in the 1920s work of Ivan Pavlov and John B. Watson. Mowrer proposed that fears are acquired by classical conditioning and maintained by operant conditioning. *Classical conditioning* is the learning of associations between an unconditioned stimulus (UCS) and conditioned stimulus (CS). In the case of learned fears, UCSs are stimuli that evoke pain or fear in the absence of any prior learning. Fear or pain evoked by UCSs are called unconditioned responses (UCRs). Conditioning occurs when a CS is paired with a UCS over one or more trials. Gradually, the organism learns that the CS is premonitory of the UCS. Thus, the CS becomes fear-evoking. The acquired fear is the conditioned response (CR). Operant conditioning is learning in which a given behavior is shaped by its consequences. Avoidance and escape from feared stimuli increases in frequency because these behaviors are reinforced by short-term fear reduction. Thus, avoidance and escape behaviors fall under the influence of operant conditioning.

A rodent phobia, for example, might arise from a traumatic incident where the person is bitten on the hand by a rat while organizing boxes in a dark cellar. Stimulation of the pain receptors in the hand might represent the UCS, which evokes pain and fear (UCRs). Through the process of associative learning, pain and fear become paired to stimuli associated with the UCS (e.g., CSs such as rats, mice, places frequented by rodents). In turn, the CSs elicits fear (the CR). The strength of the CR is determined by a number of factors including the intensity of the UCS and factors influencing the strength of the association between the CS and UCS, such as the number of pairings between the two. Stimuli resembling fear-evoking CSs can become fear-evoking in their own right by processes of stimulus generalization and second-order conditioning. As a consequence, a wide range of rodent-related stimuli may elicit fear and associated behaviors, such as escape or avoidance.

The strength of the CR tends to decline over successive trials in which the CS is presented without the UCS.

Thus, fear would gradually decline if the rodent phobic had repeated harmless encounters with rats. Given a sufficient number of trials of CS without UCS, the CS eventually ceases to elicit the CR. When this occurs the CR is said to be *extinguished.* Extinction does not occur if the UCS is occasionally encountered. Driving phobia would be unlikely to extinguish if a person occasionally experiences "near misses" while driving. For many people with phobias, the process of extinction is blocked from occurring because the person learns that fear can be minimized (at least in the short term) by avoiding or escaping from the CS. In other words, avoidance or escape (operant behaviors) prevent classically conditioned fears from being unlearned.

Mowrer's theory is supported by a good deal of evidence (see Marks, 1987; O'Donohue, 1998). In brief, evidence from a variety of sources supports the theory, including (1) studies of the experimental induction of fear in animals; (2) naturalistic observations of soldiers during military combat; (3) clinical observations from anxiety-disordered patients; (4) incidental findings from studies of aversion therapy. Studies of the experimental induction of fear in children provide mixed support for the theory, possibly because of methodological limitations and ethical constraints that preclude the induction of intense fears.

B. Are Conditioned Associations Indelible?

It was once believed that extinction was a process of weakening or even breaking the CS–UCS association. Findings emerged, however, to call this assumption into question. When the CR is extinguished by repeatedly presenting the CS in the absence of the UCS, it was found that the CR could be rapidly reestablished by only a few CS–UCS pairings. Reinstatement of the CR is often more rapid that the original conditioning of the CR. Moreover, extinguished CRs sometimes "spontaneously" reemerge, or reappear when the person undergoes some unrelated stressful experience. These findings suggest that the CS–UCS link is preserved to some extent even when the CR is extinguished. Indeed, some researchers have argued that fear memories (i.e., representations of a link between a CS and aversive UCS) are indelible.

If CS–UCS links are preserved (to some extent) even after the CR is extinguished, then how does extinction occur? There are several possibilities. CR extinction may be due to counter-conditioning, where the CS is conditioned to competing UCSs. To illustrate, in a conditioned dog phobia, dogs (CSs) are associated with pain or physical injury (aversive UCSs). Over a course of exposure trials, consisting of exposure to friendly, harmless dogs, the conditioned fear (CR) extinguishes. This may occur because the extinction trials cause dogs to become associated with pleasurable UCSs (e.g., pleasurable tactile stimulation from patting dogs; or a state of enjoyment from playing with dogs). If the link between the CS and a pleasant UCS is stronger than the link between the CS and an aversive UCS, then the CR will tend to be pleasure rather than fear. Thus, extinction can be regarded as a process of building up competing responses that inhibit or interfere with the link between the CS and an aversive UCS. Other models of extinction also have been postulated. The interested reader should consult O'Donohue (1998).

The preservation of links between the CS and aversive UCS has important implications for exposure therapy. It suggests that successfully treated phobic individuals are at risk for relapse if, for example, some event caused the CS-aversive UCS link to become strengthened. A former dog phobic might discover that his or her phobia reemerges after an unpleasant encounter with a dog. Therapists need to prepare patients for the possibility of relapse. This can be done by discussing the issue with the patient, and formulating a plan for dealing with any reemergent fears. It is important that the patient understands that if the phobia returns, it can be readily eliminated by reapplying exposure techniques such as graded *in vivo* exposure.

C. Pathways to Fear

Despite its strengths, there are several problems with Mowrer's two-factor theory: (1) It sometimes appears that fears are acquired in the absence of conditioning; (2) conditioning theory fails to account for the uneven distribution of fears; that is, some stimuli are more likely to become feared (e.g., harmless snakes and spiders) compared to others (e.g., guns, knives, electrical outlets); and (3) people sometimes fail to acquire fears in what should be fear-evoking situations (e.g., air raids). Rather than reject the two-factor theory, theorists have attempted to modify it to account for these findings.

To account for fear acquisition in the absence of conditioning, S. J. Rachman postulated three pathways to fear acquisition: (1) classical conditioning, (2) modeling (e.g., vicarious fear acquisition due to observational learning), and (3) verbal information (e.g., receiving fear-evoking information or misinformation from others) (see Rachman, 1990). Several retrospective studies

of fears have assessed the relative importance of these pathways. Results show that approximately half of clinical phobias are associated with classical conditioning, with a smaller proportion of phobias associated with modeling or verbal information. Research also suggests that classical conditioning plays a greater role in phobias than in milder fears. A minority of people with phobias appear unable to recall the origins of their fears. This may be because they have forgotten the precipitating events. Another possibility is that some people cannot recall the origins of their fears because some fears are innate.

Aversive conditioning experiences are not just reported by phobics; they also occur in nonfearful people. As noted earlier, the fact that some people may have a history of "conditioning events" without developing phobias is one of the criticisms of the two-factor theory. To account for this anomaly, it has been proposed that aversive conditioning experiences are less likely to produce phobias when the person has a history of fearless contact with the stimulus in question. For example, an aversive experience (e.g., falling from a horse) may not be phobogenic when the person has a history of mishap-free equestrian adventures. This fear-impeding effect is known as latent inhibition or fearless familiarity. Latent inhibition has been experimentally demonstrated in a variety of organisms, including children and (under certain circumstances) adults. Latent inhibition appears to occur because the CS fails to become fear-evoking because a history of fear-free CS presentations causes the CS to be a predictor of the *absence* of fear. The high incidence of condition events for nonfearful people may be due to the mechanisms responsible for latent inhibition.

D. Prepared Fears

In 1970, Martin E. P. Seligman observed that phobias have a number of characteristics that seem inconsistent with the two-factor theory. Phobias can be (1) rapidly acquired (e.g., single-trial learning), (2) resistant to extinction, (3) "noncognitive" (i.e., phobias persist even when the person "knows" the stimulus is harmless), and (4) differentially associable with stimuli of evolutionary significance. With regard to the latter, the two-factor theory assumed an equipotentiality of stimuli; all neutral stimuli can be converted into a conditioned stimuli. Yet, some stimuli (e.g., small animals) are more likely to be fear-evoking than others (e.g., guns, knives, electrical outlets). As Seligman observed, only rarely, if ever, do we have pajama phobias, grass phobias, electric-outlet phobias, hammer phobias, even though these things are likely to be associated with trauma in our world.

Seligman proposed that people (and other organisms) are biologically prepared to acquire fears of particular stimuli. That is, evolution has predisposed organisms to learn easily those associations that facilitate species survival. As a result of a sufficiently long period of natural selection, organisms are prepared ("hard wired") to fear some events, unprepared for others, and contraprepared for still others. Stimuli such as guns, knives, and electrical outlets have not been around long enough for such preparedness to occur. Seligman conceptualized preparedness as an ease of learning continuum; that is, the relative preparedness for learning about a stimulus is defined by the amount of input (number of learning trials, bits of information, etc.) required in order for an output (responses) to occur reliably.

Preparedness theory has stimulated a large body of research. The most impressive evidence comes from the studies of Rhesus monkeys. In some studies, "observer monkeys" watched videotapes of other monkeys behaving fearfully with a toy snake or crocodile. As a result, the observers acquired a fear of those stimuli. In comparison, observer monkeys who watched videotapes of monkeys showing the identical fear behaviors (via videotape splicing) to artificial flowers or toy rabbits generally did not acquire fears of the flowers or toy rabbits. Thus, there were significant differences in the conditionability of fear to fear-relevant stimuli compared to fear-irrelevant stimuli.

Evidence from human studies has not been so compelling. An extensive review of the research by Richard J. McNally found that some experiments supported Seligman's preparedness hypothesis, while other studies did not. The evidence most consistent with the theory is enhanced resistance to extinction of electrodermal responses to "prepared" fear stimuli. Moreover, "prepared" phobias are generally no more difficult to treat than "unprepared" phobias. What we are left with is the fact that there is a nonrandom distribution of fears and phobias; that is, fears of some stimuli (snakes) are more common than others (e.g., hammers). Latent inhibition to stimuli such as hammers, electric outlets, and so forth may account for the rarity of fears of such stimuli (i.e., children typically receive parental instruction as to the safe use of such stimuli).

In summary, to attempt to overcome the more important limitations of the two-factor model, it has been proposed that (1) there are multiple pathways to fear, of which conditioning is one, (2) the failure to acquire fears may be due to latent inhibition (i.e., a history of

fearless familiarity with potential fear stimuli), and (3) the uneven distribution of fears arises because some fears are prepared in an evolutionary sense. Although these explanations have their merits, they also have some weaknesses, including weak or equivocal empirical support.

E. Neo-Conditioning

Contemporary approaches to classical and operant conditioning are known as neo-conditioning models (e.g., Davey, 1992; Rescorla, 1988). They propose that conditioning involves processes that draw on cognitive mechanisms such as expectations and memory representations of the CS and UCS. Here, UCS–CS links are acquired because CSs are predictors of the occurrence of the UCS. To illustrate, a person with a fear of driving might learn that poorly lit, wet roads (CSs) are predictive of life-threatening motor vehicle accident (UCS). The strength of the conditioned fear is a function of two factors: (1) the strength of the UCS–CS link (i.e., subjective probability that a given CS will lead to a given UCS), and (2) the perceived aversiveness of the UCS (e.g., perceived dangerousness of motor vehicle accidents).

The neo-conditioning approach also entails a revised view of operant conditioning of avoidance behavior. Here, avoidance is not directly determined by the experience of fear, but by the individual's expectation of whether a given behavior (e.g., driving in the rain) will lead to an aversive outcome (e.g., a fatal accident). Avoidance behavior is not reinforced by reduction of fear; it is reinforced by full or partial confirmation of one's expectations (e.g., by a "close call" while driving). According to the neo-conditioning perspective, UCS evaluation (and reevaluation) can influence the acquisition, extinction, and inflation of fears. When an association between a CS and UCS has been formed, the representation of the CS (stored in long-term memory) evokes a representation of the UCS. Information about the UCS contained in this representation is evaluated, and the result of this evaluation process determines the strength of the CR. If the UCS is evaluated as aversive or noxious, this will result in a fear CR.

Mild conditioned fears can escalate into phobias when the UCS is reevaluated. To illustrate, a person might acquire a mild fear of spiders after sustaining a painful but harmless spider bite. The fear may escalate into a phobia if the person later learns that spider bites are often lethal. Thus, the intensity of the UCS is inflated from a harmless painful bite to a painful and potentially life-threatening bite. As a consequence, the nature of the CS changes (i.e., spiders now become predictive of life-endangering events) and the conditioned fear increases accordingly.

F. Emotional Processing

The neo-conditioning model proposes that the CS and UCS are cognitively represented, possibly in networks of interconnections among CSs, CRs, UCS, and UCR. The emotion processing model developed by Edna B. Foa and others (e.g., see Foa and Kozak, 1986) can be seen as an extension of the neo-conditioning model. According to the emotional processing model, fears are represented in networks known as fear structures stored in long-term memory. The networks contain cognitive representations of feared stimuli (e.g., oncoming trucks, driving at night), response information (e.g., palpitations, trembling, subjective fear, escape behaviors), and meaning information (e.g., the concept of danger). In the network the three types of information are linked (e.g., links between oncoming trucks, danger, and fear). Links can be innate (i.e., UCS–UCR links) or acquired by processes such as classical conditioning (CS–UCS links and CS–CR links). Fear structures are activated by incoming information that matches information stored in the network. Activation of the network evokes fear and motivates avoidance or escape behavior. According to Foa and colleagues, fears are reduced by modifying the fear structure through the incorporation of corrective information (e.g., safety information acquired during behavioral exposure exercises).

The neo-conditioning perspective and the emotional processing model are useful ways of conceptualizing fears, and can account for phenomena that are not explained by the two-factor theory (e.g., postconditioning fear inflation due to UCS inflation). A further advantage is that these models are compatible with other cognitive models of fears, such as those discussed in the following sections. The emotional processing model has the advantage of readily including multiple pathways for the acquisition of fears, such as classical conditioning, modeling, and verbal information. The possibility of innate fears is also consistent with the model, if one assumes that some networks or fragments of networks are innate. The model also includes a role for dysfunctional beliefs, which may amplify fears and other emotional reactions. Beliefs are represented in the network as links between meaning concepts and stimulus or response concepts (e.g., "tunnels are dangerous" is represented by a link between "tunnel" and "danger").

G. Dysfunctional Beliefs

Theories of fear have become increasingly complex in recent years. Classical conditioning and many other factors are thought to be involved. Consistent with the neo-conditioning and emotional processing models, some theorists have proposed that exaggerated beliefs about the probability and severity of danger may play an important role in motivating fear and avoidance. Such dysfunctional beliefs play a prominent role in contemporary theories of agoraphobia and social phobia, and may play a more important role in these disorders compared to specific phobia. People with social phobia tend to be preoccupied with their social presentation and have heightened public self-consciousness. They also tend to be self-critical, to excessively worry about being criticized or rejected by others, and to overestimate the likelihood of aversive social events. This suggests that such dysfunctional beliefs may be important in maintaining generalized social phobia. These beliefs appear to persist because of a variety of factors, such as avoidance of fear-evoking stimuli. Avoidance behavior limits the opportunity for collecting information that might disconfirm erroneous beliefs. Recent empirical studies support the role of distorted beliefs and appraisals in social phobia, and may be important targets for treatment. However, treatment outcome research provides mixed support for the view that adding cognitive restructuring to exposure improves treatment outcome. This may be because exposure is a potent vehicle of cognitive change.

H. Anxiety Sensitivity

In an effort to account for individual differences in the tendency to acquire conditioned fears, Steven Reiss and colleagues proposed that anxiety sensitivity is a fundamental fear than amplifies or exacerbates other fears, such as fears of animals, social situations, blood–illness–injury stimuli, and agoraphobic situations. Anxiety sensitivity is the fear of anxiety-related sensations (e.g., fears of palpitations, dizziness, and tremulousness), which arises from beliefs that these sensations have aversive somatic, psychological, or social consequences.

Anxiety sensitivity can be considered to be a fundamental fear because (1) anxiety is inherently noxious and therefore feared by most people, and (2) anxiety sensitivity provides reasons for fearing a variety of stimuli, whereas ordinary fears do not have this property. To illustrate, fear of flying can be exacerbated by, or entirely due to, the following: (1) Fear of the plane crashing (illness–injury sensitivity), (2) fear of anxiety evoked by bumpy flights (anxiety sensitivity), and (3) fear of embarrassing oneself by becoming airsick (fear of negative evaluation). Thus, a common fear (fear of flying) may be logically reduced to one or more fundamental fears such as anxiety sensitivity. Empirical support for this proposition has been provided by a number of studies.

Several studies have reported that the severity of anxiety sensitivity is correlated with the severity of various common fears, and that anxiety sensitivity predicts the person's risk for developing later fears and other anxiety symptoms. Anxiety sensitivity is reduced by exposing the person to feared arousal-related body sensations. This is called interoceptive exposure. For example, aerobic exercise can be used to extinguish the person's fear of palpitations. Voluntary hyperventilation exercises can be used to reduce fear of dizziness.

