ilar events and triggers, necessitating that each of these be reprocessed separately.

When appropriate, events are selected for processing in chronological order, beginning with the earliest. It is assumed that a later related event will contain elements that are connected to the earlier incident and that it will not be adequately processed until such elements are resolved. For example, "Trina" was the first person on the scene after a car had crashed on a deserted road and rolled into a river. She rescued the passengers who were still alive. Afterward, she blamed herself for the deaths of those who had not survived. While processing this with EMDR, she realized how similar this was to the drowning death of a younger sibling when she was 5 years old: Her parents had blamed her for the tragedy. The emotional content of the childhood event was fueling her emotional response to the current incident. After EMDR was used to target the issues of responsibility for her sibling's death, the distress related to the current accident resolved rapidly. (*Note:* Trina's story and subsequent clinical vignettes are based on actual clients, with names and minor details changed to protect confidentiality.)

2. Phase Two: Preparation

Phase Two involves establishing the therapeutic relationship, setting reasonable levels of expectation, educating the client about his or her symptoms and about EMDR, and ensuring that the client demonstrates adequate stabilization. Stabilization is a state of equilibrium achieved prior to the processing of distressing material and includes safety, affect management skills, and self-control. Clients with histories of childhood trauma/neglect often have deficits in affect regulation and impulse control and may require substantial preparation. Similarly, avoidance behavior exhibited by anxiety-disordered clients must be addressed before serious attempts at reprocessing can begin.

Client strengths are developed by combining relaxation, imagery, and EMDR in interventions that assist the client in acquiring new skills and resources. For example, EMDR is commonly used to enhance "safe place" visualizations. Such self-calming techniques are an important element of treatment and are used to "close" incomplete sessions, as well as to maintain client stability between and during sessions. During Phase Two, the client is prepared to "just notice whatever happens" and to maintain a balanced observation/participation position. This is encouraged by the use of helpful metaphors (e.g., to imagine being on a train and to think of the disturbance they may be experiencing as merely passing scenery).

Many of the procedural elements in subsequent phases of EMDR treatment incorporate elements to enhance stabilization. For example, during the desensitization phase, frequent brief exposures to the distressing experience encourage a sense of psychological mastery and stability and may counter the avoidance reaction that accompanies and maintains the pathology. The client receives supportive statements from the clinician in a safe context, fostering positive counterconditioning.

3. Phase Three: Assessment

In the third phase, the client and therapist select a specific memory to address during the session and identify the associated mental image, beliefs, emotions, and physical sensation, taking baseline response measures. The assessment phase contains steps designed to fully activate the dysfunctional memory network. First, the representative and/or most salient mental image of the event is identified. Next, the therapist helps the client to identify the current negative belief about him/herself that is related to the target memory (e.g., "I'm powerless" or "I am worthless"). It is formulated in the present tense to activate the disturbing information and to assist clients in recognizing the impact of the past event on current self-concept. This is the first step in recognizing the irrationality of their cognitive interpretation of themselves in relation to the event. While the words "I was powerless" may be an appropriate description of the past event, the words "I *am* powerless" are considered an irrational cognition because the person is not *currently* powerless. The words verbalize the current belief and affect experienced by the client when the dysfunctionally stored memory is accessed.

After this, the therapist helps the client to identify a desired positive belief that expresses a sense of empowerment or value in relation to the past event, such as "I'm competent" or "I'm lovable." The client rates how accurate this positive belief feels on the Validity of Cognition Scale (VOC), where 1 represents "completely false" and 7 represents "completely true." This is not an intellectual assessment of accuracy but rather a felt sense of how true the cognition feels when paired with the target incident. The VOC rating provides both client and clinician with a baseline with which to assess a given session's progress, thereby further promoting client treatment adherence. It also increases clients' awareness of their cognitive distortion and offers a "light at the end of the tunnel," thereby encouraging

and motivating them to stick with the treatment. This process forges preliminary associative links between the state-dependent memories and the emotionally corrective information contained in the positive cognition and may expedite information processing.

In the fourth step, the image and the negative belief are paired to facilitate access to the stored memory of the trauma. The client identifies the emotions that are elicited by the memory and rates his or her level of distress on the Subjective Unit of Disturbance (SUD) Scale, where 0 is "calm" and 10 is "the worst possible distress." Explicitly labeling the emotion allows the clinician to (a) offer the appropriate verbal support, (b) anticipate any beliefs about emotions that might block processing and that therefore need to be addressed, and (c) establish a response baseline. It also allows both client and therapist to recognize changes in the type of emotion experienced during the session. Next, the client identifies and locates the body sensations that accompany the disturbance. During EMDR, clients are encouraged to concentrate for prescribed periods of time on the physical sensations associated with their traumatic imagery. This focus may allow them to identify the purely sensory effects (e.g., physical pain) of the trauma and to separate them from the cognitively laden affective interpretations (e.g., I am helpless) of these sensations.

4. Phase Four: Desensitization

During the desensitization phase of EMDR, adaptive processing (i.e., learning) takes place. The client is instructed to focus on the visual image, the identified negative belief, and body sensations, and then to "Let whatever happens, happen." He or she maintains this internal focus while simultaneously moving the eyes from side to side for 20 or more seconds (depending on nonverbal cues), following the therapist's fingers as they move across the visual field. Other bilateral stimuli (e.g., hand-tapping, aural stimulation) can be used instead of eye movements. After the set of eye movements, the client is told "Blank out (or "Let go of") the material, and take a deep breath," and then is asked "What do you get now?" Depending on what emerges (image, thought, sensation, or emotion), the clinician then directs the client's attention to the appropriate target for the next set of eye movements. This cycle of alternating focused attention and client feedback is repeated many times according to specified procedural guidelines that address various aspects of the memory network and is typically accompanied by shifts in affect, physiological states, and cognitive insights.

Because EMDR uses a nondirective free association method, some clients spend very little time being exposed to the details of the presenting problem. They may rapidly and spontaneously access a succession of related thoughts, images, emotions, sensations, and memories. These associations to the various components of the targeted memory network and other related networks are indicative of the active reprocessing of dysfunctionally stored material. For example, having started with a memory of his mother beating him, "John" recalled many incidents of his mother's cruelty, her vicious criticisms, humiliating him in front of his friends, laughing at him. He progressed through a range of intense emotions (anger, fear, sadness, shame), with accompanying physiological shifts. John experienced a number of insights, including the realization that he frequently repeated his mother's harsh criticisms in his own internal dialogue. Throughout the session the therapist remained almost entirely silent, gently asking, "What do you get now" and encouraging John to "Just notice" and to "Stay with that." If John's processing had stalled, the therapist would have used specialized interventions worded and timed in a specific manner to reactivate processing.

5. Phase Five: Cognitive Installation

As negative imagery, beliefs, and emotions become diffuse and less valid, positive ones become stronger and more salient. This transformation appears to result from a shift in how the memory is stored with new associations to more adaptive information. The fifth phase occurs after the targeted issue is resolved and the accessed memory spontaneously arises without distress. This phase allows for the expression and consolidation of the client's cognitive insights. For many clients it is characterized by a profound change in self-concept that entails an integration of self-acceptance and new positive and realistic self-perceptions. In this phase, the original target is paired with the most enhancing positive cognition during sets of eye movements. This could be the belief designated to replace the original negative self-belief or a more therapeutically beneficial belief that emerged during the desensitization phase. The focus is on incorporating and increasing the strength of the positive cognition until strong confidence in the belief is apparent (e.g., VOC of 6 or 7). For example, while a rape victim may enter therapy "knowing" that she is not to blame, the installation phase is not considered complete until she truly "feels" the truth of this self-evaluation.

6. Phase Six: Body Scan

In Phase Six, the clinician asks clients, while focusing on the image and positive cognition, to notice if there is any tension or unusual sensation in the body. Because dysfunctionally stored information is experienced physiologically, processing is not considered complete until the client can bring the previously disturbing memory into consciousness without feeling any significant body tension. Any residual negative sensations detected by the body scan are targeted with eye movements until the tension is relieved. Such body sensations can be linked to unprocessed aspects of the memory network. For instance: After an apparently complete EMDR session targeting a car accident, "Sam" reported a strange feeling in his foot during the body scan phase. This sensation was targeted with EMDR and resulted in him recollecting a forgotten aspect of the accident. His foot had been stuck for a brief period after the collision, and he had felt trapped and frightened. After processing this with EMDR, the foot sensation disappeared, and SUD and VOC ratings were consolidated at optimal levels.

7. Phase Seven: Closure

In this phase, the therapist determines whether the psychological material has been adequately processed and, if not, assists clients with the self-calming interventions developed in Phase Two. The client is told by the therapist that other material might emerge after the session and is asked to maintain a journal to record any disturbance that arises, such as nightmares or flashbacks, or related material such as insights, memories, emotions, and dreams. The form that this journal takes parallels the assessment stage of treatment (Phase Three) and identifies possible targets for future sessions. This process of recognizing and recording patterns of reaction extends treatment effects to real-life disturbing events and encourages a sense of self-mastery and observation, thus facilitating between-session stabilization.

8. Phase Eight: Reevaluation

Reevaluation takes place at the beginning of every EMDR session following the first. In this phase, the therapist determines whether the treatment gains from the previous session have been maintained by eliciting the previously processed targets and assessing the current emotional, cognitive, and physiological responses. The clinician reviews the client's journal to evaluate the degree to which treatment effects have generalized or need further attention, and to identify new issues that need to be addressed. For example, after processing the molestation by her grandfather, "Lisa" began thinking about her grandmother who had refused to believe that he was an offender. This new material became a treatment target.

In addition to relying on behavioral reports, the therapist is encouraged to use various standardized self-report measures, such as the Impact of Event Scale or the Beck Depression Inventory, to monitor changes in specific symptoms. The goal of EMDR therapy is to produce the most substantial treatment effects possible in the shortest period of time, while simultaneously maintaining client function and preventing emotional overload. Therefore, thorough ongoing evaluation of reprocessing, stability, behavioral change, and integration within the larger social system is essential. The eight phases of treatment may be completed in a few sessions or over a period of months, depending on the needs of the client and/or the seriousness of the pathology.

II. THEORETICAL BASES

A. The Adaptive Information Processing Model

The Adaptive (or Accelerated) Information Processing (AIP) model which guides EMDR practice assumes that humans possess a physiologically based information processing system, which, under normal circumstances, naturally responds to and resolves everyday minor disturbances. Information is normally processed to an adaptive state where connections to appropriate associations are made, emotional distress is relieved, experiences are used constructively, and learning takes place. Information is understood to be stored in a system of memory networks, which are neurobiological structures containing related memories, thoughts, images, emotions, and sensations. For example, "George" was shocked and angry when his employer criticized him and his work product. George mentally reviewed this interaction by accessing stored information about the quality of his work, his employer's stressors, and his own competence. This allowed him to assess the situation and to make decisions about his course of action. He dismissed the personal negative comments because they were discordant with information about his abilities. Such connections are made during waking state and perhaps through the information processing mechanisms of rapid eye movement (REM) sleep.

After a traumatic event, persons who were high functioning prior to the incident generally assimilate the perceptual experience and reestablish themselves. For others, an incident of sufficiently high negative valence can result in little integration with existing positive or more adaptive information stored in networks. The AIP model proposes that pathology results when experiences are not adequately processed and the memories are dysfunctionally stored with the perceived distressing affects and physical sensations. The traumatic memory network becomes effectively isolated, and no new learning takes place.

PTSD is not the only mental disorder known to have an etiological event; phobias, panic disorders, depression, dissociation, and personality disorders are sometimes related to precipitating incidents. Deficit experiences, such as neglect, rejection, or humiliation, that occur during developmental windows can function as "small-t traumas." With frequent repetition of such events, the memory network becomes predominant, organizing similar experiences in associated channels of information and precipitating a continued pattern of behavior, cognition, and related identity structures. Such persons often develop rigid defenses, a limited sense of self, impaired interpersonal function, and affect dysregulation.

Because of the lack of adequate assimilation of these events into the larger associative network, similar experiences in the present, including a variety of triggers implicit in the memory network, can elicit these dysfunctional affects and negative appraisals. It is further hypothesized that the inadequately processed information is stored in a "state-dependent" fashion. The information is easily activated when the individual experiences affect or a physiological state similar to that of the memory network. Feeling afraid, for example, activates fear-related information, while feeling depressed activates information about hopelessness and helplessness. The flashbacks of PTSD often contain immediate sensory information: the smell of the rapist's breath, the feel of his rough hands on bare skin. Sometimes the material that is activated is primarily affective, such as fear or shame.

B. Reprocessing Information

The AIP model proposes that pathology arises when the information associated with seminal events is inadequately processed. Consequently, these disorders should respond to treatment that enhances reprocessing of the dysfunctionally stored information. The goal of EMDR therapy is to stimulate information processing by accessing the dysfunctionally held information and forging new connections with more adaptive information. It is assumed that when appropriately stimulated and maintained in dynamic form, the inherent healing processes of the information processing system will result in a positive resolution, manifest in affective, cognitive, and behavioral changes and comprehensive learning.

The AIP model has four principles that describe and predict the effects of adaptive processing.

1. Direct, Nonintrusive, Physiological Engagement with the Stored Pathological Elements Is Possible

The dysfunctional storage of disturbing memory elements is viewed as the physiological basis of the pathology. Rather than targeting the client's reaction to the earlier event, EMDR focuses on the memory components (image, affect, cognition, sensations). The treatment protocol is designed to specifically access components of the memory in such a fashion that the material is available for complete reprocessing.

2. The Information Processing System Is Intrinsic and Adaptive

The system appears to be configured to process information and restore mental health analogous to the way the body frequently recovers from physical injuries. This belief is the basis of EMDR's client-centered model, which assumes that if the information processing system is appropriately stimulated, the client's cognitions and affect will move to an adaptive level with minimal therapist intrusion.

3. As the Embedded Information Is Processed, Identity Constructs Change

Pathological personality characteristics are understood to be entrenched in dysfunctionally stored information. Therefore, it is assumed that when this information is adequately processed, there is a concomitant shift in clients' sense of self-worth and efficacy, with structural alterations in related personality characteristics, evident in changes in self concept, interactions with others, and behaviors.

4. Reprocessing Results in Rapid Changes

EMDR facilitates therapeutic effects through the adaptive connection of associated neurophysiological networks in the information processing system. Recent findings in neurobiology support the notion that treat-

ment outcomes can be rapid, regardless of the amount of time since the original distressing event.

C. Mechanisms of Action

Although it is apparent that EMDR expedites information processing, the exact mechanisms by which this occurs are unknown. Speculation about the role of eye movements abounds. A wide variety of primary research studies dating from the 1960s through the present have indicated a correlation between eye movements and shifts in cognitive content and attribution. Several hypotheses attempt to explain how they may contribute to information processing within the EMDR procedures: (1) eye movements disrupt the function of the visuospatial sketchpad and interfere with working memory; (2) they elicit an orienting response that stimulates an instinctive interest–excitement affect creating new associative links with the dysfunctionally stored information; (3) they evoke a relaxation response, or a new set of physiological states and responses, creating new associative links with the dysfunctionally stored information; (4) they activate neurological processes that mimic REM sleep-type function and its information processing mechanisms; and (5) they act as a distractor that titrates the emotional overload and encourages client engagement.

Although it is assumed that all aspects of the EMDR structured procedures and protocols contribute to its effect, two other possible mechanisms of action currently under investigation are its use of repeated brief client-directed exposure and free association. In addition to the primary research on physiological mechanisms, clinical observations have contributed to the present treatment structure. For instance, it appears that developing the ability to mentally delimit and control disturbing internal stimuli may provide clients with a sense of mastery and decrease distress about their symptoms. Use of short doses may also counter the avoidance reaction that is likely to accompany and maintain the pathology. Most importantly, information processing appears to be facilitated by repeatedly eliciting related information after each exposure. The free association component appears to activate the entire memory network and to forge connections with other associated networks. This results in the complete reprocessing of the dysfunctionally stored information. The nondirective free association method used in EMDR allows for the therapeutic focus to shift from the original targeted event to other related past experiences and is very different from exposure therapies that employ a chronological, concentrated focus on the traumatic event.

The findings of dismantling research are limited by methodological problems. Although component studies with clinically diagnosed PTSD subjects provide preliminary indications that an eye movement condition is more effective than control conditions, such studies have typically used small samples (e.g., 7 to 9 persons per condition) with inadequate power, and selected inappropriate controls, Truncated procedures are common; one study for example, provided only 145 seconds of treatment. The results of such studies are inconclusive and comprehensive research is required.

III. EMPIRICAL STUDIES

A. Posttraumatic Stress Disorder

Because of its claims of rapid effective treatment, EMDR has been subjected to many empirical tests and to much scientific scrutiny. It has been extensively researched in the treatment of PTSD. All but one of the research studies that used civilian participants found EMDR to be efficacious in the treatment of PTSD, and the one combat veteran study that provided a full course of treatment also revealed EMDR to be efficacious. Generally, these studies found substantial clinical effectiveness, reporting a decrease in PTSD diagnosis for 70 to 90% of the civilian participants after three or four sessions and in 78% of combat veteran participants after 12 sessions. There have been several other combat veteran EMDR studies, but these addressed only one or two memories in this multiply traumatized population, and thus their findings regarding efficacy are equivocal. Nevertheless, the effect sizes achieved in these studies were similar to those achieved in cognitive-behavioral therapy (CBT) studies with combat veterans.

In all but one controlled study, EMDR appeared to be equivalent in treatment outcome to CBT comparison conditions and was reported to require fewer direct treatment and/or homework hours. There are reports that EMDR may be better tolerated by clients than traditional exposure, perhaps because it typically results in a rapid in-session decrease in anxiety (as measured by SUD ratings). When EMDR was compared to other treatments such as relaxation therapy, standard mental health treatment in an HMO, and active listening, it was found to be superior on numerous measures. Two of these studies compared EMDR in actual field settings

to treatments that are commonly provided, and thus maximized the external validity of the results.

In future studies with PTSD populations, it is recommended that exposure therapy, cognitive therapy, Selective Serotonin Reuptake Inhibitors, and EMDR be compared with one another, with special attention paid to efficacy, effectiveness, efficiency, attrition, as well as clinician and client preference (e.g., tolerance and comfort) for the type of therapy being used.

B. Diverse Clinical Applications

In large-scale studies of EMDR treatment with trauma populations, direct internal comparisons were made for those with and without PTSD diagnosis. The equivalent findings on numerous affective and cognitive measures lend credence to the notion that EMDR can be effectively used to process disturbing experiences that may contribute to a variety of clinical complaints. Although positive reports have been published on the application of EMDR to the treatment of (1) personality disorders, (2) dissociative disorders, (3) various anxiety disorders, and (4) somatoform disorders, controlled research is needed to confirm the efficacy of these applications. Some of the findings are promising. For example, although body dysmorphic disorder is known to be relatively intractable to treatment, researchers in one case series study reported that five of seven patients treated with EMDR no longer met diagnostic criteria after one to three sessions.

The evidence for the effectiveness of EMDR with phobias and panic disorder is inconclusive. Many of the research studies investigating the use of EMDR with these disorders have been compromised by the incomplete application of the eight-phase approach. An analysis of procedural fidelity in the phobia studies determined that low adherence to EMDR protocol was associated with poor clinical outcome.

IV. SUMMARY

EMDR is an integrative psychotherapy approach implemented within comprehensive treatment plans to address a range of experientially based complaints. It is formulated to expedite the accessing and processing of disturbing memories by forging new links between the perceptual components of memory and adaptive information contained in other memory networks. Complete reprocessing is evident in the desensitization of triggers, elimination of emotional distress, elicitation of insight, reformulation of associated beliefs, relief of accompanying physiological arousal, and acquisition of desired behaviors.

During EMDR the client focuses on an external stimulus (e.g., therapist-directed eye movements, hand-tapping, aural stimulation) while simultaneously attending, in brief sequential doses, to emotionally disturbing material that is elicited through free association. Structured procedures based on memory association patterns enhance information processing and are embedded in a comprehensive eight-phase approach. Specific protocols ensure that all past, present, and future aspects of the clinical picture are thoroughly addressed.

The Adaptive Information Processing model posits a physiologically based information processing system that has a tendency to move toward health by processing information to a state of adaptive resolution. Various mental disorders are viewed as caused by information from traumatic events which are inadequately processed. The negative affects and cognitions contained in the memory network are frequently elicited by current life stimuli, thus precipitating maladaptive behaviors and self-concepts. Consequently, such characteristics and disorders should respond to treatment that enhances reprocessing of the dysfunctionally stored information.

Currently, EMDR has been found efficacious in the treatment of PTSD. Civilian participants have shown a 70 to 90% decrease in PTSD diagnosis and a substantial improvement in reported symptoms after three or four sessions. The only combat veteran study that provided a full course of treatment also revealed EMDR to be efficacious with a 78% decrease in PTSD diagnosis after 12 sessions. In all but one controlled study, EMDR appeared to be equivalent in treatment outcome to CBT comparison conditions and was reported to require fewer direct treatment and/or homework hours. Although there are numerous anecdotal and case study reports documenting EMDR's effectiveness in the treatment of other disorders, controlled studies are lacking or inconclusive, and future research is required to establish the parameters of EMDR's usefulness with these populations.

See Also the Following Articles

Post-Traumatic Stress Disorder ■ Self-Control Desensitization ■ Systematic Desensitization

Further Reading

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Fading

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GLOSSARY

fading Systematic process of removing prompts.
prompt Stimulus used to increase the likelihood the target response will occur at the appropriate time.
stimulus prompt Antecedent stimulus added, removed, or otherwise altered to increase the likelihood the target response will occur.
response prompt Response emitted by the individual conducting training to increase the likelihood the target response will occur.

I. DESCRIPTION OF FADING

Interventions used in applied practice take a variety of forms depending on such variables as the presenting problem and the theoretical orientation of the practitioner. One strategy that is used for a variety of presenting problems and across orientations is teaching the client a new skill or behavior. For example, a practitioner working with a client who is "shy" might teach the client to maintain eye contact with others and to initiate conversations. Initially the practitioner likely will have to remind the client to emit these new behaviors, however the hope is that, over time, the client will need less frequent reminders and will begin to emit the newly learned skills in a variety of situations. The process of gradually decreasing reminders—often referred to as prompts—such that the client emits the target response independently is called fading. Several fading procedures exist, and the specific procedure used depends on the strategy of prompting that was used to teach a new behavior. Thus, this article begins with a discussion of prompting strategies. Next, specific fading strategies are presented. Examples are used throughout to facilitate understanding of fading procedures in applied settings.

Individuals typically are taught new responses through the use of prompts. For example, when a person who is not proficient in computer use purchases a computer, that person might ask a colleague to help assemble the computer. The colleague might verbally prompt the individual through the steps of assembly. Alternatively, the individual might simply follow the instructions included with the computer. Such prompts—behaviors emitted by the trainer to guide specific responses—are called response prompts. The second type of prompt that might be used is a stimulus prompt. Stimulus prompts involve changing some aspect of the situation that should evoke the desired behavior. Continuing with the computer example, computer companies often color code connections such that connector cables are the same color as the relevant computer port. In this case, the company is adding something—color codes—to the existing items—connection cables and ports—to increase the likelihood

the user will correctly assemble the machine. Regardless of the type of prompting used, response prompts or stimulus prompts, the eventual goal of most instructional programs is to have individuals emit the correct response without the use of prompts. To accomplish this goal, the prompts must be gradually faded. Fading involves systematically removing prompts over time.

II. THEORETICAL BASES

The process of fading is derived from the behavior analytic literature. Fading procedures have been used with nonhumans as well as humans however it most often is seen in programs designed to teach individual's new skills. Fading incorporates several principles of operant conditioning including the use of reinforcement and stimulus control. Reinforcement is defined as the response-contingent delivery (or removal) of a stimulus that increases the likelihood the behavior will occur again in the future. As is discussed later, reinforcement must continue to occur following correct responding throughout all steps of a fading procedure. Stimulus control also is relevant to fading procedures. Stimulus control develops when a response is more likely to occur in the presence of a particular stimulus (e.g., a prompt) than in its absence because the response has been followed by reinforcement most often in the presence—but not absence—of that stimulus. The ultimate goal of a fading procedure is to bring the target response under stimulus control of the naturally occurring cue—the event that the instructor hopes will naturally evoke the target response.

III. USING FADING

Teaching a new behavior is most often accomplished through the use of response prompts. When using response prompts, the practitioner uses some sort of cue to evoke a behavior. Cues might be relatively simple, such as looking in a certain direction, or making a gesture, or more invasive, such as touching the learner's shoulder or physically guiding the learner to move in a certain way.

A. Fading Response Prompts

When a new response is taught through the use of response prompts, fading is accomplished through one of three procedures: time delay, least-to-most prompts, and most-to-least prompts. Time delay involves allowing the natural cue to occur, and then waiting several seconds before prompting. For example, when teaching deep breathing to an individual with anxiety, the natural cue to use deep breathing would be the occurrence of any anxiety producing stimuli, perhaps the approach of an individual of the opposite gender. In training sessions, when such a person approached the client, the practitioner would wait for several seconds before prompting the individual to begin deep breathing—the goal being to see if the client would initiate deep breathing independently. Over time, the practitioner would gradually delay the prompt for even longer durations.

Like time delay, least-to-most prompt fading is a procedure that provides the learner with an opportunity to independently emit the correct response prior to prompting. The difference between the two concerns is the variety of prompts that might be used in training: time delay typically involves only using one type of prompt (e.g., a verbal prompt), least-to-most prompting allows the trainer to use the most intensive level of prompting needed to help the learner exhibit the correct behavior. When using least-to-most prompting, the trainer begins with the least intrusive type of prompt possible and gradually increases the intrusiveness of the prompt until the learner emits the correct response. Consider again the individual learning deep breathing. The natural cue to use deep breathing is the occurrence of an anxiety-producing event (e.g., approach of an individual of the opposite gender). If the anxiety-producing stimulus has been present for certain amount of time (e.g., 5 sec), and the client has not initiated deep breathing, the practitioner would prompt the client using the least intrusive level of prompting (e.g., a gesture, such as holding up the hand). If this prompt does not result in deep breathing, the practitioner would use a more intrusive prompt, such as verbally reminding the client to use deep breathing. If the client still did not begin to use the breathing exercise, the practitioner might place a hand on the client's shoulder—using a still more intrusive level of prompting.

The third commonly used prompt fading procedure is graduated guidance. Graduated guidance involves using the most intrusive level of prompting needed to prompt a response to occur, and then immediately removing the prompt when the individual is responding independently. For example, when teaching a child to ride a bicycle, a parent might walk closely behind the child, steadying the child whenever necessary. The parent might steady the child by placing a hand on the child's shoulder or, if needed, by actually holding the

handlebars and steering the bike for the child. Foxx and Azrin discuss in their 1973 work two procedures to be used in graduated guidance: shadowing and spatial fading. Shadowing involves closely following the learner's physical movements with your own body. For example, a parent teaching a child to ride a bicycle might walk next to the child and hold the child's hands directly above the child's shoulders, ready to steady the child if need be. Over time, the parent gradually moves the hands and body further away from the child. Spatial fading is used when the trainer gradually moves a physical prompt. Continuing the bicycle example, the parent might begin teaching the child by holding onto the handlebars with one hand to steer the bike, and steadying the child with the other hand. Over time, the parent might have the child steer the bicycle but continue to steady the child. Gradually the parent would provide the child with less and less physical support until the parent was walking beside the child, but not providing any support unless necessary. The parent would then move further away from the child, until the child was riding independently.

In contrast to the other types of prompt fading, most-to-least prompt fading does not initially provide the learner with an opportunity to respond independently. Most-to-least prompt fading is often used with individuals with severe cognitive disabilities. This type of prompt fading involves using the most intrusive level of prompting initially and then gradually reducing the level of guidance provided. For example, if an individual was being taught to make the bed, the trainer might initially use hand-over-hand guidance to have the individual make the bed. The trainer would gradually fade the physical prompt by decreasing the amount of physical pressure used to have the person make the bed. Over time, the trainer might fade to gestural prompts (e.g., pointing toward the pillows), and then to verbal prompts. Eventually, the sight of the unmade bed alone should evoke the response of making the bed.

B. Fading Stimulus Prompts

When the natural cue was changed to evoke behavior, stimulus prompts must gradually be faded. For example, if the behavior being trained is recycling, the natural cues should include items to be recycled (e.g., paper, pop can). Stimulus prompts that might be used in such a situation include signs telling people to recycle or placing multiple recycling vesicles in the building. The eventual goal is to transfer control of the response—recycling—from the prompt (e.g., signs) to the natural cue (e.g., used paper), such that individuals will search for and use a recycling container on coming in contact with an item that can be recycled. Fading stimulus prompts involves either stimulus fading or stimulus shaping.

Z	S
S	Z
S	Z
Z	S
Z	S
S	Z

FIGURE 1 Example of stimulus fading procedure to teach an individual to discriminate between the letters "Z" and "S."

Stimulus fading often is used to teach an individual to discriminate between similar items. Consider the example of teaching students to discriminate between two similarly shaped letters, *Z* and *S*. One way that the discrimination might be taught is by increasing the size of one letter relative to the other. An example is shown in the top line of Figure 1. In this example, the correct response (stating, *Z*) is more likely to occur because the letter *Z* is much larger than *S*. Over time, the difference in size between the letters would be reduced until both letters were the same height (see Figure 1). Another use of stimulus fading occurs when additional prompts were added. For example, when children are learning addition or subtraction, teachers often use objects to represent the numbers the children are to add or subtract. To illustrate: if a worksheet instructs a child to add "4 + 3," the worksheet might have a group of four apples next to a group of three apples (see Figure 2). Over time, the teacher could reduce the salience of the additional objects (e.g., apples) by making them smaller in size (see Figure 2).

The second method of fading stimulus prompts is stimulus shaping. Stimulus shaping is the procedure used when the shape of the prompt is changed and then is gradually made to look like the prompt the trainer wants to evoke behavior. Such a training procedure might be used to teach an individual who does not read to recognize the word "walk" (as might be seen on a pedestrain crossing traffic signal). The initial prompt used should be something that the learner recognizes,

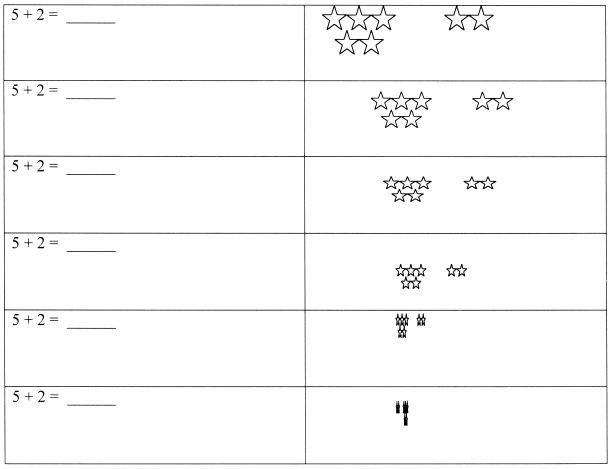

FIGURE 2 Example of stimulus fading by decreasing the size of the additional prompt.

in this case a picture of a person walking with a line through it. Over time, the prompt is gradually be changed to the natural prompt (in this case, the word "walk"). More important, the shape of the prompt must be changed slowly, so that the learner is likely to continue to respond correctly. Parents often use stimulus shaping when teaching a child to independently ride a bicycle. The child typically begins to ride with the assistance of training wheels. When the parent sees that the child is able to maintain balance relatively well, the parent may remove one training wheel, leaving the other in place. Eventually the parent removes that training wheel as well, and the child is riding a bicycle without the assistance of any additional prompts.

C. Considerations in the Use of Fading

When individuals are learning a new response, prompting is most often used. Over time, the learner must come to emit the correct response without prompting. The removal of prompts is called fading and can involve either fading response prompts or fading stimulus prompts, and the specific type of fading depends on the prompting strategy used to teach new behaviors.

Regardless of the prompting (and hence fading) strategy used, several caveats are in order. Considerations include the criterion for completion of training, selection of a reinforcer, the starting point for training, and the steps of fading. First, the instructor must determine what the goal of training is. That is, what is the stimulus that will evoke behavior when fading is completed. Ideally, the stimulus will occur naturally in the environment, so that responding will be maintained. For example, for a "shy" individual learning to maintain eye contact, fading might be considered complete if eye contact was maintained only after initiated by another person. However, if the majority of people the individual came in contact with did not initiate eye contact, the client's newly learned skill would likely not maintain. In this case, the final cue for eye contact might be simply the presence of another person within 3 ft of the client (with the exception of certain situations, such as in elevators).

Once the goal of training is determined, it is important to select a reinforcer. The reinforcer must be something that the individual enjoys and that will serve to reward and maintain responding. When working with adults who are typically developing the reinforcer often is simply the ability to emit the target response. For example, for a "shy person," simply maintaining eye contact for some duration may be reinforcing in and of itself. When working with children, individuals with disabilities, nonhumans, or adults for whom the target behavior is not likely to be especially rewarding in and of itself (e.g., coming to work on time, calculating a tip rapidly, without the use of a pencil and paper), it is critical to determine an effective reinforcer. Ideally the reinforcer should be one that is likely to occur in the individual's natural environment. For example, a natural reinforcer for rapid calculations of a tip might be admiration from others, or avoidance of "odd looks" from restaurant staff. Once a reinforcer is identified, it should be used consistently in the training program. The reinforcer should be delivered following each instance of the target response, throughout training and fading.

The third step to complete prior to beginning a prompting and fading procedure is identification of a starting point. The stimulus used for initiation of training should be something that will reliably evoke the target behavior. Continuing with the "shy" individual, the initial prompt might be a verbal cue such as "look at me." Alternatively, it may be necessary to use several types of prompts to ensure the behavior will occur when training begins. For example, a parent teaching a child to clean the child's bedroom might make a chart with pictures showing what needs to be done and in what order. The parent also might need to remain in the room and verbally prompt the child through each step. Regardless of the level of prompting or number of prompts used initially, it is critical that the initial prompts reliably occasion the target behavior. Once the behavior occurs immediately following the initial prompt for several consecutive trials, prompt fading can commence.

The fourth consideration prior to beginning a prompting and fading procedure is to determine when fading will begin and how rapidly fading will progress, based on the learner's performance. For example, the instructor might determine that fading will begin when the learner has correctly emitted the target response following prompt presentation for three consecutive trials. Further, prompts will be successively removed when the learner has correctly emitted the target response following that level of prompting for three consecutive trials. Second, the instructor should measure the learner's response in some way, so as to ensure that the fading procedure is working effectively and efficiently. The goal is to enable the learner to respond without prompts, however if fading is too rapid, the learner may cease to respond. Alternatively, if fading is conducted too slowly, the individual may become "prompt dependent." That is, the learner may not learn to exhibit the desired behavior without the prompt. Careful evaluation of the learner's progress will ensure that fading is accomplished at the desired rate. More important, as fading progresses, the goal is for removal of cues to be gradual enough that few errors occur. If an error occurs, it may be necessary to back up to the previous prompting level for several training sessions. Alternatively, frequent errors might signal two potential problems, either fading is occurring too rapidly, or the reinforcer for correct performance is no longer effective. In the case of the first problem, the instructor should return to the level of prompting at which no or very few errors occurred. Once the individual is again reliably emitting the correct response, fading should again commence, however the steps of fading need to be smaller or occur more gradually. In the case of the second problem, an ineffective reinforcer, the instructor must identify another reward that will increase the likelihood of correct responding.

IV. EMPIRICAL STUDIES

Fading has been used to decrease the use of prompts for a variety of behaviors. In 1990, Mary Ann Demchak published a comprehensive review of the use of stimulus and response prompt-fading procedures when providing instructions to individuals with severe disabilities. Both types of prompt fading also have been used to facilitate language acquisition, as evidenced by a review published by Sebestian Striefel and Charles Owens in 1980. Response prompts have been used to teach many behaviors including social skills and reading comprehension. In 1988, Phillip Moore provided a comprehensive review of the utility of fading procedures in teaching reading comprehension.

Fading of stimulus prompts also has been widely used. To illustrate, in 1984 Elsie Labbe and Donald Williamson published a comprehensive review of interventions using stimulus fading to treat elective mutism. Also, Rebecca Kneedler and Daniel Hallihan published a review of studies using fading to increase on-task behavior of children in academic settings in 1981.

See Also the Following Article

- Extinction

Further Reading

Demchak, M. (1990). Response prompting and fading methods: A review. *American Journal on Mental Retardation, 94,* 603–615.

Kneedler, R. D., & Hallihan, D. P. (1981). Self-monitoring of on-task behavior with learning-disabled children: Current studies and directions. *Exceptional Education Quarterly, 2,* 73–82.

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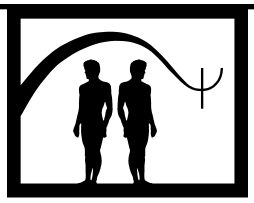

Family Therapy

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GLOSSARY

reframe Changing the conceptual and emotional perspective of a problem such that the meanings of the behaviors associated with the problem are viewed in a way that allows modifying the behavior easier for the client.

task A therapeutic directive that forces the entire family or selected family members to interact differently from the pattern thought to be associated with the presenting problem. Tasks occur in-session or as homework to be done between sessions.

Family therapy is a perspective of interpreting and modifying behavior. This perspective is implemented as psychotherapy in several diverse ways each according to a different set of theoretical tenets, where each tenet or cluster of tenets forms a separate model of family therapy. Although implementation varies, the multiple methods of doing family therapy derive from a single assumption: Presenting problems originate from inadequate, inappropriate, or dysfunctional interpersonal relationships, and therefore should be subsequently altered using techniques that in some manner modify interpersonal relationships. The various approaches of family therapy can be trichotomized based on their respective therapeutic assumptions and techniques; they are ahistorical, historical, or experiential. Each classification approach represents a general orientation toward ameliorating the problem, and within each type, various models reside.

Models within the ahistorical classification attempt to remove the presenting problem by altering family interaction sequences. Advocates of this orientation assume that current interaction processes may be unrelated to the etiology of the presenting problem, but certainly contribute to its maintenance. In general, the goal of therapy is to remove the presenting problem by changing attribution or behavioral patterns. Models within this group include strategic, structural, Mental Research Institute (MRI) narrative, behavioral, solution focused, and psychoeducational.

Historical models have psychoanalytic psychodynamic roots. Therapy tends to be longer and the therapist is generally less active in the session than in either of the other two classifications. Emphasis is on early family dynamics as templates that influence all subsequent intimate relationships. Also important is individual growth and individuation within the family. Models within this group include object relations and Bowenian.

Experiential models emphasize personal growth, experiencing and monitoring internal processes, and the development of self within the context of the

family. In addition, therapists are encouraged to share their internal processes in response to the session. Therapy within this classification is usually associated with a person (e.g., Carl Whitaker) rather than a model. Of the three types, the ahistorical approach probably best describes how contemporary family therapy is practiced and forms the basis for this article.

I. DESCRIPTION OF TREATMENT

Family therapy is any attempt to modify salient environmental features, most importantly interpersonal contacts or beliefs about those contacts, which alter interaction patterns, allowing the presenting problem to be unnecessary. Notice that family therapy does not necessarily exclude nonfamily members, nor does it necessitate that all family members be present in therapy. Problems are assumed to be embedded in behavioral patterns, and patterns are determined by context. Family therapy, then, exists to alter context. From this viewpoint, the job of the therapist is to alter the context driven behavior.

A. Initial Contact and First Session

Like other forms of psychotherapy, during the first session the objective is to join with the client and assess the problem. However, unlike other forms of psychotherapy, family therapy also begins by attempting to alter the family's perspective. Almost immediately an effort is made to dilute the idea that the presenting problem associated with an individual is encased within that person; instead an attempt is made to modify beliefs so that the problem is perceived to be a by-product of the situation that characterizes the system (i.e., environment) housing the individual. In effect, an initial objective is to have the problem viewed differently by the family. Family therapy then, especially initially, occurs through social negotiation. It involves determining what the family wants, how they see the problem, how they want it fixed relative to the assumptions and orientation of the family therapist, and how well the therapist can pull the problem away from an individual and distribute it to the system. Once this has commenced, the therapist then allows the presenting problem to be unnecessary by altering the family structure, which simultaneously alters interaction patterns, relationships, and beliefs about the family. Alternatively, the therapist modifies the beliefs about the relationship, which simultaneously alters patterns of interaction, and the family structure. Simply said, the therapist enters the family at the relationship level, not at the level of a particular individual, and alters interaction associated with the various relationships.

1. Initial Contact

Everyone relevant to the presenting problem is asked to attend the initial session. This includes all adults in the household, and all siblings. Each individual brings unique information about the family beliefs and the presenting problem. Subsequent sessions require various combinations of family members as dictated by the therapist needs.

In the interpersonal model, therapy is directed toward the relevant behavioral pattern, not the person. As such, only those family members (or relevant members of the system) are needed that provide the leverage to alter the interactions that require changing. Stated differently, the therapist needs in therapy those subsystems that have the ability to change the relationship. This needed configuration changes from moment to moment within a session, and across sessions. It is not unusual to shuffle people in and out of the therapy room if doing so generates leverage, or if the act of excluding someone mimics metaphorically the desired changes.

Conversely, sometimes the needed individuals will not, or cannot attend therapy. Although not optimal, since therapy is with the relationship, it is assumed that the intervention will ripple through the system.

2. First Session

In family therapy at least three features about the presenting problem are examined: (1) timing, (2) function, and (3) who. Each provides an important clue to discerning relevant contextual information associated with the problem.

a. Timing. General timing questions provide a timeline for understanding the evolution of the problem. The therapist seeks answers to the following questions. Why is this problem occurring now? What has occurred recently, or if not recently, how long ago? What was going on in the family when this started? Why was the behavior not present yesterday or last week? What is occurring now that makes the behavior necessary for the individual? Were there changes in the family or larger environment when the problems started? Were there job changes, separations, fights, and so on before the onset? These questions can be asked directly or indirectly. An indirect question would be something like, "Give me a picture of the family, and how it has changed over the past year," or "Describe the family's everyday routine for the past 6 months."

b. Function. General function questions provide a framework that examines the utility of the behavior associated with the problem. The therapist, asking each individual to describe the presenting problem, wants to know, "What is the result of the behavior?" Similarly, the therapist is curious about, "What gets accomplished, and what does not get accomplished when the behavior occurs?" Accomplished here means any personal or interpersonal activity that should occur in a functional family. These include, for example, developmental changes, relationships, work, or individual activities.

c. Who. These questions provide necessary information about the people involved with the problem. For example, when the problem occurs, who directly reacts to the behavior, and then what happens? Reaction means attention, action, or general response. Consider John, the biter. When John bites Jane (the sister), who reacts, how do they react, does John get more or less attention (than before the bite), do bites occur most often when mom and dad are fighting, or have they increased since mom and dad separated? This is the type of sequence information necessary to conceptualize how the presenting problem ripples among the network of family members.

Although this example illustrates a short-term (hours or minutes) behavioral sequence, the thinking is equally applicable to sequences that cycle over a period of days. The child who regularly threatens suicide illustrates this extended perspective. For example, the child threatens suicide, mom calls the crisis unit, everyone converges to the scene, and mom and child have a very different relationship for some extended, yet temporary, period. "Who" questions generate information about which people are needed in therapy or else, at minimum, who must be considered relevant when tasks are assigned.

B. Belief Structure

Depending on the specific model of family therapy, each emphasizes to a lesser or greater extent the role of beliefs and cognitions in maintaining the behavior patterns associated with the presenting problems. Consequently, the therapist seeks to simultaneously change the presenting problem, either directly or indirectly, and the cognitive perspective that necessitates the dysfunctional interactions within the environment. In family therapy, this cognitive perspective is a belief structure maintained by the family, with slight variations held among the individual family members. This family level cognitive perspective acts as a filter, determining the meaning of events, which in turn, dictate reactions to the events. Depending on the family's history and culture, events are interpreted according to beliefs held by the family. The beliefs, or myths, may be functional or dysfunctional. They may be functional in their ability to keep the family intact, and yet to the world outside the family, be dysfunctional in the type of behavior that the beliefs produce. Treating an individual within the interactional perspective assumes that he or she has a cognitive perspective that influences the perception of environmental input, and determines that individual's behavioral reaction. Consequently, family therapy seeks to alter the belief as well as the behavior. However, depending on the family therapy orientation used, the therapist may seek to change the belief either directly, or through a change in the presenting problem. In other words, it is held that you can change the behavior and assume that it will allow the belief to be less valid, and subsequently unnecessary; or you can attempt to change both simultaneously. Either way, the presenting problem must change, and its underlying belief structure must be altered enough to allow the dysfunctional behavior to be unnecessary.

C. Implementing Treatment: Dimensions of Family Therapy

It is assumed that the therapeutic process begins at first contact, and from that moment on, the distinction between assessment and prescribed change is blurred as these interdependent features continuously address the presenting problem. Instead of thinking of therapy changing over time (e.g., phases), it is better to think of therapy as containing three interdependent dimensions occurring simultaneously over the period of treatment. These dimensions are assessment, instilling doubt, and pattern change.

1. Assessment

Assessment includes determining relevant behavioral patterns and belief systems in the family. Assessment occurs throughout treatment; the therapist's concept of the problem is continuously updated using information gathered via questions and responses to tasks. Assessment is in two areas: interaction patterns and belief structures. Assessing behavioral interaction patterns include questions about who does what and when, and who responds to whom, when, and how?

Assessing the family belief structure involves the following types of questions:

1. How does the family think, in the sense of a singular unit; what themes are present?

2. Where are the family alignments and coalitions?
3. What is the language of the family, and how does it reflect their beliefs?

The therapist also examines the family beliefs and myths about causality; these usually have one or more of the following themes: genetic influence (i.e., bad seed), vaguely defined biochemical imbalance, some supernatural influence (e.g., god, devil), influence of peers, or a bad parent (typically the one not present in therapy). These beliefs are typically associated with an assumed cure; for example, if the assumed problem is peer influence, then new friends would alleviate the problem. Finally, part of the assessment includes appraising the development stage of the family. This includes considering the age of the children and their parent(s). Parents of a young child face a very different set of problems than do parents of a preadolescent, an adolescent, or a young adult living at home. At each stage of development, individuals within the family have expectations that influence their behavior. Collectively, these expectations influence the expression of the presenting problem. Each stage of the parenting process is made more complex by the impact of the marital relationship. Single parents handle parenting situations differently than married parents, and happily married couples handle parenting problems differently that unhappily married couples.

In family therapy, the therapist should be cognizant of how the family arrangement and stage influence the patterns that maintain the presenting problem, and how each can affect treatment success or failure. No single recommendation can be made for each possible combination of family stage by family composition by marital status by parenting skill, and so on. Instead it is much better to examine each family as a unique composite, having its own history and belief system. By observing this belief system as expressed through behavioral patterns, the proper therapeutic intervention becomes evident for each particular family, irrespective of developmental stage.

2. Instilling Doubt

Simultaneous to assessment, the therapist begins the process of subtly casting doubt on the validity of the family's current belief system about the presenting problem. Seldom will the family acknowledge that marital or family interaction patterns produce the presenting problem, or even that the problem lies outside of the identified patient. Typically, the therapist addresses the interactional and contextual dynamics surrounding the presenting problem. This occurs in several ways; for example, perspective altering questions, reframes, and directives for in-session interaction.

This process begins immediately in the first session and continues unabated throughout the treatment period. Initially it serves to alter the presenting perspective to allow change in dysfunctional patterns, and later serves to concretize the new ideas about how behavior occurs.

3. Pattern Change

Implicit or explicit requests for change in the behavior patterns that are associated with the presenting problem characterize this dimension of therapy. Using the removal of the presenting problem as the goal, decisions are made about what needs to be changed, and how to shift the belief structure to allow the desired behavior to occur. Although the presenting problem is the defining reason for being in therapy, short-term goals for smaller, less volatile behavior coax the individual or family toward more desirable behavioral patterns along with an altered family belief structure. This implies that as assessment is occurring and doubt is cast upon the existing beliefs, opportunities are offered for behavior change.

These opportunities occur both in and out of session. In-session opportunities occur when verbal statements by the therapist prompt a slightly different perspective (e.g., using a reframe) or when requested tasks force the family to interact differently. Out-of-session opportunities occur when behavior tasks are implemented. These requested tasks may include parents negotiating curfew times, or having the parents decide on consequences for misbehavior. The requested task forces new interactions around the presenting problem. When any task is, or is not completed, the response to the task by each individual provides additional information used by the assessment dimension.

a. Tasks: In-Session versus Out-of-Session. Requesting change via tasks is a hallmark of family therapy. Tasks, or requests for specific behaviors, can occur either in- or out-of-session. In-session tasks consist of directing the interaction among family members. This can consist of interaction between family subunits, or among members as a whole. Out-of-session tasks usually are thought of as homework assignments. Irrespective of family therapy orientation, most therapists use both types.

In-session task. The in-session task has three functions: (1) It allows the therapist to see relevant interaction, (2) it allows the therapist to alter relevant interaction, and (3) it allows the family to experience new patterns of interaction. Observing interaction in a session is extremely

beneficial in determining what is occurring in the family and how it needs to be changed. Assuming that the in-session behavior is isomorphic to the out-of-session behavior, the therapist is confident that what is seen reflects what happens in the home.

These tasks can be as simple as asking the husband and wife to talk about relevant issues, or as complex as having a family meeting on some topic. Each task, irrespective of complexity, generates relevant interaction needed for continuous assessment.

Another value of the in-session task is that it provides the therapist with the opportunity for the intended family interaction pattern to fail. For the therapist, there are therapeutic benefits in observing the family fail at the assigned task. Specifically, observing a failed task provides information about the pattern structure, provides immediate opportunity for therapist to comment on the process, and provides an opportunity to challenge the belief system.

Some families benefit more than other families from in-session compared to out-of-session tasks. Because in-session tasks generate new interactions among the family during the session, they are especially useful with families characterized as chaotic, that is, where most family members have infrequent, or volatile contact with other family members. This also includes families in which the lifestyle increases the likelihood that the family will come for only one or two sessions. Finally, in-session tasks may be necessary for families that fail, for whatever reason, to complete out-of-session tasks. These families should be given in-session tasks to determine what interactional components contribute to out-of-session failures.

Out-of-session tasks. Tasks that request specific changes in behavioral interactions outside of therapy have the singular function of altering, however slightly, familial interactions that are consistent with removing the presenting problem. Out-of-session tasks require interactions that need time, opportunity, or situations that are outside of the therapy session. These might include positive interaction opportunities (e.g., trip to the park), or need several days or weeks to complete (e.g., parent monitoring of child behavior). Moreover, if the task fails, the out-of-session task allows the therapist to determine the sequencing of behaviors associated with failure.

Like in-session tasks, failure to complete out-of-session tasks is seen as a source of information within the assessment dimension of therapy. In turn, the failure information is used to devise and re-assign another, slightly modified task. This next task accounts for the previous failure by modifying important ingredients in the interaction, which if successful, takes the pattern closer to the objective. If the task again fails, even with the modifications, then the therapist has more information about what is interfering with change. When successful, tasks simply allow the perspective shift to manifest itself behaviorally. The task, in effect, demonstrates that behaviors can change in accordance with the prescripts of therapy. In some cases, no tasks need to be given, and in others, the therapist gives a task at each session. Whether or not to assign a task depends on what the therapist determines the family needs, and since the needs of families vary, so should task assignment.

D. Subsequent Sessions

Subsequent sessions build on the initial session—shifting perspective and changing behavior. Each therapeutic maneuver either sets up or implements small changes that are consistent with eliminating the presenting problem. These small behaviors are, in fact, short-term goals; in turn, success in these short-term goals inexorably lead to changes in the presenting problem. Changes, as defined here, refer to not only interaction patterns, but also shifts in the client belief structure. Remember, the shift in perspective refers to a method of allowing the individual or family to see behavior in a slightly different way. Specifically, efforts are directed toward changing the behavior via interactional tasks while concomitantly asking questions about, or indirectly making reference to, the beliefs that underlie those interactions.

In general, there are no prescripts about what to do in any given session other than always to guide the client to change. Each therapeutic maneuver should be goal directed; each should attempt to alter pattern, perspective, or both in relation to short-term goals. In turn, each short-term goal must be directly related to the long-term goal of removing the presenting problem. For example, a short-term goal might be getting the mother and father to view the son in a slightly different way; to view the child, not as a "sick" kid, but as a son reacting to a chaotic home life. A series of small moves such as this eventually allow the parents to take more responsibility for the environment that shapes the child's behavior.

E. Termination

Because the object of all ahistorical family therapy models is to remove the presenting problem, once that objective has been met therapy ends. By maintaining a very specific objective, such as removing the presenting problem, all parties involved work toward a common goal, and everyone is aware of the changes that have

been made, or need to be made, in order for therapy to be successful. Therapy should be as brief as possible, typically lasting from 6 to 20 sessions.

II. THEORETICAL BASIS

A clear and consistent message implicit in traditional psychotherapy is that the individual with the presenting problem has a core deficit. The identified client may be lacking social skills, has aberrant thinking, is developmentally arrested or unable to resolve internal conflicts, or has some flawed biochemical process. Irrespective of etiology, the problem is within the individual and all effort focuses on treating the assumed structural deficit within the individual. Conversely, family therapy is an interpersonal model of psychotherapy; it focuses on treating the relationships between members of a delimited environment. Unlike the individual deficit model, family therapy assumes that a presenting problem reflects the inadequate quality or inappropriate structure of interpersonal relationships in which the individual resides. Moreover, family therapy assumes, a priori, that the individual expressing a symptom for the system is no more or less likely than any other family member to be psychologically vulnerable. Simply put, the identified patient is fulfilling a role within the larger system.

Each model in family therapy posits different theoretical tenets for the processes that generate the problematic behavior. Some assume a dysfunctional multigenerational process (e.g., lack of individuation), while others assume that psychological remnants from early attachment figures stifle the ability to maintain later relationships, and still others assume that inappropriate reinforcement or punishment creates a chaotic environment that produces aberrant behavior in children. Although each model has different assumptions about the presenting problem, a single conceptual thread binds them together—the identified patient represents the cumulative inability of the immediate environment, usually the family, to functionally adapt to exogenous or endogenous changes that naturally occur as a system evolves over time. Furthermore, although the family produces the symptom, the identified patient is simply selected as the carrier; this implies that any sibling could do just as good a job if drafted for duty.

Most of the assumptions held by family therapists derive from global theories that have no direct link to psychotherapy but instead focus on natural or biological systems. Many of the central ideas draw from general system theory, initially forward by the biologist Ludwig von Bertalanffy in the early 1930s. Lesser known theories (at least in the social sciences), such as information theory and cybernetics, also influenced the seminal writers in this area. Given the fluidity inherent in these dynamic systems models, it is not surprising that family therapists assume that, unlike many traditional psychotherapy models, change can occur spontaneously, that etiology is impossible to know, or that defense mechanisms and client resistance have no conceptual foundations. In effect, families are evolving systems, embedded in other systems and that the function of the therapist is to perturb the system enough to alter the processes that characterize the system. Exactly how the therapist induces this perturbation forms the unique underpinnings of each of the various models of family therapy.

III. APPLICATIONS AND EXCLUSIONS

Because family therapy does not attempt to modify a person but rather the behaviors exhibited by a system, it is generally applicable to most of the problems seen by mental health practitioners. With children and adolescents, it has been applied to problems ranging from conduct disorder to anxiety and depression. In adults, it has been applied to relationship problems, as an adjunct to the treatment for schizophrenia, depression and anxiety, modifying family reactions to medical illness, and drug and alcohol abuse.

Most of the couples and families treated with family therapy, at least as described in the scientific literature, have been predominantly upper-lower and middle class, and white. In the past decade, greater emphasis has been made to apply these techniques to more diverse groups such as Asian and Hispanic populations. Because family therapy did not evolve from a psychological perspective but rather from a general systems orientation, most of the assumptions that form family therapy are equally applicable across family types and cultures. For example, Salvador Minuchin developed structural family therapy in the early 1960s at a facility that dealt with young delinquents, mostly black and Puerto Rican.

IV. EMPIRICAL STUDIES

A number of studies provide evidence that family therapy is generally as effective as other forms of psychotherapy for the types of problems noted in the previous section. It is clearly the treatment of choice for relationship problems; this was established almost two

decades ago and has subsequently been confirmed through multiple studies. William Pinsof and Lyman Wynn edited a book in 1995 that provides an excellent overview of family therapy outcome studies.

V. CASE ILLUSTRATION

This synopsis reviews the case of a 10-year-old girl that presented with uncontrollable head shaking and humming. The condition had been occurring for about 1 year, and the parents were told that the disorder was caused by a biochemical imbalance in the brain. The child and her family were referred to the Marriage and Family Therapy Clinic after several thorough neurological examinations found no physical reason for the condition. The humming and head shaking, although reported to be uncontrollable, did not occur at school, during therapy sessions, or in situations that the child enjoyed. It occurred primarily at night, starting within minutes after the child went to bed. The humming usually increased slowly until it got the attention of the parents, who would then check on the girl, reassure her, and then leave the bedroom. This cycle continued until the child fell asleep. This case was assigned to an M.S.-level family therapist, and I was the supervisor.

After reviewing the videotape of the initial session, and assuming no physical disorder could explain the selective head shaking and humming, I further assumed that the family was inadvertently reinforcing the behavior of the child, and the child was unable to engage the parents with less drastic measures. I decided to discourage this reinforcement without focusing on the child or blaming parents. I used an MRI-type approach that involved having the parents "evaluate" the behavior without explanation. The intent was to simply reorganize the patterns of interaction between the girl and the response of her parents to her behavior. The therapist was instructed to commence the second session by asking about the symptoms during the previous week, what the parents did in response, and so on; most of emphasis was on getting the child to talk about the uncontrollability of the behavior. Near the end of the session, the therapist asked the following questions (these had been developed prior to the session) to the girl (with the parents present):

1. "Do you shake your head from left to right or from right to left?"
2. "Do you hum a low note, a high note, or a medium note?"
3. "Do you shake your head faster as the note gets higher?"

After each question, the therapist allowed the girl to respond, but typically, the girl would look puzzled and simply waited for the therapist to talk again. Finally, the therapist made the following statement: "I looked up biochemical imbalances in some books and I found out there are two types: the controllable type and the uncontrollable type. If, in fact, you do have a biochemical imbalance, you have the controllable type." And then the therapist said, "Ask me how I know that (pause). I know because you choose when you do it. You don't do it at school and you don't do it when I'm here. And I bet there are many, many other times when you don't shake your head and hum, right? Let's check that out right now. Shake your head and hum right now." (Note: It did not matter whether she moved her head or not, either behavior showed control.) After a long pause, the therapist said, "That confirms everything I've read. In your case it's very controllable."

The therapist then asked the young girl to step out to the waiting area and gave the following instructions to the parents. "Do you want to get rid of the head-shaking and humming, which she can control?" Of course, the parents said yes, and then the therapist gave each parent a set of 10 (3×5) cards, numbered consecutively from 1 to 10. The therapist then said, "Each of you has a card, numbered from 1 to 10, with 10 being high. Before I tell you what to do with these cards, I need your complete assurance that you will do exactly what I say. Are you willing?" The parents nodded affirmatively. Next the therapist said, "If you do this every single time it's appropriate, she will stop, very soon." After more assurances by the parents, the therapist said, "One thing about this type of behavior is that kids can sometimes do it better and sometimes do it worse. Since it's controllable, we've found by using this method, it effectively reduces the incidence—if it's used correctly. Many parents are distressed enough by the behavior to follow through. Do you think you are?"

After repeated assurances by the parents, the therapist then gave the following instructions: "Every time she does the behavior, it's your job to evaluate how well she does it. Go to where she is; turning the light on if she's in bed. Watch for 5 to 10 seconds to evaluate. Dad holds up his card with his rating. Mom then rates. Finally, dad adds the two ratings up, then divides by two, to get a single rating. Dad, in his very best fatherly tone, tells (child's name) her rating on this episode of the behavior. Then both parents calmly turn around and walk away, saying nothing more about the behavior. Do this every single time, but only one time per episode." Mom was assigned to keep track of the number of times they forget to do this.

At the following session (1 week later), the parents reported that during the first rating (while the child was in her bed) the girl stopped the head shaking and humming after several seconds of the parents observing and asked the parents what they were doing. They did not respond but simply completed the task as directed. During the second and third episodes, she stopped when the parents walked into the room. The fourth episode occurred in public; when the girl began her head movement and humming, the mom pulled out her set of cards and the girl stopped immediately. The following week no episodes occurred, and again at a 1-month follow-up, no additional episodes had occurred. The family was seen for a total of four sessions.

This case illustrates the use of an out-of-session task assigned to alter interaction around a problem behavior expressed by the child. The task and assignment method (i.e., specific oral instructions) allowed the family to view the distressful behavior as controllable. Each parent was assigned a unique part of the task, and as a unit, they engaged in behavior that modified the typical response to the presenting problem, thereby forcing new interaction patterns for the family.

VI. SUMMARY

Although multiple, disparate models of family therapy exist, all presuppose that the presenting problem is embedded and maintained in behavioral patterns that originated from inadequate, inappropriate, or dysfunctional interpersonal relationships. Consequently, the psychotherapy techniques used by a family therapist attempt to modify salient environmental features, most importantly interpersonal contacts or beliefs about those contacts, which alter interaction patterns, allowing the presenting problem to be unnecessary. These techniques include in-task and out-of-session behavioral tasks, reframes, and perspective-altering questions. Therapy is typically brief (less than 20 sessions) and ends when the presenting problem or behavior has stopped or is no longer considered distressful.

See Also the Following Articles

Behavioral Marital Therapy ■ Couples Therapy: Insight Oriented ■ Home-Based Reinforcement ■ Psychodynamic Couples Therapy ■ Spouse-Aided Therapy

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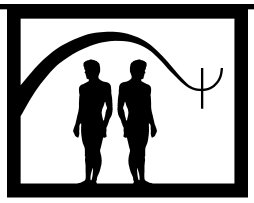

Feminist Psychotherapy

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GLOSSARY

consciousness-raising Activities that increase awareness about how oppressions such as sexism, racism, heterosexism, and ageism influence the lives of individuals.

feminist analysis and gender role analysis Techniques used to examine how inequality, injustice, and power imbalances may limit individual potential. Gender analysis involves examining restrictive gender role beliefs and behaviors, weighing their costs and benefits, and constructing alternatives to prescriptive gender roles.

the personal is political Personal issues are not individual concerns alone, but are shaped by cultural forces and have implications for political and social change.

Feminist therapy integrates feminist analysis with a variety of psychotherapy systems to support egalitarian psychotherapy practice and goals as well as social change. Of central importance to this approach are (1) efforts to address the connections between variables such as race, culture, class, sexual orientation, and gender; (2) a commitment to equality and social justice for all people; and (3) the assumption that both personal and social change are necessary to support feminist therapy goals.

I. DESCRIPTION OF TREATMENT

Psychotherapy was first described as "feminist" during the early 1970s. Feminist therapy was not founded by or connected to any specific person, theoretical position, or set of techniques; its origins are embedded in the diverse social change goals and activities of the women's movement. Feminist practitioners integrate knowledge about psychotherapy methods, social structures, multiple intersecting oppressions, activism, feminism, multiculturalism, and the diversity of women's and men's lives. Feminist therapy can be best defined as an umbrella or philosophical framework for organizing a therapist's assumptions and psychotherapy techniques. Important features include emphases on (1) consciousness-raising and activism; (2) egalitarian therapist–client relationships and goals; (3) diversity and the multiple meanings of gender; and (4) a sociocultural perspective that addresses relationships among the personal problems, social forces, and various "isms" (e.g., racism, heterosexism, sexism, ageism). Feminist therapists are informed by a wide range of personality and psychotherapy theories, eschewing only those techniques that support inequality or narrow life options.

In contrast to traditional psychological approaches that may emphasize internal attributes and pathologies, feminist therapists view problems from a complex biopsychosocial framework, highlighting the ways in which social realities shape, constrict, and limit choices. Intrapsychic explanations of distress may decontextualize problems, promote narrow thinking, or support victim blaming. If therapists define problems primarily as a set of symptoms, they may also tend to emphasize symptom removal, which may not result in genuine change or renewal, but may merely call on individuals to resolve issues by accepting the very circumstances that contributed to their problems.

From a feminist perspective, many psychological symptoms represent efforts to cope with negative conditions, and thus, reflect communication and survival mechanisms. These behaviors, which frequently play important short-term adaptive roles, often become increasingly uncomfortable and counterproductive over time, and may eventually exhaust a person's resources. The feminist therapist helps the client understand how these forms of coping, such as anxiety and depression, can be redirected in productive and empowering ways. The therapist's frame of reference is not how symptoms are signs of pathology that must be removed but rather, what symptoms convey about a person's circumstances, strengths, and coping skills.

The feminist therapist emphasizes egalitarian practice and shared responsibility, and views the client as competent and as an expert on his or her own life and circumstances. Due to the training of therapists, however, the relationship may approach equality but is not likely to be fully equal. From a feminist perspective, open therapist–client discussions of power and the positive and negative uses of power facilitate the client's ability to deal with unequal power both within and outside of psychotherapy. Believing that all human interactions are infused with values, feminist therapists often make their values explicit, and encourage clients to take an active role in clarifying their own values and preferences.

During the 1970s, feminist therapists provided leadership within mental health professions by promoting informed consent and highlighting the value of clearly negotiated, collaborative therapeutic contracts. Informed consent assists therapists and clients in evaluating progress regularly, minimizes the risk that therapists will abuse power or manipulate clients, and enables clients to assume optimal levels of responsibility for their own direction in psychotherapy.

The goals of feminist therapy emphasize personal awareness of biological, personal, relational, cultural, and sociocultural factors. Clients are encouraged to consider the role of both internal and external contributors to their problems and explore denied or distorted aspects of their experiences in order to discover hidden or submerged sources of strength. This consciousness-raising and clarification process may decrease clients' self-blame and help clients transform indirect forms of influence (e.g., symptoms) into direct, constructive, assertive expressions that support health. Clients may also explore ways in which restrictive environments may limit their freedom or may punish them for stepping outside of prescribed roles. In order to help clients deal with external and internal resistance to creative change, therapists often encourage clients to weigh the costs and benefits of change, and to consider how they may cope with negative reactions to their positive change efforts. Feminist therapists, recognizing that individual change alone will not lead to extensive systemic change, also attempt to devote some time to social action and advocacy. When appropriate, clients are also encouraged to become involved in social change or volunteer work that contributes to social justice.

As feminist therapists pursue the goals outlined above, they incorporate techniques from a variety of psychotherapy approaches. Some techniques are identified as hallmarks of feminist therapy, such as gender-role analysis, feminist analysis, self-disclosure, group work, and social change activities. Gender-role analysis, a component of assessment, involves exploring the impact of gender and related identity statuses (e.g., age, sexual orientation, race) on psychological well-being, and using this information to make new decisions about gender roles. Laura Brown summarized comprehensive gender role analysis as including the (1) exploration of gender in light of personal values, family dynamics, life stage, cultural/ethnic background, and current environment; (2) discussion of the rewards and penalties for gender role conformity or noncompliance in the past and present; (3) clarification of how the client–therapist relationship mirrors gender issues or provides insight about the client's gender roles; and (4) exploration of the client's history related to victimization and oppression. A victimization history may include information about interpersonal violence, sexual harassment, assault and abuse, racism, sexism, heterosexism, and other related injustices that have contributed to the person's gender-related rules. The goals are to clarify how gender-related messages were absorbed by the individual, what functional and negative forces they have played in the individual's life, and how the client can use this information to choose emotional,

cognitive, and behavioral responses that enhance health.

Feminist analysis and power analysis refer to various methods for helping clients understand how unequal access to power and resources can influence personal choices and distress. Therapists and clients explore how inequities or institutional and cultural barriers may limit or complicate self-definitions, achievements, and well-being. To facilitate this process, therapists may provide information about dynamics or statistics associated with problems related to the unequal distribution of power (e.g., family violence, divorce, traditional marriage, sexual abuse). They also use open-ended questions to explore these dynamics and how clients can develop positive, personal approaches to power and relationships that empower themselves and others. Bibliotherapy, therapist self-disclosure, and psychoeducational groups may also be incorporated into feminist analysis.

Both gender-role and feminist analysis help clients reframe problems and develop new lenses for understanding issues, which often lead to renewed self-esteem. Rather than viewing themselves as deficient and needy individuals who must experience psychological overhaul, clients learn to define themselves as capable individuals who will benefit by redirecting their energy toward new goals.

Self-disclosure and group work are sometimes used to build connections between diverse groups of women, demystify the psychotherapy process, and decrease power differentials in psychotherapy. Therapist self-disclosure may decrease a client's feelings of isolation, and help the client connect abstract concepts about social structure and gender role conflicts to real-life issues. Through carefully timed and appropriate self-disclosure, the feminist therapist may serve as a coping model whose human qualities facilitate client empowerment. As noted by the Feminist Therapy Institute "Ethical Guidelines for Feminist Therapists," all self-disclosure must be used "with purpose and discretion and in the interest of the client." Group work, including consciousness-raising, support and therapy groups, psychoeducational groups, and seminars may also decrease feelings of isolation between clients and foster self-trust and social support. The sharing of life stories supports the mutual disclosure of gender role conflicts and everyday inequities, and often facilitates increased awareness of gender issues and solidarity among members. Members learn to use power effectively by providing support to each other, practicing new skills, and taking interpersonal risks in a safe environment. Groups also decrease power imbalances between therapists and clients because members are not only receiving, but also giving emotional and practical support.

II. THEORETICAL BASES

During the first decade of feminist therapy practice, practitioners tended to be most concerned with responding effectively and immediately to the extensive gender-related problems that had been ignored, marginalized, or distorted by the lenses of mental health professions that had been dominated by androcentric theories and practices. The feminist critique of the mental health professions focused primarily on four overlapping issues: (1) personality theories and research that supported biased models of therapy; (2) double standards of mental health that overvalued attributes described as "masculine" and devalued attributes labeled as "feminine"; (3) diagnostic practices that contributed to labeling clients without regard to contextual, situational contributors to distress; and (4) psychotherapy relationships in which an all-powerful therapist defined reality for the client.

In the late 1960s, Naomi Weisstein declared that "psychology has nothing to say about what women are really like, what they need and what they want, essentially, because psychology does not know." A study conducted by Inge Broverman and colleagues during the early 1970s also revealed that mental health professionals' views of healthy men and women were influenced by gender stereotypes. In addition, Phyllis Chesler's influential book, *Women and Madness,* compared the therapy relationship to that of a patriarch and patient, noting that this relationship mirrored women's roles in patriarchal families where women were rewarded for submitting to an all-knowing father figure. Chesler argued that the band of "normal" behavior for women was extremely narrow and that women were diagnosed for both underconforming and overconforming to limiting mandates.

These powerful critiques, along with the activism of the women's movement, contributed to an initial emphasis on providing immediate, practical, respectful therapeutic options to women, as well as changing the systems in which therapy occurs. Following the establishment of basic principles, feminist therapists focused on developing theory that supports ethical practice, and one outcome was the Feminist Therapy Institute's "Ethical Guidelines for Feminist Therapists." These principles are not designed to replace other codes, but

to enhance feminist practice by enumerating positive, proactive responsibilities regarding cultural diversities and oppressions, power differentials, overlapping relationships, therapist accountability, and social change responsibilities of feminist therapists.

Rather than articulating one feminist theory of practice, feminist therapists have tended to propose criteria for evaluating theories applied to women's lives. For example, Hannah Lerman indicated that feminist personality theories should (1) view women positively and centrally, (2) avoid confining concepts, (3) encompass the diversity and complexity of women's lives, and (4) attend to the inextricable connections between the internal and external worlds. The feminist theory working group of the 1993 National Conference on Education and Training in Feminist Practice proposed that feminist theories should (1) support social transformation and the development of feminist consciousness; (2) emerge from and speak to the lived experiences of clients who exist in changing social worlds; (3) address power imbalances related to gender and diversity; (4) give voice to and authorize the world views of oppressed persons; (5) recognize that psychological constructs, including feminist constructs, are not based on universal "truths," but vary across time and culture; and (6) de-center the experiences of dominant groups, whose behaviors are often defined as healthy, correct, or normal. Several feminist psychological theories have also provided important foundations for the work of many feminist therapists. These include Sandra Bem's gender schema theory, Carol Gilligan's work on the relational qualities of women's ethics, and the self-in-relation model of Jean Baker Miller and colleagues at the Stone Center at Wellesley College.

The work of feminist therapists is informed by a wide range of sociological, philosophical, political, feminist, and psychological theories, and these feminist philosophical theories posit a variety of overlapping and sometimes competing views of the meanings and nature of sex and gender, the causes and consequences of gender oppression, the implications of gender-related inequity, and solutions to gender-related oppression. Feminist theories bear diverse labels such as liberal feminism, cultural feminism, radical feminism, women of color feminisms, lesbian feminism, global feminism, socialist feminism, postmodern feminism, and third wave feminism. Although feminist therapists generally agree on basic principles of practice, their unique orientations to feminism may have profound impacts on their interpretation of feminist therapy principles and choice of psychological and social interventions. One's feminist theoretical perspective influences the degree to which the therapist believes that (1) gender is socially constructed or an aspect of one's essential nature; (2) self-disclosure serves as a useful support for empowerment; (3) traditional diagnosis can or cannot be integrated with an egalitarian stance with clients; and (4) social change activity is an essential role of feminist therapists.

Judith Worell and Pam Remer developed a five-step decision-making model to help feminist therapists assess the compatibility of specific psychological theories and feminist therapy principles and, when necessary, transform incomplete or biased theories. The decision-making sequence starts with the identification of a theory's historical development and theoretical concepts, its views of clients' problems, its use of language and labels, the functions and roles of diagnosis and assessment, the role of clients and therapists, and techniques. Therapists then identify limitations, consider ways to restructure the theory, and incorporate aspects of other theories to construct more inclusive, egalitarian approaches.

III. APPLICATIONS

As a philosophical approach that can be integrated with a wide range of psychological theories, feminist therapy is applied to a broad range of psychological problems, including those problems that are often defined as "feminist" (e.g., sexual and domestic violence, sexual harassment), as well as problems that are influenced by biological factors (e.g., bipolar disorder, schizophrenia, anxiety, depression). Approaches to dealing with the following issues have received the most extensive attention in the feminist therapy literature: achievement and career issues, eating disorders, addictions, relationship issues, sexual assault and abuse, sexual harassment, family and domestic violence, trauma-related problems, depression, anxiety, and dissociative disorders.

Some early feminist therapists opposed the use of prescription medications because some practitioners' indiscriminate and singular use of some biological interventions represented forms of superficial treatment, social control, or led to addiction (e.g., the prescription of valium to homemakers in order to ease anxieties related to dissatisfying roles). At present, however, most contemporary feminist therapists operate from a biopsychosocial model that highlights social contributions to distress but also recognizes multiple contributions to psychological problems, including biochemical imbalances. Feminist psychopharmacology, an aspect of feminist psychiatry and therapy, is characterized by

the integration of feminist principles with attention to biases in medical diagnosis and research, vigilance about gendered prescribing practices, rejection of mind–body dualisms, and respect for the client's choices and treatment preferences. Phyllis Chesler, an early critic of the medical control of women through biological interventions, has recently argued that although clients are still often overmedicated or wrongfully medicated, medical advances have increased the quality of life of many. A sociocultural framework remains crucial for ensuring that clients experience an integrated approach that addresses the full range of internal and external contributors to distress.

Feminist therapy was originally developed by, practiced by, and applied to work with women. However, there has been increased recognition of the ways in which men's traditional roles and socialization can also be restrictive. Feminist therapy may be used to help men redefine masculinity according to values other than power, prestige, and privilege. Feminist therapy may also help men integrate relationship and achievement needs; increase men's capacity for intimacy, emotional expression, and self-disclosure; create mutually rewarding and collaborative relationships; and learn noncoercive problem-solving methods. In order to affirm men's contributions to justice and egalitarianism while also preserving the uniqueness of women's experiences as therapists and clients, some feminist therapists refer to the feminist activities of male therapists as profeminist therapy. Profeminist approaches are applicable to a wide range of men's problems including depression, anger management, interpersonal violence, anxiety issues, addiction, achievement concerns, and relationship and family problems.