III. EXPOSURE THERAPIES: APPLICATIONS AND EXCLUSIONS

A. Medical Contraindications

Exposure techniques, such as graded *in vivo* exposure, are safe for the great majority of patients. The only medical contraindications are serious diseases that prevent the patient from entering the situations or make the experience of intense emotions hazardous to the person's physical health. Pregnancy or serious heart disease would contraindicate the use of flooding therapy. Medical conditions that seriously limit mobility—such as severe obstructive lung disease—can prevent the patient from completing some forms of *in vivo* exposure (e.g., walking long distances from home in the case of agoraphobia). In practice, however, it is rare to encounter a patient who is medically unsuited for at least some form of exposure.

B. General Guidelines for Conducting *in Vivo* Exposure

Given that graded *in vivo* exposure is the most commonly used exposure technique, it will be described in detail. There are several protocols for conducting *in vivo* exposure. Rather than describe them all, we will review the general guidelines. The guiding principle is for the person to remain in the situation until the fear has declined. Ideally, exposure also teaches the person that exposure to a feared stimulus has no harmful consequences. Thus, in addition to fear reduction, it is

important that patients remain in the feared situation until they can observe the true consequences of being exposed to the feared stimulus. Persons with a fear of heights would be encouraged to remain at, for example, the fourth floor balcony until they learn that they will not "lose control" and topple over the edge. The goals of exposure—fear reduction and expectancy change—are derived from modern conditioning theories, which emphasize the role of expectancies (see Section II).

Exposure therapies should only be implemented by a suitably trained therapist. The therapist should not only be skilled in exposure therapy, but should have a good understanding of psychopathology and psychiatric diagnosis, and should be skilled in the psychotherapeutic interventions commonly used in conjunction with exposure therapy (e.g., cognitive therapy, social skills training, relaxation training). Relaxation training is particularly useful for phobic individuals who are chronically anxious. If the patient experiences intense anger or guilt during exposure, as sometimes happens when treating patients with posttraumatic stress disorder, it is often necessary to combine exposure with cognitive therapy. The latter is used to address any dysfunctional beliefs associated with anger or guilt.

The patient should be a willing participant in the process of exposure therapy, with complete control over the nature and timing of any exposure exercises. Exposure may be traumatizing if forced on an unwilling patient. Exposure should be used only if the patient is able to tolerate some degree of distress, and is sufficiently motivated to overcome his or her fears. Patients should be told about the side effects of exposure treatment (e.g., transient increases in irritability), so they can make an informed choice about whether or not to proceed with treatment. Therapists also need to consider the patient's other problems before initiating a course of exposure. If an agoraphobic patient was suicidally depressed, then one would need to consider whether the distress caused by exposure therapy would precipitate a suicide attempt. In such cases the depression would be the first target of treatment.

In vivo exposure exercises should be specific and well-defined, in terms of duration, situation, and what the patient must do (or not do). The exercises should be written down so they are not forgotten by either patient or therapist. The patient and therapist might generate an assignment such as the following: "Walk seven blocks from home to the supermarket. Don't take your Ativan, cell phone, or Medi-Alert bracelet. As you walk along, pay attention to your anxiety and to your surroundings."

In vivo exposure exercises can be practiced during therapy sessions and as homework assignments. The exercises should be ones that patients can realistically accomplish, given their current levels of functioning. Patients should not be asked to attempt exercises that they are too frightened to complete. The patient should actively participate in the exposure situation in order to be exposed fully to the various stimulus elements. Joanne N., who suffered from agoraphobia, was asked to park her car at the back of the shopping mall parking lot so she would have to walk some distance to the mall and would not have rapid access to the "safety" of her vehicle. Instead of racing through the mall, she was encouraged to stroll through, taking time to browse through the stores and ask questions of sales clerks. Contrast this therapeutic exposure to her brief exposures prior to treatment, in which she would park her car as close as possible to the mall entrance, then run in to purchase what she needed, and then race out.

In vivo exposure should be comprehensive, with different exercises covering different manifestations of the feared situations. A patient who fears and avoids shopping at supermarkets, for example, would be advised to perform this activity in many different shopping conditions, including different stores (e.g., small vs. large stores), at different locations (e.g., near vs. far from home), at different times (e.g., times in which the store was busy vs. quiet), and with different purchases (e.g., few vs. many items). This ensures that learning generalizes across settings and difficulty levels.

C. Frequency and Duration of *in Vivo* Exposure Sessions

Long, continuous periods of exposure tend to be more effective than short or interrupted periods. Although short exposure sessions (e.g., 10 to 15 minutes) can be effective, longer sessions (20 to 60 minutes) are often necessary. With regard to the frequency of exposure exercises, the research has produced conflicting results. Some studies have found that the higher the frequency of exposure sessions, the greater the rate of dropouts, the greater the short-term response for treatment completers, but the higher the rate of relapse later on. Some *in vivo* exposure is better than none, and so phobic patients should be counseled to practice their exposure exercises as frequently as they reasonably can, depending on the type of exercise and on the logistic constraints. Patients frightened of riding on buses might practice this activity 4 times per week. Patients frightened of riding as a passenger in a car might

be only able to practice this activity only 1 to 2 times each week, depending on the availability of someone to drive them.

D. Assisted Exposure

There are numerous ways that patients can be assisted in completing *in vivo* exposure exercises. Among the more commonly used are (1) therapist-assisted exposure, conducted either from the clinic or from the patient's home, and (2) exposure in which the patient is assisted by a friend, partner, or family member. Assistance consists of initially accompanying the patient, and by providing prompting and encouragement for attempting the exposure exercises. Assistance can be particularly useful during the initial attempts at exposure. Therapist-assisted exposure is also a good way for the therapist to learn about the patient's subtle avoidance behaviors. There are several ways that the therapist can directly help the patient complete *in vivo* exposure exercises:

1. The therapist can provide just enough assistance for the patient to perform the exercise, and then the assistance is faded out. If the task is to walk around a 10-block circuit from the patient's house, the therapist might accompany the patient all the way on the first trial. On the second trial the therapist might accompany the patient for 5 blocks, and on the third trial the patient might complete the circuit alone, with the therapist waiting outside the patient's home. On the fourth trial the patient might complete this task without the therapist's presence.
2. The therapist can demonstrate (model) how the exercises are performed. Here, the patient observes the therapist perform the exercise *in vivo*. For example, the patient and therapist might travel to the foot of a bridge, and then the patient would observe the therapist walk to the midpoint of a bridge without holding onto the railing, then pause and look over the edge. The therapist would then return to the foot of the bridge and the patient would perform the task. Alternatively, each step of the task could be modeled. For example, the therapist could walk to the midpoint, and then the patient would do so. The therapist would then look over the edge. The patient then follows suit.
3. The therapist can provide any support that may be required. The therapist might offer his or her arm for assistance when the patient is first approaching a bridge railing. A therapist in a hospital setting who is helping a patient overcome fear of elevators might reserve a service elevator for some of the exposure session. The therapist and patient would have exclusive control of the elevator, and so it could be used for various exposure assignments (standing in a stationary elevator with the doors open, then with the doors closed, then traveling to the next floor, etc.). The interested reader should consult Williams (1990) for detailed descriptions of these methods.

A friend of the patient or significant other can be recruited as a "coach" to provide prompting, encouragement, and guidance. This person also can be used as a stimulus in the exposure hierarchy, as illustrated in Table 1. Later in treatment, all forms of assistance should be faded out, along with other safety signals and safety behaviors. Otherwise, patient's may attribute their gains to the aid they received, rather than to their own efforts.

E. Troubleshooting

Adherence problems are the most common difficulties encountered when using *in vivo* exposure. Patients may refuse to perform the exercises. Other, more subtle, adherence problems consist of using distraction during the exercise, or limiting the intensity or duration of exposure. The best strategy for dealing with adherence problems is to avoid them before they occur. The following can help avoid these difficulties:

1. Ensure that patients understands why the exercises are important. Periodically check their understanding.
2. The interventions should not be too complicated. Understandably, patients might become confused if asked to do many things at once in a given situation.
3. Ensure that the patient understands that the selection of exercises is a collaborative venture, negotiated between patient and therapist. Tasks can be readily modified in such a way that the patient can perform them.
4. Perform the exercises yourself so the patient can see they are safe (i.e., modeling). As a rationale, the therapist might say to the patient, "I wouldn't ask you to do something I wouldn't do myself, so I'm to show you how this exercise is done."
5. Adherence can be maintained at an adequate level if the patient is sufficiently motivated to complete the various treatment exercises. To sustain motivation it can be useful to (1) reinforce (e.g., verbally praise) the patient for his or her efforts in completing each therapy assignment, and (2) have the patient self-reinforce for these efforts (e.g., praising oneself or using other incentives). Initially, reinforcement from the therapist should occur frequently. As therapy progresses, reinforcement

from the therapist can be faded out as the patient continues to use self-reinforcement.

If adherence continues to be poor then it is important to identify the source of the problem. Does the patient regard exposure exercises to be relevant to his or her problems? If not, then the patient may regard the task as pointless. Is the timing right for using exposure? More time may need to be spent on developing a trusting therapeutic relationship. Also, more time may be needed for cognitive restructuring to address beliefs about feared stimuli. For patients on PRN (as needed) medication, it is important to ensure that medication is not used as a way of avoiding the experience of fear.

F. Variations on Exposure

Exposure therapies have been applied to all kinds of disorders in which excessive fear plays an important role. Apart from the disorders discussed earlier, exposure therapies have been successfully used in treating obsessive–compulsive disorder. Here, the treatment consists of exposure and response prevention. A person with contamination obsessions and cleaning compulsions, for example, would be exposed to a "dirty" object such as a doorknob, and then asked to refrain from engaging in handwashing compulsions. In this way, the contamination-related distress gradually diminishes, and the obsessions about contamination and associated compulsions similarly abate. Exposure and response prevention are most often used in the form of graded *in vivo* exposure, although flooding is sometimes used.

Other anxiety disorders can be similarly treated with exposure methods. Acute stress disorder and posttraumatic stress disorder can be successfully treated with implosion or systematic desensitization. Here, the person is exposed to traumatic memories of the trauma, and also exposed to harmless but distressing real-life trauma-related stimuli. For example, the person might be asked to return to the site of a traumatizing motor vehicle accident. Panic disorder is treated by exposing the person to feared body sensations that lead to panic attacks (i.e., interoceptive exposure. Generalized anxiety disorder, for which excessive worry is a central feature, can be treated by exposing the person, in a prolonged fashion, to his or her worries. The person might spend 20 minutes each day writing out his or her main worries. The distress associated with the worries gradually abates, and the person correspondingly learns to dismiss the unrealistic concerns.

IV. EMPIRICAL STUDIES

A. Efficacy of Exposure

Decades of research have established that exposure therapies, particularly graded *in vivo* exposure and flooding, are the treatments of choice for specific phobias and play an important role in treating other anxiety disorders. These treatments produce clinically significant reductions in fear in about 60 to 80% of cases. Systematic desensitization is the least effective of the exposure therapies. Although it is not often used as a stand-alone treatment, this mild, undemanding intervention is a useful starting place in an exposure program for patients who are extremely phobic.

A growing number of studies have investigated whether the efficacy of real-life exposure (flooding or graded *in vivo* exposure) can be enhanced by combining it with other interventions such as relaxation training, cognitive restructuring, or social skills training. For the average phobic patient, exposure alone is no less effective than exposure combined with either cognitive restructuring or relaxation training. Few studies have investigated whether particular treatment packages are best suited to particular patterns of symptoms. Combined exposure and relaxation, compared to exposure alone, may be most effective for phobic patients who have intense chronic anxiety. Similarly, combined cognitive restructuring and exposure, compared to exposure alone, might be most effective for phobics who have a great deal of negative thoughts (e.g., many pessimistic or self-disparaging thoughts, or numerous catastrophic thoughts about the occurrence of threatening events). There is some evidence to support these conjectures, although further research is required.

In clinical practice it is common for patients to be receiving a combination of drug treatment and psychological therapy. This raises the question of whether combined exposure and antianxiety medication is more effective than exposure alone. The research on this topic has focused mainly on combining real-life exposure (flooding or graded *in vivo* exposure) with benzodiazepines such as Valium (diazepam) or Xanax (alprazolam). These are among the most widely prescribed antianxiety drugs. Research shows that adding benzodiazepines to exposure therapy either has no effect on treatment outcome, or may actually impair the efficacy of exposure.

It has been suggested that drugs interfere with exposure because of state-dependent learning. That is, the learning that takes place during treatment (e.g., learning

that agoraphobic situations are not dangerous) may be available in the patient's working memory only when the retrieval conditions match the conditions under which the learning originally took place. Learning acquired under the effects of an antianxiety drug may not be retrieved when patients are in a drug-free state. Research has provided mixed results for the state dependency hypothesis. Although state dependency might explain the exposure-impairing effects of antianxiety drugs in animal research, the same effects might not be as important in humans.

Recent research shows that a good predictor of relapse from combined exposure and drug treatment is the degree to which patients attribute their improvement to their antianxiety drugs rather than to their own efforts. Patients who attribute improvement to their drugs tend to be less confident about coping and have more severe withdrawal symptoms during the drug taper period. Withdrawal symptoms may further lead patients to attribute treatment gains to their drugs (instead of their own efforts) and also lead patients to expect to relapse once the medication is withdrawn. Attributing improvement to effective self-initiated action (i.e., self-directed exposure exercises), rather than to an external agent like a drug, may reduce the chances of relapse. This is because attributing improvement to self-initiated action encourages the person to persist with exposure exercises even while experiencing drug withdrawal effects. People who attribute their gains to the drug are less likely to enter feared situations when they notice the waning effects of the drug.

If patients are taking benzodiazepines when they commence exposure therapy, it is not uncommon for the exposure therapist, in consultation with the prescribing physician, to gradually taper the patient off their drugs, so that they may eventually complete an exposure program without relying on drugs.

B. Long-Term Follow-Up

Conditioning research suggests that fear memories (i.e., representations of the link between the CS and an aversive UCS) are relatively permanent, and that exposure may exert its beneficial effects by inhibiting links between a CS and an aversive UCS, possibly by creating competing links between the CS and a pleasant UCS. The animal research on the reinstatement of fears suggests that exposure therapies should be short-lived in their effects, with relapse common. Outcome studies on people with phobias have examined the durability of the benefits of exposure therapy, with follow-up assessments typically conducted 6 to 12 months post treatment. Although relapse sometimes occurs, the majority of patients maintain their treatment gains. How are we to reconcile this with the putative "indelibility" of fear memories? It may be that such memories are indelible and that patients often do experience minor resurgence of fear, of insufficient severity to represent a relapse of the phobia. During exposure therapy patients are taught skills for overcoming their fears, such as the skill of constructing a fear hierarchy and systematically exposing themselves to fear-evoking stimuli. These skills may help patients deal with minor resurgences of fear, thereby reducing the fear before it can escalate into a full-blown phobia. Thus, even if fear memories are indelible, that does not mean that patients will inevitability relapse. Patients who do relapse can be successfully treated with a further course of exposure therapy.

C. Symptom Substitution

Psychodynamic theories posit that phobias are expressions of unconscious conflicts. In Sigmund Freud's famous case of Little Hans, for example, the child's horse phobia was conceptualized as arising from an Oedipal conflict (i.e., unacceptable impulses consisting of libidinous longing for the mother and aggression toward the father). Such theories imply that exposure therapies simply treat the symptom (i.e., the phobia), without treating the underlying conflict, and that if one symptom is eliminated, then another will emerge in its place as a further expression of the unresolved conflict.

Research on exposure therapies for phobias has revealed no convincing evidence of symptom substitution. Once fears or phobias are eliminated by exposure therapy, the treatment-related gains tend to be maintained. Although new symptoms may sometimes later emerge (e.g., depressive symptoms), a more common pattern is that there is a generalization of treatment effects; once a patient's phobia has been reduced by exposure, the patient's mood may improve and he or she may become happier in general. This effect is most often seen when debilitating phobias have been eliminated, thereby enabling the person to enjoy a higher quality of life. Interestingly, in the treatment of phobias, even Freud recommended *in vivo* exposure as an important component of therapy.

V. CASE ILLUSTRATION

Michelle K. was a 32-year-old single woman working as an administrative assistant in a large corporation. She had a long-standing history of generalized social phobia

and intermittent alcohol abuse. Michelle had been shy for as long as she could recall. During her adolescent years she was overweight and suffered from bad acne, which bought her ridicule and rejection from schoolmates. As a result of a series of particularly disturbing episodes of teasing during grades 10 through 12, she became increasingly anxious in social settings, including talking in groups and having one-to-one conversations, particularly with members of the opposite sex. Michelle also developed intense fear of eating in public after an episode in which she vomited during lunchtime in the school cafeteria. This appeared to have been the result of influenza combined with the effects of high anxiety.