Feminist therapy is appropriate for working with a variety of diversities, such as ethnicity, multicultural themes, class issues, life stage issues, sexual orientation, and physical disability. A substantial feminist therapy literature has emerged on the counseling needs of women of color, lesbians, and bisexual women. Authors such as Oliva Espin, Lillian Comas-Diaz, Beverly Greene, and Karen Wyche have also articulated feminist therapy approaches relevant to diverse groups of women of color, including immigrant women and lesbians of color.

IV. EMPIRICAL STUDIES

Some of the earliest studies relevant to feminist therapy examined the impact of consciousness-raising groups on participants, and in general, found that participation in these groups was associated with increased endorsement of feminist attitudes and expanded concepts about women's potential. During the late 1970s, Marilyn Johnson's comparison of a small sample of clients who participated in feminist or conventional therapy found that these two groups reported similar types of problems, similar levels of satisfaction, and similar levels of change. Diane Kravetz, Steven Finn, and Jeanne Marecek compared the experiences of consciousness-raising group members who had sought feminist or conventional therapy and found that women who defined themselves as feminist reported higher levels of satisfaction when the therapist was feminist.

Another group of studies examined reactions of potential clients to videotaped, audiotaped, or written depictions of nonsexist, liberal feminist, and radical feminist therapy. Gail Hackett and Carolyn Zerbe Enns found that feminist respondents, including male participants with profeminist values, showed more positive reactions to all versions of counseling than individuals who did not endorse feminist values. Research participants were able to accurately identify counselors with a feminist orientation and generally expressed positive attitudes toward feminist therapists. Respondents also rated liberal and radical feminist counselors as emphasizing similar goals, but viewed radical feminist counselors as communicating these goals more strongly than liberal feminist therapists.

Recent survey studies have explored shared values and perspectives of feminist therapists and how these values may differentiate their work from therapists who do not define themselves as feminist. Judith Worell, Redonna Chandler, and colleagues found that self-identified feminist or woman-centered therapists were significantly more likely than nonfeminist therapists to endorse the following behaviors: affirming the client, adopting a gender-role perspective, valuing woman-centered activism, using therapist self-disclosure, and displaying an egalitarian stance. In 2000, Bonnie Moradi and colleagues compared the reported behaviors of feminist therapists and those who did not identify themselves as feminist. A factor analysis of feminist therapy behaviors revealed three major themes: (1) an emphasis on gender role analysis and the personal is political, (2) empowerment through respecting individual differences and focusing on strengths, and (3) valuing behaviors such as assertiveness and autonomy. When examining the five top-ranked behaviors of feminist therapists, this study found no significant differences between feminist therapists and other therapists with regard to displaying empathy and unconditional positive regard toward clients. However, feminist therapists were significantly more likely to describe their top

five behaviors with both male and female clients as consistent with the following: (1) paying attention to clients' experiences of discrimination, (2) adopting a collaborative role with clients, (3) reframing problems to include an emphasis on socialization, and (4) enhancing self-esteem by emphasizing clients' unique and positive qualities. Marcia Hill and Mary Ballou's 1998 survey of 35 feminist therapists also revealed the following themes: (1) attention to power differences, overlapping relationships, and therapist accountability; (2) an emphasis on the sociocultural causes of distress; (3) the valuing of women's experience; (4) application of an integrated analysis of the multifaceted and interlocking aspects of oppression; and (5) an emphasis on social change. These findings show the repeated endorsement of two key groupings of feminist therapy principles: the personal is political, and egalitarianism.

A final group of studies examined whether actual clients have viewed their therapists as displaying feminist therapy behaviors. Studies conducted by Judith Worell, Redonna Chandler, Anne Cummings, Niva Piran, and colleagues showed that clients view feminist therapists as displaying the qualities and behaviors that feminist therapists endorse (e.g., empowerment, reducing power differentials, exploring gender-role issues). Noting that traditional measures of symptom reduction are not consistent with feminist therapy outcomes, this group of researchers has also developed measures of feminist empowerment and have found that feminist therapy clients report outcomes consistent with feminist empowerment (e.g., resilience, developing coping skills for dealing with barriers).

Given the fact that feminist therapy is usually defined as a philosophical approach rather than as a highly standardized, technique-oriented approach to therapy, the examination of the processes and outcomes of feminist therapy is complex. Nevertheless, it is essential for researchers to study the process and outcome variables associated with distinctive techniques such as gender-role analysis, feminist social and power analysis, and feminist self-disclosure. It is also important to examine outcomes related to feminist therapy for specific types of problems (e.g., sexual assault, career counseling) as well as how the theoretical diversity of feminist therapists is reflected in actual feminist therapy behaviors.

V. CASE ILLUSTRATION

Briana, a 21-year-old college student, reported difficulty concentrating on courses, conflicts with her boyfriend and parents, depressed feelings, anxiety, and nightmares. Other issues included difficulties trusting others, feelings of inadequacy, dysfunctional eating, and alcohol use. During initial sessions, Briana's therapist also asked questions about family and relationship interaction patterns, paying special attention to "shoulds" and beliefs that appeared related to gender dynamics in her family, friendships, and school experiences. When the therapist (Jean) inquired about the presence of past trauma or victimization, which is one aspect of gender-role analysis, Briana reluctantly revealed being the target of sexualized comments during her high school and college years and an unwanted sexual experience during her second year in college. After inquiring further about these experiences, Jean hypothesized that Briana coped with these unresolved events by minimizing the significance of these events. Her use of alcohol, eating issues, and her anxieties represented survival skills related to Briana's efforts to cope with events that might be too overwhelming to acknowledge. Although Briana's descriptions of unwanted sexual encounters were consistent with legal definitions of sexual harassment and rape, she did not label these experiences with these terms. She merely noted that she had been stupid and gullible, and that in accordance with her family's subtle "shoulds," she had learned to avoid thinking about these issues in order to "get over it and move on." After focusing briefly on the costs and benefits of this belief, Briana stated that she did not want to think about these experiences while she was trying to cope with pressing everyday demands.

Respecting Briana's ability to assess her most immediate needs, subsequent sessions focused on helping her deal more effectively and assertively with interpersonal and academic tasks. Jean and Briana identified and practiced concrete strategies for negotiating conflicts with her boyfriend and parents, dealing with anxiety and concentration problems, and decreasing her use of alcohol. Briana developed new communication skills, cognitive behavioral tools, coping imagery, and relaxation to deal with the immediate problems. Although Briana became more confident about everyday coping, she admitted that she continued to have nightmares, did not enjoy physically intimate contact with her boyfriend, and still used alcohol or food to submerge depressed feelings.

In response to the therapist's tentative hypothesis that her negative sexual experiences might be related to these issues, Briana expressed willingness to explore this material. The therapist briefly disclosed that her own sexual assault as a college student had drained her energy and productivity for some time, but that working through her reactions had freed her to deal more

effectively with life tasks and direct her anger in productive directions. While acknowledging that Briana's experience was unique, she noted that the research literature reveals that many women have long-term reactions to unwanted sexual behavior, and proposed that exploring this material might be a constructive experience.

Before talking specifically about her unwanted sexual experiences, Jean and Briana identified how she might use the new skills she had learned to deal with uncomfortable emotions that could emerge during their next phase of exploration. Briana described her memories about the painful sexual experience of the past year, which had involved a friend forcing her to have sex following an evening at a party and a bar. She had coped by defining it as a bad experience, and had stifled painful emotions because she believed that family and friends would not believe her or would blame her for being "seductive." As Briana described the assault, she cried and expressed feelings of sadness and anger. Jean supported her expression, framing it as a new type of response-ability and a chance to refocus her intense feelings from depression to more direct expression of her feelings.

Building on earlier gender-role analysis activities, Jean encouraged Briana to draw potential connections between her thoughts about the sexual violation and messages and myths she had learned from family, media, and friends. These included (1) "It was my fault because I was dressed in a sexy outfit"; (2) "It was my fault because I had two beers and could not resist like I should have"; (3) "He was a good friend and wouldn't do anything to hurt me, so I must have sent the wrong signals"; and (4) "It's a sign of weakness to be overwhelmed by this." An exploration of the myths that supported these beliefs (feminist analysis) helped Briana understand how the cultural "smog" she had been exposed to had affected her self-statements. Further examination also focused on how her status as an African-American woman contributed to her realistic fears about how others would react to potential disclosure about harassment and sexual violation. They discussed how myths associated with confining images of African-American women's sexuality as Sapphires and Jezebels contribute to beliefs that Black women are promiscuous, sexually voracious, dominant, and incapable of being raped. Thus, Briana may have been affected by these beliefs, perhaps nonconsciously, and did not believe she could expect empathy from others. Paying attention to personal trauma is not unique to feminist therapy; however, efforts to place victimization within a larger social context by exploring myths and social attitudes, as well as efforts to redirect self-blame associated with these myths are important features of feminist therapy.

Jean also recommended several books that (1) identify the dynamics of acquaintance rape and gender harassment on college campuses (*I Never Called It Rape,* by Robin Warshaw), (2) discuss the acquaintance rape of women of color as well as cultural beliefs that support acquaintance rape in American culture (*A Woman Scorned,* by Peggy Sanday), and (3) describe healing after rape (*After Silence,* an autobiographical account by Nancy Venable Raine). After writing about her experience for a homework assignment and reading these materials, Briana developed a new framework for conceptualizing the personal violations, and began to use the terms rape and sexual harassment to describe her victimization. The books affirmed and validated her experience, and provided additional permission to deal more specifically with the consequences of harassment and rape.

Counseling sessions also focused on (1) finding effective ways of expressing feelings related to personal violation and anger, and translating this anger into positive directions; (2) talking with intimate others about her experiences of violation; and (3) learning to initiate intimate contact on her own terms. Briana's therapist referred her to a support group for sexual assault survivors, and in this setting she was able to work through additional feelings in a supportive environment, overcome feelings of isolation, and experience empowerment through connections with others. She also became more aware of the many ways in which media promote rape and how fears about rape often constrict women's lives. Briana enrolled in a psychology of women course in order to gain more understanding of gender dynamics, and as an extension of her emerging interest in activism and supporting others, she enrolled in crisis training at a rape crisis hotline. She also joined several student activist groups on campus, including Sisters for Sisters, a group designed to provide support for women of color on campus.

VI. SUMMARY

Some form of unequal power, victimization, or abuse often underlies the concerns that clients bring to therapy. Many clients have experienced abuse or unequal power over an extended period of time, and may enter therapy with intense feelings of guilt, isolation, and self-denigration. These clients often use denial or minimization as methods for coping with the long-term, insidious effects of unequal power and abuse and may have difficulty

identifying and naming the problems they are experiencing. As clients disclose personal information, the therapist and client examine how these issues are influenced by the contexts in which they live, confront personal myths that support internalization, and identify ways in which symptoms serve as survival mechanisms. Working through these problems is often difficult because they have become entrenched and solidified by many years of restrictive socialization and unequal power.

As clients experience new levels of awareness, they often express previously suppressed feelings of anger, pain, grief, or disappointment. Clients also explore sources of strength, capacity, and personal power, which help them develop new coping and behavioral skills for caring for themselves and interacting with others. Finally, creating new support systems that support individual changes reinforces positive progress and also helps individuals think more globally about the implications of their experience for social change in general.

See Also the Following Articles

Cultural Issues ■ History of Psychotherapy ■ Multicultural Therapy ■ Oedipus Complex ■ Race and Human Diversity ■ Women's Issues

Further Reading

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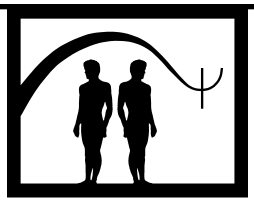

Flooding

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GLOSSARY

conditioned response Response to conditioned stimulus; similar to response to unconditioned stimulus.
conditioned stimulus Stimulus that elicits similar response as unconditioned stimulus after repeated pairings.
exposure General term for many therapeutic techniques in which clients are presented with feared stimuli or situations in order to reduce anxiety symptoms.
neutral stimulus Stimulus that produces no response prior to repeated pairings with unconditioned stimulus; becomes conditioned stimulus.
operant conditioning Type of learning; responses that are reinforced will be repeated, whereas responses that are punished will not be repeated.
respondent conditioning Type of learning; repeated pairing of unconditioned and neutral stimuli will result in neutral stimulus becoming conditioned stimulus and eliciting conditioned response.
unconditioned stimulus Stimulus that elicits response without training.

Flooding is an intervention developed for the treatment of anxiety symptoms. This article will discuss the main variations of flooding and the theoretical basis for the intervention. Finally, a review of the effectiveness of this intervention with anxiety symptoms as well as a discussion of contraindications are provided.

I. DESCRIPTION

Due to the many variations of flooding, it is difficult to provide a concise and universal definition of the technique. Traditionally, flooding has been defined as a technique that involves prolonged exposure to feared stimuli or situations at full intensity, in an attempt to extinguish anxious responses. In other words, from the beginning of treatment, the client is exposed to stimuli that evoke maximal anxiety. In addition, the client is exposed to these stimuli for prolonged periods of time, until anxiety has begun to dissipate. Flooding typically is conducted *in vivo,* with live presentation of anxiety-provoking stimuli. The duration of each session varies depending on the client's presentation, with a typical session lasting anywhere from 90 to 180 minutes. The length of the session is not predetermined but instead is dictated by the client's level of anxiety. In addition, the number of sessions is not fixed but instead is based on the client's anxiety level. Research suggests that significant symptom reduction generally occurs following 10 to 15 hours of exposure. Throughout the flooding procedure, anxiety symptoms should be consistently monitored via physiological assessment or client subjective

ratings of distress. Sessions typically are spaced close in time (e.g., daily or several times per week) rather than scheduled at weekly intervals.

This general definition of flooding belies the many variations of the technique that have been reported in the literature. Overall, many central features, including the method and intensity of stimuli presentation, as well as the use of response prevention techniques, may vary while still being considered flooding. Rather than consider flooding one technique, it may more properly be considered a collection of techniques that are designed to expose clients to anxiety-inducing stimuli with the purpose of reducing anxious responses. A description of the variations of flooding is required to fully understand this collection of techniques.

A. *In Vivo* versus Imaginal Flooding

Clients may be exposed to actual feared stimuli (*in vivo* flooding) or may be asked to picture feared stimuli (imaginal flooding). Deciding which procedure to employ requires clinicians to consider practical matters as well as prior research. Overall, studies have found that *in vivo* exposure is superior to imaginal exposure in reducing anxiety symptoms. In particular, for simple phobias, anxiety reduction is clearly enhanced with *in vivo* exposure. However, *in vivo* stimuli presentation has been found only marginally superior to imaginal exposure for obsessive–compulsive symptoms.

Logistically, setting up *in vivo* exposure situations may be difficult when the fear involves remote or unpredictable stimuli (e.g., fear of earthquakes). Further, it may be impossible to arrange *in vivo* exposure to existential fears (e.g., fear of dying). Finally, due to the anxiety-inducing nature of treatment, clients may be more reluctant to engage in live exposure situations, at least initially. However, imaginal exposure also has its difficulties. First, not all clients are capable of evoking anxiety-inducing images in sufficient detail or for sufficient periods of time, which may necessitate time-consuming imagery training. Second, clinicians never will be able to fully ensure treatment adherence with imaginal exposure, as such procedures are assessed only via self-report. In other words, it is impossible for clinicians to accurately assess the clarity and duration of imagery, as well as whether the client is avoiding focusing on the anxiety-invoking image.

B. Graduated versus Intensive Stimuli Presentation

Clients may be exposed to stimuli in a graduated fashion, beginning with a stimulus that induces little anxiety, or in an intensive fashion, beginning with a stimulus that is maximally anxiety-provoking. The decision on which format to follow should be based on prior research and practical concerns. Research has demonstrated that either format is effective in reducing overall anxiety symptoms, both immediately following treatment and after a short interval. However, one study found that intensive exposure appears more effective in the long run: 5 years posttreatment, 76% of the intensive exposure group and 35% of the graduated exposure group remained free of anxiety symptoms for the treated stimulus. Surprisingly, in comparison to reports from the intensive exposure group, clients who received graduated exposure reported that the procedure was more distressing overall.

Despite research supporting effectiveness of the intensive approach, a decision to utilize this format must be tempered by the acceptability of the approach to clients. Studies have found that the graduated approach produces fewer clients leaving treatment prematurely. The intensive approach, due to its high anxiety-provoking format, may be intimidating to clients, at least initially.

C. Response Prevention versus Exposure Alone

Typically, flooding involves both exposure to a feared stimulus and a response prevention component. In other words, once exposed to the stimulus, clients are prevented from responding with escape or avoidance behaviors. It was believed that allowing clients to avoid focusing on the anxiety or to escape the flooding situation prior to anxiety reduction would only increase anxiety symptoms. Prevention of escape or avoidance behaviors was once considered the hallmark of flooding procedures. However, more recent research has suggested that exposure alone may be as effective as exposure with response prevention.

Studies on the role of avoidance behaviors have examined the use of distraction techniques (e.g., playing video games, spelling tasks) or medications (e.g., anxiolytics) during flooding procedures. Cognitive distraction techniques allow clients to avoid focusing on their feelings of anxiety. Anxiolytics, which are designed to reduce anxiety symptoms, may prevent anxiety induction and allow clients to avoid focusing on feelings of anxiety during flooding. Research has found that distraction provides more rapid decrease in both subjective reports of anxiety and in avoidance responses immediately following treatment and at short-term follow-up. In addition, research has found that concurrent use of anxiolytic medications and flooding was effective in reducing

subjective reports of anxiety symptoms, particularly early in treatment.

Studies on the role of escape behavior have found that flooding is effective in reducing overall levels of anxiety even if clients are allowed to terminate flooding sessions when their anxiety reaches unduly high levels. In other words, research has found that keeping a client in the session until anxiety decreases (within-session reduction of anxiety) is not necessary for successful treatment outcomes. In addition, clients allowed to escape the anxiety-inducing situation reported more perceived control and less overall fear during the flooding session than clients who were told to remain in the situation.

Taken together, these studies suggest that long periods of unavoidable or inescapable anxiety are not essential for anxiety reduction. In addition, it appears that clients may find exposure alone without a response prevention component to be more acceptable and less distressing.

D. Summary of Variations

Given the many variations of flooding, clinicians must, in collaboration with clients, make difficult decisions as to which method to employ. Research has not provided a clear answer regarding which variation works best with which client. In general, *in vivo* flooding with intensive presentations of stimuli appears to be most effective with the majority of clients. Requiring clients to remain in high-anxiety situations for long periods of time, once considered the hallmark of flooding, no longer appears necessary.

Once a clinician and client agree on the preferred flooding method, many unanswered questions remain regarding the optimal presentation of the technique. Although most researchers agree that massed sessions are more effective than spaced sessions, optimal frequency of sessions has not been determined. In addition, debates are ongoing over the necessity of clinician-directed individual sessions. Research supports the idea that flooding is as effective with group sessions as it is with individual sessions. In addition, research has found that self-directed flooding may be as effective as therapist-directed flooding, albeit somewhat less rapid.

II. THEORETICAL BASES

To understand how flooding is believed to work, acquisition and maintenance of fear or anxiety first must be considered. Orval H. Mowrer developed a two-factor theory that incorporates both respondent and operant conditioning principles. He posited that fear originally is learned through respondent conditioning but maintained through operant conditioning. A person learns to fear a previously neutral stimulus when it is paired over time with an aversive unconditioned stimulus. Once this conditioned stimulus elicits fear, the person will engage in escape or avoidance behavior in an attempt to reduce fear or anxiety. Successful reduction in fear or anxiety reinforces escape or avoidance behaviors, increasing the likelihood that they will be repeated in the future.

Based on the two-factor model, flooding is believed to work to reduce anxiety by the process of extinction. Extinction is defined as repeatedly presenting a conditioned stimulus without an unconditioned stimulus; over time, the conditioned response will diminish. During flooding, the person experiences no aversive event with the presentation of the feared stimulus. Repeated and continual presentation of the conditioned stimulus without the unconditioned stimulus results in extinction of the fear response over time.

Traditionally, theorists have touted the necessity for both within-session and between-session extinction for flooding to be effective. In other words, it was believed that successful flooding entailed diminishment of anxiety both within a single flooding session and across several sessions. As previously indicated, research has not consistently supported this belief, as some studies have found that within-session reduction of anxiety is not necessary for successful outcomes. However, it should be noted that the majority of studies support the view that the combination of within- and between-session extinction increases the likelihood of positive treatment outcomes.

Although extinction is the predominant theory regarding the mechanisms of flooding, Edna Foa and Michael Kozak offered an alternative view based on emotional processing theory. Briefly, this theory stated that anxiety-provoking stimuli reactivate a fear memory from some earlier trauma. During treatment, incompatible information is presented to the client, in that the client is exposed to feared stimuli without negative outcomes. This information is incorporated into the fear memory, so that a new memory is formed. In other words, Foa and Kozak posited that it is the processing and incorporation of corrective information that is the mechanism for reducing anxiety or fear during flooding, rather than simple extinction. Their model includes a cognitive component that is not discussed in the extinction literature.

One final issue should be noted regarding the theoretical bases of flooding. Flooding frequently has been confused with other anxiety-reduction techniques, such as

systematic desensitization and implosion. Although there is much procedural overlap among these techniques, there are some significant theoretical differences.

Systematic desensitization is a behavioral technique that involves short periods of exposure to feared stimuli, which are presented in a graduated or hierarchical fashion. As previously discussed, flooding may utilize either a graduated or intensive presentation of anxiety-inducing stimuli. Therefore, the major difference between flooding and systematic desensitization lies not in procedural differences but in the theoretical mechanisms believed to underlie the techniques' effectiveness. In systematic desensitization, clients are taught a competing response (i.e., progressive muscle relaxation), so that feelings of anxiety experienced while undergoing treatment may be minimized. Joseph Wolpe, the developer of systematic desensitization, advocated the theory of reciprocal inhibition, the idea that it is impossible for a person to feel both anxious and relaxed at the same time. He concluded that anxiety could be reduced by inducing a relaxed state and then slowly introducing anxiety-invoking stimuli; due to reciprocal inhibition, the relaxed state would inhibit the anxious responses. As previously discussed, flooding is presumed to operate due to extinction processes rather than reciprocal inhibition.

Implosion is a technique developed by Thomas Stampfl and Donald Levis, based on psychodynamic theory. In flooding, no attempt is made by the clinician to construct scenarios that elaborate or expand on the situations described by the client. Implosion, on the other hand, involves exploring clients' childhood memories and developing hypothesized cues based on repressed childhood trauma. Hypothesized cues may involve Oedipal situations, death wish impulses, and fears of castration, to name a few. Implosion imaginally exposes clients to horrific situations, including bodily injury, world annihilation, universal condemnation, and abandonment, in an attempt to induce maximal levels of anxiety. Psychodynamic theory underlying implosion requires use of hypothesized cues, whereas the behavioral theory behind flooding generally eschews these hypothesized cues for cues based on current symptom presentation.

III. EMPIRICAL SUPPORT

Flooding was introduced to the psychological literature via animal studies. In one early study, rats were conditioned to avoid electric shock in one half of a cage by moving to the other side of the cage when a buzzer sounded. After conditioning, the buzzer was continually sounded while the rats were prevented from emitting the avoidance response by the presence of a barrier in the middle of the cage. After several long trials of continuous stimulus presentation along with response prevention, the rats no longer exhibited the avoidance response in the presence of the buzzer when the barrier was removed. Human studies quickly followed, including numerous case reports in which adult subjects were successfully treated via flooding for examination panic, snake phobia, and spider phobia.

Since that time, many studies have been done establishing the effectiveness of flooding for the treatment of anxiety symptoms. Flooding has been found effective in treating adults with the following anxiety disorders: obsessive–compulsive disorder, simple phobias, social phobia, agoraphobia, posttraumatic stress disorder, and panic disorder. For example, in a 1993 meta-analysis, George Clum, Gretchen Clum, and Rebecca Surls found that flooding was the treatment of choice for panic disorder, showing better results than other psychological techniques (such as systematic desensitization) or medications. In a 1995 review, Melinda Stanley and Samuel Turner concluded that flooding was the treatment of choice for obsessive–compulsive disorder, resulting in greater reduction of anxiety symptoms, decreased drop-out rates, and decreased relapse rates over time than other psychological techniques or pharmacological treatments. Across all anxiety disorders, flooding has been found to be effective in the 60 to 75% range. Longitudinal studies have reported that symptom improvement may last up to 9 years.

There have been few studies examining efficacy of flooding with children. Research that has been conducted has demonstrated that flooding is effective in treating childhood obsessive–compulsive disorder, posttraumatic stress disorder, specific phobias, and panic attacks. Results should be interpreted with caution, as prior research has focused solely on case studies. To date, no large-scale group study examining long-term outcome has been conducted with children.

Research has not supported a common belief among clinicians that flooding inevitably retraumatizes clients or further exacerbates problems. It is true that brief exacerbation of anxiety symptoms may occur throughout treatment as the client is exposed to feared stimuli or situations. Overall, however, studies have found that negative side effects of flooding are extremely rare. In one survey of practitioners, only 9 out of 3493 clients undergoing flooding techniques experienced any negative

effects. The complications that did occur were serious, however, and included exacerbation of vegetative depressive symptoms, increased suicidal ideation, relapse of alcoholism, and precipitation of panic disorder. It is likely that comorbidity with other Axis I disorders increases the risk of negative outcome of flooding. Therefore, flooding may not be the treatment of choice if, in addition to anxiety symptoms, the client is diagnosed with Major Depressive Disorder or Substance Abuse/Dependence. There are no known studies that have demonstrated an increased risk of physical problems due to flooding. However, it is possible that intense exposure to anxiety-inducing stimuli may aggravate medical conditions such as high blood pressure and asthma. Therefore, clinicians should require clients with physical ailments or on medications to obtain medical clearance prior to implementing flooding techniques.

IV. SUMMARY

Overall, flooding has been found effective in reducing anxiety symptoms with both children and adults. In addition, flooding techniques are relatively brief and results may be long lasting, making flooding an extremely cost-effective treatment. As previously reported, flooding has been found to be effective in the 60 to 75% range across all anxiety disorders.

Although flooding is the treatment of choice for many anxiety symptoms, it should not be the first treatment employed when anxiety is due to a skill deficit. In that case, the deficit should be remedied by skill-building techniques prior to assessing the need for anxiety-reducing therapies. Flooding may not be successful in cases where the client is in the process of seeking compensation for trauma (e.g., via a lawsuit, worker's compensation). In a case where compensation is dependent on continued demonstration of symptoms, the client may sabotage treatment efforts, making it unlikely that any therapy technique would be effective.

Despite positive research results, flooding may not be frequently employed by clinicians for two main reasons. First, there is a widely held belief that flooding results in negative side effects. Although rare, it is true that serious negative side effects have occurred during flooding, including the exacerbation of existing Axis I symptoms. To prevent this, clinicians should not employ flooding as a first-line treatment with clients with comorbid Major Depression or Substance Abuse/Dependence diagnoses. In addition, clinicians should carefully monitor clients throughout treatment to assess for exacerbation of any comorbid symptoms.

A second reason that flooding may not be frequently employed is the belief that the technique is not acceptable to clients. To address client concerns, all reasonable treatment options as well as the research supporting each option should be presented to clients prior to implementing a treatment plan. The theoretical rationale for flooding should be clearly explained to clients, and clients should be warned that brief exacerbation of anxiety symptoms is to be expected. Clinicians should debunk myths about flooding and reassure clients that they will be allowed to leave the situation if needed. Not only is it unethical to prevent clients from withdrawing from treatment, research has not supported the idea that preventing escape or avoidance responses is necessary for successful outcomes. Finally, clinicians should fully inform clients about the many variations of flooding. It is likely that the options of imaginal and graduated presentations of stimuli would be more acceptable to clients, at least initially. When employed with informed and cooperative clients, flooding may be one of the most effective techniques a clinician has to treat anxiety symptoms.

See Also the Following Articles

Classical Conditioning ■ Danger Ideation Reduction Therapy ■ Exposure ■ Informed Consent ■ Panic Disorder and Agoraphobia

Further Reading

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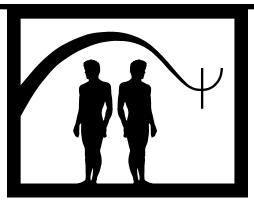

Formulation

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GLOSSARY

central relationship pattern Repeated and maladaptive ways of initiating and maintaining important interpersonal relationships, presumed to be based on early interpersonal experiences and innate dispositions.

core beliefs Organizing beliefs or schemas about the self, others, and the world that are presumed to precipitate and maintain psychological problems.

functional analysis Causal relationships among a patient's problematic behavior, goals, affects, and cognition.

states of mind Recurrent and distinct complexes of affect, cognitiion, experience, and behavioral propensities.

Case formulation is a core psychotherapy skill that posits hypotheses about the causes, precipitants, and maintaining influences of a person's psychological, interpersonal, and behavioral problems. A formulation helps organize information about a person. It serves as a blueprint guiding treatment, as a marker and predictor of change, and as a structure facilitating the therapist's understanding of and empathy for the patient's intrapsychic, interpersonal, cultural, and behavioral world.

I. DESCRIPTION

A psychotherapy formulation links descriptive diagnosis to treatment. It contains inferences representing the therapist's best explanation of the causes, triggers, and maintaining influences of a patient's problems. As the result of two trends, formulation has become more important in recent years. First, the predominance of brief psychotherapy has required therapists to determine a treatment focus early. Second, the current nosology of mental disorders is almost exclusively descriptive rather than etiological in nature, leaving a gap between diagnosis and treatment that formulation is meant to fill. A formulation is a "work in progress" that changes as it is tested and as more information about a patient is revealed. As an organizational tool, a formulation helps the therapist categorize information about a patient; in particular, it can bring disparate pieces of information into a coherent whole. The specific categories used will depend on the formulation approach of the therapist, but may include symptoms and problems; events that precipitate symptom or problem onset; concepts of self and others; maladaptive interpersonal behavior patterns; methods for controlling ideas and affect; strengths and resources, wishes and fears; biological or constitutional influences; environmental circumstances; and developmental factors.

A formulation is useful to the extent that it accurately guides the therapist's interventions and facilitates a favorable outcome. A well-developed formulation enables the therapist to maintain a focus in treatment, to

construct language effectively, and to anticipate events in therapy so as to respond more effectively if those events occur. Therapy goals are embedded explicitly or implicitly in a formulation. Therefore, the formulation enables the patient and therapist to track progress and to identify and correct missteps. A key advantage of a formulation is that it helps the therapist to understand and therefore to empathize with a patient.

Ideally, a clinician should aspire to four goals when constructing a case formulation. First, the formulation should paint a distinct portrait of a unique individual; it should not describe a person or a patient in general. At the same time, it should remain consistent with current scientific knowledge about personality, psychopathology, development, and interpersonal relationships. Second, as a fundamentally practical tool, a formulation should be parsimonious and just comprehensive enough to explain the patient adequately for the purposes of the therapy. The formulation should not contain excessive or extraneous information or be so complicated that it fails as a practical guide to treatment. Utility is a key objective. Third, a formulation should strike the right balance between observation and inference. Low-level inferences are usually best for effective therapy. These are inferences that are tightly linked to readily observable behavior, but go beyond those observations to a construction of their meaning and consequences. Inferences that go "too deep" may lack sufficient empirical foundation and may not be meaningful or helpful to patients. A fourth characteristic of an ideal formulation is objectivity. A formulation should be about the patient and not the therapist. Psychologists have documented many biases in clinical judgment that therapists are prone to commit. For example, a therapist may assume that a patient is either too much like the therapist or too different. Psychoanalysts have long cautioned about the risk of therapists imposing their own psychological needs, characteristics, or problems on patients rather than seeing those patients more objectively.

A few practical details about case formulation may be helpful. First, a formulation should be written down, referred to during treatment, and revised when necessary; otherwise, the therapist is like a builder without the benefit of blueprints. Second, a case formulation should be constructed systematically early in therapy. Typically, a formulation can be constructed after the first one or two sessions, and certainly within the first five sessions. Research suggests that formulations constructed early in therapy predict topics discussed much later in long-term therapy. With practice, a formulation can be constructed within a matter of a few minutes using notes and memories from early sessions. Efficient and high-quality work is facilitated by having an *a priori* set of formulation categories or "bins" in mind that one "fills in" based on information provided by the patient and others. The formulation systems described later in this article provide examples. Research has shown that a formulation is more likely to be reliable and accurate when the therapist is guided by a structured and systematic formulation method.

Some therapists avoid formulations for fear that they may limit the therapist's openness to new experiences of the patient, may lead to a rigid view of the patient, or may place the therapist in an unsalutary dominant, powerful role. On the contrary, a well-constructed and well-implemented formulation should facilitate openness to the patient, and should help the therapist develop and communicate empathic understanding in the context of a collaborative, mutually respectful relationship. As an expert in interpersonal communication and psychological problem solving, the psychotherapist should avail himself or herself of the "tools of the trade" to facilitate the work.

Therapists sometimes wonder whether and how a formulation should be shared with patients. In a sense, the entire therapy can be viewed as the construction, revision, and imparting of the formulation. Yet the question remains as to how explicitly the written formulation should be shared in a single session or intervention. Opinions are divided on this question. Some, such as Anthony Ryle who developed cognitive analytic therapy, recommend that the entire formulation be shared with the patient and serve as an explicit center point guiding the therapy. Others believe that sharing the entire formulation in one intervention is unwise because it may overwhelm a patient, may be too much to assimilate at once, may be used by the patient in nontherapeutic ways, or may be less therapeutic than letting the patient arrive at the formulation on his or her own terms. Instead, these practitioners advise that the therapist select portions of the formulation and offer them in succinct interventions that are timed to match the current topic under discussion and the emotional state of the patient. Whichever approach one chooses, the intervention should enhance the therapeutic alliance rather than detract from it. Further, one should not offer the entire formulation until one is reasonably confident of its accuracy.

II. HISTORY AND INFLUENCES

The modern psychotherapy case formulation can be traced to the medical examination and case history,

which are rooted in Hippocratic and Galenic medicine. Hippocratic physicians emphasized viewing the individual as a whole in arriving at a diagnosis, and encouraged the patient's active involvement in his or her cure. In contrast to their forebearers' beliefs in polytheism and mythological causes of disease, they based conclusions on observation, reason, and the belief that only natural forces are at play in disease. Hippocratic case reports provided many observable details about physical functioning, then drew inferences from these observations before prescribing treatment. Galen's contribution to modern medicine was his emphasis on experimentation and a focus on physical structure and function as the foundation of disease.

Consistent with the tradition of Hippocrates and Galen, psychotherapy case formulations depend on close observation as a basis for inference. In accord with the holistic ethos of Hippocrates, a formulation should consider the patient from multiple dimensions, including the biological, psychological, and social. Also consistent with the Hippocratic view, psychotherapists view active patient involvement in treatment as essential for success. Galenic influences are seen in inferences about psychological structure, including concepts such as the id, ego, and superego, and more cognitive concepts such as self-representations, faulty reasoning processes, and maladaptive core beliefs about the self, others, and the world.

The content of a case formulation is influenced by multiple factors. Chief among these is the therapist's world view, that is, the basic axiomatic tenets that guide the therapist's assumptions about people, the world, and the future. The therapist's world view, in turn, influences and is influenced by the therapist's opinions on the nature of psychopathology, and his or her approach to psychotherapy and how it works. A third influence is recent case formulation research. It is to these three influences that I now turn.

A. Nature of Psychopathology

What the therapist defines as adaptive or maladaptive behavior will affect how problems are defined and conceptualized in a case formulation. Views of psychopathology fall into two general classes: categorical and dimensional. Those favoring the categorical view believe that mental disorders are syndromal and are qualitatively distinct from each other and from nonpsychopathological states. The dimensionalist view is that psychopathology lies along a set of continua from normal to abnormal. The difference between normal and abnormal behavior is viewed as one of degree rather than of quality.

The therapist's stance on the categorical–dimensional debate can affect the formulation in a number of ways. First, it may affect the terminology appearing in the formulation. Dimensionalists tend to think in terms of a relatively small set of dimensions, such as the five-factor model of personality. The categoricalists use a broader range of terms, including those in the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV),* which is categorical in nature. On the other hand, categoricalists may be more prone to stigmatize patients by reifying what is actually a theoretical construct. For example, being told one "has" a personality disorder may inadvertently damage self-esteem and confirm pathogenic beliefs rather than be therapeutic. Finally, some argue that the categorical approach is easier to use than the dimensional approach because many clinical decisions are categorical in nature (e.g., treat or not, use intervention A or B). Ease of use is an important consideration because a case formulation must often be developed quickly.

A therapist's criteria for defining normality are also central to the task of case formulation. Common criteria include personal distress, behavior that causes distress in others, capacity to adapt to stress, deviation from an ideal of normality, personality inflexibility, and irrationality. These criteria provide a context and reference point for understanding patients and for setting therapy goals.

B. The Therapist's Approach to Psychotherapy and How It Works

One's approach to psychotherapy provides a framework for conceptualizing patients. Psychoanalysis has had a pervasive effect on views of personality and psychopathology, as well as on our understanding of the psychiatric interview. Before Freud, the psychiatric interview was viewed simply as an opportunity for the patient to report his or her symptoms. Now, we recognize the interview as a vehicle through which the patient's problems express themselves; that is, interpersonal problems outside of therapy may be enacted within the therapy.

Like psychoanalysis, cognitive therapy has provided a lexicon for case formulation, and sets of standardized formulations of psychopathology, particularly for depression, anxiety, substance abuse, and personality disorders. These formulations emphasize cognitive patterns, schemas, faulty reasoning processes, and core beliefs, each specific to particular disorders.

Behavior therapy has typically not emphasized diagnosis or formulation, but nevertheless has affected the case formulation process through its emphasis on

symptoms, a skepticism toward mental representations, and a focus on empiricism. Behaviorists strive to understand the topography of symptomatology, including stimulus-response connections, behavioral chains, and contingencies of reinforcement. Behaviorists have also focused on the role that environmental conditions play in maladaptive behavior. Consequently, behavioral formulations include analyses of the environment and how it might be changed to help an individual.