Michelle suffered for many years until she saw a television program describing cognitive-behavior therapy for social phobia. When she presented for treatment, at age 32, her major problems were eating in public, giving oral presentations at work, and initiating and maintaining conversations with men. Whenever she had to eat in public, her hands trembled and she worried that others would think she was "weird." While giving oral presentations, she would tremble, blush, and sweat profusely, and sometimes would have a panic attack. As a result of these problems, she recently turned down a promotion because it would have required her to give speeches and to attend business dinners. Although Michelle very much wanted to be in an intimate relationship, she rarely dated because of fear of being rejected. She believed it would be "terrible" to be rejected. Michelle attempted to cope with her anxiety by consuming "a few drinks" before social engagements. On occasion this resulted in her become extremely intoxicated and behaving inappropriately. These embarrassing episodes exacerbated her social fear and avoidance.

Michelle's history suggested that aversive conditioning experiences (e.g., vomiting at school) gave rise to some of her social fears (e.g., fear of eating in public). Operant conditioning also appeared to play a role (i.e., reinforcement of avoidance and escape behaviors, and reinforcement of using alcohol to dampen her social anxiety). Conditioning alone seemed insufficient by itself to account for all of her problems. The fact that her shyness was long-standing suggested that some form of *diathesis* (vulnerability factor) predisposed her to acquire social fears. This might have been due to some combination of genetics and childhood learning experiences. With regard to the latter, Michelle recalled that her father had long emphasized the importance of being popular with others. Maladaptive beliefs, arising from these diatheses or from other sources, also seemed to play a role (e.g., the belief that it would be "terrible" to be rejected). Social skills deficits (e.g., deficits in conversation skills) appeared to exacerbate her social anxiety. Thus, as is often the case in anxiety disorders, Michelle's problems appeared to be multifactorial in origin. Accordingly, treatment was multifaceted, with different interventions addressing different aspects of her problems.

Michelle received 16 sessions of cognitive-behavior therapy, involving cognitive restructuring of maladaptive beliefs, social skills training, and graded *in vivo* exposure. She was also counseled to abstain from alcohol before and during social engagements. This was for several reasons. First, it was important that she avoided exacerbating her social fears by drunken behavior. Second, without the mind-clouding effects of alcohol, Michelle was better able to concentrate on practicing her social skills. Third, alcohol may have inhibited the effects of *in vivo* exposure in the same way that benzodiazepines interfere with exposure.

Given that this chapter is concerned primarily with classical conditioning and associated treatments, the remainder of this case illustration will focus primarily on the exposure exercises used in Michelle's treatment. To reduce her fear of public speaking, Michelle completed a series of graded *in vivo* exercises, conducted during therapy sessions and as homework assignments. She began by delivering increasingly longer speeches to her therapist during the sessions. Her SUDS were initially 75/100. After two sessions of repeated practice her SUDS declined to 10/100. For homework she practiced giving these speeches to her dog, who turned out be a generally attentive listener (although he tended to doze off during the boring parts). Then she practiced giving speeches to her sister and elderly neighbor. As her confidence grew, Michelle asked her supervisor for permission to present aspects of the weekly reports at staff meetings. Before and during each of her oral presentations, Michelle's therapist encouraged her to "feel the fear" without distracting herself or using alcohol, and to treat each presentation as an opportunity for honing her presentation skills.

Michelle's fear of eating in public was similarly treated with graded *in vivo* exposure. Initially, exposure exercises took place during treatment sessions held at lunchtime, during which Michelle and her therapist would eat at the hospital cafeteria. During the first exposure session, Michelle ate "nonmessy" foods (e.g., sandwiches), which evoked low levels of anxiety. She later progressed to eating "messy" foods, such as soups, salads, and spaghetti. Michelle was encouraged to allow herself to feel anxious and to allow her hands to tremble. During these exposure exercises her fear gradually declined and the trembling also abated. Michelle's in-session exposure exercises were complemented by a series of homework assignments. The latter began with relatively easy tasks (e.g., eating by

herself in the food court of a large shopping mall). As she became comfortable with these tasks she moved on to more fear-evoking exercises, such as eating with coworkers in the office lunchroom.

Her fear of dating was treated with a combination of graded *in vivo* exposure and social skills training. Michelle was encouraged to attend social functions whenever the opportunity arose, and to make increasing efforts at being actively involved in conversations. Michelle began to take up offers from her friends to join them on social outings, and thereby had numerous opportunities to enter into conversations with people she met, both women and men.

By the end of treatment Michelle's social phobia had abated considerably. She was able to comfortably give oral presentations at work and to attend work-related dinners. She also had accepted a promotion. The added opportunities for *in vivo* exposure entailed in her new job led to further reductions in social anxiety, and to increases in self-confidence. Treatment concluded with a review of the gains made during therapy, a discussion of the goals that remained to be attained, and a discussion of how she would go about using the skills learned in therapy to attain these goals. For example, Michelle was still anxious about dating, and was also frightened of making extemporaneous speeches. For each fear, she was encouraged to construct a hierarchy of feared situations, and systematically exposed herself to them. Michelle was also counseled on the situations that might lead her social phobia to worsen (e.g., an episode of being criticized by a supervisor) and how to use exposure and cognitive restructuring for dealing with any exacerbation. Michelle was advised to recontact the clinic if she experienced any further problems.

VI. SUMMARY

Classical conditioning theories have become considerably more complex since the early formulations by O. H. Mowrer and others. Modern conditioning models emphasize the role of cognitive factors such as memory processes and expectancies in the etiology and maintenance of conditioned responses. As theories of fear have developed, other pathways to fear acquisition have been added, although classical conditioning continues to be seen as important. Classical conditioning theories have led to a number of important treatments, with the most widely used being the exposure therapies for reducing fear. According to contemporary views, extinction of the CR can be regarded as a process of exposure to corrective information. Exposure involves having the person repeatedly exposure himself or herself to a feared stimulus until fear abates. Patients play an active role in choosing what they will be exposed to, and when the exposure will occur. Exposure therapies can successfully reduce conditioned fears and fears arising from other forms of learning.

Of the exposure therapies, graded *in vivo* exposure and flooding are among the most effective treatments of phobias, and play an important role in treating disorders in which fear plays a prominent role (e.g., social phobia, agoraphobia). For patients who are extremely phobic, the least demanding form of exposure (systematic desensitization) is typically the exposure intervention to be used first. Graded *in vivo* exposure is particularly important because it involves teaching patients skills for overcoming their fears. Patients can continue to apply these skills on their own, without the aid of a therapist. Exposure therapies can be combined with other psychological interventions, such as relaxation training and cognitive restructuring. For the average phobic patient, combination treatments tend to be no more effective than exposure alone. However, there are likely to be exceptions to this rule, and some patients may benefit most from a combination of psychotherapeutic procedures. Combining exposure with antianxiety drugs does not improve outcome, and may actually impair the effects of exposure. The benefits of exposure therapy tend to be long lasting, with no evidence of symptom substitution. Patients sometimes relapse, although their reemergent fears can usually be successfully treated with a further course of exposure therapy.

See Also the Following Articles

Anxiety Management Training ■ Avoidance Training ■ Behavior Therapy: Historical Perspective and Overview ■ Behavior Therapy: Theoretical Bases ■ Conditioned Reinforcement ■ Exposure ■ Extinction ■ Flooding ■ Habit Reversal ■ Implosive Therapy ■ Operant Conditioning ■ Panic Disorder and Agoraphobia

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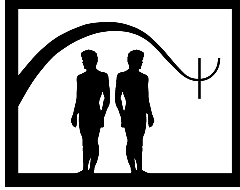

Cognitive Appraisal Therapy

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I. Description of Treatment
II. Theoretical Bases
III. Empirical Studies
IV. Summary
Further Reading

GLOSSARY

emotional setpoint A nonconscious prescription about how and what a person should feel. When affect deviates from the setpoint processes are automatically activated to restore the setpoint. Negative deviations prompt defensive maneuvers; positive deviations prompt security-seeking behaviors and justifying cognitions.

justifying cognition Perception and thought that elicit and rationalize personotypic affect, and restore the emotional setpoint.

personal rule of living Conscious and nonconscious cognitions that form a personal rule book for guiding decisions, behavior, and the processing of social information. They may function as mediators of emotional experiences or as nonconscious algorithms for value-based responses.

personotypic affect Certain emotional experiences that are frequently experienced by the individual, depending on his or her socialization environment; the person's emotional "default" setting.

security-seeking behavior Behavior, especially interpersonal, that elicits personotypic affect and restores the emotional setpoint.

I. DESCRIPTION OF TREATMENT

Cognitive appraisal therapy (CAT) began as a form of cognitive-behavior therapy (CBT) and evolved into an integrated psychotherapy for personality-related disorders. CAT departs from conventional cognitive-behavior therapy in its view of affect and motivation:

- Affect is a result of prior cognitive processing in CBT; in CAT cognition can also be the result of emotional processing.
- Behavior is affect-driven in CAT, not cognition-driven. Nonconsciously motivated attempts to reexperience familiar feelings (personotypic affects) account for symptomatic behaviors and self-handicapping actions.

Whereas reduction of symptoms of anxiety and depression and improvements in social and familial functioning are the ultimate goals of treatment, they are not the primary focus in CAT. Instead, the emphasis falls on the discovery of a person's patterns of personality (affect, behavior, and cognition).

These patterns emerge in therapeutic dialogues, especially during initial contacts. The Millon Clinical Multiaxial Inventory is used to confirm preliminary diagnostic impressions of personality functioning, but another test (e.g., the MMPI) could also be used for this purpose.

To achieve self-understanding, the therapist assists in describing affective, cognitive, and behavioral patterns,

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their interrelations, and their functions in a person's life. Together client and therapist develop plans to work against these patterns using the client's new awareness.

CAT is not a set of specific procedures, but rather a portrayal of emotional and behavioral processes the client can readily comprehend and work to change. Because self-awareness and understanding can be achieved in various ways, the techniques employed vary with each individual. Special attention is given to three areas:

1. *Affect:* Methods of comforting oneself and soothing one's feelings are encouraged. These new methods usually replace ones that have been more maladaptive than adaptive (e.g., alcohol, drugs, avoidance).
2. *Behavior:* Clients are encouraged to do what they deem to be right at any given moment in time, and thereby give expression to their moral code and the raising of positive self-appraisals. They also identify self-handicapping actions (security-seeking behaviors).
3. *Cognition:* Clients work to identify and change cognitive distortions, especially those concerned with poor self-image and pessimism about the future, and justifying cognitions that support familiar affect. These in turn promote effective future actions.

Sessions are conducted in plain language. All forms of jargon (including our own), psychobabble, and counseling cliches are actively discouraged. Theoretical assumptions are divulged only when they might prove helpful (e.g., in understanding failure to maintain changes). Formal homework is not assigned. Bibliotherapy, thought records, daily logs, and the like, common in CBT, are seldom used. The emphasis is on establishing new patterns of interaction and self-care, not intensive self-examination of cognitive content or of one's past.

By speaking in an open, self-disclosing manner, therapists attempt to create a strong working alliance and a shame-free environment. Therapists disallow self-criticism and call attention to the minutest self-critical remark. It is expected that anger be expressed respectfully, and when necessary therapists model ways to express anger and other emotions. The endless expression of affect is discouraged because catharsis is counterproductive.

In an effort to reduce self-pity, therapists do not sympathize with clients but affirm the respectful and optimistic position that everyone has the capacity to cope with personal tragedies, and that humans are far more resilient than they may realize. Complaining is discouraged and clients are required to behave actively rather than passively and not to continue as helpless victims stuck in an unresolvable paradox.

All clients address two questions: "What do you want?" and "What are you willing to do to get what you want?" These questions identify therapeutic goals and get the client's commitment to them and to the assuming of responsibility while relinquishing the self-imposed status of victim or incompetent.

Self-appraisals, central to most forms of psychological therapy, receive special attention in CAT. Most clients set arbitrary standards of worth or goodness that they must attain, and view themselves negatively when they fail. These standards often involve achieving success or social popularity or other outcomes not fully under the control of the individual. Because human worth is a moral or ethical question, clients are urged to adopt a different standard: Positive self-appraisals should only be made when one acts ethically and morally. Actions are controlled by the person (a humanistic aspect of CAT) and therefore clients can control self-appraisals by doing what they think is right.

When clients do not act in accord with their personal values, it is suggested that most of us are tempted to do what feels good rather than what is right. A self-respecting life comes not from pursuing hedonistic pleasures, but from acting responsibly, morally, and ethically; only then can self-respect be achieved.

The CAT therapist understands setbacks, so-called resistance, and stalled therapeutic progress by using the concept of emotional setpoint and the person's nonconscious motives to reexperience personotypic affects.

There are no formal termination procedures in CAT, because therapy is viewed as a continuing resource to clients. (Administrative policies in some settings may prohibit this.) Rather, clients are asked to decide when to schedule their "next session," which, of course, may never occur.

II. THEORETICAL BASES

The phrase cognitive appraisal therapy was adopted to distinguish it from other forms of cognitive behavior therapy, especially rational-emotive therapy. The phrase also emphasizes the fact that evaluative cognitions (a synonym for appraisal) are centrally involved in emotional processes and are a target for therapeutic intervention.

People seem unaware of their most significant appraisals, which function as nonconscious algorithms—stored routines for the processing of social information. These algorithms, in the form of therapeutic hypotheses about covert mental functioning, can be inferred from what people say and do. Cognitive evaluations,

along with patterns of behaving and emoting, are used in CAT to describe personality.

Personality vulnerabilities are the central focus of CAT. Clinical conditions result from psychosocial stressors interacting with personality variables within a social context. These clinical conditions are personality-related disorders. CAT thus has a holistic orientation rather than a syndromal focus.

Emotion and behavior are viewed as the end result of cognitive processing in most forms of cognitive-behavior therapy. Beliefs or cognitions are said to mediate between stimulus and response, producing the “frightened animal” model of emotion: An animal reacts with flight and fear to a stimulus it interprets as dangerous.

In humans, the interpretive process uses cognitive inferences and appraisals to create an emotional response, and these cognitive processes are targets of therapeutic interventions. In CAT, inferences and appraisals are labeled personal rules of living—personal versions of correlational and cause-and-effect relationships, and of moral principles and social values. For example, if one has an inferential rule that all dogs will bite and an evaluative rule that pain is bad and should be avoided, the person will avoid dogs in order to avoid pain—exactly what phobic persons do.

This mediation model of episodic emotion accounts for a person’s reaction in specific situations, and can be helpful in relieving emotional distress in crises. However, most patients are not in psychotherapy for crisis intervention. The disordered emotions for which they seek treatment are habitual rather than reactive, chronic rather than episodic. They are emotional habits rather than emotional responses.

In order to sustain emotional habits thinking and acting must be brought into harmony with feelings. Each person, it is assumed in CAT, has one or more emotions that have been practiced so often they become, in computer terminology, his or her “default setting.”

CAT hypothesizes that people need to reexperience familiar feelings in order to have a sense of psychological security that originated in preadult patterns of attachment. People feel most comfortable and secure in familiar surroundings, with familiar people, and with their own possessions (familiar objects). Too much familiarity can be boring, but too much novelty can be threatening. CAT postulates an emotional setpoint—a familiar prescription about how a person should feel.

When a person’s subjective feelings fail to match his or her setpoint automatic processes are activated. Deviations below the setpoint are corrected by mood-lifting thoughts and actions (psychological defenses) that raise the emotional state. When one feels too good, automatic processes (security-seeking maneuvers) lower the individual’s affect to his or her accustomed, and therefore secure, state.

Two important but easily overlooked feelings that receive close attention in CAT are shame and self-pity. Shame is a feeling of personal deficiency, a form of self-criticism so extensive that one feels like an outcast from one’s community of friends and family. Self-pity is the feeling that one is weak and disadvantaged through no fault of one’s own. Prompting pity in others may result in motivating them to assist, but self-pity does not lead to self-help initiatives because the feelings confirm that the person is powerless. When shame and self-pity are personotypic affects, they move people to engage in behaviors that elicit criticism (shame) or tempt others to take advantage of them (self-pity). Although consciously abhorring these feelings, when people repeatedly act as if they seek them it provides evidence that the feelings are personotypic and their actions fit a pattern of security-seeking.

Both shame and self-pity are implicated in rage. The target of rage is often people who shamed or victimized the enraged person or who refuse to help. Because of the self-image of weakness, the person seldom expresses rage directly due to fear of retaliation.

Self-respect is necessary to combat shame and self-pity. It is difficult to feel ashamed when doing what is right, nor is it easy to feel sorry for oneself. Self-respect based on moral actions gives power to the person, and a powerful person cannot readily feel shame or self-pity, because the person feels adequate and worthwhile, not inferior and vulnerable.

III. EMPIRICAL STUDIES

CAT originated as individual psychotherapy, and its concepts have been applied to children, adolescents, adult groups, and couples. Because it is a theoretical perspective on personality and motivation, CAT can be adapted to other forms of psychotherapy. When therapy stalls, CAT concepts offer a fresh perspective on resistance to change; familiarity is a powerful force in people’s lives. Developed in a private practice setting, CAT has not yet stimulated empirical studies.