Phenomenological and humanistic psychotherapies have also influenced the case formulation process. Like behavior therapy, they traditionally have rejected case formulation, although on grounds that it can position the therapist in a superior, more knowing relation to the patient and foster an unhealthy dependency. The contributions of humanistic thought to case formulation are an emphasis on the person instead of a disorder, a focus on the here-and-now experiencing of the therapist and patient, and the view of the patient and therapist as equals, both focused on enabling the patient to achieve greater self-awareness and congruence within the self. Humanistic psychology's holistic approach to the person, following from the Hippocratic tradition mentioned earlier, is also an influence.

C. Case Formulation Research

A final influence on the case formulation process is that it has come under much greater scientific scrutiny in the last several decades. The key questions asked are the following: Can case formulations be constructed reliably and validly? To what extent do formulation-based interventions predict psychotherapy outcome and processes? What does the formulation add to outcome? Can a formulation be used to understand psychopathological states?

In 1966 Philip F. Seitz, a Chicago psychoanalyst, reported a 3-year effort to study the extent to which analysts agree in formulating the same clinical material. Each of six analysts independently reviewed either detailed process notes or a set of dreams from a single case. Each analyst wrote an essay-style narrative addressing the precipitating situation, focal conflict, and defense mechanisms at play in the case. The group distributed the formulations, giving each member the opportunity to revise his work based on the formulation of others, then met weekly to review their findings. The results were largely disappointing in that consensus was reached on relatively few cases.

The primary contribution of Seitz and his colleagues' work is that it has alerted the community of psychotherapy researchers to the "consensus problem." If psychotherapy research aspired to be a scientific enterprise, progress had to be made in the consistency with which clinicians describe a patient's problems and way of managing them. Another contribution of Seitz was his delineation of why the clinicians failed to agree. One key problem was that group members made inferences at overly deep levels that seemed to stray too far from the clinical material, for example, making references to "phallic-Oedipal rivalry" and "castration fears." Seitz also noted that the group relied too much on intuitive impressions and did not systematically and critically check their interpretations.

Seitz's paper achieved its stated goal and sparked research efforts to improve methods of case formulation. In the following decades, at least 15 formal methods for constructing case formulations were developed and empirically tested. Most of these methods share several characteristics: They focus on relationship interactions expressed in psychotherapy sessions; they identify core relationship conflicts based on the frequency with which patterns are conveyed in therapy; they rely on clinical judgment rather than rating scales; they include provisions for testing the reliability and validity of the method; they emphasize relatively low-level inferences; the formulation task is broken down into components; and they reveal a trend toward psychotherapy integration. The following section describes some of these methods.

III. STRUCTURED FORMULATION METHODS

A. Core Conflictual Relationship Theme

The first of the structured formulation methods, the Core Conflictual Relationship Theme (CCRT), was introduced by Lester Luborsky in 1976. The CCRT is based on Freud's concept of transference, which states that innate characteristics and early interpersonal experiences predispose a person to initiate and conduct close relationships in particular ways and in repeated fashion later in life. The goal of the CCRT is to reliably and accurately identify a patient's central relationship pattern. The CCRT focuses on narratives a patient tells in therapy, identifying three key components within those narratives: an individual's wishes, expected responses of others, and responses of the self. The CCRT is applicable in everyday clinical use as well as in research. In day-to-day clinical use, therapists may note the relationship

components as they arise in therapy, then infer a CCRT later. In the research context, trained judges first extract relationship episodes from therapy transcripts; a second set of judges then identifies each of the three key relationship components just mentioned. The CCRT is operationally defined as the most frequently observed wish, response of other, and response of self, regardless of whether these components occur sequentially in the separate narratives. Based on a mixed group of patients in multiple studies, the most frequent CCRT is a wish to be close and accepting, a response from others of rejection and opposition, and a response of the self marked by disappointment, depression, and anger. Due to its complexity, Luborsky does not recommend that therapists offer patients the entire CCRT in a single intervention, but rather select portions that are most likely to be accepted by patients in the current context of the therapy. He also recommends that therapists link the CCRT to symptoms; focus primarily on wishes and responses from others because these are the most reliably identified components; and focus on negative components of the CCRT but in a manner that enhances the therapeutic alliance.

The CCRT is the most frequently researched of the structured case formulation methods. Luborsky and his colleagues found adequate to good reliability in identifying the three components, but particularly the wish of self and response of other. Other CCRT-related research findings are that about four narratives are typically told in a therapy session; interventions based on a patient's CCRT predict psychotherapy outcome; gaining mastery of the CCRT is associated with successful outcome in therapy; CCRTs derived from dreams are similar to those derived from waking life; narratives told outside of a session are similar to those told in sessions; CCRTs show consistency across the life span and across the course of psychotherapy, although successful treatment is correlated with a decrease in the pervasiveness of the CCRT (i.e., the extent to which it characterizes multiple relationships); greater pervasiveness of the CCRT is associated with greater psychopathology; and symptom onset seems closely related to central interpersonal conflicts of patients as measured by the CCRT.

B. Configurational Analysis

Configurational Analysis (CA), developed by Mardi J. Horowitz, is similar to the CCRT in its focus on identifying a central relationship pattern, but adds important elements. These are inferences about a patient's states of mind; the assumption of multiple rather than single relationship patterns; and defensive control processes. States of mind are recurrent and distinct complexes of affect, cognition, experience, and behavioral propensities. They can be described in simple adjectival terms, such as "depressed and helpless" or "angry and bitter"; in motivational terms (a wished-for or feared state); or according to the degree of affect modulation characterizing the state. According to Horowitz, states of mind are organized by mental representations that guide interpersonal relationships and concepts about the self and others. These representations can be depicted in configurations of role relationship models that describe wished-for, "dreaded," and either adaptive or maladaptive compromise relationship patterns, views of self and others, and states of mind. CA also includes a system for formulating an individual's defensive control processes, which are habitual ways of controlling ideas and affect so as to maintain a well-modulated state of mind.

The formulation steps in CA move from description to increasing degrees of inference. They are to (1) describe clinically relevant phenomena; (2) identify the patient's repertoire of states of mind; (3) identify self, other, and relationship schemas; and (4) identify defensive control processes. Finally, the therapist plans goals and interventions specific to each of these categories.

Research on CA has shown a similar level of reliability as that shown by the CCRT, although the studies are fewer as are subjects per study. Convergent validity for CA as well as for CCRT is suggested by the high level of similarity between formulations independently constructed with each system. Horowitz and colleagues have also provided evidence that states of mind can be reliably coded. In a series of quantitative single-case studies of individuals responding to psychosocial trauma, Horowitz and colleagues found evidence of recurring emotionally significant states; showed that state shifts are related to whether or not a patient is discussing a conflict-laden topic; and showed that increased signs of defensive control processes occur when conflictual or unresolved themes are being discussed in therapy. A series of single-case studies have also shown convergences between clinically derived case formulations and quantitatively derived formulations.

C. Plan Formulation Method

The Plan Formulation Method (PFM), developed by John Curtis and George Silberschatz, follows earlier formulation work by Joseph Caston and is based on Joseph Weiss's control mastery theory of psychotherapy. Control mastery theory assumes that psychopathology results from pathogenic beliefs stemming from traumatic

events that are usually experienced in childhood. Weiss believes that patients develop an unconscious plan to disconfirm these beliefs. The plan may involve testing the therapist through behavioral or verbal challenges or expressions of anger. The therapist must understand the purpose of these events in order to best help the patient.

The goal of PFM is to identify, categorize, and test the key elements of control mastery theory. Five components comprise a plan formulation: the patient's goals for therapy; the obstructions (pathogenic beliefs) that may interfere with achieving the goals; the traumas that produced the pathogenic beliefs; insights necessary to help the patient achieve the goals; and tests the therapist might expect from the patient as the patient attempts to disconfirm a set of pathogenic beliefs. For regular clinical use, these components can be inferred from the early sessions of psychotherapy. For research purposes, coders follow a five-step process. First, three or four judges who are versed in control mastery theory review transcripts from early psychotherapy hours and create a list of "real" and plausible "alternative" items for each formulation component. Second, a master list of goals, obstructions, traumas, insights, and tests is compiled and randomly ordered within each component. Third, the judges review the master list and rank order each item according to its relevance to the patient. Fourth, mean ratings are obtained and rank ordered; those items ranking below the median are discarded. Fifth, the group meets and consensually finalizes the most relevant items for each formulation category. The final formulation contains a description of the patient and his or her current life circumstances followed by the patient's presenting symptoms and problems. Then, the goals, obstructions, tests, insights, and traumas are listed.

The reliability of the PFM is excellent, although adherence among the clinical judges to an explicit conception of psychotherapy appears essential. One interesting study showed that two independent research teams, one working from the control master perspective and the other working from an object relations standpoint, independently developed highly reliable plan formulations, but the two formulations correlated poorly with each other. Several studies have been published showing that the degree of therapist's adherence to the plan formulation predicts patient progress and outcome in psychotherapy. Patients appear to deepen their level of experiencing subsequent to plan-compatible interventions as compared to plan-incompatible interventions. Other studies show that achieving goals and insights, as listed in the formulation, correlates with standard psychotherapy outcome measures.

D. Other Primarily Dynamic or Integrative Methods

The CCRT, CA, and PFM are representatives of psychodynamic-based structured formulation methods. Another in this class is Thomas Schacht and colleagues' Cyclical Maladaptive Patterns (CMP) approach, which helps organize interpersonal information about a patient. This method has four major components: acts of self, expectancies of others' responses, acts of others toward the self, and acts of the self toward the self. Recently, the CMP has been integrated with Lorna Benjamin's Structural Analysis of Social Behavior, a system for organizing interpersonal behaviors.

Another dynamic formulation method is J. Christopher Perry's Idiographic Conflict Formulation Method, which draws from Erik Erikson's psychosocial model of development. It places a particular emphasis on a patient's defensive structure. In addition, Anthony Ryle has developed a formulation method based on his cognitive analytic therapy, which integrates dynamic and cognitive therapy. Franz Caspar's Plan Analysis is atheoretical in nature and can be applied to behavioral, dynamic, cognitive, or other forms of psychotherapy. Case formulation methods have also been developed for cognitive-behavioral therapy and behavior therapy. Two examples are now described.

E. Cognitive-Behavioral Case Formulation

Jacqueline Persons is one of several cognitive-behavioral (CB) therapists who have developed case formulation methods, but hers may be the best known. The method draws extensively from Aaron Beck's cognitive therapy, which holds that psychological symptoms and problems result from the activation of maladaptive core beliefs under conditions of stressful life events. The CB case formulation approach also draws from behavior therapy, which emphasizes measurement to track change and the identification of causal, functional relationships among behaviors that lead to problematic behaviors. According to Persons, a CB formulation must contribute to treatment outcome for it to be valuable.

Persons identifies seven steps in CB case formulation. First, the therapist compiles a problem list. She recommends 5 to 10 items that should include psychological symptoms, problems in adaptation, and other problems in living. Second, the formulation should include hypotheses about the patient's core beliefs about the self, others, and the world. These beliefs are assumed to

maintain the patient's problems. Third, the formulation includes precipitants and activating situations that trigger a maladaptive core belief. Next, the therapist formulates a working hypothesis. It is the heart of the formulation and links the preceding components. Step five of the CB formulation states the origins of the maladaptive core beliefs. This section could include two or three key incidents in the individual's past. Step six states a treatment plan. Finally, the CB case formulation includes predicted obstacles to treatment. These may include statements regarding how the patient's core beliefs may undermine the therapy.

Persons has reported data showing average to good levels of agreement among clinicians independently constructing CBT-based formulations. The utility of CBT formulations has been preliminarily assessed by exploring the contribution that individualized formulations have on treatment outcome. Early evidence is equivocal. A study by Persons found that a group of depressed patients treated by her with individualized CBT guided by a CBT case formulation had similar outcomes to patients treated in a much larger study in which similar patients were treated with a standardized CBT protocol. Persons noted, however, that many of her patients had comorbid diagnoses that would have ruled them out for the comparative study.

F. Behavioral Case Formulation

As noted, behavior therapists emphasize a detailed analysis and evaluation of behavior. They use the term "functional analysis" to describe the clinician's assessment of causal relationships among a patient's problematic behavior, goals, affect, and cognition. Although the emphasis is on readily observable behavior including how the environment affects behavior, many behavior therapists also attend to an individual's thoughts and affect, considering these to be important mediating variables leading to behavior problems or solutions. Behavior therapists distinguish between ultimate outcomes and instrumental outcomes. The former reflect global, multidimensional, end-point solutions, such as resolution of a depressive episode. The latter refers to sets of tools that can facilitate achieving the ultimate outcome. For example, a depressive episode may be resolved through increasing social contacts, improving social skills so as to increase social reinforcements, exercise, changing self-beliefs, or decreasing negative automatic thoughts.

Many behaviorists view their work fundamentally as a problem-solving endeavor, and the role of the case formulation is to delineate problems, then generate, implement, and evaluate solutions. Arthur Nezu and colleagues have articulated a four-step case formulation process centering on a problem-solving approach. Step one is to identify the problem. Nezu advocates a comprehensive, systematic approach in order to reduce clinical judgment error. Problems may occur either within the individual or the environment. Within the person, problems may occur in the behavioral, cognitive, affective, or biological realms. Problem behaviors reflect deficits (e.g., lack of social skills) or excesses (e.g., obsessive–compulsivity). Problematic cognition may reflect deficiencies (e.g., failure to appreciate the responses of others to one's actions) or distortions (e.g., arbitrarily inferring lack of self-worth based on a single mistake). Environmentally, problems may be identified in the physical realm (e.g., housing, financial) or social realm (e.g., dangerous neighborhood, nature of social support). A behavior therapist may also view problems from a temporal standpoint (present to past) and with regard to the source of information (factual and well-substantiated versus the perceptions and assessments of a patient). Step two is to generate solution alternatives. Here, the clinician may encourage brainstorming for solutions. This involves producing numerous possible solutions and suspending judgment as to their quality until after the list is completed. Step three is to plan treatment. The key question the clinician tries to answer is, "What treatment strategies and tactics will best implement the solution alternatives selected in step two?" The clinician must determine how amenable the target problem is to treatment; whether the therapist is capable of providing the treatment and if not, whether the treatment is available elsewhere; and whether reaching the selected instrumental objective to solve a target problem will achieve the ultimate objective. Step four is solution implementation and verification. This step involves putting the planned solution into effect, assessing the consequences of the plan, and evaluating its effectiveness.

To date, no studies have been published showing the reliability of the method just described or similar methods, although they have been called for. Some behaviorists assert that a hypothesis-testing approach in which early interventions and their outcomes are assessed, and altered as needed, is more important than initial agreement.

IV. SUMMARY

Formulation is a basic psychotherapy skill that involves generating and testing hypotheses about the

causes of and factors perpetuating a patient's problems. The formulation guides treatment and is revised as necessary. Several reliable, structured methods of case formulation have been developed and empirically tested.

See Also the Following Articles

Applied Behavior Analysis ■ Behavioral Assessment ■ Behavioral Case Formulation ■ Configurational Analysis ■ Contingency Management ■ Functional Analysis of Behavior ■ Functional Analytic Psychotherapy ■ Objective Assessment ■ Projective Testing in Psychotherapeutics

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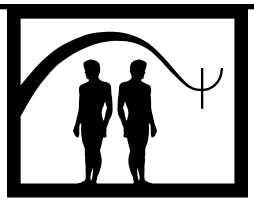

Forward Chaining

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GLOSSARY

conditioned reinforcer A previously neutral stimulus that becomes a reinforcer after it is paired a number of times with an established reinforcer.

continuous reinforcement A schedule of reinforcement in which the reinforcer is delivered after every response.

discriminative stimulus A stimulus that is present when a particular response is followed by a reinforcer.

fading Gradual removal of a prompt as the behavior occurs in the presence of the discriminative stimulus.

intermittent reinforcement A schedule of reinforcement in which the reinforcer is not delivered after every response.

prompt A stimulus delivered by the trainer following the discriminative stimulus that increases the likelihood that a person will engage in the correct behavior in the presence of the discriminative stimulus.

reinforcer A stimulus that increases the future probability of a behavior when it is delivered contingent on the occurrence of the behavior.

response One instance of a particular behavior.

stimulus control A behavior is under the stimulus control of a particular discriminative stimulus when it occurs in the presence of that discriminative stimulus.

stimulus-response chain A behavior that consists of two or more component behaviors that occur in sequence. For each behavior in the chain, there is a discriminative stimulus and a response. Also called a behavioral chain or a chain of behaviors.

I. DESCRIPTION OF TREATMENT

Forward chaining is a procedure that is used to teach a chain of behaviors (a stimulus-response chain). In forward chaining, you first conduct a task analysis to identify each component of the stimulus-response chain. Then you use prompting and fading to teach the first component of the chain. Once the learner can engage in the first component behavior without prompts, you teach the second component behavior in conjunction with the first component. Once the learner can engage in the first two components of the chain of behaviors without prompts, you teach the third component in conjunction with the first two components. This process continues until the learner can engage in the entire chain of behaviors at the appropriate time without prompts.

Forward chaining, similar to backward chaining, is used with beginning learners (young children) or learners with limited repertoires (for example, individuals with mental retardation). Forward chaining is used when more efficient training strategies, such as instructions or modeling, cannot be used with learners with limited intellectual abilities.

A common example of forward chaining involves teaching a young child to recite the alphabet. A parent typically divides the alphabet into four strings of letters

and uses verbal prompts to teach the child to recite the first string of letters (ABCDEFG). The child recites the string of letters after the parent's prompt, and the parent provides praise. Once the child can recite this first string of letters without help, the parent adds the second string of letters (HIJKLMNOP), and the child repeats the first two strings together with praise from the parent. When the child can recite the first two strings of letters without help, the parent adds the third string of letters (QRSTUV) and the child repeats the first three strings together with praise from the parent. Finally, when the child can recite the first three strings of letters without any help, the parent adds the fourth string (WXY and Z), and the child recites the entire alphabet with praise from the parent. In this case, each of the four strings of letters is a response and the four responses are chained together until the child recites the whole alphabet

The process of conducting forward chaining is described next.

A. Conduct a Task Analysis

Because each component behavior in a behavioral chain is taught in sequence, the first step in conducting forward chaining is to conduct a task analysis to identify each component behavior. A task analysis identifies each discriminative stimulus (S^D) and response (R) in the chain of behavior from start to finish. Consider the following task analysis of a four-component behavioral chain in which a person with mental retardation stuffs brochures into envelopes as part of her job in a sheltered workshop. In this chain of behaviors, the person (1) first picks up a brochure from a pile of brochures on the table, (2) then picks up an envelope from a pile of envelopes on the table, (3) then stuffs the brochure in the envelope, and finally, (4) puts the envelope containing the brochure into a bin. In a task analysis, each of the stimulus and response components would be identified as follows.

S^D_1: Pile of envelopes, pile of brochures, and a bin on the table in front of the learner
R_1: Pick up a brochure
S^D_2: Brochure in hand and pile of envelopes and bin on the table
R_2: Pick up envelope
S^D_3: Brochure in one hand, envelope in the other hand, and bin on the table
R_3: Insert brochure into the envelope
S^D_4: Envelope containing a brochure in hand and bin on the table
R_4: Put the envelope containing the brochure into the bin

As can be seen in this task analysis of a stimulus-response chain, the chain of behaviors is initiated when the first S^D (S^D_1) is present, and each response in the chain creates the S^D for the next response in the chain. For example, the first response (R_1-pick up envelope) creates the second S^D (S^D_2-envelope in hand), the second response (pick up envelope) creates the third S^D (envelope in hand), and so on. The learner cannot engage in each subsequent response until the previous response has occurred and created the S^D for the subsequent response.

A task analysis can be conducted in three different ways. First, you can observe a competent person engaging in the chain of behaviors and write down the sequence of stimulus-response components. Second, you can ask an expert who performs the behavior competently to identify all of the stimulus-response components. Finally, you can engage in the behavior yourself and write down all of the stimulus-response components.

Once you have conducted the task analysis, you can then conduct the forward chaining procedure.

B. Conduct Forward Chaining

To begin forward chaining, you present the first S^D, prompt the first response, and provide a reinforcer such as praise. You then fade the prompts over trials until the learner can engage in the first response without any prompts when the first S^D is present.

From the previous example, you have the learner sit at a table containing a pile of envelopes, a pile of brochures, and a bin (the first S^D), prompt the learner to pick up a brochure (first response), and provide praise (a reinforcer). The prompt might involve physically guiding the learner's hand to pick up the brochure (physical prompt), showing the learner how to pick up the brochure (modeling prompt), pointing to a brochure on the pile of brochures (gestural prompt), or telling the learner to pick up a brochure (verbal prompt). You repeat the trial a number of times and gradually remove the prompt (fade the prompt) until the learner engages in the first response in the presence of the first S^D without prompting.

$$S^D_1 \dashrightarrow R_1 \dashrightarrow \text{praise}$$

After the learner consistently engages in the first response when the first S^D is present, you add the second component of the chain. To do this, you present the first S^D and the client will engage in the first *response* (because the first response is under the stimulus control of the first S^D). The first response creates the second S^D. At

this time, you then prompt the second response and provide a reinforcer. In this way, the learner is engaging in the first two component responses in sequence; the first is unprompted because it was previously learned, and the second is prompted after the first response creates the S^D for the second response. Over trials, you fade the prompts until the learner is engaging in the first and second responses in the chain without any prompts.

From this example, you have the learner sit at a table with a pile of brochures, a pile of envelopes, and a bin (first S^D) and the learner will pick up a brochure (first response). Once the brochure is in hand (second S^D), you prompt the learner to pick up the envelope (second response) and provide praise (a reinforcer). Over trials you will fade the prompts until the learner can engage in the first two components of the chain without any prompts.

$$S^D{}_1 \longrightarrow R_1$$
$$S^D{}_2 \longrightarrow R_2 \longrightarrow \text{praise}$$

At this point, you use prompting and fading to teach the third component of the chain. To teach the third component of the chain you present the first S^D (every trial starts with the presentation of the first S^D), and the client will engage in the first two responses in the chain without prompts. The second response creates the third S^D. Following the second response, you prompt the third response and provide praise. Over trials, fade the prompts for the third response until the learner makes the first three responses in the chain without any prompts.

From this example, have the learner sit at the table with the pile of brochures, envelopes, and a bin (first S^D). The learner will then pick up a brochure (first response) and pick up an envelope (second response) without any prompts. Once the learner has engaged in the first two responses and has a brochure and envelope in hand (third S^D), prompt the learner to insert the brochure into the envelope (third response) and provide praise. Fade the prompts over trials until the learner is engaging in the first three responses without any prompting.

$$S^D{}_1 \longrightarrow R_1$$
$$S^D{}_2 \longrightarrow R_2$$
$$S^D{}_3 \longrightarrow R_3 \longrightarrow \text{praise}$$

Now the first three components of the chain have been learned and it is time to teach the last component of the chain. To teach the fourth response in the chain, have the learner sit at the table with the piles of brochures and envelopes and a bin (first S^D) and the learner will engage in the first three responses without any prompts. The third response creates the fourth S^D. After the third response, prompt the learner to engage in the fourth response and provide praise. Over trials fade the prompts until the learner is engaging in all four responses without any prompts.

From this example, have the learner sit at the table with the piles of brochures, envelopes, and the bin (first S^D) and the learner will pick up a brochure, pick up an envelope, and insert the brochure in the envelope (first three responses). When the envelope containing the brochure is in the learner's hand (fourth S^D), prompt the learner to put it into the bin (fourth response) and provide praise. Over trials, gradually withdraw the prompts until the learner is engaging in all four responses without any prompts. The learner has now learned the entire chain of behaviors.

$$S^D{}_1 \longrightarrow R_1$$
$$S^D{}_2 \longrightarrow R_2$$
$$S^D{}_3 \longrightarrow R_3$$
$$S^D{}_4 \longrightarrow R_4 \longrightarrow \text{praise}$$

Following forward chaining (or any other chaining procedure), the learner should engage in the complete chain of behaviors without any prompts when the first S^D is present. Although the learner can now engage in the chain of behaviors without assistance, it is important to continue providing a reinforcer, at least intermittently, following the completion of the chain of behaviors. During training, a continuous reinforcement schedule is used, and every response is followed by a reinforcer. Once the learner is engaging in the chain of behaviors without any prompts, the schedule of reinforcement can be thinned so that the behavior is maintained with intermittent reinforcement.

In the previous example, the learner gets praised for every correct response during training. Once the learner can complete the entire chain of behaviors without prompts, the trainer continues to provide praise every time the learner completes the chain of behaviors. After the learner successfully completes the chain of behaviors a number of times without any prompts, the trainer can start to use an intermittent reinforcement schedule and provide praise after the learner completes the chain every second time, then every third time, and so on until many responses are required for reinforcement.

II. THEORETICAL BASES

Forward chaining is based on the behavioral principles of stimulus control and conditioned reinforcement.

Stimulus control is present when a response occurs in the presence of an S^D. Stimulus control develops because the response has been reinforced in the presence of the S^D in the past. In forward chaining, you prompt the first response in the presence of the first S^D and reinforce the response. As a result, over a number of trials, the first response is then more likely to occur without prompting when the first S^D is present. The first S^D now has stimulus control over the first response. Next you prompt the second response in the presence of the second S^D and reinforce the response. Over a number of trials the second response will occur when the second S^D is present without any prompts. The second S^D now has stimulus control over the second response, and the first two responses in the chain will occur together. This process continues in forward chaining until each S^D develops stimulus control over each response in the chain of behaviors and all of the responses in the chain occur in sequence.

The second principle involved in forward chaining is conditioned reinforcement. In conditioned reinforcement, a neutral stimulus becomes a conditioned reinforcer when it is paired a number of times with an established reinforcer. In forward chaining, the S^D that is produced by each response becomes a conditioned reinforcer because each response is followed by the delivery of praise from the trainer. As a result, the outcome of each response in the chain (the S^D produced by each response) becomes a conditioned reinforcer and serves to maintain each of the individual responses in the chain of behaviors. This is particularly important in a long chain of behaviors where the reinforcer may occur a long time after the occurrence of the early responses in the chain. Conditioned reinforcement for each response in the chain is also important after the learner has learned the chain of behaviors and intermittent reinforcement is used to maintain the chain of behaviors.

III. EMPIRICAL STUDIES

Forward chaining is one of the three chaining procedures (along with backward chaining and total task presentation) described in major behavior modification textbooks, applied behavior analysis textbooks, and learning textbooks.

A number of studies have evaluated forward chaining procedures for teaching chains of behaviors to individuals with developmental disabilities. For example, Wilson and his colleagues in 1984 used forward chaining procedures to teach family-style dining skills to individuals with profound mental retardation living in an institution. The authors first conducted a task analysis of the chain of behaviors involved in family-style dining. The components of the chain of behaviors involved in family style dining included the following:

1. Hold bowl with both hands
2. Place bowl within 1 in, from plate
3. Grasp serving spoon
4. Grasp bowl with one hand without hand in food while spoon is in bowl
5. Serve food to plate
6. Replace spoon
7. Grasp bowl with both hands
8. Pick up bowl
9. Place in neighbor's hand or place within 6 in. of neighbor's plate.

After developing the task analysis of the behavioral chain, the authors used forward chaining procedures to teach the mealtime behaviors. Starting with the first response in the chain, the authors used prompting and fading until the learner engaged in the response without prompts. Then they taught the second response in conjunction with the first using prompting and fading procedures. The authors proceeded in this fashion until the learner could engage in the entire chain of behaviors without any assistance.

Another example of the use of forward chaining is the 1982 study by Tom Thompson and colleagues in which the authors taught laundry skills to individuals with developmental disabilities. The authors first conducted a task analysis of the chain of behavior involved in doing laundry and identified 47 responses that they grouped into seven major components. The authors then used prompting and fading to teach the first of the seven laundry components, then the first and second, then the first three, and so on until the individuals were engaging in all seven components without any prompts.

IV. SUMMARY

Forward chaining is one of three procedures used to teach a chain of behaviors. A chain of behaviors involves individual stimulus and response components that occur together in a sequence. Forward chaining is a procedure that is typically used with individuals with disabilities or extremely limited abilities. The first step in forward chaining is to conduct a task analysis that identifies each S^D and response in the chain of behaviors. To conduct forward chaining you use prompting and fading to teach the first component behavior in the

chain. Once the learner engages in the first response without prompts, you teach the second response in conjunction with the first using prompting and fading. Once the learner engages in the first two responses in the chain without assistance, you use prompting and fading to teach the third response in conjunction with the first two. This process continues until the learner can engage in the entire chain of behaviors without assistance. Praise or other reinforcers are delivered on a continuous reinforcement schedule for every correct response during training. Once the learner competently engages in the chain of behaviors without assistance, an intermittent schedule of reinforcement can be used to maintain the behavior.

See Also the Following Articles

Backward Chaining ■ Child and Adolescent Psychotherapy ■ Competing Response Training ■ Fading ■ Habit Reversal ■ Home-Based Reinforcement ■ Parent–Child Interaction Therapy

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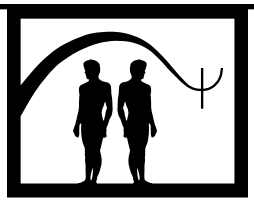

Free Association

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GLOSSARY

countertransference The feelings and responses that the therapist has towards the patient.

discontinuities A momentary impairment or sudden modification of thought, affect, memory, sensation, self-control, etc., in which unconscious motivations may or may not be expressed.

free association The effort to speak the contents of one's mind free of conscious control, aimed towards social appropriateness, coherence, etc.

fundamental rule The requirements that the patient report or, in the more modern iteration, attempt to report all of his or her associations without editing them and without an effort to make them socially appropriate to express a certain idea or to conform to conventions of coherence and reasonableness.

parapraxis Unintentional lapses in behavior or thinking which are believed to be compromise formations resulting from a conflict between the actor's conscious goals and intentions and unconscious urges seeking expression.

transference The tendency to unwittingly construct and create, through an active but unconscious process, the pattern of imagined and real past relationships with an important person in the present.

unconscious The quality of a mental structure not being available for conscious examination and a system of mental events, structures, and motivations in which there is an active and motivated effort to keep from consciousness certain material.

I. HISTORICAL BACKGROUND

"The technique of free association, considered by many people the most important contribution made by psychoanalysis, the methodological key to its results" as Sigmund Freud stated in 1931, remains central to psychoanalysis and psychoanalytic psychotherapy. Although it has a history in literature and philosophy dating to classical antiquity, free association as an investigative and psychotherapeutic method was Freud's invention in the 1890s. It derived from the cathartic "chimney sweeping" use of unrestricted speech, under hypnosis, by one of the patients of Freud's senior colleague, Josef Breuer. Freud gradually modified the method of free association, discarding massage and hypnosis that were its earlier companions, eventually following the patient's lead rather than introducing a subject of his own. Focusing on the patient's introspections, with the requirement that the patient speak without critical judgment, he created a systematic means to infer unconscious thoughts and feelings. The approach was consonant with his general conviction about the determinism of mental life and the importance of unconscious influences. Going far beyond the original aim of reducing traumatic experiences by abreaction, he turned the new method into a vehicle

for deciphering the language of dreams, parapraxes (Freudian slips), and symptoms and for elucidating inferred unconscious conflicts and the history of their development in the patient's life.

II. DESCRIPTION

An important difference between the method of free association and a directed discussion of problems, is that the free associations provide a basis for inferences of unconscious aspects of the patient's mental life. Discontinuities in the patient's mental functions—impairments of thought, affect, memory, sensation, desire, sense of self, self-control, and personal relationships—can be accounted for in large part by unconscious influences. The free associations are "understood" by recognition of sequences, patterns, and a variety of attributes and characteristics that permit them to be "interpreted."

Here is an example of free association. A young man, wondering about his own psychoanalytic treatment, thought: What good is a treatment that only uses words? Not taking the question seriously, he went about his business (actually, some early spring work in the garden) and found himself, a few minutes later recalling the well-known lines from "Daffodills":

> *For oft when on my couch I lie,*
> *In vacant or in pensive mood.*
> *They flash upon that inward eye,*
> *Which is the bliss of solitude.*

At that point he recognized that he had returned to his original thought. He was pleased to see that the poet's name, Wordsworth, repeated his original question, and he took the sequence as something of an answer. He was not then aware that the couch in the poem had eliminated the problematic analyst and afforded him the privacy of solitude, which likely reflected some less friendly feelings about psychoanalysis. Both the young man's understanding of "Wordsworth" and the added idea that there was a hostile side to his unconscious thoughts about psychoanalysis constitute inferences about his unconscious motivations.

The term "free association" is used in a number of different ways. In all of these the word "free" connotes a relative freedom from conscious control. So, the activity of free association (i.e., the expression of a sequence of thoughts, feelings, wishes, sensations, images, fantasies, and memories) produces the free associations (or, more simply, the associations). The method of free association involves two persons, patient and analyst (or therapist). It is an integral part of the psychoanalytic situation. The analyst's first aim is to promote greater freedom of association, that is, relatively greater autonomy from unconscious interferences (resistances) to expression. Together patient and analyst engage in an attempt to understand and modify the patient's mental life, through the consequent process of free association (or analytic process, therapeutic process). Accordingly, the concept of free association touches on all the concepts that are implied in therapeutic process. Transference and countertransference, for example, can be recognized as patterns of association. Their unconscious existence can be inferred from those patterns.

The "fundamental rule" of psychoanalysis was originally stated as the requirement that the patient report all of his or her associations, without editing them, saying whatever came to mind. In his original work on free association, Freud used the associations to interpret to the patient the nature of his or her unconscious motivations, which sometimes brought dramatic relief to patients. This approach led to his study of dreams, which he published in 1900. Inevitably, in the interests of expanded treatment potential, modifications in the analyst's aims have brought about a more complex concept of the analyst's role and activity.

The fundamental rule is now usually presented in a somewhat less authoritarian way. The patient is expected to try to say whatever comes to mind, and part of the attention of the analytic pair is directed toward an understanding of the difficulties in following the rule. To make sense of this "rule" and of the psychoanalytic method, one must understand that the activity of free association is interspersed with an attempt to recognize meaning in the associations, through the interpretive efforts of both the analyst and the patient. The therapeutic method, whose central feature is the understanding of the associations, goes beyond the study of the patient's words to the interpretation of actions and interactions within the psychoanalytic (psychotherapeutic) situation, that is, between the analyst (therapist) and the patient. The analyst's associations and actions (principally, the action of words) are now seen as an integral part of the analytic method.

The stance of the analyst or therapist—his or her attitude to the task and to the patient—is an essential part of the method of free association. A fundamental component of that stance is a commitment on the analyst's part to provide a setting of safety for the patient's free as-

sociation and to channel his or her energies, as much as possible, into understanding the associations and the interactions of the analytic process. Necessarily, the analyst's stance must be a blend of subjectivity and objectivity, of compassion and dispassion, involvement and separateness, although what may be an ideal mixture, for any analyst or for any patient, at any particular time, remains a matter of uncertainty and debate. Variations among analysts on these matters continue to provide fruitful avenues of research into therapeutic effectiveness. Savo Spacal, for example, in 1990, demonstrated differences between Freud's use of free association and that of the relational schools, which, as he saw it, had reduced the introspective emphasis and substituted interpretation of interaction. In practice, the two forms operate together, variably, in most psychoanalytic work.

III. CONCLUSION

These considerations make it hard to define limits for the method of free association. To attempt to distinguish associations from dreams and transferences, for example, seems wholly arbitrary. But even interpretations, whether made by the analyst or by the patient, cannot be reliably distinguished from the associative flow. It is sufficient to know that the data of free association and the events of the therapeutic process can be understood from a variety of useful perspectives, some of which may pay little regard to associative sequences and patterns, while others attend closely to them.

See Also the Following Articles

Interpretation ■ Psychoanalysis and Psychoanalytic Psychotherapy: Technique ■ Self Psychology ■ Unconscious, The

Further Reading

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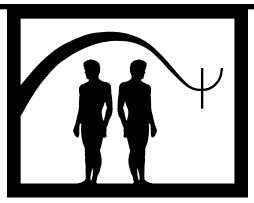

Functional Analysis of Behavior

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GLOSSARY

conditioned stimulus A stimulus that acquires some aversive or appetitive psychological functions as a result of respondent conditioning processes.

discriminative stimulus (S^D) A stimulus (or context) that increases the probability of a given response as a result of a history of reinforcement in the presence of that stimulus and extinction in its absence.

establishing operations (EOs) Operations that have two primary effects on operant responding. First, EOs make a given response more probable. Second, EOs make a reinforcer associated with that response more effective. For example, if a rat has been reinforced for lever pressing with food, food deprivation would be an EO. The establishing operation has sometimes been referred to as a fourth term in the three-term contingency analysis.

reinforcing stimulus (S^R) A stimulus that follows a response and alters the future probability of that response. Reinforcing stimuli increase the probability of response, and punishing stimuli decrease the future probability of response.

three-term contingency A description of the functional relationship between (1) antecedent stimulation, (2) responding, and (3) the consequences produced by that response.

Functional analysis is an approach that guides treatment decisions. This article provides information about the approach, focusing on the theory from which it developed, and its clinical application. This article also introduces some of the well-validated treatments that make use of functional analysis and provides a clinical example of the process.

I. DESCRIPTION OF TREATMENT

Functional analysis is not a treatment per se. Rather, it is an analytic strategy that directs intervention. In the most abstract sense, the term functional analysis is borrowed from mathematics and describes some relationship between variables in which changes in one variable alter the value of another variable. In psychology, functional analysis refers to the exploration of how certain stimuli and responses mutually fluctuate. The process includes monitoring a target behavior over time and manipulating antecedents and consequences methodically to determine the features of the environment that predict and influence the behavior of interest. Although functional analysis has historically been most identified with operant conditioning, operant and respondent conditioning processes do not occur in isolation of one another. Rather, these are densely interrelated conditioning processes. Especially in attempting to understand complex clinical phenomena, functional analysis must include an assessment of both respondent and operant contingencies and their interactions.

Functional analysis in psychotherapy is the link between pretreatment assessment data and the design of individualized treatment plans. Elements of the analysis affect decisions about which variables should be targeted in treatment. Such treatment focuses on the variable or variables whose modification is likely to cause the greatest reduction in the problem behavior and/or increases in behaviors that enhance the client's quality of life. Because certain behaviors are reasonably well correlated, research may guide the functional analysis. For example, if someone reported a fear of panic attacks, research suggests a variety of situations that are likely to be avoided (e.g., shopping malls, buses), and those would be assessed directly. However, because functional analysis is linked to a tradition of examining the effects of antecedent and consequent events on the patterns of behavior in individual subjects, the focus has been on individualized assessment of these variables.

Functional analysis used for treatment purposes involves several steps:

A. Assessment of problem behaviors, including intensity, frequency, duration, and variability
B. Assessment of relevant antecedents, including establishing operations, discriminative stimuli, and conditioned and unconditioned aversive and appetitive stimuli
C. Assessment of consequences, including reinforcing and punishing consequences
D. Treatment by intervening on identified antecedents and/or consequences.

A. Assessment of Problem Behavior

Where direct observation of problem behaviors is possible, it is preferable to indirect assessment. However, in the treatment of adult outpatient cases, such direct observation is often impossible or impractical. In such instances, assessment of the problem behavior is accomplished through questions like, "What is going on in your life that concerns you?" Details about the range of the problem can be obtained through questions about affect, overt behaviors, somatic sensations, and thoughts that are related to the problem. Questions that illuminate duration, intensity, and variability might include: "On a scale of 1 to 10, how depressed did you feel?," "How long did that continue?," or "Can you tell me about the worst your problem has ever been and also times when it seemed to improve?" Terms like anxious and depressed are used very loosely in lay vocabulary. For treatment purposes, we want a more particular description of the problem behavior. We may obtain this by asking questions such as "When you say you feel depressed, what, in particular, does that mean to you?" Examples may be provided based on research demonstrating the co-occurrence of some behaviors. For example, in an interview with a client complaining of depression, we might ask about sleep, mood, and appetite concerns.

B. Assessment of Antecedents

Questions such as "Has this ever happened at any other time in your life?," "What else is going on when this occurs?," and "Does this same thing happen in different places or at other times?" can be used to assess the antecedents influencing behavior. It may also be useful to ask about situations in which the client's difficulty is least likely to occur, or is least severe. In summary, it is necessary to ask questions that provide the therapist with some sense of the variability in the problem behavior. Identification of most and least problematic contexts can form the basis for hypotheses about relevant discriminative stimuli as well as conditioned appetitive and aversive stimuli.

For example, a client might describe anxiety in social situations that is exacerbated by an evaluative component in the social interaction. In this example, social interaction is the context (S^D) in which escape is reinforced by the termination of the aversive stimulus (e.g., the social interaction, aversive thoughts, emotional, and bodily states associated with such interactions). Adding an evaluative component to such an interaction would constitute an establishing operation (EO), because it would alter the probability of escape and the reinforcing value of that escape.

C. Identification of Consequences

Consequences can sometimes be identified by asking questions such as "What happens after this?" and "How do you feel when this is over?" Sometimes there are social consequences for symptoms. For example, others in the household may pay more attention to the client when the client show signs of depression, or they may temporarily take over household tasks. This sort of consequence can be assessed through questions like "What are the reactions of other people when you get depressed?" Whenever possible behavior, antecedents, and consequences should be assessed using direct observation. When direct observation is not possible, using multiple sources of information, such as family, friends, and co-workers, can be helpful.

D. Treatment Process

An intervention is devised based on the functional analysis. Appropriate interventions could be aimed at a variety of components identified in the analysis. Some interventions aim at altering the presence of the actual antecedent and consequent stimuli that maintain the behavior. For example, a heroin addict might be relocated to a setting that had few or no drug dealers. This would result in the removal of both S^Ds (drug dealers) for drug seeking, and heroin, which is the reinforcer for drug seeking. Other interventions are aimed at altering the psychological functions of the antecedents and consequences, rather than their actual presence. The same addict might be given methadone to eliminate the reinforcing properties of the opiates. Opiate deprivation is an EO for drug seeking, because it makes drug seeking more probable and increases the reinforcing properties of opiates. Because methadone blocks abstinence syndrome, it also alters the motivational (EO) effects of opiate deprivation and therefore alters the probability of drug seeking.

Other means of altering the psychological functions of antecedent stimuli might be to reduce or eliminate the effects of appetitive or aversive conditioning. In the earlier social anxiety example, this might involve systematic exposure to social interactions, which would result in lessened fear and avoidance in the presence of social situations. In the addiction example, we might systematically expose the addict to drug cues, thereby reducing the conditioned appetitive functions.

Finally, the problem behavior can be targeted directly by, for example, increasing the probability of some incompatible behavior. Often, these interventions are combined. Thus, in the social anxiety example, the therapist would likely give considerable social reinforcement to the client as the client approached feared social situations. This intervention might result in both strengthening of the approach operant and extinction of conditioned fear. Having been conceptualized in terms of basic behavioral principles, the treatment is implemented, and an assessment of change is made. If the outcome is acceptable, the process is complete. If the outcome is unacceptable, the next step is to recycle to conceptualization stages. More assessment may be needed, or other controlling variables may be manipulated.

These cases consist of relatively simple examples; however, functional analysis need not be limited to a narrow range of behaviors, antecedents, or consequences. Extraordinarily complex human problems can be examined without violating the fundamental premises of functional analysis. Some of the process will be illustrated with the following case.

E. Case Example

Mary is a 20-year-old African-American female who was seven months pregnant with her third child at the time of the interview. She was referred for psychological treatment by her gynecologist, who described her as "difficult," "angry," and "indifferent." His immediate concern was her drug use. Excerpts from the initial interview with Mary are used to illustrate assessment components in a functional analysis in an outpatient clinic setting.

Therapist directly assesses problem behavior: Mary, your doctor referred you here, because he was worried about you and your children. It would be good to take a few minutes to talk about this. Help me understand what is going on. First, tell me about the drug use and then we can talk about anything that you think will help me understand what it is like for you. Your doctor tells me that you have been smoking marijuana about once a week, drinking alcohol several times a month; and that you have smoked crack cocaine twice since becoming pregnant.

Client: Yeah, that's about right. So what?

Therapist attempts to get the client to discuss range of the drug problem: So what? You tell me. What does that mean to you?

Client: I don't care.

Therapist continues to assess range: You don't care about your health, or your baby's?

Client: Not really.

Therapist attempting to elicit other problems and prioritize: Wow, that is a pretty powerful statement. Things must be really bad.

Client: Not any different than usual. I have never had a happy day in my whole life. Never. There is nothing for me to live for. I am sad all day.

Therapist attempting to find out about duration and variability: You have never had a happy day, what about a happy moment?

Client: I guess that I have had a few short minutes but I don't really remember them.

Therapist assesses problem severity: Have you ever thought about ending it all, about suicide?

Client: Every day. I think of it every day. I've tried twice by taking a bunch of pills, but it didn't work. My boyfriend killed himself.

Therapist asking about boyfriend's suicide as potentially important antecedent: When did that happen?

Client: Three months ago. His family blames me. We were fighting and talking about breaking up. He told me that he was going to do it. I didn't believe him. I hung up on him, and two hours later I found out he was dead.
Therapist: How did you find out?
Client: His friend walked over to my apartment and told me.
Therapist assesses response to painful antecedent: What did you do?
Client: I took my kids to my mom's and went to get high.
Therapist attempting to clarify response: You got high, how?
Client: I smoked a blunt (marijuana). I drank some beer too, just two. I don't like the taste of alcohol.
Therapist attempting to assess consequences: You don't like the taste but you drink anyway. What does it do for you?
Client: Same thing it does for everybody, helps keep my mind off things.
Therapist assessing consequences: Did it help you keep your mind off your boyfriend's suicide?
Client: For a little while.
Therapist asking about other antecedents: When you are getting high what other things are you trying not to think about?
Client: Men. I hate men.
Therapist clarifying range and context: All men?
Client: All men. My boyfriend was the only halfway decent one that I ever met. They think differently than women. They think backwards. I hate them.
Therapist assessing variability: You say that you hate men; do you feel anything else?
Client: My cousin starting molesting me when I was six. He kept doing it until I moved out. I told my uncle but he did not believe me. I told my stepdad and he didn't believe me. You cannot trust a man. Do we have to talk about them? I wanted a female to talk to so we wouldn't have to talk about them.
Therapist eliciting other problems: I understand that it is very hard to talk about these things. I am only trying to figure out what all of your concerns are. What do you think is the hardest thing for you right now?
Client: Being depressed. I just watch TV all day long. Usually I watch game shows but I am not very good at them.
Therapist asking about context: Is there anytime when you do not feel depressed?
Client: Not really.
Therapist assessing antecedents: Is anyone else around?
Client: My baby. He will be one next week. He is wild sometimes.
Therapist assessing social environment as relevant context: One year olds aren't great to talk to. Do you have any friends?
Client: My mama. That's it. She is the only one who cares about me.
Therapist assessing consequences: Is there anything, besides getting high, that seems to make things better?
Client: Watching television helps a little. Sometimes I clean the house, even if it does not need it. It keeps my mind off stuff.
Therapist asking about context and consequences: What about doing something out of the house, like work or school?
Client: I can't get a job. I can't pay a babysitter. Besides, nobody wants to hire me. I went to college for one semester, after my baby was born. I got mostly A's. I got twelve credits, but I cannot go back because it would be too hard with three babies. People tell me that I can't do it.
Therapist clarifying nature of problem: Do you think that you can't do it? You had good grades before and you already had two kids.
Client: I don't know, someday. I have to get them to school first.
Therapist assessing consequences: Sounds frustrating. It sounds like you want to go to school but feel like you can't. What about a job?
Client: I really don't want that.
Therapist clarifying consequences: So, you get out of having to work because you have kids and are pregnant. Is there anything else that these problems get you?
Client: I don't know, maybe.
Therapist assessing consequences: Like what?
Client: My mom helps me out. I like that. I am still a kid, you know.
Therapist: Is there anything else that you have to say that will help me understand things better?
Client: No.
Therapist reasserts interest in understanding client's problems and the need for more assessment: Ok, see you next week. I will keep asking more of these questions to try and get it. Thanks for talking with me.

In this excerpt from an intake interview several potentially important components of the client's problem and its context were revealed (see Table 1). From them a tentative case conceptualization can be formulated. As identified by the client's physician, drug use during

TABLE 1
Components and Treatment Implications of Functional Analysis of Behavior

Antecedents	*Behaviors*	*Consequences*
Social isolation Low levels of physical activity Hx of sexual abuse & other negative experiences with men Death of boyfriend Social punishment for boyfriend's suicide	Drug use during pregnancy Depressed mood Hopeless thought patterns Avoidance of negative mood and cognitions using unproductive activity such as drug use, TV Generalized avoidance of men	Drugs produce positive intoxicating effects Drug use makes temporary avoidance of negative cognition and mood possible Drug use reduces social isolation
Potential intervention on antecedents		*Potential intervention of consequences*
Increase general and especially social activity Exposure-based treatment to cues related to loss of boyfriend, including both external cues as well as associated cognition, emotion, and bodily states Exposure-based treatment with respect to sexual-abuse cues, including both external and interoceptive cues Antidepressant medication to alter negative mood states that precipitate maladaptive avoidance		Reinforce any increases in general and especially social activity Reinforce client's willingness to engage in exposure-based treatment efforts Antidipsotropic medications to replace reinforcing effects of alcohol with punishing effects (poor choice given client circumstances and problem severity)

pregnancy is this young woman's most pressing behavior problem. Relevant antecedents appear to be depressed mood, guilt, boredom, and perhaps relief from decidedly fatalistic thinking. Given the client's circumstances, these are not unexpected reactions. In behavior analytic terms, drug use is maintained by negative reinforcement. That is, aversive mood and thinking are removed as consequences of drug use. In another part of the interview, the client revealed that the instances of drug use were also some of her only social interactions apart from interactions with her mother and children. This further bolsters the notion that drug use is maintained by negative reinforcement. Drug use not only reduces aversive mood and cognition, it also reduces social isolation and increases a general low level of activity.

Intervention on the consequences of drug use is unlikely to be helpful. The reinforcing effects of alcohol could be eliminated by administering an antidipsotropic drug, like antibuse, that would produce a potent punisher for drinking. Given the pregnancy, however, this would be unacceptable. No such pharmacological interventions are available for marijuana or cocaine. In addition, the client would be left with no good alternative strategies to cope with her rather bleak existence and resulting aversive mood states. Intervention on problematic antecedent mood states might include antidepressant drugs, although this pharmacological intervention might reduce aversive mood states, it would not address the clients impoverished life circumstances.

A more hopeful intervention could focus on increasing the client's general activity level, with a special emphasis on healthy social interactions. Because this client grew up in a very active religious community, the possibility of becoming engaged in social, worship, and volunteer activities with her church could be explored. Reentry into school could also be examined as a possibility. Initially, any increase in physical and/or appropriate social activity ought to be reinforced. Behavioral activation has several advantages. First, behavioral activation has been repeatedly demonstrated to have a positive impact on negative mood and cognition. Second, these activities would be incompatible with drug use. Third, the young woman would likely broaden her social support system. And finally, the resulting social support system might provide reinforcement that could maintain this ongoing stream of healthy behavior.

This client revealed a variety of other difficulties that may bear further exploration and direct treatment. For example, her history of sexual abuse may have precipitated a host of potential difficulties. She may have difficulties with intimate relations and issues of trust with men. Although not revealed in this interview, possible posttraumatic stress disorder symptoms, like sleep disturbance, flashbacks, and hypervigilance are possible

and ought to be directly assessed. The same functional analytic strategy would be applied to these difficulties.

II. THEORETICAL BASES

Although the concept of functional analysis can be identified with a variety of schools of thought, it is most commonly associated with the behavioral tradition. The core position suggests that if we want to understand behavior, we must understand the context, both historical and current, that produced and maintain the behavior of interest. Advocates of this position have sometimes maintained that environmental events are the real determinants of behavior. A somewhat softer position, called functional contextualism, holds that behavior may be understood in terms of its functional relation to environmental events and that such a method of understanding leads quite naturally to effective interventions, because the analysis points to manipulable aspects of context. Stated in this way, the position does not exclude other methods of understanding behavior, it simply claims this one as an effective strategy for the prediction and influence of behavior.

III. EMPIRICAL STUDIES

As previously stated, functional analysis is not a treatment, instead it is an analytic strategy that provides a basis for treatment. As such, there are not studies of functional analysis per se. However, functional analyses are components of many well-validated treatments. Functional analysis as a component in treatment development is most clearly and explicitly described in journals such as the *Journal of Applied Behavior Analysis* and *Behavior Modification* that tend to have a behavior analytic focus. Within them, one may find hundreds of studies treating a diversity of behavior problems, such as tic disorders, infant feeding problems, trichotillomania, and self-injurious behavior, as well as a wide variety of behavior deficits among populations with both developmental disabilities and normal development such as daily living skills, job skills, communication skills, academic skills, and social skills, among others.

Although less explicit in the published journal articles, functional analysis exists as a key component in a wide variety of empirically supported behavioral and cognitive-behavioral treatments. For example Michael Kozak and Edna Foa's treatment manual for obsessive–compulsive disorder, David Barlow and Michelle Craske's anxiety and panic manual, and Stewart Agras and Robin Apple's eating disorders manual all contain careful assessment of antecedents, behaviors, and the outcomes of those behaviors. Although early behavioral treatments were focused on external antecedents and consequences, more recent advances such as Barlow and Craske's panic treatment include a wide variety of interoceptive antecedents that are directly targeted in treatment. In these instances, negative mood, cognition, and bodily states can be thought of as both problematic behavior and as antecedents for other problematic behaviors. Using panic disorder as an example, someone may have a panic attack at a shopping mall and begin avoiding shopping malls. Panic as a response pattern is problematic and can be analyzed in terms of its functional relation to external events, such as the shopping mall. However, individuals with panic also begin to avoid activities that will precipitate early indicants of autonomic arousal, such as avoiding exercise to avoid increased heart rate. Thus, avoiding exercise can be understood distally in terms of the shopping mall, but more proximally in terms of bodily states associated with panic attacks at the mall.

IV. SUMMARY

Functional analysis is a theory-driven approach to understanding behavior in terms of its context. It involves the organization of our understanding of behavior into three primary categories, including (1) antecedents, both remote and proximal, and also including internal and external cues; (2) the behavior of interest; and (3) consequences of that behavior. The analysis proceeds on the assumption that manipulation of antecedents and/or consequences can produce changes in relevant patterns of behavior. Identification of antecedents includes both discriminative stimuli and conditioned aversive and appetitive stimuli. Assessment of the behavior of interest involves examination of frequency, intensity, duration, and variability in the problem behavior. Identification of consequences includes assessment of potentially reinforcing and punishing consequences for the behavior of interest. Having gathered this information, a case formulation is made in terms of the well-established behavioral principles of operant and respondent conditioning and the interaction of these two conditioning processes. A wide variety of interventions have emerged from this functional perspective on behavior, including very

straightforward interventions involving reinforcement of appropriate classroom behaviors to the treatment of complex adult clinical problems like panic disorder with agoraphobia.

See Also the Following Articles

Applied Behavior Analysis ■ Behavioral Assessment ■ Behavorial Case Formulation ■ Configurational Analysis ■ Contingency Management ■ Functional Analytic Psychotherapy ■ Objective Assessment

Further Reading

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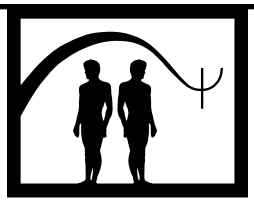

Functional Analytic Psychotherapy

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GLOSSARY

Beck Depression Inventory A standardized measure of depression that is used to assess a client's progress during treatment.

behavior therapy A type of psychotherapy that is based on learning principles, is usually time limited, and is symptom focused.

cognitive-behavior therapy A variety of behavior therapy aimed at detecting and changing faulty beliefs, attitudes, or thoughts that are hypothesized to be responsible for the symptoms.

internal validity Refers to whether an outcome of a therapy treatment can be confidently attributed to the treatment itself and not some extraneous factor.

major depressive disorder A mood disorder characterized by sadness, despair, loss of energy, sleep and appetite disturbance.

radical behaviorism The psychology of B. F. Skinner that accounts for our external actions, private feelings, and beliefs in terms of the types of past experiences that shape us. The most fundamental type of past experience involves the contingencies of reinforcement (nontechnically referred to as rewards and punishments) that we experienced throughout our life span. This historical account of behavior leads to a contextual approach in which meaning, perception, language, and even truth and reality vary according to our past.

therapy rationale An explanation given to clients about the causes and cures for their problems. The rationale reflects the theory and types of techniques used during treatment and varies with the type of therapy being done.

Functional analytic psychotherapy (FAP) is a form of behavior therapy that that emphasizes use of the therapist–client relationship for providing powerful *in vivo* learning opportunities. Based on the radical behaviorism of B. F. Skinner, FAP produces change through the natural and curative contingencies of reinforcement that occur within a close, emotional, and involving therapist–client relationship.

I. DESCRIPTION OF TREATMENT

Psychologists Robert J. Kohlenberg and Mavis Tsai noticed that some of their clients treated with conventional cognitive-behavior therapy techniques showed dramatic and pervasive improvements that far exceeded treatment goals. In their search for an explanation as to why this happened with some clients, they noticed that the dramatic improvements occurred in those clients with whom they had particularly intense and involved therapist–client relationships. These intense relationships were not created purposely as part

of the therapy but seemed to emerge spontaneously from time to time. As a result of these observations, Kohlenberg and Tsai used behavioral concepts (a) to theoretically account for the hypothesized connection between dramatic improvement and an intense therapist–client relationship, and (b) to delineate the steps therapists can take to facilitate intense and curative relationships. The result was FAP, a new type of behavioral therapy in which the therapist–client relationship is at the core of the change process. In particular, the FAP therapist focuses on the special opportunities for therapeutic change that occur when the client's daily life problems are manifested within the therapeutic relationship.

In 1994, Kohlenberg and Tsai detailed how FAP, a powerful treatment by itself, is also an integrative approach that can be combined with almost any other type of therapy to improve outcome. It should also be pointed out that FAP emphasis on the therapist–client relationship, based on behavioral theory, has some unexpected similarities to the Freudian concept of transference.

A. *In Vivo* Learning Opportunities

Functional analytic psychotherapy underscores the importance of *in vivo* learning opportunities—the actual occurrences of the client's daily life problems in interactions with the therapist. The well-accepted notion that learning is accelerated when done *in vivo* can be illustrated by the accelerated learning that occurs when learning to drive a car while actually driving with an instructor, as opposed to classroom instruction.

In vivo occurrences of the client's problems are "real" and are distinguished from the "role playing" or "behavioral rehearsal" that are sometimes used in behavior therapy. Examples include: (a) A woman, depressed mainly because she has no friends, avoids eye contact during the therapy session, answers questions by talking at length in an unfocused and tangential manner, has one "crisis" after another, and gets angry at the therapist for not having all the answers; (b) An unhappy man whose main problem is that he avoids getting into love relationships, always decides ahead of time what he is going to talk about during the therapy hour, watches the clock during the session so he can end precisely on time, states that he only can come to therapy every other week because of tight finances (he makes a relatively large income), and cancels the next session after making an important self-disclosure.

In these examples, the client is seeking treatment for certain daily life problems and then acts in the same problematic way within the therapist–client relationship. In FAP, these *in vivo* occurrences of the client's problems are referred to as clinically relevant behaviors, type 1 (CRB1s). On the other hand, clinically relevant behaviors, type 2 (CRB2s) are actual improvements that occur in-session. For example, if the woman in the earlier example subsequently increases her eye contact with the therapist and is more accepting of the therapist's limitations, these are CRB2s. In order to do FAP, it is crucial that the therapist has an understanding of CRBs, be able to recognize them when they occur, and know how to nurture the development of CRB2s.

B. Doing FAP

Functional analytic psychotherapy employs several therapeutic strategies. The three primary ones are: (a) watch for CRBs, (b) evoke CRBs, and (c) reinforce CRB2s.

Strategy 1: *Watch for CRBs*. This strategy is the most important one because it alone will lead to more intense and effective treatment. A therapist who is skilled at observing instances of clinically relevant behavior also is more likely to naturally encourage clients to give up self-defeating patterns in the here and now, and foster more productive approaches to life.

Strategy 2: *Evoke CRBs*. Because the occurrence of CRBs are required to do FAP, how can this be facilitated by a therapist? Client problems reenacted during role playing, as pointed out earlier, are not the same as naturally occurring CRBs. Further, feigning evocative situations, such as coming late to a session or getting angry at the client, are not recommended. Such disingenuous behaviors are incongruent with the close and honest relationship called for in FAP.

As it turns out, the structure of most therapy sessions naturally evokes CRB. For example, all therapists set appointments and require fees for treatment. These procedures can evoke CRBs relating to the client making and keeping commitments, being punctual or being too compulsive, feeling like they are so worthless that they need to pay someone to listen to them, and so on. Similarly, the universal therapist request to the client to be open and to express both positive and negative feelings could evoke the client's problems in forming close relationships. CRBs are ubiquitous in all therapies but frequently are overlooked by therapists who are not trained to see them.

Strategy 3: *Reinforce CRB2s*. Reinforcement is the technical term that means the therapist should nurture and strengthen in-session improvements. It is best to rely on the therapist's natural reactions for this process rather

then to gratuitously use phrases such as "that's terrific" or "great," which may be viewed by the client as insincere. Therapists who are skilled in FAP are aware of CRB2s as they occur and are genuinely and spontaneously reinforcing. One way that therapists can become more naturally reinforcing of improvements in their clients is by doing good deeds for others in their own personal lives.

On the other hand, therapists who are not aware of CRBs may inadvertently punish CRB2s (improvements). For example, consider a case in which a woman was seeking help for depression that was related to her lack of assertiveness with her husband. The therapist attempted to teach her to be assertive by using role playing, a common behavior therapy procedure. The client expressed discomfort with role playing and asked if there were another way to approach the problem. The therapist then suggested to the client that by resisting the role playing she was being avoidant, and he pressured her to do the role playing anyway. The FAP analysis of this incident is that the client's expression of her reluctance to do the role play was a CRB2 because she was being assertive with the therapist—the very real-life skill that the therapist was attempting to teach. The therapist, on the other hand, did not nurture and strengthen this assertiveness and may even have unintentionally punished it by accusing her of being avoidant and insisting that she do the role play. If the therapist had been aware that a CRB2 were occurring (as called for in Strategy 1), he would have recognized the *in vivo* therapeutic opportunity and nurtured the assertiveness by pointing out to the client how useful it is for her to express her feelings, and to find other ways to approach the problem besides role playing.

C. Using FAP to Improve Cognitive Therapy for Depression

Cognitive-behavior therapy (CBT) for depression, developed in 1979 by Dr. Aaron Beck and his colleagues, has been shown to be an effective treatment for major depression. As with any treatment for depression, however, there is room for improvement. In particular, some clients are resistant to the methods and rationale of cognitive therapy, and outcome is endangered by what is known as a rationale–client mismatch. Examples of mismatches include clients who experience that their feelings rule no matter what thoughts they have, who are looking for a more intense and interpersonal therapy, and those that want to understand how their problems are related to their family histories. In an attempt to more effectively address the diverse needs of clients, reduce mismatches, and yet retain the value that cognitive therapy has for many clients, a combined FAP and cognitive therapy (CT) treatment was developed. The new treatment is referred to as FAP enhanced cognitive therapy (FECT).

FECT contains two enhancements to standard CBT. The first is an expanded rationale for the causes and treatment of depression. The expanded rationale includes several possible causes for depression in addition to the cognitive therapy hypothesis that depression results from dysfunctional thoughts and beliefs. For example, clients are told that depression can be related to losses that need to be grieved, to family of origin or historical issues, to a dearth of experiences that bring a sense of mastery and pleasure, to anger turned inward, to not having intimacy skills. This expanded rationale allows for better treatment–client matching.

The second enhancement is using the therapy–client relationship as an *in vivo* opportunity to learn new patterns in thinking and to create better relationships. Clients are told that.

> It will be helpful for us to focus on our interaction if you have issues or difficulties that come up with me which also come up with other people in your life (such as co-workers, acquaintances, supervisors, friends, spouses). When one expresses one's thoughts, feelings, and desires in an authentic, caring and assertive way, one is less likely to be depressed.

II. THEORETICAL BASES

FAP stems from the psychology known as radical behaviorism proposed by Psychologist B. F. Skinner. Many readers may erroneously associate Skinner with a narrow theory used for explaining lever pressing by rats in experimental chambers. In fact, Skinner attempted to show how contingencies of reinforcement enter into the understanding of fundamental human processes such as perception, sense of self, identity, beliefs, language, poetry, happiness, personality, love, and creativity.

As a means of illustrating how radical behaviorism works, consider how it views thoughts, beliefs, or cognition. Cognitive theory (often considered the nemesis of radical behaviorism) posits that a person's thoughts, beliefs, or attitudes determine how they react to events in the world. Known as the A->B->C paradigm, it is shown in Figure 1 (a). The radical behavioral position, in contrast, posits that one's thoughts in some cases may determine a person's subsequent reactions as shown in

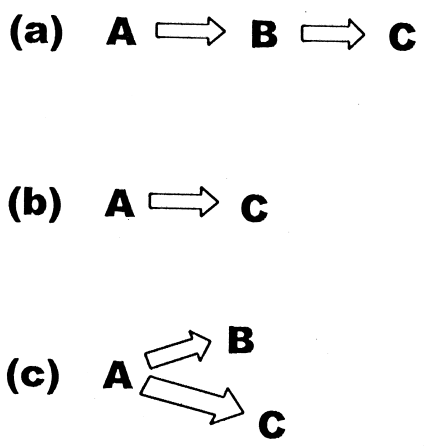

FIGURE 1 Some cognition-behavior relationships according to the FECT expanded rationale. A = Antecedent Event; B = Belief/Cognition; C = Consequence (emotional reaction). Figure (a) represents the standard cognitive model; (b) represents a situation in which there is no cognition; (c) represents a situation in which cognition precedes but is not causally related to the reaction.

Figure 1 (a), but in other cases thoughts may occur that have no influence on reactions (Figure 1 [c]). In fact, one may even have reactions without any preceding thoughts (Figure 1 [b]). The radical behavioral position is that different paradigms apply depending on our history of reinforcement. Using an example from our daily lives, we all have had thoughts in the form of a self-promise, such as "I will not eat that fattening cream pie" when offered a piece. At times we will confirm paradigm 1 (a), the cognitive hypothesis, by not eating the pie. At other times, however, we will have the thought but eat the pie anyways (paradigm 1 (c), thus disconfirming cognitive theory. Then, of course, at times we will have the experience of just eating the pie without any preceding thoughts (Figure 1 [b]) which is also inconsistent with cognitive theory. An advantage to the radical behavioral view is that it accommodates all these possibilities. Because the radical behavioral view accommodates a wider range of how people experience the relationship between their thoughts and subsequent actions, it was used as part of the expanded rationale to enhance cognitive therapy.

Another implication of radical behaviorism as applied to therapy is that people act the way they do because of the contingencies of reinforcement they have experienced in past relationships, and more broadly, in our culture. Based on this theory, it follows that clinical improvements or psychotherapeutic change also involve contingencies of reinforcement that occur in the relationship between client and therapist. A well-known aspect of reinforcement is that the closer in time and place the behavior is to its consequences, the greater the effect of those consequences. Treatment effects will be stronger, therefore, if clients' problem behaviors and improvements occur during the session, where they are closest in time and place to the available reinforcement. In other words, FAP places great emphasis on the therapist being aware of the therapist–client interaction and on client CRBs because the most significant therapeutic change results from contingencies that occur during the session within the therapist–client relationship.

Functional analytic psychotherapy theory does not say that other types of interventions (e.g., giving advice, using homework, cognitive therapy, social skills training) are not effective. Rather, the FAP position is simply that *in vivo* interventions are more powerful and increase the likelihood of positive therapy outcome.

III. EMPIRICAL STUDIES

Kohlenberg and Tsai present a number of case studies in their 1991 book, *Functional Analytic Psychotherapy,* that supports their hypothesis that an *in vivo* focus during therapy leads to significant clinical improvement. In 1994, they published a case study of a 35-year-old depressed man who started a course of standard cognitive therapy. Although he showed an initial improvement as measured by the Beck Depression Inventory, he failed to make further progress until the therapist began using FAP Enhanced Cognitive Therapy (FECT) in Session 7 of the 13-week treatment. The patient also reported that his interpersonal relationships improved as a result of FECT. In another case study published in 1999, R. H. Paul and associates reported benefits of using FAP as an addition to other treatment for a pedophiliac. In a group therapy for depressed adolescents, Scott Lawrence and Scott Gaynor at the University of South Carolina, Greensboro, reported at the annual meeting of the Association for Behavior Analysis in 2000 that FAP improved treatment outcome.

Also in 2000, Robert Kohlenberg, Mavis Tsai, Chauncey Parker, Jonathan Kanter, and Madelon Bolling completed a National Institute of Mental Health treatment development study using FECT for clients with major depression. The study demonstrated that experienced cognitive therapists could learn how to competently do FECT. The results also showed that FECT improved treatment outcomes and interpersonal

relationships. Other studies using FAP are currently underway—at the University of Nevada-Reno, William Follette is studying patients who are dependent on tranquilizers, and Steve Hayes, Elizabeth Gifford, and Barbara Kohlenberg are studying the treatment of nicotine dependence.

Although the empirical findings are favorable, FAP is a new treatment, and the types of empirical studies conducted thus far reflect its early stage in the treatment development process. Threats to internal validity have not been dealt with unequivocally. To advance to the next stage of empirical support, Robert Kohlenberg and colleagues are conducting a randomized clinical trial in which patients are randomly assigned to receive either CT or FECT for major depression. The outcome of this study will add important evidence that will be useful in assessing the utility of FAP.

IV. SUMMARY

Functional analytic psychotherapy posits that the therapist–client relationship is a social environment with the potential to evoke and change actual instances of the client's problematic behavior. FAP underscores the importance of *in vivo* learning opportunities, the actual occurrences of the client's daily life problems in therapist–client interactions. Change is produced through the natural and curative contingencies of reinforcement that occur within a close, intense, and emotional therapeutic relationship.

See Also the Following Articles

Behavior Therapy: Historical Perspective and Overview ■ Behavior Therapy: Theoretical Bases ■ Cognitive Behavior Therapy ■ Exposure *in Vivo* Therapy ■ Functional Analysis of Behavior ■ Functional Communication Training ■ Working Alliance

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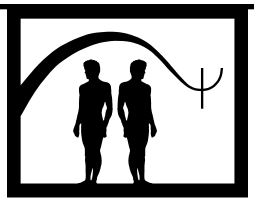

Functional Communication Training

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GLOSSARY

antecedent The preceding factor or stimulus that may cue the occurrence of the observable behaviors (an antecedent for tantrums in young children is being told "no").

applied behavior analysis Field of inquiry that studies variables influencing observable behaviors by use of a systematic experimental design. This term is oftentimes used interchangeably with behavior therapy and behavior modification.

augmentative communication system An alternative communication designed for those impaired in verbal communication. Systems may vary from simple photographs, to picture symbols, to computerized devices programmed specifically for an individual.

consequence The event or stimulus, occurring after a behavior, that influences the future likelihood of the behavior. A consequence may be a reinforcer (thus increase the likelihood of the behavior to occur) or a punisher (decrease the likelihood of the behavior).

extinction Commonly called systematic ignoring; a behavior procedure by which reinforcement of an earlier reinforced behavior is withheld with the goal of reducing the behavior.

punisher A consequence presented contingent on a particular behavior that results in the decrease of the behavior.

reinforcement A process in which the consequence of a behavior results in an increased frequency of the behavior.

reinforcers A contingent consequence of a behavior that results in an increased frequency and long-term maintenance of that behavior.

self-injurious behaviors Behaviors self-inflicted by an individual that have the potential to be harmful (hand biting, head banging, face slapping).

single-subject design A research design often utilized in behavior treatment whereby measurements of a behavior are repeated under same and different conditions to determine the effects. Studies using this research design may have one to a handful of subjects.

stereotypical behaviors Repetitive, seemingly nonpurposeful movements, also often referred to as self-stimulatory behavior (hand flapping, body rocking, finger posturing).

Functional communication training (FCT) is a treatment approach often implemented to attenuate challenging behaviors, most often in individuals with developmental and communication disabilities. The specific FCT procedures for an individual are determined by the findings of a functional assessment and analysis of the challenging behaviors to be treated. FCT is typically one component of a multicomponent treatment package. This article provides a description of this treatment approach, the theoretical underpinning, and a summary of empirical findings to date.

I. DESCRIPTION OF TREATMENT

The premise for the treatments that fall under this domain is that challenging, problematic behaviors may act as an unconventional but effective form of communication. Hence, the goal of FCT is to teach an alternative, more adaptive behavior that will serve the same function or purpose for the individual with the assumption this will in turn attenuate the occurrence of the challenging behavior. This treatment is a popular approach as one component to addressing the often-occurring challenging behaviors in individuals with developmental disabilities, communication delays, and other groups whose ability to communicate effectively is thwarted (hearing impaired, traumatic brain injury). FCT has been successfully implemented in treatment of such behaviors such as aggression, self-injurious behaviors, disruption, severe tantrums, and stereotypical behaviors. Common communicative functions these challenging behaviors have typically found to serve are (a) to escape or avoid a situation, (b) to gain attention or comfort, (c) to obtain access to a preferred tangible item or reinforcer, (d) and to gain sensory reinforcement. There are likely many more communicative purposes behaviors serve, but these are the ones most researched. Determining first what communicative functions challenging behaviors serve is critical to the implementation of FCT. Hence, a specific type of assessment precedes successful FCT. A functional assessment and analysis is conducted during which the function or purpose of the behavior is hypothesized. Subsequent to the functional assessment, the type of communicative behavior to be taught may be chosen (to end an activity, to obtain assistance, to request a preferred activity, to gain sensory input). Based on developmental and communication levels of the individual, the communicative behavior may be verbal, a manual sign, use of pictures, or other augmentative communication systems (electronic devices). To be effective, the alternative behavior response to replace the challenging behavior needs to be less effortful, more efficient, and consistent in obtaining the same end or the same need met for the individual. Steps in using treatments based on this paradigm are outlined below

1. Following a functional assessment and a determination of the function of the problem behavior, a replacement behavior is chosen. Table 1 provides examples of responses that might be taught based on

TABLE 1
Examples of Responses That Might Be Taught

Challenging behavior maintained by	*Teach*	*Examples*
Escape—to get out of of or avoid a situation	Appropriate escape responses	1. Verbalize "I need a break." 2. Manual sign "Finish." 3. Push some items away
Attention—to gain someone's attention	Appropriate attention gaining response	1. Raise hand 2. Ring a bell 3. Press communication device programmed to say "Hey look at me." 4. Shake a rattle
Tangibles	Appropriate request for tangibles	1. Verbalization of "I want…" 2. Use of picture communication symbols to show an adult what is wanted 3. To lead an adult to what is wanted. 4. To manually sign "toy" if that is what is wanted.
Sensory feedback	Appropriate requests for sensory activities	1. Teach child to point to a bin of tactile, sensory items.

the hypothesized purpose or function of the challenging behavior.

2. The training of these replacement behaviors may initially take place out of the setting where the challenging behavior is likely to occur.

3. Once the individual has the chosen behavior in his repertoire, he is prompted to use that communication while often ignoring or interrupting the challenging behavior. For example, if an individual hits himself when given a difficult task, he may be prompted to request a break.

4. When individuals are consistently using the communication, replacement behavior in lieu of the challenging behavior, the addition of requests (in the case of escape situation) or increasing the delay for a response (in the case of receiving assistance) are typically systematically added. Differential reinforcement is often part of this step whereby the individual receives additional reinforcement for complying with requests and for the absences of the challenging behavior.