IV. SUMMARY

CAT treats the personality vulnerabilities that underlie anxiety and mood disorders. It assumes that people seek to restore their emotional setpoint by distorting

perception and cognition and by pulling responses from others that prompt personotypic affects. Failure to change or maintain change is due to the power of the emotional setpoint. Therapeutic procedures focus on the understanding of these patterns of personality and using such awareness to work against them. Special attention is given to achieving self-respect, based on personal responsibility for doing what is right, to combat shame, self-pity, and rage.

See Also the Following Articles

Anxiety Disorders: Brief Intensive Group Cognitive Behavioral Therapy ■ Cognitive Behavior Group Therapy ■ Cognitive Behavior Therapy ■ Rational Emotive Behavior Therapy

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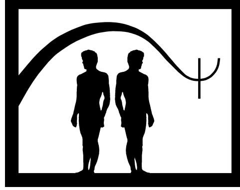

Cognitive Behavior Group Therapy

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I. Outcome Research on CBGT
II. The Relevance of the Group in CBGT
III. The Structure of the CBGT Group
IV. Phases of CBGT
V. Intervention Strategies
VI. Some Closing Remarks
Further Reading

GLOSSARY

cognitive behavior group therapy (CGBT) Therapy that occurs within the context of a group and that incorporates a variety of cognitive strategies, modeling techniques, and other behavioral techniques.

generalization phase In this phase clients are prepared to transfer what they have learned in group to the natural environment. Extra-therapeutic assignments are designed to be carried out in the community.

intervention phase Situational analyses and goal setting are the primary foundations. Technical applications include correcting cognitive distortion, providing corrective information, exposure, modeling, and behavior rehearsal, with input from other group members.

Cognitive-behavior group therapy (CBGT) refers to a variety of different group approaches. What they have in common is that therapy occurs within the context of a group, and that intervention exploits various cognitive strategies, modeling techniques, and other behavioral strategies as well. The goals of intervention are behavioral, cognitive, and/or emotional change. Specifically they aim at the reduction of stress and anxiety responses, depression, eliminating panic responses, reducing bulemic behavior losing weight, the resolution of phobic disorders, ameliorating agoraphobia, effective management of chronic pain, improving general social functioning, abstinence from risky sexual activity, and increasing self-control in the area of drug and alcohol abuse. (A comparable program has been described by Rose in 1998 for use with disturbed children and adolescents.) In the model proposed in this article the clients make use of the conditions of the group to enhance the clients' learning and motivation. Most CBGT models teach specific skills for coping with and resolving unique problem situations. Skills are usually developed for coping effectively with situations that trigger stress, anxiety, pain and/or anger through the use of various cognitive and behavioral procedures. In some cases where the goals are approaching anxiety-producing situations or phobic objects, the clients are gradually exposed to the phobic targets, often as a group. In almost all CBGT groups extragroup tasks (homework) are negotiated with the clients as a means of transferring learning to the real world. These tasks are monitored at a subsequent session. The therapist in CBGT, although presenting a highly structured program, in most cases involves the clients in many goal, task, and intervention decisions. Before we discuss CBGT in more detail, let us examine some of the research related to this approach.

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I. OUTCOME RESEARCH ON CBGT

The research tends to provide support of the effectiveness of CBGT in the treatment of social phobias. For example, Heimberg in 1990 conducted a study comparing CBGT with a credible placebo control in the treatment for social phobias of 49 participants. Groups met weekly for twelve 2-hour sessions. The CBGT condition ($n = 25$) consisted of exposure to simulated phobic events, cognitive restructuring of maladaptive thoughts, and homework for self-directed exposure and cognitive restructuring between sessions. The educational supportive psychotherapy comparison group (ES) ($n = 24$), which acted as a control, consisted of lecture–discussion and group support. While both groups demonstrated significant pretreatment-to-posttreatment change, CBGT patients' phobias were rated as significantly less severe than those of ES patients at posttest assessment. Six-month follow-up data revealed a similar pattern.

In another study Mattick and Peters in 1988 conducted a study to assess the effectiveness of guided exposure in groups with and without cognitive restructuring in 51 subjects (24 male) with severe social phobia. The guided exposure model of CBGT emphasized the role of avoidance behavior in the etiology and maintenance of phobias and involved exposure to moderately difficult situations, the subjects being directed into increasingly difficult situations, and self-directed exposure homework assignments. The combined model of guided exposure and cognitive restructuring emphasized both avoidance behavior and the role of irrational thoughts in initiating and maintaining behavior and included systematic rational restructuring with elements of rational-emotive therapy as well as identifying, challenging, and altering maladaptive beliefs and attitudes. The combined methods group showed a significantly greater improvement than the exposure group from before to after treatment. Results from the self-report measures of target phobia avoidance rating indicated that the treatment resulted in greater approach to the phobic object.

Support for CBGT in the treatment of agoraphobia with panic disorder in intensive short-term CBGT (two all-day workshop) was provided by Evans, Holt, and Oei in 1991. They assigned 97 participants with the diagnosis of agoraphobia with panic attacks to either the treatment ($n = 74$) or the control wait-list group ($n = 23$). All subjects in the treatment condition attended the brief intensive CBGT, which consisted of lectures regarding agoraphobia, relaxation training, cognitive rehearsal of panic control messages, *in vivo* exposure, and group discussion. Waiting list participants were all consecutive referrals to the clinic following the treatment phase. Results revealed that patients who received the treatment program had improved significantly at posttreatment and at follow-up and that significantly more patients were symptom-free or symptom-reduced following the CBGT treatment than the control group.

Lidren and colleagues in 1994 reported the results of a study that compared the effectiveness of CBGT in treating panic disorder (PD). Thirty-six men and women who met criteria of the DSM-III-R for PD were randomly assigned to one of three conditions: bibliotherapy (BT), group therapy (CBGT), or a waiting-list control (WL) group. Both groups were compared to a no-treatment control condition, and all three conditions contained 12 subjects. Results in terms of decreased panic attacks and lessening of severity of behavioral avoidance suggested the greater effectiveness of both treatment conditions over the wait list.

A number of studies support the effectiveness of CBGT in the treatment of eating disorders. For example, Telch, Agras, Rossiter, Wilfley, and Kenardy in 1990 assessed the effectiveness of CBGT in treating binge eating disorders Forty-four female patients who binged were randomly assigned to either CBGT ($n = 23$) for ten sessions or a waiting list control condition ($n = 21$). At posttreatment assessment, between-group comparisons revealed that subjects in the intervention group reported significantly reduced binge eating episodes compared with subjects in the waiting list control group. CBGT participants continued to binge significantly less frequently than at baseline. However, bingeing was usually not eliminated entirely.

Tanco, Linden, and Earle in 1997 conducted a study evaluating the effectiveness of a cognitive group treatment program on morbidly obese women. Sixty-two obese women were randomly assigned to either the cognitive program (CBGT), a behavior therapy weight loss program (BT), or a wait-list control condition (WL). Both treatment groups consisted of eight to 2-hour weekly sessions with the wait-list control condition lasting 8 weeks. However, results revealed that scores for the CBGT group improved significantly across time, while those for the BT group and the control group did not. The CBGT group and the BT group, but not the control group subjects, lost significant amounts of weight during the course of treatment. Analysis of body mass index (BMI) revealed a decrease with time in both the CBGT group and the BT group. Finally, the proportion of subjects in the CBGT group exercising regularly increased significantly over the course of treatment. Six-month follow-up data suggested that all treatment benefits were maintained.

A number of studies lend modest support to the use of CBGT in treating patients with hypochondriacal complaints or somatization. Lidbeck in 1997 conducted a study of the effectiveness of a short cognitive-behavioral group treatment model for somatization disorder in general practice. The CBGT condition consisted of six treatment groups with three groups of six patients and three groups of five patients making a total of 33 subjects receiving cognitive-behavioral therapy. The treatment included patient education to explain the psychological and physiological stress symptoms in order to enable cognitive restructuring, relaxation training, and homework consisting of one relaxation training session. CBGT consisted of eight 3-hour sessions. The control group consisted of 17 people: five groups of 3 patients and one group of 2 patients. Although no significant differences were found in dealing with social problems in either condition, reduction of illness behaviors was significantly greater in the CBGT condition than in the control condition, both at posttreatment evaluation and at the 6-month follow-up, and there was also a group difference reported for hypochondriasis at the 6-month follow-up. No significant differences were reported for anxiety, depression, or sleep disturbance, either at posttreatment or at the 6-month follow-up. Medical usage was significantly different between the CBGT and control conditions at the posttreatment evaluation and at the 6-month follow-up.

Avia and colleagues in 1996 also examined the effectiveness of CBGT with hypochondriacal patients. Seventeen participants were assigned to either the CBGT groups or the wait-list control group. The CBGT condition consisted of six weekly 1.5-hour sessions of general education covering inadequate and selective attention, muscle tension/bad breathing habits, environmental factors, stress and dysphoric mood, explanations given to the somatic signals, practical exercises implementing educational material, and homework to practice skills related to topic areas. The two CBGT groups were identical except for the assigned therapist. The waiting list control condition did not receive any form of treatment for the duration of the experiment. Results suggested a significant difference between CBGT and the control condition in the reductions of physical symptoms, bodily preoccupation, symptom interference, an overall reduction of the IAS, and also in their overall change in dysfunctional health beliefs. One year follow-up data reported that subjects maintained their reductions in their worry about illness and continued reducing symptom interference.

CBGT has found some support in the treatment of drug and alcohol abuse. Fisher and Bentley in 1996 conducted a study looking at the effectiveness of two group treatment models, CBGT, disease and recovery approach, and a usual treatment comparison group. The CBGT condition consisted of interventions to enhance self-efficacy, provide more realistic and appropriate expectations about the effects of the abused substance on symptoms of personality disorders, increase adaptive coping skills, and enhance relapse prevention capacity. The disease and recovery group approach consisted of interventions to develop an "alcoholic" or "addict" identity, acknowledge a loss of control over the substance abuse and the effects of the personality disorder, accept abstinence as a treatment goal, and included participation in support group activities such as AA. Both experimental groups met for three 45-minute weekly sessions for 4 weeks. The usual treatment comparison group did not receive experimental interventions and met three times weekly in an open-ended group format. The analysis revealed that within the outpatient setting, the CBGT was significantly more effective than the disease and recovery group and the control group in reducing alcohol use, enhancing psychological functioning, and in improving social and family relations.

Eriksen, Bjornstad, and Goetestam in 1986 evaluated the efficacy of a CBGT model that used primarily social skill training procedures with patients who abused alcohol. Social skills training as part of inpatient treatment for patients with DSM III diagnosis of alcohol dependence delivered in a group format resulted in better outcomes than a traditional discussion group. Over the 1-year period after discharge, patients who had received social skills training were abstinent 77% of days, whereas control patients were abstinent 32% of days. In 1997, Vogel, Eriksen, and Bjoernelv also found support for the greater efficacy of the treatment of alcoholics in social skill groups over those in a control condition 1 year after the end of therapy.

Roffman and colleagues in 1997 assessed the effectiveness of CBGT to prevent HIV transmission in gay and bisexual men. Approximately 159 men were matched and assigned to receive either the 17-session group counseling (n = 77) or remain in an 18-week wait-list control (n = 82) condition. The CBGT condition was based on a relapse prevention model. Early sessions emphasized building group cohesion (one of the few studies that explicitly did so), HIV education, motivational enhancement, and goal setting. Middle sessions focused on determining antecedents to risky behavior and developing appropriate coping strategies that included coping skills training in high-risk situations that involved communication, cognitive activities, and behavioral strategies. Maintenance strategies for the preservation of safer behaviors were also included. This

study utilized one specific dependent measure: abstinence from AIDS-risk sexual activity over the 3-month period prior to reassessment. Data reveal men exposed to the treatment group had roughly 2.3 times the odds of success experienced by men assigned to the no-treatment control condition. Also, results indicate that the intervention appeared to be more effective with exclusively gay than with bisexual men.

Lutgendorf and co-workers in 1997 conducted a study of gay men diagnosed with HIV seropositive status to measure the psychological and immunological effects of a cognitive-behavioral stress management group (which could also be classified as CBGT) (n = 22) versus a wait-list control (n = 18). The CBGT group met for weekly 135-minute sessions that consisted of didactic components explaining physiological effects of stress, stress-immune associations, cognitive-behavioral theory of stress and emotions, identification of cognitive distortions and automatic thoughts, rational thought replacement, coping skills training, assertiveness training, anger management, identification of social supports, group discussion of personal examples, and homework.

Results of measures assessing relaxation practice and mood changes revealed a correlation between regularity of relaxation practice and changes in depression and anxiety, and in assessing immunologic effects. No changes, however, were found between groups at posttest or within groups over time in most of the immunological measures.

Adjustment of newly diagnosed cancer patients was found in a study by Bottomley, Hunton, Roberts, Jones, and Bradley in 1996. The groups compared were a CBGT condition (n = 9), a social support group (n = 8), and a wait list control condition (n = 14). Both treatment groups met for 8 weeks with sessions lasting 90 minutes. The cognitive-behavioral intervention focused on challenging dysfunctional thinking and learning coping skills while the social support group encouraged open and honest expression of ideas and employed topic-based discussions as primary treatment modalities. No significant differences were found between treatment groups at postintervention. However, differences in groups' scores on the Fighting Spirit subscale approached significance, suggesting that patients in the CBGT group received the most significant benefit in developing coping styles such as fighting spirit. However, at 3-month follow-up data indicate that the CBGT group significantly improved in their fighting spirit as compared to the other two groups. Also, a trend toward deterioration in the scores of the nonintervention condition was statistically significant in terms of increased helplessness and depression.

In the use of CBGT in the treatment of men who batter (see review by Tolman and Edleson in 1995), the results are mixed, although the authors note that consistent findings in varying programs, using various methods, seem to result in a large number of men stopping their violent behavior. In most studies they report that CBGT was more effective than a control group but not significantly more effective than alternative treatments.

In summary, the research cited earlier lends some evidence for the effectiveness of CBGT with a wide variety of presenting problems, although more research is needed. Often the group phenomena was confounded with the cognitive-behavioral procedures. The control groups were often not randomly assigned although the authors provided evidence for similarity of experimental and control conditions. In addition, it should be noted that in many of these and other studies, the number of subjects was low, and hence the power to reject the null hypothesis extremely small. It is in fact surprising that so many studies found a significant difference between control group and treatment conditions in spite of the small number. In all cases there was at least a no-treatment control group but often in the absence of a best possible alternative permitted only the conclusion that CBGT was better than nothing. In the several studies in which contrast groups existed, differences occasionally existed. No power analysis was reported prior to the intervention of most of the studies. The individual was in all cases the unit of analysis in spite of the fact that the treatment was in groups, thus incurring both statistical as well as psychological dependency.

One of the reasons for the modest methodological quality of research on small therapy groups is the complexity of such designs for groups and difficulty in recruiting sufficient subjects to meet quality design requirements. Second, because of the need to standardize treatment packages, individualization in experiments had to be ignored in contrast with actual practice. Third, most of the studies were field experiments that required special protections for the subjects that often worked against a strong design.

II. THE RELEVANCE OF THE GROUP IN CBGT

It is possible to do therapy in groups without making very much use of the group. Although most of the studies cited earlier do not include group interventions and group problems in their description, at the very least, all of them employed some form of group discussion

and member interaction. Unfortunately, the content and purpose of this discussion was not always made clear. This section describes the potential advantages as well as the difficulties, created by working with clients in a CBGT or any other group approach. Ways for dealing with some of the difficulties inherent in groups are also suggested. Many of the assumptions stated have been drawn from clinical practice. (For more details for adult groups see Rose's 1989 work and for groups of children and adolescents see Rose's 1998 research.)

A. Advantages of the Group

First, group membership commonly ends the sense of isolation many clients feel. It is difficult to maintain the feeling that you are the only person experiencing a particular problem when you are surrounded by other individuals who are dealing with similar issues. One of the potentially therapeutic factors in group treatment is the interaction with others who share common concerns (Yalom in 1985 referred to this as "universality"). Listening to others who describe and solve problems brings hope to the client that his or her problems are also manageable, which Yalom in 1985 also stated is a curative factor. These group phenomena are supported by the therapists who continuously permit members to help each other and create other conditions that increase the cohesion and work focus of the group. Helping others, a form of altruism and group cohesion, has also been described as curative factors by Yalom in 1985.

The group provides the client with a source of feedback about those behaviors that are irritating or acceptable to others and about those cognitions that can be viewed as distorted, self-defeating, and/or stress eliciting. As a result the group contributes to improved self-assessment for the individual client.

Another reason for using groups is the frequent and varied opportunity for mutual reinforcement. We have noted that clients find reinforcement from other group members more powerful than reinforcement from a single therapist. Reinforcement is a highly valued commodity in interpersonal relationships. As clients increase the frequency of reinforcing others, they note that they are reciprocally reinforced by others, and mutual liking increases. Each client is given the chance to learn or to improve his or her ability to mediate rewards for others in social interactive situations (with acquaintances, friends, family members, acquaintances in other groups, with other group members, etc.). The group therapist can create situations in which each client has frequent opportunity, instructions, and rewards for reinforcing others in the group. Special group exercises have been designed to train clients in mutual reinforcement, and extragroup tasks (homework assignments) are used to encourage clients, deficient in reinforcement skills, to practice them in the real world. The completion of these tasks is monitored by other group members.

In groups, a client must learn to deal with the idiosyncrasies of other individuals. Clients must wait while other people explain their problem. They must learn to tolerate what they perceive to be inadequate or even inane advice. Clients may be required to tolerate major differences with other group members and in some cases to deal with them. They must learn how to offer other clients critical feedback and advice in a tactful and helpful manner. By helping others, clients are likely to practice a set of strategies for helping themselves and learn a model of helping others that can be applied outside of the group. In this way they are likely to improve their relationships with others.

Therapy groups simulate the real world of natural friendship groups more accurately than does individual therapy if the therapist permits and even encourages such simulation. Individual therapy consists solely of a high-status therapist and a low-status client. Due to the greater similarity of the group to other social situations in the real world, the group setting facilitates transfer of newly learned behavior from the therapeutic setting to the community.

Groups create the opportunity for the group therapist to use an abundance of therapeutic procedures that are either unavailable or less efficient in individual treatment. Among these procedures are the "buddy system," numerous group exercises (see, e.g., Rose's work in 1998), multiple modeling, group feedback, group brainstorming, and mutual reinforcement. Groups also provide each client with a large number of models, role-players for overt and covert behavioral rehearsal, manpower for behavior monitoring, and partners for use in a "buddy system." By simulating the social world, the group provides a natural laboratory for learning, discussion, behavioral testing, and leadership skill development. All of these acquired skills are essential to form good social relationships in any setting.

In the process of interaction in therapy groups, norms (informal agreements among members as to preferred modes of action and interaction in the group) often arise, which serve to control the behavior of individual members. If these norms are introduced and effectively maintained by the group therapist, they serve as powerful therapeutic tools. The group, through group discussion of the implication of nonconformity to the norms, pressures deviant members to conform to such norms as

attending regularly, mutual reinforcement of assignment completion, self-disclosing, analyzing problems systematically, and assisting peers with their problems. Of course, if the group therapist is not careful, antitherapeutic norms also can be generated such as members coming regularly late, or having group members inappropriately or prematurely confronting one another.

In addition to modifying the norms of the group, the group therapist can facilitate the attainment of both individual and group therapy goals by such procedures as modifying the cohesiveness of the group, the status pattern, or the communication structure in the group. Group problems are also dealt with and resolved when they arise. Much of the power of group therapy to facilitate the achievement of therapy goals is lost if negative group attributes are permitted to fester.

B. Limitations of the Group as the Context of Therapy

Of course, groups are not without major disadvantages. Two mentioned earlier were that antitherapeutic norms occasionally develop and may be maintained if the therapist does not deal with such norms with the group members. Moreover, such phenomena as group contagion and mutual aggression can sometimes get out of hand in groups. In spite of such complications strategies for dealing with such group phenomena are available.

A relevant limitation to be concerned with is that it is more difficult to individualize each client in the group than in individual therapy. For efficiency, the group therapist is continually looking for common goals to pursue and may, therefore, overlook the unique needs of one individual. Within many complex group interactions, identifying the distinct needs of specific individuals requires a great deal of attention. Another threat to individualization is the fact that in order that everyone has a chance to participate actively in every session, restraints must be placed on people who talk more than their share. This is sometimes frustrating, but failure to limit excessive talking can result in the frustration of other members. The use of exercises with built-in restrictions depersonalizes the giving of structure and usually makes it more acceptable.

Confidentiality is more difficult to maintain in groups than in the therapeutic dyad. Confidentiality and the consequences of breaches need to be dealt with by the therapist in pregroup screening and early group sessions so that all group members conform to appropriate standards of conduct. Nevertheless, the participants are not professionally trained and abuses do occasionally occur and when revealed have to be dealt with in the group.

Finally, working with groups requires an extensive repertoire of skills and training to be minimally effective. Unfortunately, such training programs are not ubiquitously found in psychology, social work, counseling, psychiatry, or other professional training programs. However, training programs are available in the form of workshops. Exercises are available that can be used to develop in-service training (see Rose's 1998 discussion for more detail).

If the group therapist is aware of these limitations, all of the above potential problems can be avoided or, should they occur, dealt with. In this and the following sections the specific ingredients of CBGT are described. Since there are many models of CBGT, the focus is on the most eclectic approach, one that uses a wide variety of interventions and takes advantage of the group phenomena. How this model differs from other models is occasionally pointed out.

III. THE STRUCTURE OF THE CBGT GROUP

Before the interventions and phases of treatment are described, a number of practical questions need to answered regarding number of participants, number and duration of sessions, number of therapists, and characteristics of members.

A. Size of the Group

The size of a group depends on its purpose, need for individualization, and practical considerations such as available space, length of stay in the institution, and available staff. Since individualization within a group is highly valued, the outpatient groups with which this approach has been used usually range in size from three to eight members. Generally, however, six members makes it possible to involve everyone at every session. Having a group with less than three members seems to lose many of the beneficial group attributes discussed earlier. A group larger than eight makes it difficult to allow every member to bring in a problematic situation at every meeting.

There are sometimes clinical practical reasons to modify this range. A limited number of staff may be available and a need for a group has been established. In some agencies groups of 12 or more clients have been carried out effectively, especially when all the clients share a common problem area, or if there are two therapists and the activities of the group are frequently carried out in subgroups. If there are two expe-

rienced therapists available, it would, based on my experience, be more efficacious to have two small groups than one large group. Often these larger groups have a more didactic than therapeutic goal purpose.

Institutional groups tend to be larger because they often overlap with the residential group. In order to facilitate greater individualization, the group may be divided into two subgroups, one led by the group therapist and the other by the residential worker or family worker or even a supervisor. Another reason for larger groups in institutions is that as a rule they meet much more frequently than outpatient groups. If a group meets every day, even if the group is large, each individual in the course of the several meetings a week will have the opportunity to focus on his or her problems.

B. Frequency, Length, and Duration of Group Sessions

Group size is also a function of the frequency, length, and duration of sessions. Most outpatient groups are time limited, and meet for approximately 2 hours a week for 6 to 18 weeks. In our review of the literature the modal number is 8, but most therapists prefer 12 to 18 sessions in order to achieve most treatment goals. Regular weekly sessions rather than the more variable schedule recommended later are the general pattern primarily because of the personal or work schedules of the families, of the clients, and of the group therapist rather than for any particular therapy rationale. Some have been able to follow 8 weekly sessions with 4 monthly ones as a way of providing the clients with more gradual fading of the intensity of treatment.

The exact number of sessions for outpatient groups depends on the purpose of the group, its composition, and certain practical limitations. In heterogeneous groups (members enunciating diverse presenting problems), in order to deal with a wide range of problems 14 to 18 sessions are usually required to meet treatment goals. When a highly specific and limited goal is pursued, a fewer number of sessions may suffice. In general, however, assuming major goals have been achieved after one set of therapy sessions, clients are referred to nontherapy groups such as at the YMCA/YWCA, yoga classes, bridge clubs, or sports groups to provide relatively safe opportunity to practice, unsupervised, what they have learned in therapy. Referral to individual therapy or support groups may also occur if clients have demonstrated increased motivation but are not yet ready to demonstrate their skills in the real world.

In institutions, transitional groups (groups that prepare the client to go back to the outside world) will meet from 1 to 3 hours daily from their onset until termination, which is usually about 3 to 6 weeks. Only modest research exists to point the way to differences in the number of sessions. In adult groups in the therapy of social anxiety, D'Alelio and Murray in 1981 demonstrated that eight 2-hour sessions was significantly more effective in reducing social anxiety than four 2-hour sessions, perhaps because there is more extragroup time to practice what is learned in the group. In anger management groups for adolescents, Lochman in 1985 demonstrated the greater effectiveness of 16 sessions over 8 in increasing the control of anger by the youth.

As we mentioned earlier, although most outpatient groups are closed, some are also open-ended and have no set duration. In private practice especially, these groups of indefinite length tend to be organized. When the clients provide evidence that goals have been attained and a plan for generalization has been designed, the clients are helped by the other members to plan to terminate. Of course in such groups, termination of a given individual may also occur against the advice of the group therapist, as the attraction of the group fades for that individual without concurrent achievement of treatment goals.

In residential treatment, CBGT groups tend to meet every weekday or every other day for an hour and half for as long as the client is in the institution. Occasionally a client will miss sessions for such practical reasons as illness, doctor's appointments, court appearances, psychological testing, and special programs. Some institutions use CBGT only 2 or 3 of the 5 days, using the other days for more traditional methods.

C. Number of Group Therapists

As the number of group therapists in any one group increases so does the cost to the client, to the agency, or to the community. There is no evidence that two experienced group therapists are more effective than one, provided that the group therapist is experienced and trained. Thus, in most cases one group therapist is adequate and less costly than two or more. Moreover, two therapists often seem to amplify what the other says, which limits the time available for the clients to participate. There are, however, several situations in which more than one group therapist is required: if one of the therapists is in training, if both therapists are learning the method for the first time, if the group is larger than 10 persons, and if there are several acting-out persons in the group.

IV. PHASES OF CBGT

A. Beginning the Group

The structure of interaction in most models of CBGT can be divided into phases. Each phase overlaps with other phases, but in each phase the therapist focuses somewhat more on one set of behaviors than another. All have a "beginning the group" phase in which clients are oriented to the method, get to know each other, and the cohesion of the group is developed. Orientation involves explaining to clients what they can expect from the group experience and what is expected from them. The therapist usually describes the larger structure in the beginning and gradually fills in the details as the group progresses or as a new intervention is introduced.

Cohesion refers to the mutual liking of members with each other and with the therapist and their attraction to the program of the group. In our groups, the cohesion of the group can be enhanced by the use of group introductory exercises in which members interview each other in pairs and partners introduce their partner to the group. It is also a safe way of increasing broad participation and is the first step in self-disclosure. Cohesion is also enhanced by creating opportunities for continued broad participation, protecting members from premature and/or too harsh confrontation, keeping the interaction generally positive, using variation in the program, occasionally using humor, and developing opportunities for choice and self-decision-making by the members. The cohesion is continually monitored at the end of every session on one question of a postsession questionnaire (see later).

B. The Motivational Enhancement Phase

At the same time that the group begins and continuing into the later phases, in some models of CBGT the therapist focuses on increasing the motivation of the participants. (In most of the research cited earlier, this phase has not been explicated. One exception is found in the study by Roffman in 1997). When most clients enter a treatment group for the first time, they are often anxious, afraid of what others might think of them, and hesitant to expose their flaws to other people. They are often poorly motivated to work on the very problems that brought them to, or resulted in their being sent to, the group. This lack of motivation is particularly apparent in groups of involuntary clients such as men who batter, prisoners, and those who suffer from addictions. However, even in voluntary groups, this ambivalence can often be detected. The type of behaviors often observed at the first session or even in the pregroup interview are a reluctance to speak, some anger about being in treatment, denial of any serious problems, setting themselves apart from the others in the group, speaking only to the therapist, an unwillingness to disclose anything about themselves, and an unwillingness to develop goals, treatment plans, or extragroup tasks.

Motivation has been operationally defined as the readiness of the client to participate actively in the treatment process (as discussed by Miller and Rollnick in 1991). This can be assessed by therapist's observations of the level of self-disclosure and other forms of participation of a self-report checklist. Strategies for enhancing motivation have been developed and are implemented throughout the treatment process to maintain the client's ever-changing commitment to change. Although in 1991 Miller and Rollnick viewed motivation as an individual characteristic, one often observes in groups a phenomenon in which motivation of each mutually influences the motivation of others. There appears to be a shared or prevailing group level of motivation. Miller and Rollnick identified a number of principles to be considered in the process of enhancing motivation. Some of these principles include normalizing ambivalence, contrasting costs and benefits of changing or resolving problems, eliciting and reinforcing self-motivational statements, and removing barriers to treatment. In addition, the therapist carries out a set of interviewing principles, such as supporting self-efficacy, avoiding argumentation, providing clear advice, and delivering continued feedback to the client. In groups the members are encouraged to respond in a similar fashion to each other.

C. Assessment Phase

Overlapping with cohesion building and orientation is the assessment phase. This actually begins with the client selecting a given group with a general theme in which she or he is interested or has major concerns (e.g., anxiety management, anger control, dealing with HIV infection). In the group and even in an intake interview, the particulars of the problem begin to be spelled out. Many practitioners make use of such paper and pencil tests as Beck's 1976 depression inventory, the fear survey schedule, and the fear questionnaire. Many other instruments are to be found in research summarized earlier. For practitioners a useful qualitative procedure often used is some form of situational analysis. Members can be trained by means of group

exercises and therapist modeling to identify and describe recent problematic or stressful situations in which they are dissatisfied with the responses. These situations are highly specific events that represent a sample of the more general complaint.

> *Client:* Even though I am lonely most of the time and would like to meet people, I guess I don't do much to help myself (general problem).
>
> *Therapist:* Can you give me a recent example of when you avoided doing something that would bring you in contact with others?
>
> *Client:* That's easy; just this evening my brother called me to come for dinner, Friday. He said there would be some interesting new people there (situation). (This point is the critical moment.) The idea of meeting all those people scared the hell out of me (affective response) so I lied to him and told him I would have to be working that night (verbal response). I guess I'll never meet people that way (indicates dissatisfaction). But the people in this group have told me I'm a pleasant person and an interesting one, too (resources), so maybe this is something I can work on (goal).
>
> *Client 2:* Sure, I have trouble controlling my temper (general problem). My dad was that way too (early background). But, Jeez, sometimes my wife, Shirley, really pushes my button with all her nagging (recent background). Thursday, when she told me to take the garbage out for the third time (situation) (at this point the critical moment), I thought, "there she goes again, nagging me" (cognitive response), then I really got teed off (affective response) and I let her have it (physical response). She called the cops (consequence) and I'm out on my own again (long-term consequence).

After the client provides a brief background, the situations are described in terms of what happened, where it happened, with whom it happened, and when it happened. Each client identifies a critical moment in the event and the behavioral, emotional, and cognitive response at the critical moment. (The critical moment is that instant in time that separates the triggering event from the response of the client.) The clients also state their level of dissatisfaction with the response and examine the long- and short-term consequences of their responses. In the assessment phase the group is used by having members evaluate each other's presentation as to how well the description meets the criteria.

Goal setting is also part of the assessment phase. Both individual treatment and common treatment goals are developed by each client, and, later in the process, group goals are formulated concerning group conditions requiring change. The attainment of group goals should mediate the achievement of the individual treatment goals. As part of systematic problem-solving, specific treatment targets or goals are concrete behaviors, sets of actions, or identifiable cognitions that occur in response to a given specified problem situation. These behaviors and cognitions are specific to a given client and are identified in the interaction among members and in their description of problematic situations that they experience in their day-to-day social encounters. Since goal attainment is future oriented, the group therapist, group members, and each client together estimate a time frame for attaining the goal, which is incorporated into the formulation of the goal. Although clients identify unique individual goals, in groups common goals shared with some or all of the other group members are also identified. Common goals permit greater efficiency in terms of information to be provided, group exercises to be used, and problems to be solved. Most goals are developed over time, as members learn the language of therapy and begin to describe their problems in this highly specific terminology. When goals are not forthcoming from a given individual, the other members can "brainstorm" goals, based on earlier discussions, that might be considered by the reluctant client.

Group goals refer to a future change in interactive phenomena that occur in the group. An example of one group goal is "at the end of this session, all the members of the group will have actively participated in the role-plays." Another is "by the end of the next session, the members all establish a norm that extragroup tasks will be completed if agreed to at a prior session." A third example is "the attraction of the members to each other (as measured on a postsession questionnaire) will increase from the previous session to the end of this session." Although we urge formal goal setting as part of the treatment process, in some versions of CBGT the use of goals is more implicit than explicit. Group goals can sometimes be estimated by means of a postsession questionnaire distributed at the end of each session.

In the postsession questionnaire (PSQ) participants rate their own response to various aspects of each group session. A variety of group problems and group goals can be formulated in terms of these scales, which are in the form of 6 to 12 questions administered to all the members and the therapist at the end of every session. Some of the following are examples of PSQ items commonly used.