The replacement communication behavior chosen is dependent on findings from the functional assessment conducted prior to treatment planning. If it is determined the individual is attempting to escape or avoid a situation, then a likely communication to be taught would involve an indication of wanting a break, asking to leave, or of simply disliking an aspect of the situation. The communication behavior chosen to be taught depends on a number of variables. First, the skills of the individual obviously have to be determined. For individuals with no verbal skills, a nonverbal mode of communication will need to be chosen. Again, based on the developmental level of the individuals, the communication behavior could range from a sign, to pointing to a picture, or to using some other augmentative communication device. Augmentative communication devices now available include an array of sophisticated electronic devices that are individually programmed to support an individual in his or her communication needs. For example, the device may be programmed to "verbalize" the individual's favorite cereal when the key with a picture of that cereal box is pressed. Although the goal may be for the individual to use verbal communication, for purposes of FCT in decreasing a challenging behavior, a lower-level communication behavior is typically chosen. To illustrate this point, a child may have recently begun using phrases and short, simple sentences to make requests. This child however, when upset, uses no words. Hence, a possible replacement communication behavior may be a single word such as "help" to signal the child needs assistance from an adult in the setting.

A major advantage of this treatment is that a new, appropriate behavior is being taught versus the simple suppression of the challenging behavior. It may also be considered a more proactive approach instead of simply reacting when a challenging behavior is observed. Further, for individuals with limited skills to be independent and exert control and make choices, this approach builds more independence and choice making. Also of great importance is the increased likelihood of the effects of this treatment to maintain over time and to generalize to new situations. That is, the treatment will be effective over time and in new settings where not initially trained. For example, the individual will communicate the need to get out of a situation or to gain attention in a new classroom.

II. THEORETICAL BASES

Functional communication training is a set of treatment procedures borne out of the applied behavior analysis tradition. Numerous treatments for behavior and emotional problems have emerged from this field. Functional communication training as well as functional assessment and functional analysis share the basic principles of operant learning theory. The shared tenets based on this theory include the "ABC" model that assumes overt, observable behavior (the B) depends on the antecedents (the A) and the consequences (the C) of the behavior. Behaviors such as aggression, self-injury, tantrums, and disruptions are certainly challenging; however, for the individual engaging in them, they may not be maladaptive at all. The consequences for these behaviors may be positive reinforcement or negative reinforcement. In the case of positive reinforcement, the individual is given a reinforcer contingent on the behaviors. For example, a child may be given a preferred toy or adult attention. An example of the challenging behavior being negatively reinforced is the behavior results in the individual being allowed to get out of doing something (i.e., escaping, avoiding, or delaying a situation or task that is aversive). In other words, problematic behaviors may result in the individual obtaining attention or comfort from another, being allowed out of a situation they find uncomfortable or stressful, or acquiring a favorite item. Hence, on the contrary, these behaviors labeled as problematic or challenging may be quite

adaptive for individuals, effectively providing them control over their environment and access to desired reinforcers or outcomes. FCT is based on what has been described as the "communication hypothesis" of challenging behaviors. Carr and Durand in a 1985 seminal article first hypothesized that behaviors serve to communicate for an individual that may have limited effective means to communicate his or her needs or preferences. The individual may in fact have language, but for many possible reasons, the challenging behaviors may have been reinforced more often than language or communication efforts. For example, in young children, a child biting certainly will gain more immediate attention that a soft, poorly articulated request. Hence, the essence of this treatment approach is to teach or strengthen alternative communication skills to serve as a replacement for the challenging behavior.

A. Functional Assessment and Functional Analysis

Essential to the FCT approach is the first conducting a functional assessment and functional analysis. It is universally accepted in the field of applied behavior analysis that a functional assessment is quintessential to appropriately design behavior treatments. In a 1999 edited book, by Alan Repp and Robert Horner, the importance of effectively conducting a functional analysis to then develop effective behavior treatments of all types is stressed. In the case of FCT, the comprehensive assessment informs the choice of specific FCT procedures for a particular individual. As with FCT, functional assessment practices have been the focus of tremendous investigative efforts in the past two decades. Functional assessments are intended to identify the relative "functions" of the identified challenging behavior for a particular individual. Since Brian Iwata and his colleagues published their 1982 article on the functional analysis of self-injury, the importance of conducting functional assessments and analyses to appropriately design functionally derived interventions is widely acknowledged.

Functional assessments may include a range of indirect and direct assessment practices. Indirect assessments may include structured interviews with individuals knowledgeable about the identified client and a behavior motivation checklist developed to ascertain the possible function or purpose of a target behavior for a specific individual. Direct assessment may include naturalistic observations or analogue observations. With naturalistic observations, the individual is observed in a typical setting (school, home, and other community setting) with the intent of observing the challenging behavior, and thus infer the function for that individual given the consequences the behavior rendered. As illustrative, did the child gain the teacher's attention by hitting a classmate? Alternatively, was the child allowed to "escape" the situation for the same behavior by being sent out of the room (and away from the stack of worksheets)? The term functional analysis is typically reserved to describe specific analogue observations, which are often employed as part of a functional assessment. Analogue, meaning analogous to a situation, observations are intended to simulate likely real-life scenarios in which the challenging behaviors likely occur. Hence the goal of a functional analysis is to identify environmental variables that may be maintaining or controlling certain challenging behaviors. In the functional analysis observations, the systematic manipulation of variables in an analogue setting allow for data-based development of hypotheses regarding the function of a particular observed behavior.

To get an idea of what a functional analysis entails, commonly used functional analysis conditions and procedures first published by Brian Iwata are briefly described.

B. Social Attention

This condition is designed to approximate a common type of reinforcement contingency that may maintain a challenging behavior. In the natural environment, many challenging behaviors may in turn result in attention from caregivers, teachers, and peers. Verbal attention, nurturance, and comfort may be the consequence of an individual engaging in a challenging behavior, thus inadvertently maintaining the behavior as a form of positive reinforcement. In this analogue observation, attention is delivered contingent on the challenging behavior.

C. Demand

This session is designed to assess whether a challenging behavior is maintained by negative reinforcement as a result of being allowed to escape or avoid demanding or stressful situations. In this condition, demands or requests are issued, and the individual is

allowed to escape contingent on the challenging behavior under assessment.

D. Preferred Tangible Removal

This session serves to determine if the challenging behavior is a means to gain access to preferred activities or items. In this condition, preferred items may be removed and then returned contingent on the identified challenging behavior.

E. Alone

This analogue condition assesses whether a behavior is maintained by sensory reinforcement. The individual is observed without stimulation/activities and receives no attention.

These types of observations usually are conducted after other earlier described assessment procedures have been completed. The functional analysis observations are the most controlled observations and may be thought of as "testing out" the hypothesized purpose of challenging behaviors for an individual. The approach may not always be feasible in all settings. Nonetheless, gathering as much precise data about the function of a problematic behavior is of great importance. Accurate hypotheses about the purpose or function of a particular challenging behavior are essential in the design of effect in FCT procedures.

III. EMPIRICAL STUDIES

Since the first FCT studies were published in the mid-1980s, there has been much enthusiasm surrounding this promising approach. This enthusiasm was generated for several reasons. The treatment approach moved away from the reliance of consequence and earlier punishment procedures that had evoked controversy in the field. The treatment also resulted in often dramatic decreases in challenging behaviors and had more inherent likelihood of being maintained over time. Edward Carr and V. Mark Durand first reported in 1985 on four individuals with developmental disabilities. Aggression, self-injurious behavior, and tantrums were successfully treated with FCT. Subsequent to this first report, a plethora of investigations emerged very quickly in the behavior treatment literature. Most commonly, functional communication training has been implemented to decrease excessive behaviors. In the research literature, behaviors studied have included most commonly aggression, self-injurious behaviors, tantrums, and disruptive behaviors such as throwing. The studies have been almost entirely single-subject design, hence each study includes only a small number of subjects. Thus, the generalization of the application of specific FCT procedures to populations different than the specific characteristics of the subject studies is yet to be understood.

In recent years, there has been considerable FCT research designed to examine the underlying behavioral mechanisms to explain the powerful effects of the treatment. It appears that FCT is only useful in combination with components. That is, FCT is only effective when the problematic behavior is simultaneously placed on extinction or even perhaps punished. FCT is also more likely to be effective if there are more opportunities for the new replacement behavior to be evoked and then reinforced.

IV. SUMMARY

The past 15 years have seen a truly remarkable impact of the functional communication or functional equivalence training approach to the amelioration of challenging, interfering behaviors. This approach has been primarily applied to individuals with developmental disorders and those with noted limitations in communication skills (young children). Since the introduction of this treatment approach, a plethora of empirical reports in the literature have supported the efficacy of this approach as one component in a multicomponent treatment package. This approach is not only widely accepted in intensive treatment settings but has been instituted as an intervention in children's behavior support plan as part of their individual education plan in the special education system.

See Also the Following Articles

Behavioral Assessment ■ Communication Skills Training ■ Extinction ■ Functional Analysis of Behavior ■ Neuropsychological Assessment

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Gambling: Behavior and Cognitive Approaches

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GLOSSARY

core cognitive error Relates to gamblers' erroneous cognitions related to randomness and predictability.

pathological gambling Individuals gamble because they maintain the unrealistic hope that they will recover their losses if they continue to gamble.

randomness No event can influence another, thus resulting in the upredictability of events.

I. DESCRIPTION OF TREATMENT

The legalization of new forms of gambling is increasing in most Western countries. This trend has created a situation in which more and more people will develop serious gambling problems, for which they will need to seek professional help. Pathological gambling was officially recognized in 1980 with the publication of the *DSM-III*. It is now acknowledged that the prevalence of pathological gambling is related to the availability of gambling opportunities, legal or illegal. Current prevalence rates of this disorder vary from 1 to 2% in the United States and Canada.

The cognitive approach to the treatment of pathological gambling is based on experimental work demonstrating a wide range of cognitive errors made by gamblers in relation to gambling. The core cognitive error lies in the gamblers' notions concerning randomness and predictability. Essentially, gamblers fail to recognize the random nature of games of chance and believe that they can predict the outcome of the game and win through the use of skills or strategies. This misconception of randomness leads gamblers to develop what has been referred to as the "illusion of control," and false beliefs in their ability to predict the outcome of a game. The basic assumption of cognitive theories is that gamblers will dramatically decrease their gambling activity if their erroneous perceptions about randomness can be corrected.

Our treatment program focuses on erroneous perceptions about randomness and makes it the most important target for change. Two components are crucial in this treatment: the cognitive correction of erroneous perceptions and relapse prevention. Because cognitive therapy usually integrates behavioral as well as cognitive strategies for change, specific behavioral interventions are included in the treatment package. This specific treatment is administered on an individual basis, over an average of 12 weekly sessions lasting 60 min each.

A. Evaluation of Pathological Gamblers

A thorough evaluation of each individual's gambling problem must be conducted to determine how best to implement the therapeutic intervention. Before treatment begins, therefore, the nature and severity of the gambling problems must be evaluated. Although the South Oaks Gambling Screen (SOGS) is not made for diagnosis, this brief questionnaire developed by Henry Lesieur and Sheila Blume is a pertinent, easy to use, and widely recognized evaluative instrument. This instrument is frequently administered over the phone, before the first treatment session takes place. To date, the *DSM-IV* criteria for pathological gambling remain the most accepted instrument for the diagnosis of pathological gambling. Thus, to achieve a complete and comprehensive evaluation, our group developed a semistructured interview that includes the *DSM-IV* criteria and obtains additional information about historical gambling habits, social functioning, suicidal thoughts, concomitant excessive behaviors, and so on.

Ambivalence toward abstinence or controlled gambling is the gambler's worst enemy and must be addressed during the first stage of evaluation. The motivational level of individuals with a gambling problem should therefore be assessed before they undertake any treatment. Our team of therapists have made use of a motivational scale allowing them to decide which treatment target should be prioritized. A high level of motivation, such as 7 out of 10, could indicate a lower level of denial from the client, and a better likelihood of treatment adherence. In contrast, a low score on the motivational scale indicates that treatment adherence may be a problem and should be addressed first. Ambivalence about conquering the desire to gamble must necessarily be dealt with if the treatment is to succeed. Thus, addressing motivational issues is the very first step, before even considering targeting erroneous perceptions about gambling.

To further test the gambler's motivation to cease gambling, the therapist and client also engage in discussion about the positive and negative aspects of gambling during this evaluation phase. A better consciousness of the positive and negative aspects of ceasing gambling is also an issue. During this discussion, the therapist obtains information about the client's gambling behavior and identifies the client's goals regarding treatment.

To keep track of their gambling activities, clients are asked to complete a daily monitoring sheet. With the help of this monitoring sheet, the therapist can start every clinical session with a discussion about the client's progress or relapse throughout the course of the therapy.

The next treatment target involves the correction of the client's erroneous perceptions about the role of randomness in games of chance. Most gamblers are either not aware that their perception of these games is inaccurate, or they simply deny that they believe these games can be predicted, controlled, and won. Increasing awareness of their gambling activities and the erroneous perceptions associated with them is an essential first step if gamblers are to overcome their urge to gamble and work their way toward abstinence. Given that relapse rates among gamblers are high, and that gamblers tend to be ambivalent about conquering their habit, or deny that they even have a problem, abstinence is the ultimate goal in therapy. A study currently underway at Laval University is evaluating the efficacy of controlled gambling versus abstinence, with the gambler's characteristics as predictors of success for either goal; until these results are known, however, abstinence should remain the main goal of therapy.

Cognitive treatment for pathological gambling is not based on simply providing information concerning actual probabilities and the true random nature of games of chance. Rather, the main goal of this treatment is to enable gamblers to become aware of their own misconceptions about gambling and challenge their unrealistic beliefs about the predictability of games of chance. Thus, an evaluation of the gambler's misconceptions is a crucial step that must be taken before therapy can be initiated. To do this, clients are invited to describe the evolution of their gambling habits. As mentioned previously, the main cognitive error of the pathological gambler is to make links between events that are in reality absolutely random. Gamblers will perceive patterns and signs about the patterns of numbers in a game that they believe allow them to predict the outcome. The basic misconception, which is specific to gambling, is expressed through a number of erroneous perceptions about gambling and games of chance. Examples of such misconceptions are: "I won three times in a row, that's my lucky day today," "Since I won yesterday and the day before, I can't lose today," "After wining the jackpot, I must continue gambling because I don't want to break my lucky streak," "When little numbers come up on the wheel, it means that a big one is coming." To identify these erroneous perceptions and to increase gamblers' awareness of them, a careful analysis of a gambling episode is carried out.

B. Detailed Analysis of a Gambling Session

An innovative way of assessing the gamblers' erroneous thoughts is through a detailed analysis of a gambling session. For this analysis, clients are invited to describe in detail what they were thinking about before, during, and after a gambling session. By asking gamblers what they were doing and thinking at each stage of a memorable gambling session, the therapist will gain access to the illusions and cognitive errors of clients. The following questions are examples of what the therapist may ask the client:

Before: "What were you doing when the idea of gambling popped into your head? What were you thinking at that precise moment, or what were you saying to yourself?" "Once you decided to go, what did you do? What was going through your mind?" "On your way to the casino, what were you thinking?" "Once you arrived there, what did you do and why? How did you choose your slot machine or roulette wheel? Did you start gambling right away? What were you thinking then?"

During: "What was your first bet? Why?" "Because gamblers have their own specific ways of gambling, how were you playing? What were you thinking at that precise moment? Why?" "Tell me more about what you were doing and thinking while you were playing the game." "Pretend I don't know the game, what would you recommend if I were to play? Why?" "Do you pay attention to what is happening on your slot machine or bingo table? Why?" "Once you lost the $60, what did you do? What were you saying to yourself? Why didn't you quit at that time?" "When you went to the bank machine, what were you saying to yourself?" "When you came back to the game, what did you do? Why? "Do you sometimes change your slot machine for another? Why?"

After: "Once you lost everything, what did you do? and why?" "On your way home, what were you thinking? What did you do after?"

The information gathered at the "during" phase of the analysis will identify the gambler's obvious misconceptions about randomness. This process also allows clients to discover some of their own errors in perception. Gamblers will often spontaneously describe strategies that assume that there is more predictability present than is in fact the case. Inevitably, gamblers wrongly use information to predict an event that is independent of all other events, and is essentially unpredictable beyond its chance probability. The therapist's attitude during this analysis should be one of curiosity and a certain naiveté concerning gambling, rather than a confrontational or challenging approach. This will usually lead to cognitive dissonance within clients, as they attempt to clarify and justify their beliefs and behaviors; this dissonance can be useful in the therapeutic phase. The ultimate goal of this procedure is to make clients doubt the validity and reliability of the predictors they rely on while gambling (behavior, feelings, thoughts). Progressively, clients will learn to free themselves of their erroneous thoughts and regain control over their choices and lives.

C. Cognitive Treatment

In the next phase of therapy, clients are invited to give their definition of the concept of chance or randomness. At this point, games of skill are discussed in contrast to games of chance, as gamblers often mistakenly believe that games of chance can be influenced by the application of skills that will improve their chances of winning. This example of the illusion of control explains why people tend to bet more money as they become more familiar with a game, firmly believing that they have developed specific skills that can be used profitably. During this stage of treatment, information is provided to highlight the fact that games of chance essentially exist for business reasons, and that therefore the sole purpose of these games is to make a profit. At this point, clients may become ready to discuss their misconceptions about randomness and all the pitfalls that surround this misconception. Literature detailing the frequent misconceptions about gambling may then be provided to the gamblers.

D. Increasing Awareness toward the Notion of Randomness

The crucial concept of randomness, or independence between events, is addressed as a priority in the treatment. The explanation and demonstration of the fundamental concept of randomness is the heart of the treatment program. The concept of randomness is essentially that no event can influence another, which results in the absolute unpredictability of events. Because games of chance are random, the events they involve cannot be influenced, and in reality no strategy has the capacity to control the outcome of the game. The therapist will illustrate the concept of randomness by referring to the client's own gambling strategies, helping

them to realize that these strategies arise from the mistaken linking of independent events. The therapist should always remain focused on any verbalizations made by the client relating to the attempt to predict the outcome of a game by linking unrelated events. Clients will gradually realize that their beliefs are erroneous, and more importantly that these beliefs are based on the association of irrelevant events, that are actually unrelated to their chances of winning.

A useful way to illustrate how erroneous links can be made between unrelated events is to toss a coin. First, therapists might ask the gambler to predict whether the next toss will result in heads or tails and to explain their choice. Most gamblers will say that their choice is based on a 50/50 probability of each possible outcome, which is indeed correct. This exercise is carried out a few times to demonstrate that predicting heads or tails is simple, and that the outcome of each toss is independent from every previous toss. At this point, clients will generally agree with the therapist. Then, to demonstrate the presence of erroneous perceptions during gambling, a simple test can be performed. The therapist tosses a coin six times without showing the results to the client. The therapist then writes down six consecutive heads, no matter what really happened, and covers these results with a piece of paper. Once again, the gambler is asked to predict the outcome of the next toss. After the choice has been made, the six "previous" outcomes are revealed, and the gambler is asked if he or she would like to change his or her prediction before the coin is tossed again. Whether the gambler changes the prediction or not, he or she will certainly examine the series of previous outcomes. The therapist can then point out that although the client knew that every outcome of a coin toss would be independent, the gambler examined past outcomes even though they were perfectly useless in the prediction of the next result. This simple exercise has proven to be very helpful for demonstrating how this tendency to link irrelevant events is very powerful. The concept of randomness is then explained in detail and illustrated by examples of specific types of games the client has played.

E. Cognitive Restructuring Exercise Sheet

In the next part of treatment, clients are asked to identify their own erroneous perceptions about gambling and to write them down. This can be achieved through an additional analysis of a specific gambling session, or through a variety of methods, that is, asking gamblers to describe what they typically say to themselves when they gamble; by simulating a game and having clients describe how they choose their bets; or by asking them to imagine a gambling session and describing out loud what they are thinking using the "thinking out loud" method for gambling.

During the therapy program, pathological gamblers will monitor their own verbalizations when they are thinking about gambling, when they have the urge to gamble, or when they actually gamble, if they are not able to remain abstinent. The client's tasks are to (a) to identify erroneous perceptions, (b) to evaluate and challenge the adequacy of these perceptions, (c) to replace these inadequate perceptions by adequate verbalizations, and (d) to assess the strength of their beliefs in their new, realistic perceptions. The following is an example of how such cognitive restructuring might be achieved with clients who have just relapsed and lost a large sum of money:

Therapist: "What happened before you decided to gamble?"
Gambler: "I had just received an unexpected amount of money."
Therapist: "What did that mean to you at that moment?"
Gambler: "I saw it as an opportunity to make it grow a little."
Therapist: "To make it grow…"
Gambler: "Yes, since I had lost so many times recently, I felt it was going to be my turn to win."
Therapist: "Do you usually listen to such a feeling?"
Gambler: "Yes, all the time!"
Therapist: "Does it ever happen that you lose, even when you have this feeling?"
Gambler: "I understand what you mean by that question…"
Therapist: "This feeling seems to get you into a lot of trouble. Since you listen to it, would you rate this feeling as a good or bad predictor of winning?"
Gambler: "I never thought of being critical about my feelings. I guess I should be…"

The successful resolution of this phase is normally required before further issues can be addressed. If the illusion of predictability in gambling events remains, relapse is likely to occur. This is the most important target of the treatment. Of course, other erroneous thoughts, superstitions, or intuitions also stem from the basic error of linking independent events. The belief that a specific watch can bring luck and that a specific feeling can predict the outcome of a game are good examples of this phenome-

non. However, other erroneous thoughts must also be addressed even if they are not linked to misconception about randomness. For example, many gamblers will say to themselves that "I have nothing to lose by continuing to gamble" or "This time, I will control myself," or "I will gamble only $20.00, that won't do me any harm," or "I want to win a last time before I quit gambling. I must not quit as a loser." Obviously, all these thoughts must be addressed if a treatment is to be maximized.

When they are in the process of modifying their habits, gamblers usually find it helpful to use a cognitive restructuring exercise sheet. When they are confronted with a high-risk situation, clients must ask themselves what they are thinking, identify what their misconceptions are, and correct them with realistic thoughts. Finally, clients must choose what they want to do. Gambling is a choice as long as the gamblers are fully aware of their thoughts, beliefs, and misconceptions. Furthermore, our clinical experience and empirical data support the proposal that other therapeutic components such as behavioral strategies can be helpful within such a cognitive therapy to diminish the risk of a relapse. However, these behavioral interventions must follow, not proceed, the cognitive correction of erroneous perceptions if therapeutic gains are to be maintained.

F. Behavioral Strategies and Relapse Prevention

Clients undergoing treatment for pathological gambling often struggle with many high-risk situations that may reduce their resistance to gambling. Cognitive correction will help clients to develop a more realistic perception of gambling that will help them to refrain from participating in these activities. However, social, professional, or financial difficulties may compromise their abstinence goal and put them in a state of vulnerability. Behavioral interventions can forestall many problems and raise the efficiency of a cognitive treatment.

A basic relapse prevention strategy is to ask clients to list the high-risk situations that may confront them following treatment. The purpose of this exercise is to make clients aware of what triggers their desire to gamble. There are five main categories of high-risk situations: (a) exposure to gambling situations, (b) financial problems, (c) emotional or relational problems, (d) lack of employment, and (e) alcohol and drug consumption. These difficulties can be prioritized, and strategies for dealing with these situations can then be generated through the use of problem-solving training or social skills training.

1. *Exposure to gambling situations:* Exposure to a gambling situation is by far the most difficult test of the gambler's ability to remain abstinent, and the one in which relapse is most likely to occur. Thus, therapist and client must discuss the possible consequences associated with high-risk gambling situations. Avoiding these situations becomes an alternative, and clients are strongly encouraged to find strategies that will enable them to avoid exposure to gambling. For example, on their way home from work, clients may choose alternatives route that do not require them to drive past a gambling establishment. Or, a client may choose only to frequent bars that do not have video lottery terminals.

2. *Financial problems:* Because excessive gambling involves important financial loss, gamblers must find ways to stabilize their financial situation. It will therefore be useful for the therapist to know how much money has been lost in gambling activities, what the client's weekly earnings and expenses are, as well as the amount of the client's gambling-related debts. Given this information, the therapist can help clients find money-managing strategies such as asking a family member to take care of their finances for a period of time. During the high-risk period immediately following therapy, many gamblers find it helpful to carry a small amount of money or no money at all on their person. This behavioral strategy serves to restrict access to money and discourage excessive gambling behavior. Along with cognitive therapy, some clients may benefit from the advice of a financial counselor, to help resolve financial problems and maintain their motivation to abstain from gambling.

3. *Emotional and relational problems:* If needed, the therapist might explain how emotional or relational difficulties are linked to gambling problems and discuss ways in which the client can resolve these difficulties. Social skills training is useful, for example, when gamblers have difficulty saying "no" to an invitation to gamble. Social skills training can teach clients how to refuse such invitations. For others, gambling activities might conceal difficulties with establishing social contacts or maintaining friendships. Learning how to develop new, mutually rewarding social ties might in these cases aid clients in abstaining from gambling.

4. *Lack of occupation:* Gamblers are encouraged to look for new activities to occupy the time they formerly spent gambling. Activities they enjoyed prior to the onset of their gambling problem are often the key to safely occupying their new spare time. Scheduling specific activities is a good way to avoid the feelings of emptiness and boredom that are so frequently associated with relapse. Behaviors that improve the quality and closeness of

clients' relationships are emphasized. In fact, because pathological gamblers tend to isolate themselves, they often abandon activities involving their spouses or children. Simply encouraging clients to go to the park and play with the people they love can be very beneficial.

5. *Alcohol and drug consumption:* For many gamblers, alcohol or drug consumption contributes to losing control and leads to excessive gambling. If this appears to be an issue, it should be evaluated immediately. Even if there is no substance dependency, but some substance abuse is occurring, the client will have to address this issue because it can contribute to the maintenance of excessive gambling.

G. Relapse Prevention

Relapse prevention is a major theme throughout therapy. When clients have successfully modified their cognitive errors and gambling behaviors, the therapist introduces a relapse prevention strategy. First, the therapist asks clients to describe what a relapse would mean to them, and then to outline the events, thoughts, or situations that could trigger such a relapse. A discussion about past relapses can be helpful. The therapist employs other strategies to prevent relapse such as a gradual tapering-off of therapy or increasing time between consultations. This tapering-off strategy encourages clients to perform their cognitive exercises after the end of the therapy, to use available resources, and to promote the idea of participating in self-help groups such as Gamblers Anonymous. Finally, the therapist outlines what clients can do in emergency situations, or when they experience the overwhelming urge to gamble. They are instructed to: (a) stay calm, (b) remember their commitment, (c) carefully analyze the situation that has produced the relapse or increased their desire to gamble, and (d) ask for help.

II. THEORETICAL BASIS

The central assumption of cognitive approaches to the treatment of pathological gambling is that individuals gamble because they maintain the unrealistic hope that they will recover their losses if they continue to gamble. It is assumed that their erroneous beliefs about gambling, the nature of predictability, and their own special skills and knowledge concerning the prediction of gambling outcomes conspire to maintain the gambling far beyond any reasonable limits. It follows that the correction of these erroneous perceptions weakens the belief that gambling losses can be recouped.

Gambling takes place when an item of value, usually money, is staked on the outcome of an event that is entirely unpredictable. In gambling, the primary task of gamblers is to use available information at their disposal to try and predict the outcome of an event that is essentially unpredictable. Most gamblers behave as if the act of gambling actually involves some element of personal skill, the exercise of which might influence the outcome of the game. In the mind of the gambler, skill can be superimposed on chance. This phenomenon, described as an illusion of control, refers to the belief that the outcome of a chance event can be influenced or controlled to some degree by one's skill or ability.

Most gamblers fail to correctly perceive or understand that there is no relationship between their behavior and the outcome of a chance event, and that no matter how hard they try, they have no ability to exert any influence or control over the final outcome. There is an abundance of experimental and anecdotal evidence demonstrating the existence of this illusion of control among gamblers.

James Henslin conducted an observational study of gamblers in the casinos of Las Vegas. He described a characteristic behavior displayed by some gamblers: when "craps" players wished to obtain a high number on the roll of a dice, they threw the dice rapidly and forcefully, while when they desired a low number, they threw them slowly and lightly. In this case, the illusion of control can be seen through the player's attempt to "control" which numbers come up through the use of a specific type of wrist motion when throwing the dice.

In our laboratories, we have verified the central role that illusions of control and erroneous perceptions have in the overall process of gambling. In one experiment, we invited two groups of gamblers to participate in a session of roulette. The two groups were exposed to the same conditions as those found in a casino, with one exception: the "active gamblers" were allocated the responsibility of throwing the roulette ball themselves, while for the "passive gamblers" in another group, the dealer performed this task. In reality, the numbered slot where the ball finally came to rest was left to chance regardless of whether the gambler or the dealer threw the ball onto the roulette wheel. However, the results of the experiment clearly demonstrated that participants who threw the ball themselves placed higher bets and overestimated their chances of winning to a greater extent than did the passive gamblers.

As intelligent beings, we like to impose order and causality on the events that happen around us. We are not used to, and feel a degree of discomfort in, relying

on chance as an accurate and plausible explanation for events. Chance is a concept we are most likely to invoke when confronted with events that are totally unusual, unpredictable, coincidental, or unexpected. However, scientific studies have convincingly revealed that few people fully understand the concept of randomness. People do poorly in generating a random sequence of numbers. People have an excessive tendency to avoid repetition, and because of this, when asked to produce something random, they produce too many variations in sequences or patterns. For example, few individuals will believe that the following sequence of heads (H) and tails (T) was randomly generated: H-T-H-T-H-T-H-T. The same is true when playing the 6/49 lottery. Few will have the courage to select 20, 21, 22, 23, 24, and 25 as their choice of numbers despite this series having the same probability of coming up as any other combination.

We have noted that this cognitive tendency reflects the fact that people in general find it difficult to take into account the independence of events. This cognitive tendency or trap is, in our opinion, one of the most important elements in understanding the psychology of the gambler, and ultimately, the pathological gambler. Let's take another example. When we ask gamblers to generate sequences of "heads and tails," we observe that more than 70 to 80% of people rely on the outcome of past events in predicting the next one. Yet, we also know very well that in each toss of the coin, "heads" or "tails" has, and will always have, a one in two chance of appearing. How does this error in thinking often manifest itself? A detailed analysis indicates that the principal error committed is in the desire to have an equal proportion of "heads" and "tails" in a sequence; the gambler attempts to move away from any form of apparent pattern and avoids long sequences of the same event. This has been shown empirically by the tendency of people to prefer a selection of "heads" after a run of six or seven "tails." The outcome of the next toss is still one in two for heads independent of whatever pattern or sequence of heads or tails came before it.

What happens in the minds of problem gamblers when they are in the midst of gambling? How do gamblers interpret the probabilities and outcomes of a game to conclude that, despite the presence of repeated losses, taking continued greater financial risks is justifiable? Several observations made in our experimental and clinical work leads us to the conclusion that gamblers' cognitive activity is distorted in many respects, and that these distortions bias the individual's perception of reality. To understand and solve the puzzle of cognitive distortions, we must examine the cognitive activity of gamblers during play; for this purpose, the "thinking out loud" method is extremely useful. In this method, gamblers are requested to clearly verbalize all the thoughts that go through their minds about the game itself, even if these statements seem unimportant or irrelevant to them. This verbalization of internal dialogue is recorded onto audiocassette and then analyzed by an experienced psychologist. The researcher then evaluates and categorizes the cognitive content of the audiocassette into two classifications: "rational and adequate" or "irrational and erroneous," according to whether the elements verbalized seem to consider accurately chance as the primary determinant of the outcome. With the assistance of the thinking out loud method, we studied slot machine players. The results showed that more than 75% of the verbalizations made by the players were irrational, inadequate, or erroneous; that is, they did not reflect reality in that they clearly ignored or denied chance as the determining element of the game. It should be noted that this is a particularly large percentage considering that slot machines involve little subtlety and no opportunities to apply personal skill of any kind.

These results have been independently confirmed in several other studies carried out around the world, among different types of gamblers, using various types of games. In addition, we have observed that the erroneous perceptions of gamblers share a common factor: Gamblers consistently commit the error of associating previous independent events in predicting the outcome of the game.

III. EMPIRICAL STUDIES

Although the prevalence estimates of pathological gambling range between 1 and 2% of the population, the number of gamblers who will seek professional treatment is only a small percentage of the population. Relatively few effective interventions have been developed and validated. Most published papers dealing with the treatment of pathological gamblers have either been uncontrolled case studies, or consisted of small samples, thus making it difficult to reach any conclusions about the efficacy of the interventions in question. Their most useful function might be as a source of valuable hypotheses concerning treatment efficacy that can then be evaluated more rigorously. This article is based on studies that have employed a randomization procedure to allocate gamblers to treatment and control groups. A review of the literature reveals that few studies appear to

exist, originating in Australia, Canada, and Spain. We review these studies, according to the countries where the interventions were developed and evaluated.

A. Australia

Nathaniel McConaghy, Alex Blaszczynski, and their colleagues, in Sydney, have conducted several controlled studies of imaginal desensitization (ID), which is based on a conceptual model of compulsive behavior. According to their theory, if an individual does not perform a given compulsive behavior when in the presence of conditioned stimuli (which could be environmental or cognitive), tension and arousal will increase and will be relieved only when the compulsive behavior is carried out. Imaginal desensitization (ID) was developed as a means of giving individuals control over their compulsive behavior by reducing their level of arousal and tension in the presence of the conditioned stimuli, so that the urge to complete the behavior sequence is no longer experienced.

In 1983, these researchers compared the efficacy of ID for pathological gambling to electric aversion therapy. ID consisted of inducing a relaxed state in the presence of several imaginal gambling-related episodes. Electric aversion therapy consisted of delivering an aversive stimulus to inhibit the excitation produced by undesired gambling stimuli and interrupt the compulsion to gamble, which otherwise would be acted on. The key findings were a significant difference in the number of ID participants attaining cessation or a marked reduction of their gambling and urges, compared to participants in the electric aversion condition. They further conducted an additional trial to evaluate the efficacy of ID. Twenty pathological gamblers were randomly allocated to ID and imaginal relaxation, a treatment similar to ID but that does not instruct the individual to visualize gambling situations but rather being in the presence of relaxing situations. Results indicated no differences at either follow-up assessment point, with 30% of both groups reporting either abstinence or controlled gambling. Similar results were reported for gambling urges.

B. Spain

Enrique Echeburua and his colleagues compared three different active treatments for pathological gambling to a wait-list control group. The active treatments consisted of exposure–response prevention, group cognitive restructuring, and a combination of these two types of treatment. Exposure–response prevention is a behavioral treatment in which participants are trained to manage money, avoid gambling situations, and encouraged to remain present in high-risk gambling situations but refrain from gambling. The cognitive treatment challenged the "illusion of control" and other memory biases within a group format. The combined treatment included both treatments. These three treatments differ from each other that one half of the participants in each type of treatment received it in a group format, and the other one half received it in an individual format. Although the three treatment groups showed higher rates of abstinence at 6-month posttreatment than did the control group, there was no difference between the combined group and the control group. The individual treatment was found to be superior to the group or combined treatment at the 12-month posttreatment assessment, but there were no group differences between the active treatments for any of the other dependent variables at 12 months. The control group, however, did show considerable improvement at 6 months on most of the gambling-dependent variables, which suggests that natural recovery or spontaneous remission played an important role in the outcome of this study. This finding underscores the need for including non-active control groups in gambling research studies.

In a follow-up to this study, 69 problem slot machine gamblers were treated with stimulus control and *in vivo* exposure with response prevention and then randomly assigned participants to one of three treatments: individual relapse prevention (RP), group RP, and no treatment control. The RP conditions trained participants to identify high-risk gambling situations and to develop effective coping strategies for these situations. Exposure to gambling-related stimuli was also included as a component of RP. All 69 participants stopped gambling following the exposure–response prevention phase of the study, a precondition to enter the relapse prevention phase. The results showed no significant differences between the two RP groups and the no-treatment control group until 3 months posttreatment. At that point, and continuing until the 12-month follow-up point, the two active RP groups were achieving significantly higher rates of abstinence than the control group.

C. Canada

A treatment developed by Robert Ladouceur and his team was among the first to target cognitive errors, such as the independence of events, in the treatment of pathological gambling. Assuming that this fundamental error is the basis of the progression of nonproblematic to problematic gambling behavior, the target of the treatment was to help gamblers realize this cognitive

error and provide them with the means of correcting their perceptions. Using a single-case experimental design, this treatment program included four components. The combination of cognitive correction, problem-solving training, social skills training, and relapse prevention resulted in positive treatment outcomes. Following treatment, participants no longer met *DSM-III–R* criteria for pathological gambling. These results were maintained at a 9-month follow-up.

Three ensuing studies further investigated the efficacy of this procedure through the use of controlled designs. The efficacy of cognitive-behavioral treatment was compared to a wait-list control group. Participants were randomly assigned to a control group or to an individual treatment consisting of cognitive correction of core erroneous gambling cognitions, problem-solving training, social skills training if indicated (about one half of the sample) and relapse prevention. The treated group was found to improve on all key dependent variables compared to the control group, as well as on measures of gambling behavior (frequency, hours spent gambling, and amount of money spent gambling). Clinically significant changes indicated that the majority of the treated participants no longer met the *DSM-III–R* criteria neither at the end of treatment nor at the 12-month follow-up.

Because the cognitive correction was accompanied by two behavioral procedures (problem solving and social skills training), these positive outcomes may not have solely been the result of the cognitive intervention but may also have been due to the positive effects of the behavioral intervention. To investigate this possibility, a preliminary study of the treatment of five pathological gamblers was examined using a multiple-baseline, across-participants design. Cognitive correction targeted gamblers' erroneous perceptions of randomness was the only therapeutic intervention used. Following treatment, four participants reported a clinically significant decrease in their desire to gamble, an increase in their perception of control, and no longer met *DSM-IV* criteria for pathological gambling. Therapeutic gains were maintained at a 6-month follow-up assessment. These results suggest that a cognitive therapy targeting misconceptions about randomness is a promising treatment for pathological gambling.