1. How useful was this session?

1-----2-----3-----4-----5-----6-----7-----8-----9

not at all   very little   somewhat   quite a bit   extremely

2. How actively involved were the members in today's session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

3. How helpful were members to each other during this session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

4. How much did the members reveal about themselves (their real thoughts, feelings, motivations, and or concerns) during this session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

5.How close did the members feel to each other during this session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

6. How upset or angry were the members during this session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

7. How much did the members control the content and direction of this session?

1-----2-----3-----4-----5-----6-----7-----8-----9
not at all very little somewhat quite a bit extremely

Means, discrepancies among the members, and discrepancies between the mean of the members and the therapist's observations provide a rough estimate of some of the group phenomena as perceived by the members with the group. These data and member comments are discussed at the beginning of the subsequent session.

Group attainment scaling can also be used in group therapy as a way of estimating whether group goals are achieved. Group goals usually refer to a change in process such as broader participation, greater cohesion, increase in on-task behavior, greater decision making by members, and reduction of in-group conflict. A commonly used example of a Group Goal Attainment Scale (for more details on goal attainment scaling, see Kiresuk, Smith, and Cardi's 1994 discussion) in CBGT is the following:

Much less than expected (–2). Members talk almost exclusively to group therapist (91% or more).
Moderately less than expected (–1). Members talk primarily to group therapist (65%–90% of the time).
Expected level (0). Members talk about equally to other members and to group therapist (35%–64%).
Moderately more than expected (+). Members talk primarily to other members (10%–34% toward leader).
Much more than expected (+2). Members talk almost exclusively to each other (9% or less toward leader).

As observed in some of the research summaries presented earlier, individual and common treatment goals in CBGT have included a wide range of targets including managing pain, stress, anger, depression, or anxiety; reducing and/or eliminating the use of drugs, alcohol, or cigarettes; eliminating violence toward one's spouse and children; improving parenting skills; reducing the frequency of bulemic behavior; increasing safe sex practices; increasing positive life experiences in the face of personal tragedies; building more satisfying experiences; and reducing negative or self-defeating self-statements or avoidance behavior. Most of these goals can be broken down into even more specific short-term goals to be achieved by the end of one or two subsequent sessions.

D. Intervention Phase

Situational analyses and goal setting become the foundation for the intervention phase, which may involve correcting cognitive distortions implied in the situation, providing corrective information, exposure to the anxiety-producing object, systematic problem solving, modeling and rehearsing alternatives, reinforcing successful actions, and other interventions, most of which are carried out in the group with the help of the other group members. All of these interventions as they are applied in groups are described later.

E. Generalization Phase

In the generalization phase, which overlaps with the earlier phases, clients are prepared to transfer what they have learned in the group to the outside world and to maintain what they have learned in therapy beyond the end of therapy. In particular, extragroup tasks are designed for each member, usually at the end of every session, to be carried out in the community. Some of the other principles that are incorporated into treatment and that guide the planning for generalization are teaching the target behaviors in varied and multiple ways, finding opportunities for clients to teach what they have learned to others, encouraging clients to go public with their intervention plans and goals, gradually increasing the level of difficulty of expected behavior, preparing the clients for potential setbacks, having booster sessions following termination,

and encouraging membership in support or social recreational groups following group therapy.

V. INTERVENTION STRATEGIES

Almost all models of CBGT make use of a wide variety of interventions. Different models tend to emphasize different sets of interventions. These include cognitive change procedures, guided group exposure, modeling techniques, relaxation training, problem-solving techniques, operant procedures, community change strategies, relationship enhancement methods, and small group techniques, all of which are now discussed in more detail.

A. Cognitive Change Methods

Since the method is referred to as cognitive-behavioral, the major strategies employed focus on correcting distorted cognitions and replacing them with coping thoughts. Specifically, it includes such techniques as cognitive restructuring, cognitive modeling, self-instructional training, and realistic goal setting.

The most commonly used form of cognitive restructuring in groups is derived from the work of Aaron Beck in 1976. Bottomley, Hunton, Roberts, Jones, and Bradley in a 1996 study described earlier used Beck's method of challenging dysfunctional thinking of clients by the therapist. In groups the challenging may also be the responsibility of the other group members as they learn the correct techniques. In addition, the clients are helped to develop alternative cognitive coping skills and some behavioral alternatives as well (e.g., relaxation, recreational skills, social skills). The cognitive coping responses are often practiced in the group in role-plays (cognitive rehearsal). One technique proposed by Beck and Emery in 1985 that lends itself in particular to groups is "point counter point." In this technique a target client argues why his position is distorted or illogical, while another member or the group therapist try to support the illogical position. The discussion is first developed in pairs and then later presented to the entire group. The group members may coach the target client in his or her new role. The danger is that sometimes the group is too aggressively confrontative. To avoid this the group members are first trained through therapist modeling and explanation and a group exercise how to deliver and receive critical feedback.

Another version of cognitive restructuring as discussed by Meichenbaum in 1977 that we employ most frequently as noted by Rose in 1998 is characterized by a set of procedures used to change self-defeating or illogical patterns of thinking to self-enhancing or logical ones. It is the first step used in improving cognitive coping skills. It is assumed that in a given set of circumstances cognitions partially mediate overt behavioral responses. These cognitions include how one values oneself and one's actions and how one specifically thinks or responds covertly in a given situation. The clients are trained to identify self-enhancing and self-defeating thoughts in case examples or exercises. Later they learn to identify their own self-defeating thoughts and try to change these to self-enhancing thoughts. They are taught through modeling initiated by the therapist and rehearsal by the client of the new cognition. Rehearsals may be carried out by all the group members, one after the other. Self-instructional training as described by Meichenbaum in 1977 combines cognitive restructuring and problem solving. It consists of the members being encouraged to make step-by-step verbalizations concerning the problem definition ("What's wrong with the way I'm thinking about this?"), problem focus ("What can I do about it?"), focusing of attention ("I should think about how that will get me in trouble"), coping statements ("If I keep relaxing I won't blow it!"), and self-reinforcement ("Wow! I did it! See, I can do it!"). To prepare for implementation of these strategies the group therapist or another client demonstrates (modeling) what might be said to oneself. This is followed by practice (rehearsal) by the client with the problem, first stating the coping statements aloud, then whispering, and eventually silently stating the coping statements to himself or herself. The group members serve as coaches for each other. This technique is often integrated into guided group exposure.

B. Guided Group Exposure

This technique has been primarily used in the treatment of agoraphobia, as described by Hand, LaMontagne, and Marks in 1974, although some practitioners and researchers have used it with other phobic objects usually in combination with cognitive restructuring and other techniques. The guided exposure involves exposure of the client in groups to feared situations *in vivo,* first together with other group members and then eventually alone. For example, a group of clients who suffered from agoraphobia went toghether to a department store after preparing by means of cognitive restructuring and the modeling sequence. The first trial was in the morning when the store was almost empty;

later they went at noon when it was more crowded; and the third time they went to the department store during a high volume sale. Later, they tried out the same exercises with partners from the group and eventually they performed them alone. Emmelkarnp and Kuipers in 1985 reviewed the commonly used procedures and the current research that lends support to these methods. As described earlier Mattick and Peters in 1988 conducted a study to assess the effectiveness of guided exposure with and without cognitive restructuring. The combined model of guided exposure and cognitive restructuring was significantly more effective than guided exposure alone. Evans, Holt, and Oei in 1991 reported on the long-term effects of a brief intensive CBGT in which group exposure methods combined with cognitive and other procedures were successfully used in treating agoraphobia. Heimberg and Colleagues in 1990, as described earlier, successfully used exposure methods and cognitive restructuring to significantly change the prosocial behavior of social phobics.

C. Modeling Methods

In our experience, symbolic modeling is one of the most effective strategies in group therapy. As we noted earlier, modeling by the therapist and the members for each other was an integral part of all of the other strategies described so far. Modeling strategies in groups have also been used in preventive and behavioral medicine with patients using the health care system (as described, for example, by Newton-John, Spence, and Schotte in 1995, and by Subramanian in 1991 and 1994). It has also been used successfully with mentally ill patients with social impairments, (as discussed by Daniels and Roll in 1998, and by Van Dam-Baggen and Kraaimaat in 1986). Modeling techniques are the central procedures in assertion training and play an important role in teaching clients how to cope with stress. In addition, because of the presence of many potential models and sources of feedback, modeling is especially useful in groups.

Symbolic modeling involves simulated demonstrations (role-playing) by group members, the group therapist, and/or special guests in the group. It may also include video or audio tapes of actors or real clients. The advantage of symbolic modeling over real-life modeling is that simulated modeling can be focused and developed systematically by the group and group therapist. It can be applied in simple situations with one critical moment or eventually in complex situations consisting of many critical moments. In symbolic modeling the group therapist can direct the action so that successful efforts can be reinforced and unsuccessful ones terminated and redeveloped. The small group is especially well-suited to the use of symbolic modeling since it affords a rich source of ideas as to what the model should do, and multiple models and multiple sources of feedback to the person attempting to duplicate the role of the model. The techniques used in enhancing the modeling effects are drawn from the assumptions about and research on social learning, theory according to Bandura in 1977.

As in the earlier examples, most modeling is used solely by the therapist to demonstrate a given behavior or set of behaviors. However, modeling may be used as a major intervention package. In that case the modeling sequence in its entirety makes use of a number of steps.

1. The therapist orients the group to modeling and demonstrates the modeling steps (the first few times only).
2. Based on a situational analysis of an interactive situation, each client presents a situation he or she wants to have role modeled. The client clarifies the roles of model, target person, significant others, and observers.
3. A model is selected who demonstrates the desired behaviors. The model may be the therapist, a group member, or a guest invited for that purpose.
4. The target person rehearses or practices what she or he has observed, if necessary with some coaching or assistance from others (rehearsal plus coaching). If coaching is used the rehearsal is repeated without coaching.
5. The target person is provided with feedback from the other group members and the group therapist.
6. The practice is repeated as many times as time permits and the target person requires in order to be comfortable in his or her new set of behaviors. If necessary, additional practice may be carried out in pairs or triads to save time.
7. With the assistance of the group or a partner, each client designs an extragroup task to perform the modeled behavior in the real world or to practice again outside of the group.

D. Relaxation Methods

Relaxation is a way of teaching clients to deal directly with such strong emotions as anxiety, stress, pain, or anger for which no external coping behavior is possible or where cognitive coping behavior is insufficient (although the two procedures are often paired). This technique primarily involves teaching clients a

modified version of the system developed by Jacobson in 1929 and 1978 in which various muscle groups are alternately tensed and relaxed. This is often referred to as neuromuscular relaxation. In later phases, the tensing of muscles is eliminated. To make use of the group, after an initial demonstration by the therapist, the clients teach, monitor, and reinforce each other's efforts in the group for suitable performance and practice. Various alternatives uniquely suited to specific populations are also taught. Modest research support for the use of neuromuscular relaxation procedures for reducing anxiety and stress is to be found in studies by Stovya in 1977 and Lyle, Burish, Korzely, and Oldham in 1982. However, Heide and Borkovec in 1983 showed that relaxation may increase anxiety for some individuals. Meditation and breathing exercises can be taught as alternatives to neuromuscular relaxation depending on the preferences of the group members and the skills of the group therapist.

E. Systematic Problem Solving

Many models of CBGT make use of some form of systematic problem solving insofar as clients bring problems of concern to the group. The group, under the therapist's guidance, attempts to help find solutions to those problems. It is systematic insofar as the members follow specified steps, which include orienting the members to the basic assumptions of problem solving, identifying and defining the problem and client resources for dealing with the problem, generating alternative solutions, evaluating and selecting the best set of solutions, preparing for implementation, implementing the solution outside the group, and evaluating the outcome with the other group members at a subsequent session (as discussed by Heppner in 1978 and Goldfried and D'Zurilla in 1969). We have added the intermediate step called preparation for implementation. In this preparation, modeling, cognitive restructuring, or information giving may be used and an extragroup task is designed to be carried out prior to the next session. The tasks may involve small and gradually increasingly difficult steps toward performing the goal behavior.

Systematic problem solving is most effective as a group procedure, because in generating ideas for dealing with the problem, the many group members are a rich resource for potential solutions. Moreover, in evaluating these ideas the many group members provide varied life experiences on which to support or reject some of these solutions generated. The group is also a source of reinforcement and support for carrying out the task.

F. Operant Methods

These methods involve procedures in which the immediate consequences of a given behavior are followed in some systematic manner by a reinforcing event. It may also involve procedures in which the immediate conditions that lead to, or are parallel with, a given behavior are changed to create circumstances more amenable to the performance of a desired behavior. The latter is often referred to as stimulus control.

In groups, clients receive many kinds of reinforcement for the performance of prosocial group behavior and the completion of extragroup assignments or home tasks. With adults, this reinforcement takes the form of praise by the group therapist or other group members. Occasionally, it takes the form of smiles, applause, approving nods, and delighted laughter. Reinforcers are withheld in response to undesirable behaviors. This is referred to as extinction and is an occasional response in groups when someone is frequently off-task or complains a great deal. However, because in groups so many people are involved, it is a difficult procedure to manage.

Operant procedures, especially reinforcement, lend themselves to group conditions if the therapist trains and encourages members to reinforce each other and significant others outside of the group. Exercises have been developed to train members in effective use of praise and constructive criticism as communication skills in their own right.

Modifying the antecedent conditions or stimulus control was exemplified by a client in a weight-loss group who was urged by the others to eat only at a set table and with food that had been cooked. The group had a pot luck dinner in which the behavior was modeled. Two college students in a study skill enhancement program developed with each other a plan in which they only studied at a clean desk and did nothing but study at that desk. They monitored each other. They removed the telephone and food from the study room. Success was followed by group approval and self-reinforcement.

G. Community Interventions

Community interventions are used as part of the generalization process. It involves the client in dealing with other organizations or social systems in which they might find social support, social recognition, and reinforcement. For example, a group of parents of intellectually challenged children organized a float on which their children sat in a local parade as means of educating the public that they were not ashamed of their children.

This same group developed a little booklet for physicians on how to deal with the parents of special children and the children themselves as described by Kirkham, Schinke, Schilling, Meltzer, and Norelius in 1986. In working with clients with limited resources, referral to needed services may be considered. Ideas for community interventions may also come from the group.

H. Relationship Enhancement Methods

A number of skills have been identified as crucial to any helping relationship, (as discussed by Goldstein and Higgenbottom in 1991), regardless of whether this relationship is dyadic or within the structure of a small group. We have noted in our supervision of group therapists that in spite of high levels of technological skill, failure of group therapists to possess these relational or clinical skills results in high dropout rates from groups, disinterest on the part of the clients, and high levels of group problems.

Many of these skills are to be found in the other methods described earlier. For example, group therapists who can comfortably and frequently provide their members with high levels of reinforcement and protect the clients from premature or abusive feedback tend to establish sound relationships with group members. Similarly, group therapists who model self-disclosure (and all of the other skills that the members are expected to carry out) discover that the indicators of group problems (high levels of conflict, low cohesion, low satisfaction, exclusive pairing off, low group productivity) seldom arise.

Some skills are unique to relationship building. For example, the use of humor with clients is not addressed in the methods above. Yet, successful therapists must be able to play and joke with clients. Involving clients and the group in their own therapy is a skill that is essential for achieving generalization of change. This involves helping clients to take a chance at answering the questions of their fellow members, to make suggestions to each other for plans of action, to help each other to clarify the essential aspects of their problems, and to formulate appropriate goals. The process by which clients are involved is a vital relationship-building skill. Another skill is letting clients make their own decisions as much as possible concerning goals, extragroup tasks, and the extent of their participation. The more clients perceive themselves as deciding on what happens to them, the more likely it is that they will make use of interventions (similar to the ideas of Miller and Rolinick in 1991).

Listening to clients is a skill not discussed earlier, yet the absence of careful listening often results in choosing wrong change targets. Effective listening does not necessarily require seeing the underlying implications of the client's words, but rather has to do with grasping the obvious meanings. While hastening to carry out the items on a group's given agenda, for instance, therapists might interrupt or ponder next steps while a client is still speaking. This can cut off important interpersonal messages.

Attending skills refers to competency in observing nonverbal responses such as eye contact, body posture, and voice tone. Although these are nonspecific characteristics that are difficult to define, ratings by observers of group therapists in action tend to indicate whether such skills are indeed operating.

Setting limits on disruptive or off-task behavior is another relational skill that must be considered if the goals of change are to be pursued in a safe environment. This is one of the more difficult of the relational skills and one of the most frequently needed. It is not always clear when to set limits and when to ignore disruptive behavior. Skill in reinforcement and developing interesting and attractive program content often protects the group therapist from frequent application of limit setting.

I. Small Group Procedures

We have already discussed the unique opportunities as well as the limitations offered in therapy in small group settings. As mentioned earlier, interventions such as modeling, cognitive restructuring, and relaxation are administered in such a way as to encourage broad participation and high attraction among group members. In addition to the specific intervention strategies adapted from individual treatment mentioned earlier, there are some concrete group procedures that appear to contribute to helping clients move toward change. These group procedures include broad group participation, role-playing, the buddy system, subgrouping, leadership skill delegation, group exercises, and sociorecreational procedures. All of these techniques are described below. Combinations of these procedures are often applied to attain group goals or resolve group interaction problems.

Broad group participation refers to client-to-client verbal as well as client-to-therapist interaction in which all members participate extensively. It is the essential element by which problems are laid out and considered, solutions are shared and evaluated, decisions are formulated and affirmed, values are deliberated, and friendships are made. Maximum involvement of all group

members is essential for high cohesion and effective therapy. Broad group participation in the discussion is a necessary ingredient in the evaluation process, in problem solving, in assessment as members respond to other persons' stories, and in providing feedback to each other. Although not typical of many CBGT groups, issues sometimes arise that need to be discussed, such as stereotyping of persons with the client's problems and group problems (e.g., someone dominating the interaction). The therapist usually encourages such discussions but holds them to tight time constraints in time-limited groups.

Role-playing, in its most elementary form, can be defined as the practice of roles under simulated conditions. The group therapist, by acting as a guide and structuring the role-playing, contributes to the process and to the outcome achieved through role-playing. If the group therapist is clear about the purposes of role-playing, this technique can prove highly beneficial in promoting change, broadening participation, and in increasing cohesion. Role-playing may be used in assessment to discover how clients actually handled a given situation. In the modeling sequence, role-playing is used both to demonstrate specific skills and to practice them. Role-playing is also used to demonstrate and practice specific therapy skills such as giving and receiving feedback or showing empathy to others. Role reversal is a form of role-playing in which the client plays a significant person in his or her life and that person or another group member plays the client. It is a procedure that gives insight into how it feels to be the other person. Finally, role-playing is used to practice generalization strategies evolved in the group. Some clients are initially reluctant to role-play; however, the activity appears to eventually gain the enthusiastic cooperation of almost all members if it is implemented in a supportive, nontheratening atmosphere.

Subgrouping is a simple procedure in which clients work in pairs, triads, or other sized subgroups to increase interaction among group members and provide them with an opportunity to work without the oversight of the therapist. It also may increase the amount of work that can be done in a given period of time. Subgrouping creates an opportunity for group members to practice leadership skills and afford clients the opportunity to help others while being helped themselves. The buddy system (as discussed by O'Donnell, Lydgate, and Fo in 1979) is a special subgrouping procedure for clients to work together outside of the group. In addition to the advantages mentioned earlier, it contributes to the transfer of learning from the group to situations outside of the group. The danger of subgrouping is that the interaction occurs without the supervision of a therapist. In the group sessions the therapist can sample the interaction by floating from subgroup to subgroup. Moreover, subgroup activities are usually highly structured.

Group exercises refer to the use of structured interactive activities as ways of teaching clients the skills that mediate the achievement of therapeutic goals. For example, an introduction exercise is used in which a client interviews and is interviewed by at least one other client in the group and then introduces the partner to the others. Another exercise is one in whch the clients study a case and discuss how each of them is different from the person in that case. Other exercises involve teaching clients how to give and receive both praise and criticism to a partner in the group. To be effective exercises are usually in writing and the goals as well as the activities are stated.

The therapist must make sure that the exercise is understood before they begin. Usually, at least one group exercise is carried out in every session. Other interventions, in addition to subgrouping, may be embedded within group exercises. For instance, a "round robin" exercise uses modeling and rehearsal at a fast clip in order to provide multiple trials of new behavior. In teaching how to ask for help, Pete asks Don for help, then Don asks Robin for help, then Robin asks Jerry for help, and finally, Jerry asks Pete for help.

VI. SOME CLOSING REMARKS

In this article the process of using cognitive behavioral and small group strategies in the treatment of individuals in groups has been described. Although the focus has been on adults, most of the same principles apply equally to group therapy for youth and children (Rose in 1998 provided a detailed account of this approach with youth). Where relevant literature was available, it was cited. However we have also drawn on our own experience and that of other practitioners for examples and practice principles. This article has stressed the use of procedures commonly used by various helping persons as they can be applied in groups. It should be noted that this chapter has drawn from practice, research, theoretical, and clinical literature produced by psychologists, social workers, psychiatrists, and others in the helping professions and social sciences. The therapists of the groups exemplified in this book come from diverse professional backgrounds. The label most commonly attributed to work with groups to achieve social–therapeutic goals has been "group therapy." In

many cases, the labels group treatment, group work, group training, or group counseling could have been used just as appropriately. We have referred to the individual who leads the process as group therapist—a label that cuts across all of the above fields. The group therapist might just as readily have been identified as group worker, group leader, or group counselor, since the activities of each overlap the others considerably. We have used the words, "clients" and "members" interchangeably to refer to the persons belonging to the groups.

As noted often, CBGT is not one approach but several similar ones. I have tried to point out some of the differences as well as similarities. Some stress one intervention strategy such as modeling, cognitive restructuring or guided imagery, while others use a wide range of interventions. The particular model stressed in this chapter is cognitive-behavioral interactive group therapy (CBIGT) because of its emphasis on the use of the group as the means as well as the context of therapy, along with a wide variety of both cognitive and behavioral procedures.

See Also the Following Articles

Adjunctive/Conjoint Therapies ■ Anxiety Disorders: Brief Intensive Group Cognitive Behavior Therapy ■ Cognitive Appraisal Therapy ■ Cognitive Behavior Therapy ■ Group Psychotherapy ■ Psychodynamic Group Psychotherapy ■ Self-Help Groups

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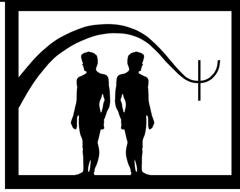

Cognitive Behavior Therapy

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I. Description
II. Theoretical Bases
III. Empirical Studies
IV. Summary
Further Reading

GLOSSARY

automatic thoughts The self-critical or exaggerated negative self-statements that go through a person's mind and are accepted as true by the person without testing their accuracy.

cognitive restructuring A treatment technique that attempts to identify and modify negative or unrealistic thoughts or attributions.

cognitive triad A person's view of him- or herself, of the world, and the future, which may lead to depression when negative.

exposure A treatment approach in which clients systematically confront their feared objects or situations.

exposure and response prevention An approach to treatment for obsessive–compulsive disorder (and other disorders such as bulimia nervosa) in which the client is systematically and gradually exposed to his or her feared thoughts or situations while compulsive rituals or other behaviors are actively prevented.

schema An enduring and stable belief system that assists in explaining experiences, mediating perception, and guiding response.

self-monitoring A treatment technique in which clients systematically observe and record behaviors or responses and may be used to highlight subsequent changes in patterns of responses.

I. DESCRIPTION

Cognitive behavior therapy (CBT) incorporates principles associated with information-processing and learning theories. A basic assumption of CBT is the recognition that there is a reciprocal relationship between clients' cognitive processes (what they think) and their affect (emotional experience), physiology, and behavior. Although CB treatments for individual disorders differ in both their form and application, they all emphasize the importance of changing cognitions and behaviors as a way of reducing symptoms and improving the functioning of the affected person.

CBT clearly defines roles for both the therapist and the client, both of whom are active participants in the therapy. The clinician assumes the role of educator, teaching the client about cognitive models that have been developed to understand the etiology and, more importantly, the maintenance of the client's specific problems. The clinician is also responsible for teaching clients the cognitive and behavioral techniques designed to alleviate their problems. The client is considered to be the expert on his or her personal experiences, and the two of them work together to overcome the client's difficulties.

The stance taken by therapists in CBT is quite different from that taken by therapists who employ different modes of treatment, most notably psychodynamic therapy. In CBT, therapists clearly communicate to clients that they do not have all of the answers and that they

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must collaborate to solve the client's problems. For clients to experience symptom relief, they must also actively seek out new experiences and must learn to look at the world in new ways. Clients are, in effect, taught over time to serve as their own therapists, to apply the principles of CBT with decreasing amounts of guidance from the therapist. Encouraging clients to take on this role might be part of the reason why gains experienced over the course of CBT tend to be maintained or even increased once treatment has ended.

A core assumption of cognitive behavioral approaches to understanding and treating mental disorders is that people are active processors of information. In Aaron Beck's original cognitive model of depression, three important concepts were introduced to help to explain the psychological underpinnings of the disorder, and these concepts have greatly informed our understanding of other disorders as well. First, Beck introduced the cognitive triad, a term to describe his contention that depressed people have negative views of themselves, their ongoing experiences, and their futures. The second core component of Beck's model is the schema. Each day, humans are barraged with numerous stimuli from the environment, and it would be impossible to attend to every single one. Furthermore, once a person actually attends to a stimulus, how he or she comes to understand and process it might be very different from how another individual might react to that same stimulus. Beck suggested that our reactions to stimuli are determined by relatively stable cognitive structures called schemas. Once activated, schemas can have effects reaching far beyond the immediate situation. For example, a relationship break-up might trigger a depressive schema (which might relate, for example, to the inevitability of the loss of all things good) and lead the individual to view unrelated events in a similar vein. For example, having an important piece of mail get lost might be interpreted as just one more example of how "no one cares for me," while prior to the break-up (and the activation of the depressive schema), that same event might have been interpreted in a more neutral and less hurtful way.

Finally, Beck also introduced the idea of faulty information processing. Specifically, depressed people tend to erroneously think in an "extreme, negative, categorical, absolute, and judgmental" fashion, not surprisingly leading to negative affect. According to Beck, these thinking errors maintain clients' negative beliefs about the self, their experiences, and the future, even in the presence of contradictory evidence.

Given that negative affect and behaviors are facilitated and maintained by faulty information processing, it makes sense that the main goal of cognitive behavior therapy is to fix errors in thinking. Thoughts can often be changed directly, in which case clients are instructed to be attentive to subsequent changes in their mood, physiology, and behavior. Conversely (as will be discussed in more detail below), clients are also taught that changes in behavior can result in subsequent changes in cognition. These behavioral changes can also have a profound impact on affect and physiology. In short, clients are encouraged to always keep the important reciprocal relationship between cognition and behavior in mind and to remember that alleviation of symptoms can come about via changes in thinking and/or changes in behavior.

An important component of treatment is to make clients aware of their negative automatic thoughts. Often, clients are so accustomed to having negative thoughts, and the thoughts come to them so quickly, that they are not even aware of having them. Furthermore, clients rarely come into treatment having a clear understanding of the ways in which negative thoughts impact affective, physiological, and behavioral processes. Therefore, a first step in treatment is to help clients to become more aware of their thoughts, primarily through self-monitoring exercises. In line with Beck's cognitive triad, important targets of CBT include beliefs and expectancies about oneself and one's future, about others, and about the world. Once clients become adept at this process, it is essential also to teach them to evaluate their thoughts and to restructure them to be more rational and adaptive, all the while being cognizant of how changing thinking patterns can influence feelings as well as patterns of behavior. Although cognitive restructuring is very effortful at first (and requires the guidance of the therapist), clients gradually become more adept at the process, and many remark that this new style of looking at the world becomes integrated into their internal thought processes.

As noted above, changes in behavior can also have a profound impact on thinking patterns. Behavioral exercises in CBT can take many forms. The client is encouraged to take the stance of a scientist, viewing dysfunctional beliefs as hypotheses that can be tested, rather than as facts. This process of hypothesis testing involves not only cognitive restructuring, but also behavioral exercises. An important assumption behind this scientific stance is that beliefs can only be changed if there is concrete evidence to support the integration of new ways of looking at the self, the world, and the future.

Behavioral techniques used in CBT are also greatly informed by the assumption that psychological difficulties are often maintained by dysfunctional patterns of behavior, including avoidance. As such, an important component of CBT is the use of exercises aimed at changing clients' expectancies about their ability to function in particular situations. For example, the key to treating a specific phobia of spiders is to actually expose the client to spiders. Through this experience, clients learn that their anxiety will habituate over time, that the terrible consequences that they associate with spiders are unlikely to occur (e.g., that the spider will have fangs that result in violent bites), and that they have the skills to deal with their anxiety in this feared situation.

Another behavioral technique used in the treatment of some disorders is exposure and response prevention (EX/RP). Here, clients are encouraged to resist the urge to engage in dysfunctional behaviors while exposing themselves to the stimuli that typically elicit these behaviors (e.g., refraining from bingeing after eating a bit of a fattening food in the case of bulimia nervosa; refraining from washing after touching something perceived by the client as contaminated in the case of obsessive–compulsive disorder). These exercises are again intended to test out the veracity of the client's beliefs (e.g., eating a bit of a forbidden food does not need to invariably result in a binge; touching something dirty will not result in something terrible happening), as well as to teach clients to use more effective coping strategies and to feel more in control of their behaviors.

An important component of CBT is relapse prevention. Throughout treatment, clients are encouraged to integrate CB techniques into their daily lives, with the intention that in doing so, CBT will remain effective after therapy ends. Some interventions, however, are specifically aimed at preventing posttherapy relapse. Specifically, clients are made aware of the fact that they might have difficult times in the future even following successful treatment. In line with cognitive–behavioral principles, they are encouraged not to interpret a single difficult event as a failure. Although the same difficult events might come up pre- and posttherapy, clients are reminded that they have come away from therapy with many useful skills that they did not previously have at their disposal. As already noted, an important goal of therapy should be to ensure that clients can apply cognitive and behavioral techniques on their own, with less reliance on the therapist over time, thus facilitating relapse prevention efforts.

CBT is a very versatile treatment, adaptable to both group and individual settings. It has been used with children, adolescents, and adults across a wide range of cultural and socioeconomic backgrounds. CBT is also a time-efficient treatment, with most uncomplicated cases of anxiety or depression being treated in 4 to 14 sessions. This efficiency comes about for a number of reasons. First, the CBT therapist performs a thorough assessment prior to treatment that is aimed at identifying a principal problem that will be the focus of treatment. The clinician then develops a treatment plan that specifies how long the problem should take to treat and what should be accomplished during each session to meet that goal. This efficiency has been greatly aided by the development of CB treatment manuals, written for a range of psychological disorders. While these manuals help clinicians to structure treatment, they also encourage flexibility in terms of tailoring the treatment to suit the progress of the individual client.

Another factor in the time-limited nature of CBT is its focus on the "here and now." The CB view of symptom maintenance is greatly informed by learning theory. Simply put, difficulties are viewed as maladaptive "habits" that have been learned as a result of the association between certain stimuli and certain responses or as the result of reinforcement of specific responses in specific situations. Rather than looking back on why a particular problem developed (e.g., why a stimulus came to be associated with a particular response), focus is placed on developing new, more adaptive stimulus-response associations through the use of both cognitive and behavioral techniques.

CBT is an effective treatment for a wide range of client groups, although there are some contraindications. CBT is generally not indicated for people with thought disorders, although it should be noted that some researchers have explored the efficacy of CBT for schizophrenia (as reviewed recently by Faith Dickerson) and the research done to date suggests that the approach might be more promising than intuition would suggest. CBT is also not indicated for people with organic brain disorders or for people who do not have a good grasp of the language in which therapy is being conducted. Beyond these limitations, CBT has been used successfully with clients from a broad range of educational backgrounds.

Clients who embark on CBT must also be willing to accept the basic premise of the cognitive–behavioral approach to understanding and treating psychological disorders. Thus, clients who are very wedded to a particular theoretical or therapeutic approach and who are not willing to consider alternative perspectives might not do well in CBT. Furthermore, clients must be willing to

commit time and effort to their treatment. They are expected to work on their own between sessions, and research has suggested that adherence to homework assignments is predictive of good treatment outcome. As such, clients who are so impaired that they are unable to actively engage in treatment might not be good candidates for CBT until they experience some symptom relief from other approaches (e.g., medication).

II. THEORETICAL BASES

Cognitive–behavioral theories resulted from a gradual evolution of thought in the field of psychology that began as a reaction to the psychoanalytic theories that dominated clinical psychology and psychiatry in the 1960s. In its classical formulation, Sigmund Freud's psychoanalytic theory rested on the reductive analysis of the psyche, conducted from a scientifically detached posture. The main features of this theory included an emphasis on the unconscious, intrapsychic processes, and early childhood experiences. By its very nature, psychoanalytic constructs were not conducive to empirical investigation or validation. A growing dissatisfaction with the length and expense of psychoanalytic therapy and an ongoing controversy about its relative effectiveness led to a rise in treatments based on behavioral theories of psychotherapy.

Behavioral theories in the 1960s and early 1970s were based on the assumption that behavior develops and is maintained according to the principles of learning. One of the earliest influences on behavioral models of psychopathology was the seminal work of the Russian physiologist Ivan Pavlov on the principles of classical conditioning. His specific findings on animal learning processes, as well as his controlled methods of laboratory investigation, made important contributions to the study of behavior by prompting the view that a particular psychological symptom may be a response triggered by a specific stimulus or event. In one of the most significant investigations of learned behavior, John Watson and his colleagues demonstrated that specific fears could be both conditioned and deconditioned in human beings via the principles of classical conditioning. Using these and his own research findings, Joseph Wolpe developed a treatment for human anxiety referred to as systematic desensitization, wherein deep muscular relaxation is paired with images of anxiety-provoking situations. Over time, clients using this technique would experience less anxiety in response to the feared stimulus because the conditioned relaxation response was incompatible with the physiological response of fear. B.F. Skinner explored another learning principle called operant conditioning. Theories based on operant conditioning rest on the notion that many behaviors are performed spontaneously and are controlled primarily by their consequences. Thus, the removal of a reinforcing consequence should decrease the frequency of an unwanted behavior and conversely, applying a reinforcing consequence should increase the frequency of a desired behavior.