In a related study, Ladouceur and his colleagues compared the efficacy of this purely cognitive treatment to a wait-list control group. Patients (mainly video lottery players) were randomly assigned to an individual treatment consisting of the cognitive correction of core erroneous gambling cognitions, followed by relapse prevention. The treated group was found to improve on all key dependent variables compared to the control group, as well as on measures of gambling behavior (frequency, hours spent gambling, and amount of money spent gambling). Thirty of the 35 treated participants (85.7%) attained the criteria for clinically significant change compared to 4 of 29 participants (13.8%) in the control group. More important, all 35 treated participants scored 4 or less on *DSM-IV* criteria for pathological gambling. These therapeutic gains were maintained at a 6-and 12-month follow-ups.

This latter study was recently replicated, but therapy was delivered in a group rather than an individual format (4–5 individuals per group). Results from this study confirmed previous results: Over 85% of the treated gamblers were no longer considered pathological gamblers *(DSM-IV)* at the end of treatment. In addition, participants had a greater perception of control over their gambling problem, as well as an increased self-efficacy in high-risk gambling situations.

These studies show that the central component of the treatment was highly specific, and based on a theoretical understanding of cognition in gambling, which may explain the magnitude of therapeutic gains. Research on the psychology of gambling suggests that gamblers' core cognitive error lies within their beliefs about randomness, and in their belief that they can control the outcome of random events (the illusion of control). It follows that if the gambler's erroneous perceptions and understanding of randomness can be corrected, then the motivation to gamble decreases dramatically.

IV. SUMMARY

Effective treatments are now available to help pathological gamblers. The rationale of the interventions is grounded in empirical studies that have clarified the psychology of gambling. Clinical research should now address the important issue of which patients should receive which treatment.

See Also the Following Articles

Addictions in Special Populations ■ Controlled Drinking ■ Matching Patients to Alcoholism Treatment ■ Relapse Prevention ■ Substance Dependence: Psychotherapy

Further Reading

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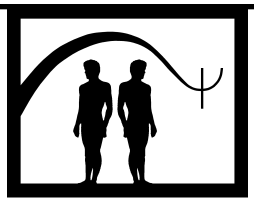

Gestalt Therapy

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GLOSSARY

background As distinguished from figure or foreground, that which is not uppermost in awareness. Provides the context and is the source from which figures emerge and become prominent in awareness.

closure The result of the natural movement toward the completion of perceptual or experiential units.

contact The experience at the self/environment boundary that leads to assimilation and growth. Good quality contact involves awareness and excitement.

contact boundary The dynamic relationship at the meeting point of self/other, or self/environment. Where experience occurs, and the focus of therapeutic intervention.

creative adjustment A person's best adaptation to dealing with feelings and needs in response to environmental inadequacy in meeting the needs, or competing environmental requirements.

figure What stands out from the background as a focus of interest and attention. Generally related to a need or desire.

figure formation/destruction process The process whereby a figure of interest emerges, becomes a focus of attention and is acted upon, resulting in the dissolving of that figure.

foreground As distinguished from background, that aspect of experience that is the focus of attention at any given point.

Gestalt A German word that has no direct translation in English. "Configuration," "structure," and "whole" are used as translations, but none of these capture the complete meaning. "Figure" and "Gestalt" are often used interchangeably.

organismic self-regulation The process whereby homeostasis is maintained via the figure formation/destruction process.

Gestalt therapy has roots in psychoanalysis, Gestalt psychology, Reichian character analysis, and the work of the early phenomenologists. It was developed in the 1940s primarily by Frederick Perls, Laura Perls, and Paul Goodman. Gestalt therapy is humanistic, holistic, and experiential. It is a process-oriented and relational approach based on a theory of healthy functioning. The focus in therapy is on disruption of the natural process of self-regulation. The goal of treatment is the restoration of awareness, which allows for increased choice and flexibility in all aspects of living.

I. DESCRIPTION OF TREATMENT

A. Philosophical Foundations

Gestalt therapy method is guided by three philosophical foundations. The first of these is field theory, a concept that comes from physics. The "field" is a dy-

namic interrelated system, each part of which influences every other part. Nothing exists in isolation. Gestalt therapy is a field theoretical and process-oriented approach, which means the therapist attends to the total field including content and subject matter, as well as the here-and-now process occurring in the moment. This involves things such as the patient's tone of voice, style of communication and interaction, facial expression, physical gestures, posture, breathing, sensation, and affect. The therapeutic field also includes the patient's history and current situation, the therapeutic relationship, feelings experienced by the patient and the therapist, and their mutual impact on one another.

The second philosophical foundation is phenomenology. The Gestalt therapist attempts to bracket off preconceived biases, beliefs, theories, and interpretations, and attend as much as possible to what is actually understandable through the senses, with the focus on the patient's subjective experience. The therapeutic stance is one of meeting the patient where he is, and the therapist describing what she observes, rather than explaining or interpreting. The patient is encouraged to do the same. The therapist also brings her own feelings, sensations, and awareness into the interaction with the patient when useful for the treatment.

The third philosophical foundation is dialogue. A dialogic stance requires that the therapist be "present," confirm the patient, and be available for an I–Thou way of relating. Presence is the therapist bringing all of himself to the encounter in the here and now. Confirmation involves seeing and accepting patients for all they are and all they are capable of being. The I–Thou mode of relating has the qualities of immediacy, directness, presence, and mutuality. These qualities create a therapeutic relationship that is not hierarchical, and a meeting between patient and therapist that is in and of itself healing.

B. Goal of Treatment/Theory of Change

In Gestalt therapy, the goal is increased awareness. Although the patient presents specific symptoms such as anxiety, depression, stress-related physical complaints, relationship difficulties, or character/personality issues, the Gestalt therapist does not focus only on symptoms or behavior change. Rather, Gestalt therapy provides a holistic perspective where symptoms and problematic behaviors are seen as the person's best attempt to deal with conflicting needs, or needs conflicting with environmental requirements. Psychological problems, symptoms, and difficulties in interpersonal relationships result from what were originally creative adjustments that have become rigid, reflexive, and unaware, restricting the experience of self, and possibilities. By focusing on moment-to-moment process in the therapy session, the Gestalt therapist works with how the person creates and maintains her particular experience of self and other, and how this experience impacts the current situation.

Change then occurs spontaneously, as a result of this increased awareness. Gestalt therapy's change theory is paradoxical in the sense that change occurs not as a result of attempting to change (one part of the self trying to control and dominate another part) but as a result of the patient attending to, investing more fully in, and living more completely the actual current experience—what is. Doing this enables new responses to emerge that better fit current needs. Increased awareness leads to choice and opens up new options for behavior and interaction.

As aspects of the personality that have been disowned are re-identified with, an expanded sense of self is also restored. For example, the patient increases her capacity to experience and express grief, anger, or tenderness, which expands her ability to live authentically, and to connect more with other people. Gestalt therapy does not focus directly on problem solving, but rather on what limits the patient's capacity for creative solutions. As the saying goes "Give a person a fish and he eats for a day; teach a person to fish and he eats for a lifetime." A Gestalt therapist is interested primarily in the latter.

C. Therapy Method

By attending to observable behaviors that indicate blocked awareness and interruptions to acting on needs, desires, or interests, Gestalt therapy captures the essence of a person's existential position in the world, which impacts all aspects of self-experience and relationships. For example, the patient speaks softly, apologizes frequently, becomes slightly tearful but cannot cry, changes the subject, or shuts down if strong feelings threaten to emerge. Can she become aware of how she clamps down on herself? What makes this shutting down necessary? How might holding back, or not allowing herself to take up space be a theme in this patient's life? How many areas of her experience and relationships are impacted by it? How is it related to her presenting symptoms of anxiety or depression, or the dissatisfactions in her life?

The therapy process enables increased awareness of these blocks and how they are maintained, and also looks at why they were initially developed. For example, if the experience or expression of sadness has been criticized, punished, or even ignored by the parent, the child learns to cut off either the feeling, or its expression to others, or both. If a child's needs have been met with resentment, criticism, or disgust, the child's creative adjustment is to learn to block awareness of needs, or to learn to avoid showing or expressing them to others.

Through focused attention, the patient can become aware of how he blocks feelings/expression, for example, tightening muscles to hold back tears, internal messages such as "Don't be weak," or "Men don't cry." And the patient will discover the etiology—what made this necessary in his development. Symptoms then resolve as the patient reconnects with his authentic self and experience. For example, anxiety may result from a fear that certain "unacceptable" needs or feelings will surface in a particular situation. Depression may result from holding in anger or grief, poor self-esteem from directing frustration or criticism toward the self that needs to be expressed to another. Relationship problems may result from an inability to open up and reveal feelings, or difficulty needing another person.

Gestalt therapy's method is experimental and experiential. Experiments can be diagnostic as well as serving to highlight current experience and uncover new possibilities. For example, an unassuming person who does not make eye contact and qualifies most of what she says, complains that people do not listen to her or take her seriously. In therapy she might be asked to experiment with lecturing the therapist on the proper way to do something that is in her area of expertise. She might then show and experience the side of herself that is a knowledgeable expert. She may begin to speak more directly and forcefully. In this process she can get more in touch with this aspect of herself, as well as increasing her awareness of her reluctance to show this aspect of herself to others, or her anxiety in doing so. Conversely, the patient may speak to the therapist as if she is not an expert, when in fact she is. Her language might be filled with reflexive use of qualifying phrases. She might speak without conviction. In either scenario, the patient can see and understand how she contributes to others not giving her the respect she desires.

The patient also learns what made this way of being necessary. She could have been told "Children should be seen and not heard," or one of her parents might have become angry or silently disapproving if she expressed an opinion of her own. She might have been told she was stupid or wrong. Prior to therapy, she may not have remembered these incidents, she may have dismissed them, or minimized their impact. She may not even have been aware that she presented herself as timid and unsure of herself, or why it was important to do so. With the new awareness, she regains the possibility of a wider range in experience and behavior.

Gestalt therapy uses experimentation to increase awareness. Meaning for the patient then comes from experienced awareness rather than being imposed by the therapist's interpretation. The therapist tries to have no goal, agenda, or desired outcome in proposing an experiment, other than to observe and work with what happens next. An experiment can also be used to highlight an aspect of the patient's way of communicating. For example, a person who qualifies much of what he says by use of words like "Maybe," "Possibly," or "I guess," could experiment with either exaggerating the use of qualifying words, or cutting them out entirely and adding after every sentence "and I mean that." The therapist encourages the patient to pay attention to his experience as he does an experiment, and to express any reluctance in doing it.

Experiments can also enrich what a person is saying, and transform it from "talking about" to a lively present encounter. For example, the patient might imagine the person she is talking about is present in the room, and express her feelings directly to that person. This use of the empty chair or two chair experiment can also be effective in highlighting an internal conflict. The patient might imagine a part of herself in the empty chair and create a dialogue between the conflicting aspects of herself, such as the part that wants to be more creative and take more risks and the part that is more logical and conservative. This type of experiment can also explore an area of impasse or stuckness, for example, suggesting the patient develop a dialogue between the part of herself that wants to leave her marriage and the part that wants to stay.

To give an example of some of the above concepts, a patient who learned to stifle her feelings and needs, and to nurture herself with food comes to treatment depressed, with a poor self-concept, complaining that she has "tried everything" to control her eating and has been unsuccessful. Turning to food to meet emotional needs was at one time her creative adjustment, the best option available given the needs she had and the lack of available gratification possibilities—in this case a mother who was stern and unaffectionate and sent the patient to her room if she was "too emotional."

The Gestalt therapist observes this patient's responses in the moment, and helps to facilitate her awareness of them. For example, the therapist notices that the patient speaks more quietly and holds her breath when she talks about a hurtful or frustrating experience. The therapist can either make an observation ("It looks like you're tightening your jaw" or "I notice you holding your breath") or ask the patient to attend to what she is currently aware of ("What is your experience right now as you tell me this?"). The patient becomes aware that she is trying to control herself. The therapist attends to her need to control herself. He also attends to what she is controlling—verbalizing feelings, showing anger or tears. Through this process the patient becomes aware that there is also a part of her that would like to express itself and feels held back. Both aspects are explored.

The working through process involves the patient becoming aware of the importance of holding back feelings to prevent reexperiencing the rejection she felt from her mother, or the anger she felt toward her mother when she had feelings or needs. She might remember a forgotten traumatic experience. She might also discover that she expects the therapist to have a similar response. This patient learned over time to identify with her "nonfeeling, nonneeding" self. Her eating behavior may be one of the only remaining vestiges of her "feeling, needing" self. In therapy, she can also experiment with giving voice to the part of her that wants to eat, and re-identify with her needs and desires, instead of only wanting to suppress these needs. For example, she might realize that while part of her wants to stop overeating, part of her—out of her awareness—also wants to continue eating as a way to take care of feelings and to comfort herself. This part might say something like "Don't take food away from me, it's all I have." Change becomes possible as she invests more fully in being where she is—feeling those needs she translates into a desire for food—and may take the form of learning to nurture herself in other ways, or to get her needs met in relationship with others.

II. THEORETICAL BASES

Many central concepts of Gestalt therapy theory are based on laws of perception discovered and studied by Gestalt psychologists in the early 1900s. Gestalt therapy applies these laws more broadly to all aspects of experience and psychological functioning. Importantly, these Gestalt psychologists discovered that we are not simply passive recipients of perceptual stimuli, but that we are active in organizing our perceptual field. Laws discovered by the Gestalt psychologists include the natural tendency to perceive a figure against a background as a way of organizing experience, and a natural tendency toward completion or closure.

Gestalt therapy takes its theory of healthy functioning from a biological concept called organismic self-regulation. This describes the organism's process of taking in from the environment what is needed (food, oxygen) and expelling into the environment that which is not required (waste products, carbon dioxide) in order to maintain balance or homeostasis. Applied to psychological functioning, this theory says that in health, people will naturally go to the environment to get emotional and psychological needs met—the need to be listened to, need for support, sex, physical comfort, social contact—and will discharge as needed by talking, expressing feelings, crying, touching, doing, and creating. Gestalt therapy theory does not see the individual as separate from the environment but rather considers the individual/environment field.

According to Gestalt therapy theory, such self-regulation occurs via the figure formation/destruction process. This process is central to any human functioning and as such is a core characteristic of people. In all functioning there is an ongoing process of the formation of a figure of interest and the eventual gratification and dissolution of this need or interest. This cycle has several stages: (1) awareness, (2) clarification of need/interest (3) scanning self-environment, (4) action, (5) contacting, (6) assimilating, and (7) withdrawing. For example, I am on my way to my favorite restaurant for lunch and see an old friend across the street. I become aware of sensations of excitement and increased energy (stage 1). I recognize my interest in talking to my friend (stage 2). I understand that walking across the street will facilitate meeting this need (stage 3). I walk across the street (stage 4). I say hello, and give my friend a hug, and we talk (stage 5). As we say goodbye I tell my friend and acknowledge to myself what this meeting meant to me (stage 6). I walk back across the street with a feeling of satisfaction, resolve to see my old friend more often, and my focus shifts to what I want to eat for lunch (stage 7).

In healthy functioning, a person will maintain balance by intake and discharge as required for the satisfaction of emotional and psychological needs by this continuous process of figure formation/destruction. Assuming there is no interference in this process (a disruption that causes the person to misperceive her needs, or an environment that is hostile to the needs, or both) what becomes figural or foreground is based on

the most pressing need at any given moment. After a need is met, this figure recedes (closure) and is replaced by whatever is next in the hierarchy of needs.

When there is a disjuncture between needs and what is available in (or required by) the environment, a person adapts. A creative adjustment is the best possible accommodation she can make at the time, given her experience, perceptions, and limitations. Over time, these creative adjustments may become obsolete, rigid, and maintained out of awareness, limiting a person's potential for satisfaction and growth. Psychotherapy involves looking at and understanding how the natural self-regulatory process has become disrupted, preventing closure on units of experience.

Disruption can occur at any stage of the figure formation/destruction process, and diminish a person's experience of himself and his ability for contact. A person who is experiencing disruption interferes with his own development of a strong and clear figure (stage 1 and 2) or with the ability to maintain the excitement and energy necessary for action (stages 3 and 4) or to move into satisfying contact (stage 5), which allows for assimilation (stage 6) and closure (stage 7). Either the interference with the development of a strong figure, or the blocking of excitement and action can interfere with good-quality contact. A Gestalt therapist is trained to observe both where in the cycle the disruption occurs and how it occurs. Often the focus is on how the disruption dilutes or distorts interpersonal contact.

In health, a person will perceive, experience, identify with, and act on needs and desires. Healthy functioning requires the ability to readily identify "This is me" or "This is for me," versus "This is not me" or "This is not for me." When disturbances exist in perceiving, experiencing, identifying with, and acting on needs, this loss of functioning is observable by the trained therapist at the contact boundary, which refers to the dynamic relationship at the point where the person and environment meet and interact.

The following five processes are the "how" of any disruption of contact. These processes can occur at any stage of the figure formation/destruction process. It is via these processes, maintained rigidly and out of the person's awareness, that the experience of self and the ability for contact that includes satisfaction of needs and closure is diminished.

Introjecting is experiencing something in the environment as if it is part of the self. An introject is an idea that has been "swallowed whole" without the "chewing" necessary to assimilate it and make it truly a part of the self. Introjecting is particularly problematic if it is a person's primary way of dealing with the world and relationships (such as doing things for others and ignoring one's own needs out of a sense of duty or obligation) or when the introject is destructive (such as a parental introject "You're good for nothing").

Projecting is disowning a feeling, behavior, attitude, or trait of one's own and attributing it to another, or the environment. For example, a person who is not able to be angry—due to an introject—may inaccurately perceive another person as angry at him.

Retroflecting is when energy or action that could be directed toward the environment circles back and is directed at oneself. Retroflecting is of two types. In the first type a person directs toward herself a feeling or action meant for someone or something in the environment. For example, the person who is unable to experience anger toward another person—again due to an introject—might end up blaming herself. Any unaware suppression or shutting down is also accomplished by this type of retroflecting. The second type of retroflecting is doing for/to oneself what you would like another person to do for/to you. For example, a person might soothe herself, buy herself gifts, or hug herself instead of getting this need met by interacting with another.

Confluence is the attempt to deny the existence of a self/environment boundary. Confluence requires a lack of discrimination and articulation of points of difference or otherness. While there is the possibility of a "healthy" confluence during which two people feel so joined that they seem "as one" (such as at the moment of orgasm) and there is momentary dissolving of the boundary, prolonged attempts to maintain confluence prevent satisfying contact.

Deflecting is behavior that dilutes or reduces the intensity of contact. Examples are avoiding eye contact, laughing off what one says, circumlocution, and understating one's true feelings. There is disagreement among Gestalt therapy theorists as to whether this is to be considered a separate self-regulatory boundary process, or whether it is the behavioral manifestation of the others—that is a result of introjects, retroflection, projection, or desire to maintain confluence.

III. APPLICATIONS AND EXCLUSIONS

Because Gestalt therapy is not an adjustment therapy and strives to be value-free, with a focus on understanding each unique individual and the individual's subjective experience as opposed to an "objective" standard for psychological health, there is no popula-

tion that would be excluded from treatment. The phenomenological and field theoretical stance, whereby the therapist is striving to understand the patient's subjective experience rather than impose his own, make this orientation valuable for different cultures and minority groups. The Gestalt therapist does not claim to know what is right for the patient, nor does he desire any particular outcome, as the only goal is increased awareness for the patient that leads to more choice.

Gestalt therapy can be used with all patient populations (children, adolescent, adult, geriatric, physically/mentally challenged, prison inmates, inpatient and outpatient psychiatric patients) as well as in a variety of modalities (individual, couples, family, group, and organization). It is applicable for a wide array of problems (such as eating disorders, substance abuse, affective disorders, personality disorders, PTSD, adjustment disorders, loss, and grief). It is an approach that can be used in both long- and short-term therapeutic work. Of course not every therapist is equally effective with all patient populations, modalities, and diagnoses. The experienced and well-trained Gestalt therapist would be aware of personal limitations and areas of expertise and refer those patients who fall outside of these limits to other practitioners, just as a responsible therapist of any orientation would.

IV. EMPIRICAL STUDIES

Research on the effectiveness of Gestalt therapy is scant, and primarily confined to specific aspects of the approach. Most research has been focused on one technique that comes from Gestalt therapy method—the empty chair (or two chair) experiment. It is important to note that use of this or any other single technique does not actually constitute a Gestalt therapy approach, without application of the three philosophical principles described in the treatment section. Although no single technique can be said to represent the essence of the Gestalt therapy approach, a technique has the advantage of being easily defined and thus accessible to the manipulations of empirical research.

The majority of research used the empty chair technique. Subjects were asked to have a dialogue with either a part of themselves, or with someone else relevant to the issues they were grappling with. Most of the studies that used the empty chair technique found it to be more effective than other forms of therapy or control groups. It was also found to be more effective in reducing anger and producing positive attitudes than either intellectual analysis or emotional discharge. It was more effective than empathic reflection or focusing for creating a greater depth of experience. For resolving "unfinished business," it was more effective than an attention-placebo condition.

In one study, K.M. Clark and L.S. Greenberg found the empty chair technique to be more effective than either a cognitive decision-making task or a waiting list control group for resolving decisional conflict. During the process of using this technique, the original decision the person had wished to make often unfolded into a deeper related decision.

In summary, studies have shown this technique to result in an increase in affect, depth of experience, and the resolution of related emotional issues. Results have included a decreased sense of decisional conflict, reduced anger, increased positive attitude, lower systolic blood pressure, and the resolution of "unfinished business."

Two studies found no benefit in using the empty chair technique for resolving grief issues or dealing with mild depression. In a study conducted by N.P. Field and M.J. Horowitz, the intervention consisted of placing subjects in a room alone and asking them to talk to their deceased spouses for 5 minutes through the direction of a taped recording. Nothing like this would ever be done in an actual Gestalt psychotherapy, which requires a focus on moment-to-moment process and the presence of the therapist. This technique was not found to be effective in reducing symptomatology 6 months later. Another study found the empty chair technique to be no more effective than time for decreasing mild depression. The researchers stated that the lack of positive results may have been due to the short duration of treatment, gravitation toward the mean over time, or experimenter bias.

Focused expressive therapy (FEP) was used in several research studies. FEP borrows from Gestalt therapy method and uses such procedures as directed fantasy, two chair dialogues, and awareness exercises. It emphasizes the importance of emotional insight and the magnification of internal experiences, but it also includes a high level of authoritative guidance and confrontation that is inconsistent with a Gestalt therapy approach. FEP was not found to be as effective as either cognitive group therapy or self-directed therapy. However, the description given for self-directed therapy was actually more similar to Gestalt therapy as it is practiced, than the more authoritarian FEP method used to represent Gestalt therapy in this study.

Few studies looked at a more complete Gestalt therapy approach. Most of these yielded positive results

such as an increase in levels of self-actualization, and more positive attitudes toward body image. Gestalt therapy was found to increase internal locus of control and the assumption of personal responsibility in prison inmates. A Gestalt therapy approach resulted in more behavior change than empathic reflection. Gestalt therapy was found to help Vietnam veterans with symptoms of PTSD. In couples therapy it was effective in replacing power struggles with self-definition, limit setting, and intimacy, resulting in greater clarity, acceptance, and understanding.

V. CASE ILLUSTRATION

The following case example will illustrate the treatment process and application of the theoretical concepts that have been presented. The therapist in this case was Stephen Zahm.

Kim, a 44-year-old successful professional woman was referred by her physician due to recurrent periods of depression. She had been depressed off and on for much of her life. The bouts of depression had worsened recently in both duration and severity. She had not been able to tolerate antidepressant medications, and two previous experiences with therapy, both brief, had not yielded lasting improvement.

Kim presented as a smart, attractive, stylishly dressed woman. Her wit and humor were evident in spite of her somewhat depressed affect. Her facility with language, keen observations, and easy manner made it clear why she had achieved success professionally. During the initial session Kim asked perceptive questions about my experience, my therapy orientation, and how I thought therapy could help her. She had been disappointed in her previous therapy experiences. When asked what she hoped to get from therapy she answered "Not just a Band-Aid, I'd like to get to the bottom of what this depression is about."

Kim described herself as "an overeducated overachiever," who had been successful in school and in her profession. She worked long hours, but wondered what the point of all her hard work was, as she took little enjoyment from her accomplishments. Kim saw her life as lacking in meaning, with little that gave her pleasure. She said she felt "down" a lot, woke up in the morning dreading the day ahead, and said she was just "going through the motions" of social interaction.

Kim described her relationship with her husband Bill as "pleasant enough" but lacking a sense of emotional connection or passion. She reported little interest in sex herself, and stated that their infrequent lovemaking was "more for him." She said "it's like I'm dead inside, or just numb." Kim reported that most of her friends were work acquaintances, and that she had only one "good friend," but didn't really confide in her. Kim and her husband had no children. Kim and I agreed to meet for weekly individual psychotherapy sessions, and to track whether she felt the sessions were useful and whether she was getting what she needed.

In describing her history, Kim reported that her parents had divorced when she was eight. Her father abandoned the family, moving to another state to avoid paying child support. Kim, the oldest of three, became responsible for helping her mother with her younger siblings and doing household chores so that her mother could go back to work to support the family. Kim also became her mother's confidant, and emotional support. She reported that she never really "got to be a kid" after that, and that her mother "never had time" for her. Kim's mother had died about 8 months prior to our first meeting. She minimized her feelings about her mother's death, saying she thought she had "dealt with it."

Kim's therapy themes emerged right away in her relationship with me. In our initial sessions, her fear of showing or revealing vulnerable feelings to me stood out. For example, when Kim talked about her mother's death she would reflexively shut down. I noticed her retroflections and deflections including choking back tears, changing the topic, and looking away. I pointed these out in an attempt to sharpen this figure, to clarify what was most important to her at that point. I observed that while she had strong feelings about this loss, it was also important to her not to show these feelings or talk about them to me right then.

This process helped Kim focus on her reluctance to open up and share vulnerable feelings. The theme of having a variety of "softer" feelings (sadness, loss, emptiness) and the reluctance to express them to me was something we worked with over the course of the therapy. The essential components involved introjects such as "Be strong" and "Don't show weakness," and the belief that no one would be interested in her feelings.

Within the first few months of therapy, Kim became more aware of these internal mandates and saw how they were connected to her relationship with her mother. Kim had learned not to reveal her feelings and emotional needs, but rather to focus on taking care of her mother and siblings, and deal with any of her needs by herself. Initially it was a big step for Kim to identify

that she felt a need and to also feel her difficulty and discomfort in expressing it to me.

I suggested Kim experiment with looking at me and imagining allowing herself to let down and cry with me. She imagined me having a critical and rejecting response. As she worked with her reluctance over a period of weeks, and felt supported by me in doing only what she was comfortable with, her reluctance moved into the background and her organismic desire and need to experience and express her feelings became more figural. At that point she was able to let down into her feelings of loss and grief, thus beginning the process of getting the closure she needed around her mother's death.

Afterwards, Kim was surprised to discover that this felt OK. It was still difficult for her to ask me how I now felt toward her. Her strong pull was to be satisfied with not knowing how I felt, and what my reaction had been to her crying. I pointed out how not asking me about that left her with a blank space that might then be filled with her own fears. She decided to ask the question "How do you feel about me now?" I was touched by her courage in asking the question and told her so, along with my honest response to her openness. This was a pivotal moment in the therapy as Kim could take in and assimilate my genuine caring for her.

As we did this work and Kim opened up to deeper levels of feeling, another theme became apparent to both of us. Kim became fearful of relying on me, and afraid that I would leave her if she needed me. She had a first class radar system that detected the slightest sign of my lack of interest, lack of energy, or attention wandering. For example, if I looked at the clock she became silent, and withdrew. When I told her of planned vacations her response was to joke that she wondered if I'd want to come back. When we explored this, it became clear that my going away evoked fear that I would abandon her or lose interest in her.

We worked with this theme in a number of ways. As Kim focused on feelings and sensations, she was able to remember particular events with her father, such as his leaving the house in a flurry of loud words and emotion, and yelling things like "I never get any peace in this house!" One time Kim tried holding on to him to keep him from leaving and he pushed her away saying something like "Why can't you kids leave me alone?" The meaning Kim extracted from these experiences and his ultimate abandonment of the family was that it was her fault that her father had left and that she must have been unlovable and "too much" for him.

As we worked with these awarenesses, Kim could feel a little girl part of her that "had always been there" that she tried to ignore. I asked Kim to focus on this sense of herself and to talk to me as the little girl. What emerged from this was that she felt shameful, and desperately wanted to hide or disappear. She went back to her adult perspective and told me she wished that little girl would disappear or at least "grow up." I suggested a dialogue between the adult Kim and the little girl. As the dialogue developed, the adult Kim began to feel sad and realized that rather than wanting the little girl to disappear, she wanted to hold and comfort her. She didn't see her as "unlovable" or "too much," but instead felt compassion for her loss and pain, and was able to tell her so. This newfound ability to experience compassion toward herself was a key in helping Kim integrate her softer "little girl" feelings with her "adult." This occurred over a number of months as she continued to work with these aspects of herself.

When we worked directly with Kim's father she was able to, in fantasy, tell him she was hurt and angry that he hadn't loved her enough to stay in her life even if he had to leave her mother. She finished her tearful dialogue with him by saying "It wasn't my fault you left. You failed me, not the other way around." She also became aware that she had never been able to grieve the loss of her father, that her mother would not tolerate her tears and told her she had to be strong and that crying "wouldn't do any good." At that point she was able to grieve the loss of her dad with me and have more of a sense of closure.

In our sessions Kim came to see how the belief "I'm too much" affected major aspects of her emotional and interpersonal existence. This was especially evident in how she experienced her relationships with men and the type of contact she could have with them. She saw that with her husband, she made no demands, rarely got angry, and focused her attention on his needs to the exclusion of hers. Our work included Kim experimenting with new ways of interacting with her husband such as being more assertive with her needs. Initially this made her anxious. As we worked with the anxiety and she realized the responses she feared were not likely ways that Bill would respond to her, she became less anxious and more excited and playful with the possibilities of being bolder about asking for things she wanted. This affected all aspects of their relationship including their sexual relationship.

A little over a year into the treatment, Kim reported that she "couldn't remember the last time" she had felt depressed. She said she felt better about herself, her re-

lationships, and the possibilities for her life than she ever had. She began to spend less time working and signed up for a beginning ballet class, which was something she had "always wanted to do." She developed closer relationships with a few women friends, revealing more personal things and accepting support from them.

I asked Kim to reflect on where she was now and where she had been when she entered treatment. Kim reported that she felt more at peace with her parents, even though she still felt sad about her childhood. She said that it had been "life changing" to risk opening up to another person and allowing herself to need and depend on me. Kim saw the connection between her process of shutting down on her feelings—her self-criticalness, rejecting the little girl part of herself, avoiding feeling her anger and grief, and not allowing herself to need anything from others—and the depression she had experienced for so long.

Kim and I agreed that she was ready to terminate therapy and we allowed a month for this process. Given Kim's issues of abandonment and loss, it was important to set an ending date and not dilute the fact that we were ending by meeting less frequently. In this way Kim had sufficient support and a structure for dealing directly with the loss of her relationship with me. We celebrated her gains together, and cried together. At our last session we said goodbye in a complete way that Kim said she had never had the opportunity to do with anyone else.

A. Outcome

Growing up, Kim experienced a lack of awareness of and responsiveness to her emotional needs from both of her parents. Her father abandoned Kim completely, and her mother was unavailable for Kim's needs, requiring Kim to attend to her needs instead. Kim's creative adjustments involved both the awareness stages and the action/expression stages of the figure formation/destruction process. She learned to cut off the experience of certain feelings and to avoid showing and expressing them. The meaning she made of her father's leaving ("I'm unlovable" and "I'm too much",) and introjects like "Be strong" created her retroflective process of cutting off and alienating aspects of herself, focusing on the needs of others, and not showing or expressing her own feelings and needs. This process resulted in unfinished emotional situations in which she had not been able to get closure. It resulted in the sense of emptiness, lack of meaning and numbness that she described at the beginning of treatment, as well as in unsatisfying interpersonal relationships that lacked depth. It also contributed to her career success, which was in part based on her skill in attending to the needs of others and her willingness to work hard so that she would not be rejected or abandoned.

All of these issues emerged and were worked in the context of the therapy relationship. As Kim's awareness increased, she was able to work through her fears and reluctance, and to feel the need to express and show her authentic feelings. She came to feel compassion for a part of herself she had previously cut off and wanted to be rid of, and through this experience of compassion she was able to re-identify with and integrate this part of her that included needs and softer feelings. She was able to redirect her self-criticism and see that it was not her being "too much" that caused her father to abandon her and her mother to be unable to attend to her needs. She came to feel that her "little girl" had deserved to be better taken care of.

In Kim's relationship with me she could experience my genuine caring and also see that when I was not there for her, for example when I went on vacation, it was not because she was "unlovable" or "too much." She learned to express disappointment with my limitations, or anger at me for leaving, in a way that she had never had the opportunity to do with her parents.

The therapy carried over to and influenced every aspect of Kim's life and interactions. Her relationship with her husband deepened, and she began to consider what she wanted to do in her life besides working. However, it was Kim's relationship with herself that changed most dramatically. Kim no longer criticized herself or felt she was weak if she had feelings and needs. She no longer cut off and numbed a major part of who she was. She had greater range of emotional experience and expression. Kim understood that her lifelong depression was the result of ignoring, denying, and cutting off her feelings, which led to an inability to identify and act on her needs. This resulted in a lack of closure on difficult emotional situations as well as unresolved issues of grief and loss.

VI. SUMMARY

The practice of Gestalt therapy is based on the philosophical foundations of field theory, phenomenology, and dialogue. Gestalt therapy is a process-oriented approach that focuses on the person/environment field. The goal in Gestalt therapy is increased awareness, and

change occurs through focused attention on "what is" not by attempting to achieve a particular goal or agenda. As the therapist brings himself or herself to the meeting with the patient, a type of contact that is in itself healing becomes possible. Gestalt therapy is based on a theory of health, and the focus is on how the patient interrupts his natural self-regulation process. The method is experiential and experimental, relying on meaning emerging from experience rather than interpretation. Gestalt therapy has wide applicability with a variety of patient populations, problems, and treatment modalities. Research, while limited, indicates its usefulness for a variety of populations and issues.

See Also the Following Articles

Dialectical Behavior Therapy ■ Existential Psychotherapy ■ History of Psychotherapy ■ Humanistic Psychotherapy

Further Reading

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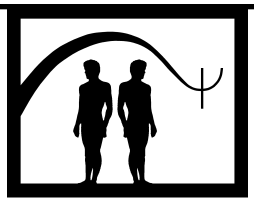

Gifted Youth

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GLOSSARY

assumptive reality The newly acquired ability of early adolescents to detect flaws and errors in adults' thinking.

cognitive conceit Once early adolescents detect a singular flaw in an adult's thinking, they automatically assume that adults are wrong in most other areas of logic.

cognitive disequilibrium During a transition from one cognitive level of another, chaos reigns as the old system is discarded before the new system is fully implemented.

concrete operational thinking Children, ages 6 to 12, view everything from what they see, hear, or experience. They are unable to go beyond the facts or immediacy of their experience.

entitlement An exaggerated feeling, from infancy, that the individual desires special treatment. This covers up the infant's, or is a projection of the parent's own, poor self-esteem.

formal operational thinking The defining quality of early adolescence. Early adolescents gain the ability to build ideas, abstract theories, or concepts without regard to whether they have been previously experienced. Early adolescents now think about the future, what "could be," rather than just the past or present.

imaginary audience The belief early adolescents have that everyone is as preoccupied with their thoughts, behaviors, and feelings as they are. This dynamic causes them to feel judged as defective and, hence, shamed in front of others.

narcissist, hypervigilant Hypervigilant to the slightest rejection, yearn to connect, extremely shy and inhibited, shun attention, yet a hidden omnipotence, underlying sense of defectiveness and shame, responds to an empathic approach in therapy.

narcissist, oblivious The classical narcissist, oblivious to the reactions of others, arrogant and aggressive, self-absorbed and seeks attention, impervious to hurt feelings of others, a more confrontational approach works better in therapy.

personal fable Exaggerated sense of self that allows early adolescents to believe that their parents could never have experienced feelings or thoughts the same way they do.

psychic structure An unconscious mental function that allows an individual to interact with the world. When the system does not function well, the person is not able to smoothly modulate feelings and interactions with the world.

right brain The earliest, non-verbal part of the brain, the amygdala, in particular. Includes the old limbic system. It is active at birth. Functions include: facial recognition, response to vocalization, and the startle response, that is, the autonomic nervous system.

I. INTRODUCTION

Early adolescence, ages 12 to 14, is one of the most creative and yet, most challenging times of one's life. A cognitive shift into abstract thinking, starting around 11 or 12, stimulates a disequilibrium that creates an

internal chaos characterized by an extreme egocentrism, as well as intense affect states. This internal chaos often causes early adolescents, especially males, to emotionally disconnect from their feelings by disavowal, dissociation, denial, or acting out.

This article focuses on a select group of early adolescents, the exceptionally gifted, who typically have I.Q.'s of 140 or higher. In later years, they often score 700, or more, in each of the SAT subsets.

I first summarize several cases that illustrate the issues that I frequently encounter with this age group. I then present an overview of my psychanalytic approach to working with this most fascinating group of young teenagers. Following a section on Empirical Data, I conclude with a summary of my work, with this group of highly gifted youths. Understanding the characteristics, dynamics, and psychotherapeutic approach of this highly gifted group has helped my work with the overall population of early adolescents.

II. DESCRIPTION OF TREATMENT

Early adolescence is perhaps the most creative, yet volatile time of one's life. With the intense disequilibrium stimulated by not only the cognitive changes, but physical, hormonal, sexual, and social changes, early adolescents feel out of control; feeling out of control precipitates struggles with affect and self-esteem regulation. This, in turn, stimulates early adolescents disconnecting, emotionally, to avoid feelings of defectiveness, shame, as well as a rage from being chronically misunderstood. An additional component of this internal chaos is the struggle early adolescents have, especially gifted ones, with fitting into their family system. Extremely sensitive to the internal life of their parents, gifted early adolescents struggle with the inability of their parents to come to terms with struggles in their own lives. Because of these conflicts, gifted early adolescents live in a state of suppressed, or often not so suppressed, rage, as they struggle to find a niche within their family and society.