This belief that psychological disorders arise from an inappropriate conditioning history led to the development of behavioral treatments based on the tenet that symptoms can be reshaped into adaptive behaviors through a program of response-contingent reinforcement. Behavioral therapy was compatible with experimental methodologies, was time-efficient and heralded success in reducing anxiety and overcoming maladaptive avoidance behaviors. However, criticism of strict stimulus-response behaviorism soon followed. Albert Bandura, a social learning theorist, showed that cognitive processes were critical to the acquisition and maintenance of maladaptive behaviors and emphasized a more reciprocal relationship between the person and the environment. Other limitations of strict behavioral therapy, including a neglect of affective processes and a lack of success in the treatment of depression, opened the way for a more cognitive approach to the theory and treatment of psychological disorders.

Albert Ellis has been credited for his pioneering work in formulating the first coherent system of cognitive behavior therapy called rational-emotive therapy (RET). RET uses direct cognitive debate, logical persuasion, and behavioral homework assignments to challenge irrational beliefs and negative thinking. The goal of this therapy was to modify the core cognitive dysfunctions that are the basis of psychological disturbance. Unlike strict behavioral theories, cognitive theories assert that individuals are active participants in their environments, judging and evaluating stimuli, interpreting events and sensations, and appraising their own responses.

As mentioned earlier, Aaron Beck has been a highly influential figure in the history of cognitive therapy. In contrast to earlier theorists, Beck placed a great deal of emphasis on the cognitive aspects of psychopathology, while also advocating the integration of established behavioral techniques.

The marriage of these two approaches provides the foundation for a cognitive–behavioral approach to psychotherapy, wherein overt behavior and covert cognition, along with the interaction between the two, are crucial

for explaining the development and maintenance of emotional distress. This approach attempts to integrate the rigors of a behavioral research methodology and performance-based exercises with the centrality of mediating information-processing factors in cognitive therapy. This therapeutic approach thus offers greater explanatory power through an integration of cognitive, behavioral, emotion-focused, and social aspects of change.

The field of cognitive–behavioral therapy has been increasingly specialized and refined since the early work of Beck and Ellis, and cognitive–behavioral treatments have been applied to a wide range of psychological conditions and problems. However, these treatment programs have a common core that belies their common ancestry.

III. EMPIRICAL STUDIES

Studies of the efficacy of CBT for the different disorders have generally sought to answer some common questions. Researchers often begin to explore whether CBT is an effective treatment for a particular disorder through "open-label" trials, wherein all participants in a study receive CBT and change is assessed from before to after treatment. Once it has been demonstrated that CBT is associated with improvement in the problem of interest, other essential questions with respect to its efficacy must be explored. First, is CBT more effective than no treatment? Second, how does CBT compare to other psychological treatments? Third, how does CBT alone compare to either medication alone or a combination of medication and CBT? Finally, if a treatment is shown to be effective, it is also important to establish whether it remains effective in the long term once active interventions (e.g., therapy sessions) have been discontinued.

A. Mood Disorders

As noted earlier, CBT was first developed as a treatment for depression. CBT for depression has been shown in numerous studies to be more effective than no treatment at all and more effective than nonspecific treatments (those not specifically targeted at depression). CBT has also been shown to be at least as effective as, or more effective than, other psychological and pharmacological treatments. Also of note, CBT seems to reduce the risk of experiencing subsequent depressive episodes following treatment.

Despite a long and relatively successful tradition of using CBT to treat depression, this approach does not seem to be a "cure-all" and not all research studies have provided strong endorsements. The National Institutes of Mental Health (NIMH) Treatment of Depression Collaborative Research Program compared CBT to interpersonal psychotherapy (IPT) (a treatment developed specifically for depression by Myrna Weissman, Gerald Klerman, and colleagues that focuses on the relationship between mood and life events, particularly those related to interpersonal relationships), the tricyclic antidepressant imipramine, and pill placebo. All three active treatments performed equally well, with a little over 50% of participants who completed all 16 weeks of treatment experiencing a significant response. Although CBT was slightly more effective than the other active treatments for people with less severe cases of depression, it fared less well for people with more severe cases. Furthermore, the three active treatment groups did not differ in terms of relapse rates 18 months after treatment had ended. Although a greater percentage of responders in the imipramine group ended up relapsing as compared to responders in the CBT and IPT groups, it should be noted that these latter two groups relapsed at the same rate as participants in the placebo group.

In a more recent study, Steven Hollon and his colleagues compared the efficacy of 12 weeks of CBT alone, imipramine alone, a combination of CBT and imipramine, and 12 weeks of imipramine followed by another year of active drug treatment. After 12 weeks, the groups did not differ. At 2-year follow-up, the participants who had taken only 12 weeks of imipramine fared worse than all of the other groups. This study also demonstrated that CBT worked well, and its efficacy was not improved by the addition of imipramine. In contrast to the NIMH Treatment of Depression Collaborative Research Program described above, more severely depressed participants responded as well to CBT in this study as did the less depressed participants.

Although the use of CBT as the sole treatment for unipolar depression has certainly been advocated, CBT is viewed as an adjunct to pharmacotherapy in the treatment of bipolar disorder. At the current time, very few studies have been conducted, but researchers are taking a greater interest in the application of CBT to this disorder. Monica Ramirez Basco and John A. Rush have published a CBT treatment manual for bipolar disorder that should facilitate research. Furthermore, a federally funded, multisite study is currently under way that is exploring the relative efficacy of CBT, IPT, and family-focused therapy for bipolar disorder.

B. Anxiety Disorders

CBT, or components of it, have also been used for many years in the treatment of anxiety disorders. In general, CBT has been shown to be effective across the anxiety disorders. CBT is generally seen as *the* treatment of choice for specific phobia and has been used for this disorder for many years. Medication has not been shown to be effective for the treatment of specific phobias, nor have alternate psychological therapies.

Another successful application of CBT in the realm of anxiety disorders has been in the treatment of panic disorder. David M. Clark and his colleagues compared the efficacy of CBT, applied relaxation, and imipramine. Clients placed on a wait-list served as an additional comparison group to ascertain whether changes could be attributable to the simple passage of time. At the end of treatment, clients in all three active treatment groups were doing better than clients assigned to the wait-list control group, and CBT clients fared better than those who received applied relaxation or imipramine. Furthermore, at 15-month follow-up, the CBT group was still doing better than the other two treatment groups. The most notable finding was that between 6 and 15 months following treatment, 40% of the imipramine group relapsed, compared to only 5% of the CBT group.

In another large-scale study of the treatment of panic disorder, David H. Barlow, Katherine Shear, Jack M. Gorman, and Scott Woods compared the efficacy of CBT alone to imipramine alone and to a combined treatment (CBT and imipramine). The results of their study suggested that CBT and imipramine were both superior to pill placebo. Although imipramine produced a somewhat better quality of response than CBT, the latter was better tolerated and proved to be more effective in the long term. The combination of CBT and imipramine was not as promising as the investigators had expected. In fact, participants in the combination group experienced the highest relapse at follow-up, suggesting that the addition of CBT to drug therapy did not protect against the relapse that has been associated with withdrawl from drug therapy in past studies of panic disorder clients. It is interesting to note, however, that there are studies suggesting that CBT can be very useful in helping clients to withdraw from benzodiazepines, antianxiety drugs commonly used in the treatment of panic disorder. In short, CBT has been shown to be very effective in the treatment of panic disorder, particularly in terms of long-term efficacy. Recent studies have also suggested that a shorter course of CBT for panic disorder using self-study modules may be as effective as longer courses of treatment.

CBT has also been shown to be as effective as alternative treatments for social phobia, when delivered in either individual or group format. Richard G. Heimberg, Michael R. Liebowitz, and their colleagues have compared the efficacy of cognitive behavioral group therapy (CBGT) to that of the monoamine oxidase inhibitor phenelzine. For comparison, some participants in this study were assigned to either pill placebo or to a psychotherapy control condition (educational supportive group therapy). The general finding from their study was that clients taking phenelzine improved more quickly than did clients who received CBGT, but CBGT seemed to be more effective in terms of long-term efficacy once treatment had ended. The same research team is now exploring the efficacy of combined treatment (CBGT and phenelzine) for social phobia.

A highly successful approach to treating obsessive–compulsive disorder (OCD) is through the use of exposure plus response prevention (EX/RP, described earlier). Since the utility of EX/RP was first explored in the late 1960s, the approach has gained ample empirical support, with the combination of exposure *and* response prevention proving to be more effective than either component alone. Although certain medications [particularly clomipramine and some of the serotonin reuptake inhibitors (SRIs)] seem to be modestly effective in the treatment of OCD, continued success depends on continued use, suggesting (as in other anxiety disorders) that CBT might be a more effective treatment than medication in the long term. Isaac M. Marks and his colleagues have explored the efficacy of combined treatments (clomipramine and EX/RP) for OCD. In general, his studies have suggested that EX/RP is a more powerful, and a more long-lasting treatment than clomipramine and that the combination of the two treatments has only a small and short-lived additive effect. The issue of the combined treatments in OCD is also being explored in an ongoing study by Michael Liebowitz, Edna Foa, and Michael Kozak. In line with Marks's findings, preliminary data suggest that EX/RP is superior to medication alone and the combination of medication and EX/RP does not seem to be superior to EX/RP alone.

In contrast to the other anxiety disorders, treatment for generalized anxiety disorder (GAD) is still in its infancy and furthermore, while treatment for GAD (including CB-type treatments) is more effective than no treatment at all, comparative studies have failed to find differences between active treatments. Many factors

have contributed to the relative slowness in the development of treatments for GAD. First, the diagnostic criteria for GAD have changed a great deal over time. Uncontrollable and excessive worry was not specified as the core feature of the disorder until 1994. As such, past treatments have included nonspecific interventions, such as relaxation training and biofeedback, rather than interventions specific to treating uncontrollable and excessive worry. In line with changes in the diagnostic criteria, there have also been major changes in the way that people understand the etiology and maintenance of GAD. Newer treatments place greater emphasis, for example, on the important role of emotion in GAD. These developments are greatly informed by current cognitive models of the disorder, like that of Tom Borkovec and his colleagues, which suggests that worry functions as a means of avoiding more emotionally laden, painful thoughts. Over the next few years, continued research into the nature of GAD may lead to the development of exciting new treatments for this disorder.

There have also been few controlled studies of CBT as a treatment for posttraumatic stress disorder (PTSD). However, various approaches based on CBT have been used to treat the disorder with encouraging results. These approaches have included stress inoculation training (SIT), a treatment originally developed by Donald Meichenbaum. In SIT, clients are first helped to make sense of the trauma that they endured and to understand the responses that they are experiencing to their trauma (in terms of cognition, behavior, and physiology). Clients are then taught coping skills to increase their sense of efficacy and to help them to feel that they have gained mastery over their fears. Coping skills are targeted at alleviating physiological symptoms (e.g., through muscle relaxation), cognitive symptoms (e.g., through guided self-dialogue), and behavioral avoidance (e.g., through modeling and role playing). Dean G. Kilpatrick and his colleagues found SIT to be effective in uncontrolled case studies but since this initial work, it has not been found to be superior to other treatments, particularly in the long term where exposure therapy seems to show greater efficacy.

Edna Foa and her colleagues have explored the use of exposure therapy for PTSD with particular focus placed on treating rape-related trauma. Their treatment, referred to as prolonged exposure, is premised on the assumption that PTSD occurs when people do not adequately process their rape experience. As such, treatment must involve processing the trauma by, in effect, exposing the client to the memories of the trauma until a fear response is no longer elicited. Foa and her colleagues have found that clients enrolled in prolonged exposure do better than clients on a wait-list and that prolonged exposure is more effective than SIT in terms of long-term efficacy. Patricia A. Resick and Monica K. Schnicke have also used a CB approach to treating PTSD in victims of sexual assault. Their cognitive processing therapy (CPT) involves both exposure and cognitive-restructuring techniques, with the latter based on the assumption that the experience of sexual assault is incongruent with schemas that were held prior to it. As such, CPT involves dealing with thoughts pertaining to such issues as danger, safety, intimacy, and competence. Studies have shown that clients enrolled in CPT do better than those on a wait-list, and CPT seems to have good long-term efficacy.

C. Bulimia

Bulimia nervosa has been treated with CBT for many years, beginning with the work of Christopher G. Fairburn in the 1970s. CBT has been associated with reductions in frequency of binge eating and purging, levels of dietary restraint, and concern over shape and weight. Furthermore, CBT for bulimia has been shown to improve general functioning (including social functioning) and to increase self-esteem. As in the case of the anxiety disorders, CBT for bulimia seems to be effective in the long term, suggesting that clients learn skills that they can continue to apply on their own once treatment has ended. In comparison studies, CBT has been shown to be more effective than alternative therapies, drug therapies or a combination of drug therapy and CBT. The one treatment besides CBT that seems to hold particular promise for individuals with bulimia is IPT (described above). Fairburn and his colleagues compared CBT and IPT and found that although CBT seemed to work more quickly than IPT, the efficacy of the two treatments evened out during the follow-up period. It is interesting to note that IPT in that study was (as in the treatment of depression) focused on interpersonal relations, not on the eating disorder, suggesting that there is more than one way to foster improvement in eating disorder symptomatology.

D. Alcohol Use Disorders

CBT has also been applied to the treatment of alcohol problems. Alcohol use is viewed as a learned behavior that can be modified once a clear understanding is reached of the antecedents and consequences of its use. Several successful treatments have been developed

with roots in CBT. Behavior self-control training (BSCT) is a treatment aimed at teaching clients self-regulation strategies. Although the goal of BSCT can be abstinence, the more common goal is moderation. Focus is placed on engaging in self-monitoring as a means of understanding motives underlying drinking, learning ways to cut back on drinking, and developing more adaptive coping skills with which to replace drinking. BSCT has been shown to be more effective than no treatment and at least as effective as treatments aimed at complete abstinence. William R. Miller and his colleagues also found that BSCT had good long-term efficacy for individuals with moderate drinking problems.

As mentioned earlier, RP is an essential part of CBT for all disorders, but the strategy was initially developed for the treatment of people with alcohol use problems by G. Alan Marlatt. Drawing from research on self-efficacy, RP is based on the premise that the probability of relapse can be predicted by client's perceptions of their abilities to handle difficult situations. RP can be easily integrated into other treatments. Over the course of RP, clients are taught to identify high-risk situations and to use cognitive and behavioral coping strategies when they find themselves in such situations. Furthermore, cognitive techniques are used to help clients deal with inevitable lapses. Clients are taught to view a lapse as a one-time mistake, rather than a sign that they have failed or that they are failures. If clients come to view lapses in this way, a single lapse will be unlikely to evolve into a full-blown relapse. James R. McKay and his colleagues explored the efficacy of RP in a sample of clients who had completed behavioral marital therapy, a CB treatment for alcohol abuse that includes the client's spouse. Their study showed that low self-efficacy at the end of behavioral marital therapy was related to a greater likelihood to relapse—but only in the group of clients that did not receive RP treatment as an adjunct to therapy.

E. Other Applications

Treatments based on CB approaches have also been demonstrated effective in the treatment of other psychological disorders (e.g., other substance use disorders, borderline personality disorder, sexual dysfunction) as well as other problems with living (e.g., couples distress). Interested readers can find more detailed information in books included in the Further Reading list.

IV. SUMMARY

Cognitive behavioral therapy is an integrative therapeutic approach that assumes that cognitions, physiology, and behaviors are all functionally interrelated. This model posits that client's emotional or behavioral distress is influenced by the manner in which they perceive, manipulate, and respond to information within their cognitive system. Treatment is aimed at identifying and modifying baised or distorted thought processes, attitudes and attributions, as well as problematic behaviors via techniques that actively involve the client's participation, such as self-monitoring, cognitive restructuring, and hypothesis testing. As such, the treatment goal is to develop a more rational and adaptive cognitive structure, which in turn is seen as a pathway to improving both affect and maladaptive patterns of behavior.

See Also the Following Articles

Anxiety Disorders: Brief Intensive Group Cognitive Behavorial Therapy ■ Behavior Rehearsal ■ Behavior Therapy: Historical Perspective and Overview ■ Cognitive Appraisal Therapy ■ Cognitive Behavior Group Therapy ■ Eating Disorders ■ Exposure ■ Matching Patients to Alcoholism Treatment ■ Mood Disorders ■ Post-Traumatic Stress Disorder ■ Schizophrenia and Other Psychotic Disorders

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