Although I occasionally have a gifted teenager who openly talks to me and shares emotional struggles, most, especially males, refuse to share intimate details of their lives. Feeling totally vulnerable and wondering whether I, too, will force them to continue to accept the fallacies they see in their lives, walking into my office is a "life and death struggle." With this state of mind, my therapeutic goal with early adolescents is quite simple—to help them and their families get through early adolescence with the minimal amount of emotional and physical damage.

I often work with early adolescents identified as, "lazy." Often, these individuals are actually exceptionally gifted adolescents who are totally overwhelmed. They struggle with intense perfectionism, a terror of failure, a rage over chronic misattunements, as well as feeling responsible for everything. These youths are hypervigilant narcissists, who yearn to connect with their parents. As they are not overwhelmed by intense rage, or shame as oblivious narcissists are, and have not given up their connection to adults, they are more responsive to "talk" therapy, than oblivious narcissists. Such was the case with my first female adolescent, a 13 year old, who presented with behavioral problems at home and academic problems at school. She was barely achieving "C's," at her prestigious high school. Early in therapy, she said,

> If I try harder and get an "A" on a test, then someone who used to get an "A" will get a "B," then someone who used to get a "B" will get a "C," then someone who used to get a "C" will get a "D," then someone who used to get a "D" will get a "F" and then someone who used to get a "F" will get kicked out of school, and it will all be my fault!

Working through her perfectionism, fear of failing, as well as her feeling responsible for everything that happened around her, she began to work harder. Unfortunately, a teacher did not acknowledge her increased effort, which devastated her. Later, she connected with an English teacher who recognized her increased efforts. Although she became a honor student, she continued to struggle with a series of disappointments due to her perfectionism.

Many early adolescents begin psychotherapy already battling their parents over communication. Not wanting to recreate these power struggles, I have successfully treated numerous teenagers nonverbally. One example is a 14-year-old male, I treated by playing double solitaire. The "golden boy" in elementary school and a straight "A" student in junior high school, his arrogance, in 9th grade, alienated his classmates. One day a row of gym lockers "mysteriously" fell over on top of him. He stopped attending high school, his grades dropped, and he became combative at home. During our first meeting, with his parents present, he refused to talk, answering everyone of my questions with, "Everything is fine!" Refusing to talk, double solitaire became a non-threatening form of interaction. Initially playing hesitantly and noncompetitively, I matched his playing skill, allowing him to win. These wins gave him a renewed sense of being in control. Playing cards also

helped him to become more assertive, while slowly delinking his assertiveness from his aggressiveness, which he experienced as destructive.

As most early adolescents respond better to actions than to words, I fed him, gave him presents for his birthday, took him for walks, and joked around with him. Over time, as he became less perfectionistic, he became increasingly competitive. The more he relished beating me, the more comfortable he became with his intense feelings, including his rage. As he gained greater confidence, he slowly returned to doing well academically. In addition, his relationships with his peers and family improved. As family sessions, early in therapy, were too volatile, his parents were seen separately. I helped his parents to acknowledge and to support his unique talents and future dreams. After 18 months of twice a week psychotherapy, one day he announced that, "Everything was fine," and quit. Unexpectedly, two years later, he returned to therapy. During his last semester of high school, he talked, nonstop, openly dealing with sensitive issues that he had desperately fought to avoid talking about during our earlier work.

Early adolescents, whom I view as oblivious narcissists, are even less able to self-regulate their feelings, due to their intense rage toward and disconnection from their parents. This was evident in one of my highly gifted 13-year-old males, who, by junior high school, was already involved with drugs, including cocaine. He arrived, with his devoted parents, for his first session, wearing Birkenstocks, a t-shirt with very provocative lettering, shorts, and a mohawk haircut. He was noncommunicative, other than to express, "There's nothing wrong with me!" "I'm fine!"

Working out of my house, he noticed my dog, a very friendly, 65-pound Samoyed. Surprisingly, he asked me, very politely, if my dog, Bushski, could come into our sessions. Although totally disconnected, emotionally, from adults, he could not resist Bushski giving him his total, undivided attention. Slowly, with the help of Bushski, Prozac, and our work together, he slowly emerged from his depression. However, unable to view his chronic drug usage as destructive, this issue remained "off limits." Immediately on graduating from high school, he terminated, as he knew that his father would not force him to continue. Although doing well in college, his poor self-esteem, unresolved rage, and use of drugs left him emotionally vulnerable to setbacks.

A frequent problem I encounter, especially with brilliant early adolescents, is "school phobia." Many of these early adolescents are also hypervigilant narcissists. They are more worried about leaving their mothers, than a fear of being at school. Most have, from a very early age, assumed responsibility for their mother's emotional well-being. In addition, they have difficulties regulating their affects, which makes being away from their mothers difficult. For example, one 13-year-old female had to be forcefully removed from her mother's care for 6 months. Immediately after leaving her daughter, the mother would call me for support of "what she had just done to her daughter." Her daughter also slept in her parents' bedroom at night, as she needed her mother's physical presence to emotionally soothe herself. A combination of talking with this gifted early adolescent, Prozac, and playing double solitaire, competitively, helped this teenager to feel more comfortable with her feelings. Slowly, she gave up feeling responsible for her mother's emotional needs and learned that her anger, at her mother, would not cause her mother harm. Weekly family sessions helped both parents to allow their daughter to express more intense feelings and to facilitate her individuation.

III. THEORETICAL BASIS

A. Cognitive Changes in Early Adolescence

There is a dramatic shift in cognitive functioning from the "here and now" concrete operational thinking of latency to the "future oriented" formal operational thinking of early adolescence. As a result, early adolescents, even more so brilliant ones, are confronted with a developmental milestone in cognitive functioning that is very similar to the toddler. They must grapple with the excitement of being exposed to a rapidly expanding world of information and ideas, while also struggling with the terror of becoming insignificant and lost in the sudden and massive expansion of their universe.

This cognitive shift stimulates a tremendous creative spurt, as well as a massive disequilibrium. This disequilibrium is further intensified by the physical, hormonal, sexual, and social changes that bombard them. Under such an assault, early adolescents are suddenly unable to easily assimilate the massive influx of information that is pouring in around them. This creates a "softening" of their psychic structure, that is, issues having an emotional component, even if a minor one, create massive changes in how they react or accommodate to a situation. As a result, this "softening" of the psychic structure of early adolescents, particularly gifted ones, often disrupts their maintaining a solid sense of self. This "softening" intensifies their reliance on external sources to maintain a sense of well-being. Unfortunately, with early

adolescents struggling for increased freedom from their parents, early adolescents often reach outside the family, toward peers, for their primary emotional support.

In addition, the resulting volatility of early adolescents manifests itself in a dialectic of creative expansiveness, moodiness, impulsiveness, self-centeredness, and a terror or intolerance for things that are different. This volatility causes self-esteem problems, which again draws early adolescents even closer to their peers who are also drowning in their own shame. Often, they hide their struggles, rage, and depression through the use of drugs, as well as antiauthority and sexual activities.

B. Characteristics of Early Adolescents

Characteristics that are stimulated by the cognitive shift, in early adolescence, include the "imaginary audience," where they feel that others are always watching and judging them; the "personal fable," in which they feel that no adult has ever emotionally experienced anything like they've experienced before; "assumptive reality," where they realize that they now know more than their parents; and "cognitive conceit," where they now believe that because they know more than adults in one area, adults are dumb. This combination, along with brilliant early adolescents' struggling with either pleasing their parents or openly challenging the pathological "family illusions," leaves early adolescents feeling emotionally vulnerable and isolated from their parents. In turn, this vulnerability stimulates much of the early adolescent's egocentrism, narcissism, and volatile moods and behaviors. As a consequence, many early adolescents, especially gifted early adolescents, use a heightened sense of entitlement, as well as omnipotence to protect themselves from feeling so vulnerable, especially from counterattacks by their overwhelmed parents.

C. The Infant Morality System

While early adolescence can be an exceptionally fascinating and creative time, it is also a very difficult time. This is particularly true for gifted teenagers. The more brilliant they are as toddlers, the earlier they begin to judge their world. Hence, the more primitive their judgments are. This intense primitiveness creates an inner world that is very "black and white," "all or nothing," perfectionistic, rigid, cruel, unrelenting, and unforgiving. Trying to make sense of the bewildering world around them, infants also take responsibility for everything that happens around them. This system, which I refer to as the infant morality system (IMS), occurs by 3 years of age. Soon thereafter, these now brilliant children must also struggle with the illusions within their family system. Hypervigilant narcissists, who are hypersensitive to the slightest emotional withdrawal by their parents, must often give up many of their own feelings and perceptions to remain connected. Those who become oblivious narcissists are devastated by intense chronic misattunements. Their protective rage against their parents often prevents them from experiencing intimate connections later in life.

Years later, when the dynamics of "the infant morality system" are added to the early adolescent's cognitive disequilibrium, life becomes overwhelming. Internally, gifted early adolescents are further overwhelmed by an even greater intensity of perfectionism, criticalness, and rigidity, as well as intense struggles with defectiveness and shame. Externally, they struggle with whether to accept what they see as the hypocricy of the parental system, or to fight it. These conflicts often devastate parents, as they experience their early adolescents explosively projecting all of their struggles onto the rest of the world.

D. Protective Mechanisms

Terrified of their own emotional regression, feeling defective, overwhelmed by shame, and struggling with a blind rage, early adolescents often protect themselves by emotionally regressing to earlier protective mechanisms including: disavowal, dissociation, and denial. This disconnection helps foster the volatility and rigid nature of the regulatory systems of this age group.

E. Affect and Self-Esteem Regulation

As the cognitive disequilibrium intensifies, affect regulation becomes tenuous. The "softening" of their psychic structure makes it difficult for early adolescents to modulate intense feelings, whether positive or negative. Constantly feeling overstimulated, early adolescents struggle to "hold on to" whatever unconscious sense they have, from infancy, that "Everything will be okay." This intense unsettledness leaves early adolescents at the mercy of external sources to help them modulate their feelings. Once again, fighting for independence, early adolescents frequently shut out their parents. The result is that an important external source for the maintenance, repair, and integration of the self is unavailable, at a time of greatest need. This leaves

early adolescents depending almost exclusively on their peers to help them to modulate their feelings. Unfortunately, their peers are just as destabilized, as they endure the same stress and struggles.

The same cognitive disequilibrium also creates a tenuousness in their self-esteem regulatory system. Continually struggling with perfectionism, feeling defective, drowning in shame, as well as flooded with rage, brilliant young teenagers tend to hear and react mostly to negative comments. Fearful of being attacked, creative ideas, exciting events, or anything that feels vulnerable to criticism is hidden from their parents. Once again, the ensuing vulnerability creates an intense need for external supports. As with affect self-regulation, young teenagers, in particular brilliant ones, gravitate toward their peers. These peers are often breaking away from parental authority, through drug usage, delinquency, and sexual acting out.

F. Consolidation of Formal Operational Thinking

A major milestone signifying that early adolescence has ended is the lessening of their internal chaos. This lessening of the internal chaos is due to the consolidation of formal operational thinking, as well as to the diminishing of their physical growth spurts, surging hormones, changes from sexual maturation, and social changes at school.

As a result, the psychic structure of midadolescents once more becomes "solid." With this consolidation, midadolescents have a growing ability to self-reflect; they can think before they act. This calmness, facilitated by a diminishing of their rage, allows for more stable affect and self-esteem regulatory systems. Consequently, mature adolescents can deal with more emotionally complex issues, with far less internal chaos and disruption of their psychic structure. Teenagers who are still experiencing difficulties at home, with peers, or in school, by 11th grade, are still lost in the ongoing struggles of early adolescence. Without a "solid" psychic structure, they are at risk for failure in their impending entrance into the "adult world."

IV. EMPIRICAL DATA

The few studies that deal with the value of psychoanalytic psychotherapy often show that different theoretical orientations have similar results. Thus, it is the interactions between the patient and therapist and not one's orientation that facilitates meaningful psychic change. My focus, for years, has been an intersubjective model, which focuses on the importance of the dyadic interaction. This interest in dyadic interactions has also led me to study the right brain (the old limbic system), where affects, vocal timing, and facial recognition are part of an early, unconscious, action-oriented process. The closer we can recreate these nonverbal right brain interactions between mother and infant in our work, the deeper and more meaningful the psychic changes will be in our patients. This has particular relevance when working with gifted early adolescents. As most early adolescents, in treatment, are depressed, of equal importance is the use of SSRI's. Studies show the value of combining psychotherapy, with medication, to prevent a relapse of their depression.

V. SUMMARY

In summary, early adolescence, is a time of great excitement, enormous creativity, as well as tremendous volatility. The leap into formal operational thinking creates a disequilibrium that overwhelms early adolescents, especially gifted ones. The ensuing chaos stimulates not only a creativity, often unsurpassed in one's life, but also an emotional volatility and regression. This volatility creates a "softening" of their psychic structure, which leaves the well-being of early adolescents susceptible to external sources, including parents and peers. However, this "softening" also presents an important opportunity for "correcting" past negative unconscious expectations. Healthier interactions, whether by peers, parents, therapists, teachers, or others, allow for the layering of new unconscious patterns about relationships and the world. This potential for layering new expectations is even more crucial for gifted youths, as they tend to be so negativistic about their world. This negativity is not only due to their perfectionism and criticalness, but also to their struggle of whether they adapt to, or reject, the family illusions.

Psychotherapy with this age group is often extremely difficult, especially with gifted early adolescents. They experience overwhelming stress over perfectionism and a fear of failure. In addition, their sense of defectiveness, overwhelming shame, and intense rage causes even the most brilliant youths to use their incredible intellectual talents to avoid their inner chaos and feelings, through disavowal, dissociation, denial, or through acting out.

Working with families is crucial, as the psychotherapist of adolescents must recognize the impact of their validating their patient's perceptions and feelings

about their family, friends, and even themselves. Although needing to support their patients, premature unleashing of their hurt and rage, from chronic misattunements by their parents, can leave long-lasting emotional scars.

The consolidation of formal operational thinking coincides with the lessening of the physical, hormonal, sexual, and social changes. With the lessening of their rage contributing to a calmer internal world, midadolescents now have a more solid psychic structure, which facilitates their exciting adventure into the world outside their family.

See Also the Following Articles

Child and Adolescent Psychotherapy: Psychoanalytic Principles ■ Parent–Child Interaction Therapy

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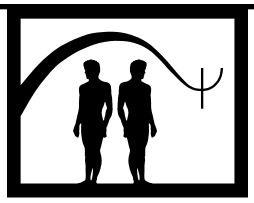

Good Behavior Game

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GLOSSARY

ABAB design A type of single-case design that evaluates the effects of intervention through the repeated alternation of baseline (A) and intervention (B) phases.

differential reinforcement of low rates of behavior A schedule of reinforcement in which individuals receive reinforcement if their behavior or responses during a particular time period are kept below or equal to some specified criterion level.

group-oriented contingency A contingency in which some behavior is required of a group of individuals and the presentation, or loss, of a reinforcer is based (i.e., contingent) on the performance of a subset of or the entire group.

interdependent group-oriented contingency A group-oriented contingency, such as the Good Behavior Game, that requires some collective level of group behavior or performance in order for the group to receive reinforcement.

internal validity The extent to which the results of an experiment can be attributed to the independent variable or treatment only.

multiple baseline design A type of single-case design in which intervention is introduced sequentially across different individuals or groups, behaviors, or settings at different points in time.

single-case experimental design A methodology used to make inferences that an observed change in behavior is causally related to the implementation of an intervention procedure rather than extraneous factors by comparing performance under different conditions applied to the same individual or group of individuals over time.

The Good Behavior Game (GBG) is a type of interdependent group-oriented contingency management procedure used primarily for behavior management in classrooms and school-related settings. This article describes the game's components, theoretical underpinnings, as well as the variety of adaptations and applications that have been used since its inception.

I. DESCRIPTION OF TREATMENT

As initially reported in 1969 by Harriet H. Barrish, Muriel Saunders, and Montrose M. Wolf in their seminal article in the *Journal of Applied Behavior Analysis,* the GBG is a group-oriented contingency management procedure that has been used primarily to control the disruptive behavior of students in classrooms and other academic settings. In its original and most basic form the GBG includes only a few integral components that have been used with various modifications in numerous empirical investigations since its initial introduction.

In the game, the class is divided into two or more teams, and team names are posted on the blackboard. Target behaviors (rules) are established and defined that must be followed (or existing classroom rules may be

used). The teacher places marks on the blackboard under a team name whenever a child on that team violates one of the rules. At the end of a period of time (e.g., end of class period, morning, afternoon, end of day) the team with the fewest marks wins the game and receives an agreed on reward(s) (e.g., extra free time, special privileges, victory tags, etc.). Further, any and all teams can "win" if they keep below a preestablished criterion number of marks.

In Barrish, Saunders, and Wolf's original study, a fourth-grade class was divided into two teams. The class was informed that they would play a game in which team members would earn marks (placed on the blackboard) against their team for talking out or being out-of-seat. The team with the fewest marks, or both teams if neither team received more than five marks, would win the game and receive special privileges (e.g., wearing victory tags, stars on a winner's chart, lining up first for lunch, 30 min. of free time at end of the day). The game reduced talking and out-of-seat behavior and was popular with students and school officials. Systematic analysis of the game's major components by others have found that the effective components include dividing the class into teams, setting criteria for winning, and reinforcement for the winning team.

Although most applications of the GBG have been for the management of disruptive classroom behavior and typically teams must avoid the accumulation of points, another variation has also been used effectively in which teams earn points for appropriate, prosocial behaviors. The game has also been used successfully for academic behaviors such as assignment and work completion, active participation, attention to task, and even written expression. In addition to daily rewards, weekly rewards are also frequently used. The game can be designed to be as simple (i.e., following the above-minimum components only), or as complex as desired. The simpler and more basic the game is kept, the better. Otherwise, teacher monitoring and implementation become overly cumbersome and unwieldy, thus defeating the purposes and attendant advantages of the game. At least two teams are needed to capitalize on team competition, although more than three teams can result in monitoring difficulties.

II. THEORETICAL BASES

A. Differential Reinforcement of Low Rates

The GBG is based on a particular schedule of reinforcement referred to as differential reinforcement of low rates (DRL). In such an arrangement the group or team receives reinforcement if their behavior or responses during a particular time period are kept below or equal to some specified criterion level. Because the GBG is a type of interdependent group-oriented contingency, it also utilizes features of group competition and conformity (discussed further later).

B. Group-Oriented Contingencies

Group-oriented contingencies have been classified into three types: (1) independent, (2) dependent, and (3) interdependent. Independent group-oriented contingencies require the same response requirements from all members of the group, but access to reinforcement for each individual is based solely on that member's own behavior (e.g., "whoever turns in a rough draft of their project by Friday morning can have extra free time Friday afternoon"). Dependent group-oriented contingencies make the group's access to reinforcement dependent on the performance of a selected individual or individuals ("On Friday morning's spelling quiz, if Erin and Andrew can improve their spelling grade by 10% above their scores from last week, we'll all have extra recess time Friday afternoon"). Interdependent group-oriented contingencies, such as the GBG, require some collective level of group behavior or performance in order for the group to receive reinforcement ("If the class average is 80% or higher on our spelling quiz, we'll all have extra recess time Friday afternoon"). In this latter arrangement, although some individual students may not meet the criterion, all students are reinforced as long as the group meets the criterion.

Contingencies that are applied individually in classrooms to manage disruptive and/or appropriate behavior can be impractical for teachers and generally difficult to manage. Group-oriented contingencies on the other hand, particularly the interdependent variety like the GBG, have several advantages in that they tend to be easier to manage, more efficient, and require less teacher time because individual contingencies do not need to be monitored; less time is required when the same reinforcer is used with all students. In addition, group-oriented contingencies avoid common concerns of teachers that a particular student will be singled out and treated differently. They may also increase prosocial and cooperative behaviors among students. Group-oriented contingencies have been found to be at least as effective as individual contingencies, if not more so.

The GBG also capitalizes on team competition and issues related to group conformity and peer influence. The peer group is essentially used to assist in managing behavior. Quite typically, attention from one's peers often works against the classroom teacher by reinforcing and

maintaining disruptive behavior. However, in interdependent group-oriented contingencies like the GBG, students either withhold their social attention (e.g., laughs, snickers, smiles) for disruptive behavior by peers, or substitute disapproval for this social attention.

Although the peer influence that operates in the GBG can be an advantage, researchers have also noted potential disadvantages of this influence. Some, for example, have cautioned that this peer influence can become undue peer pressure verging on harassment toward the individual(s) who may not be capable of performing the necessary behavior. Students may complain about a lack of fairness of the system when others cause the loss of privileges or rewards and may direct their frustrations (which can escalate into aggression) at the offending student(s). Direct proactive measures taken in one study by the teacher to guard against potential excessive group pressure consisted of her warning that such pressure toward an offending student would not be tolerated and would result in a meeting with the teacher for corrective action.

Finally, some children may find it reinforcing to "sabotage" a program or refuse to conform to the classroom rules, thus continually causing the group or team to lose rewards as found in serveral studies. In such instances the offending student may be temporarily or permanently dropped from the game, their points not counted against a team, or a separate team may be formed with those offenders so as to not penalize other team members. Some investigators have used a combination of individual and group-oriented contingencies, which others have suggested may ultimately be optimal, to overcome this potential problem of sabotage. Others suggest the randomization of components (reinforcers, target behaviors and criteria, contingency, and students) in interdependent group-oriented contingencies like the GBG to overcome many of these problems associated with undue peer pressure and sabotage.

III. EMPIRICAL STUDIES

Empirical investigations of the GBG have found it effective in its original form and in a number of modifications and adaptations in a variety of settings for numerous target behaviors (both academic and social) and age groups.

A. Single-Case Experimental Designs

Researchers have typically employed some type of single-case experimental design methodology in evaluating the effects of the GBG. Single-case designs derive their power to rule out alternative explanations of treatment effects (i.e., internal validity) by comparing performance under different conditions applied to the same individual or group of individuals (as in the GBG) over time. In most investigations of the GBG, performance or behavioral data from the group or class is aggregated and evaluated as would be done with data from a single individual.

The most commonly employed single-case experimental designs in studies of the GBG have been either one of the types of phase change designs (e.g., ABAB, etc.), the multiple baseline design, or combinations of the two. In an ABAB design, the first A phase usually consists of baseline observations and measurements prior to implementation of the intervention (e.g., the GBG). The first B phase usually comprises the implementation of the game. After observing the effects of the game on the teams' or class' behavior (e.g., a reduction of disruptive behavior) for a period of time, it is withdrawn during the second A phase (i.e., second "baseline"). Finally, the game is reintroduced in the second B phase. When the teams' behavior changes reliably and in predictable directions during this sequence of phases, it can then be concluded that the game accounts for these effects. A multiple baseline design begins with baseline observations collected on two or more classes, settings (e.g., math versus reading instruction), or behaviors at the same time. The game is then introduced at different points in time across the groups, settings, or behaviors. If the game produces beneficial results on behavior when and only when it is introduced, it can be concluded that the game only is responsible for the change rather than other alternative factors. A few studies also gradually have made the criterion number of points allowable more stringent during treatment phase(s). All the studies that have manipulated the criterion number of points have found that teams adjusted their behavior to coincide with the changing number of allowable points.

B. Target Behaviors

Most applications of the GBG have targeted primarily disruptive forms of behavior such as talking, being out-of-seat, name calling, cursing, and verbal/physical aggression. In these studies teams usually must avoid the accumulation of points.

Some researchers have expressed concerns regarding the GBG's overemphasis on disruptive behavior and negatively stated rules. To address these concerns, for example, one study allowed merits to be earned for work completion and active class participation that would

negate some of the already earned negative marks against second-grade teams. In another study, other investigators stated rules positively and included student input into rule formation for fourth graders. Other modifications in which teams have earned points for appropriate, prosocial behaviors have likewise found the game effective. One investigation used The Principal Game in which teams in a disruptive fourth-grade class earned points and teacher praise for being on-task, and the winning team(s) was visited and praised by the principal. The game was somewhat more effective than individual contingencies in increasing on-task behavior. Another study implemented the Astronaut Game in which first graders were divided into astronaut teams and earned tokens for completed seatwork and good astronaut behavior. The game was successful in decreasing inattentiveness in a target student and increasing completed seatwork for the class. In the first application of the GBG with preschoolers, researchers increased compliance using only positive procedures (accumulation of smiley faces or dinosaurs, prizes, praise). Teams consisted of two-member pairs only; noncompliance was ignored. The game was successful in increasing compliance in both pairs of preschoolers. In a unique application of the GBG in a physical education class, the GBG was successful in reducing inappropriate social behaviors and increasing appropriate social behaviors but was not successful in appreciably affecting the quality of fourth-, fifth-, and sixth-graders' volleyball skills.

Probably one of the unique applications of the game targeting non-school-related behavior was the Good Toothbrushing Game in which the oral hygiene skills of first- and second graders were targeted. Two teams were formed in each class, and the object of the game was to be the team with the cleanest teeth. Four children from each team were randomly selected each day, and the team with the lowest score on an oral hygiene index won. The winning team had their names posted on a winners' poster and received a "scratch n' sniff" sticker. Children were also praised for low scores and received feedback regarding areas of their teeth not brushed well. The game was effective in improving students' hygiene scores.

A "no tattling" rule was added in one study to overcome problems of students raising their hands to tell the teacher of students breaking rules. In addition to talking, out-of-seat, and following directions, another group of researchers also targeted tattling as well as "bothering one's neighbor" with their second-grade participants.

Another series of studies found first graders who participated in the GBG were rated lower in aggression and shyness by their teachers at the end of the year compared to their beginning-of-year ratings. These researchers later reported that the first-grade males who were initially rated high in aggression at the beginning of first grade, and who participated in the GBG throughout first and second grades, had lower teacher ratings of aggression in fourth and fifth grades, and into middle school. Thus, the GBG may serve a preventive function for aggressive young boys.

In addition to its applications with social behaviors, the game has also been used successfully with academic behaviors. One study that included a merit component in the GBG, in which teams could have negative marks erased for merits earned for assignment completion and for active class participation, produced increased rates of completed math assignments with 75% accuracy for the entire class, and even more so for two target children with histories of behavioral difficulties. First-grade students in another study showed an increase in work completion as a result of the game. Other researchers employed the Good Writing Game, a modification of the GBG in which fourth-, fifth-, and sixth graders attending a nonremedial summer school session earned points for usage of various parts of speech in written stories. The game resulted in an increase in compositional variables as well as ratings of creativity of written stories. Finally, although not a direct target of the GBG, another study found slight increases in math accuracy in fifth-grade participants.

C. Participants

Participants in a majority of the studies conducted with the GBG have consisted primarily of elementary-age students (first through sixth grades). Also, although not always specified, most studies have been conducted either with regular education students or students who have had some history of behavior management difficulties. Only a few investigations of the GBG have been conducted with students with disabilities. One study employed a modified version of the game to effectively reduce class levels of disruptive behavior with 6- to 10-year-old students with mild mental retardation. Another study that combined self-management and peer-monitoring procedures in a variation of the GBG successfully reduced uncontrolled verbalizations in third-grade students with Attention Deficit Hyperactivity Disorder. Researchers have also individualized the GBG across types and frequencies of a variety of inappropriate behaviors for three classes of 15- to 17-year-old students with emotional disturbance. The individualized GBG was success-

ful in decreasing inappropriate behaviors for these adolescents. Two studies successfully used the game with a wide age range of students with disabilities, from 9 to 20 years of age and from 12 to 23 years of age.

The youngest students with whom the GBG has been used thus far has been preschoolers. The researchers increased compliance in two pairs of preschoolers using only positive procedures. The GBG has also been used in a hospital setting with adults. In this study, the Good Productivity Game was used with four hospital residents who were trainees at a rehabilitation industry to increase their work output for a task for which they were paid a wage.

Last, the only cross-cultural application of the GBG used the game with Sudanese second graders. The game, patterned very closely after the original version, was successful in reducing talking and out-of-seat behavior, as well as aggression.

D. Reinforcers

One advantage of the GBG is that teachers can use those reinforcers that naturally exist in most elementary classrooms. For example, a common group of reinforcers used in many studies has been some form of free time, extra recess, or activity time. Other rather commonly available reinforcers also used have included various edible treats (e.g., candy, cookies, etc.). Still other privileges available that have been used consist of lining up first for lunch, public posting of results, going to library, helping the teacher, reading, playing games, working on special projects, viewing film strips, listening to records, serving as a tutor, and going outside to talk or read.

Unique and less commonly used rewards have consisted of leaving school 10 min. early at the end of the day, a special visit from the school principal, early work termination, a party and pencils, a weekly commendation letter or a positive note to a dorm counselor, or lunch with a staff member. Even many of these less commonly used reinforcers are often available or could be available in many or most classroom settings with a bit of planning and forethought.

E. Consumer Acceptance

In studies that have reported consumer (i.e., students, parents, teachers) attitudes and reactions to the GBG, most reports suggest that the GBG has been generally found to be popular and acceptable. The very first investigation of the procedure reported that the GBG was popular with teachers and school officials. Sudanese students, teachers, parents, and the principal were pleased with the game in the one cross-cultural investigation of the game. Other studies have likewise reported that the game was acceptable or even highly acceptable to participating students and teachers. One study that used a variation of the GBG but without team formation or immediate feedback to students on rule violations reported that students and teachers preferred the individual contingency compared to the interdependent group-oriented contingency (modified GBG). In general, it appears that the GBG is usually popular and acceptable with students and teachers. For students it can be exciting (group solidarity and cooperation) and provides reinforcers for work and self-control that may not have been present previously; for teachers, in addition to its demonstrated effectiveness, the GBG can be an efficient, easy to manage, time-saving procedure. Finally, an additional feature of the GBG that may contribute to its utility and popularity is that at least one study has reported that the game did not require rigorous compliance to be effective. These researchers concluded that the system may be robust enough such that complete adherence is not necessary to achieve meaningful behavior change.

IV. SUMMARY

The GBG is a form of interdependent group-oriented contingency management procedure that is used for the management of behavior primarily in classrooms and other academic settings. The game is designed to be time efficient and easy to manage for teachers and is usually used with an entire classroom in which two or more teams are formed, criteria are set for winning the game, and reinforcement is provided to the winning team. It capitalizes on team competition and peer influence in that the peer group assists in managing behavior, although some care must be taken to ensure that this peer pressure does not become excessive. The GBG is usually popular with students and teachers and has wide applicability and versatility; its efficacy has been demonstrated with many social and academic behaviors in a variety of settings with a number of modifications and adaptations for many age groups.

See Also the Following Articles

Behavioral Contracting ■ Contingency Management ■ Home-Based Reinforcement ■ Negative Reinforcement ■ Positive Reinforcement ■ Punishment ■ Time-Out ■ Token Economy

Further Reading

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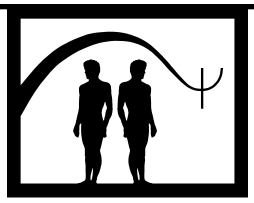

Grief Therapy

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Most people experience the loss of a loved one as a painful, confusing, and disruptive event. Several approaches to therapy with grieving persons have been widely applied. The two most well-known models of grief therapy are J. William Worden's "tasks of mourning" and Robert Neimeyer's "meaning reconstruction." Both of these approaches offer valuable specific therapeutic interventions. When applied well, they allow for the expression of feelings and provide bereaved persons with important opportunities to make sense of their grief experiences. Perhaps most significant, such grief therapies provide grieving persons with an important opportunity for self-perception and self-definition. Although grief therapy may be done in either individual or group contexts, group settings usually offer the advantages of support from others, of engaging in altruistic behaviors toward others, and of the recognition of some degree of universality in one's experiences.

I. FOUR TASKS OF MOURNING

There are four tasks in the mourning process, according to William Worden. The first task is to accept the reality of the loss (death). On one level, this is straightforward: the facts of the loss need to be recognized. On another level, there are two other, more subtle, aspects of the loss—the meaning of the loss and its irreversibility. To accept the meaning of the loss means to recognize its significance. When a bereaved individual gets rid of all reminders of the deceased, or engages in forgetting the lost person, or denies the intimacy, impact, or importance of that person then it is likely that he or she has not engaged in the task of accepting the reality of the loss. Thus, the first principle of grief therapy is to help the survivor actualize the loss. This is accomplished primarily by facilitating the survivor's talking about his or her experience of the loss.

The second task of mourning is to acknowledge and work through the pain of grief. This is a particularly difficult task because no one wishes to feel such pain.

First, grieving persons may actively seek to avoid painful feelings and thoughts. They may, for example, use thought stopping, they may idealize the deceased to allow themselves only fond memories, they may use alcohol or other drugs, or they may even try a "geographic cure" (e.g., selling the house and moving away). Second, friends may prefer to avoid the pain of the grieving person's experiences. This leaves the griever isolated. Finally, therapists themselves may avoid the griever's pain in therapy. In conceptualizing a case, therapists may reduce the pain of grief to a concept with which they may be more comfortable within their theoretical framework. Above all, therapists may give in to an impulse to help. For some, this may mean

wanting to take away the pain. It is extremely important for therapists to recognize their inability to take away the other person's pain. The therapist's role is to both sit with the person's painful feelings and to help him or her express these.

A particular set of feelings should be noted at this point. Anger is commonly experienced but not always readily expressed by bereaved persons. They often harbor anger toward the deceased and toward God, fate, or life in general. It is usually a fruitful therapeutic exercise to ask "In what ways have you been angry with … (God, etc.)?" Permission to express such anger usually results in a sense of relief at a burden lifted and at not being alone in having such feelings.

The third task of mourning is to adapt to an environment in which the deceased is missing. A deceased person has often played many roles in the survivor's life. Sometimes these roles do not become apparent until some time after the death when the survivor is coping with the everyday tasks he or she must now take over. At this time, it is usually therapeutic to problem solve in concrete ways.

In some cases, the survivor's self-definition has depended heavily on his or her relationship with the deceased person. In such cases it is often helpful to engage the survivor in an active process of self-perception. Group therapy is an especially powerful venue toward this end.

Self-perception theory, as first articulated by Daryl Bem in 1972, asserts that we come to know ourselves in the same way that we come to know others: by observing our own behaviors in various situations. In a bereavement group, members can have many opportunities to engage in altruistic, supportive, and empathetic behaviors toward other members. The group leader points out and labels these kinds of behaviors as they occur and encourages the group member to notice what sort of person would do these things. Under such conditions members can begin to see themselves not as confused and grieving but as active and engaged with others.

According to Worden, the fourth task of mourning is "to emotionally relocate the deceased and to move on with life." It is unclear from his writings if this is intended to be a resolution of the grieving process. In therapy, it is often more useful to facilitate the grieving person's recognition that the lost person is never really forgotten and in that sense that the grieving process never ends. Nevertheless, it is possible to go on with other loving relationships. Such recognitions on the part of the client represent a valid therapeutic goal.

This model has several strengths. It places a strong explicit emphasis on the feeling experiences of grieving persons. It is relatively easily understood and applied without necessarily relying on its psychodynamic underpinnings. Perhaps most significant, by presenting "tasks" it provides a structure for the grieving person as well as for the therapist. In the face of the intrinsically confusing experiences of grief, a set of tasks can provide grieving persons with a sense of order, self-control, and self-determination in their lives.

The main criticism of this approach is its implicit stagelike quality. It is very tempting to fit all grieving individuals into a mold of "working through the stages" (tasks) of grieving. Nothing could be less therapeutic.

II. MEANING RECONSTRUCTION WITH GRIEVING PERSONS

Another widely accepted approach to grief therapy is a reconstruction of meaning model. Robert Neimeyer, the editor of the journal *Death Studies,* has most effectively articulated this highly idiographic model. This approach emphasizes the uniqueness of individuals' experiences of grieving. The basic premise is that the revision of one's life story in response to a loss is the central process in grieving. Grief therapy is, therefore, primarily an opportunity for grieving persons to tell their stories in ways that will help them to make sense of loss and of life.

This approach views life itself as a story-telling process. People "write" and rewrite their stories and thus develop a sense of meaning, purpose, and identity. Losses, particularly through death, disrupt our stories. They may invalidate or threaten beliefs and assumptions that have lent meaning and order to our lives. Significant losses often trigger a search for meaning. Consequently, grief therapy is focused on a retelling or reconstruction of the grieving person's narrative. This work is done in a way that will allow the survivor to once again find meaning in life in the context of a new reality.

Such grief therapy often consists of a variety of activities, all intended to facilitate self-reflection, a search for meaning, and ultimately a new story about oneself. Writing letters to the deceased may help the grieving person not only to express feelings but also to place the deceased into the context of a new reality (without the deceased person). Keeping a journal can help grievers to label their own experiences during a loss and afterward. Putting together a book of memories can help to affirm the importance of the lost person for the griever. It can also underscore both those aspects of the griever's self that he or she chooses to hold on to after the loss and those aspects that he or she chooses to change. For

some, writing poetry can serve all of these functions but in metaphorical, indirect, and subtle ways.

For others, less verbal techniques can be more productive. Such activities include drawing stories of events in one's life, including a drawing about the loss. Compiling a book of photographs (perhaps mixed in with drawings) can be effective for some. These less verbal activities can become small rituals. Indeed, many personal rituals can symbolically express grievers' feelings and help them to put their experiences into the context of their life narratives.

Authoring an autobiography has been considered a good opportunity to redefine oneself. However, writing an autobiography can be a daunting exercise, even for the best writers among us and even without the pain of grieving. One specific format, sometimes employed in addictions counseling, that lends itself to telling one's story is an exercise known as "lifeline."

Constructing a lifeline consists of drawing a line graph of the experiences of one's life along a horizontal axis that can be divided into 10-year increments. The line goes up or down as it traces events through the years, to reflect one's feelings during those events. The vertical axis can be described as a feeling meter. Thus, the drawn line goes upward when feelings were happy and downward when one's feelings were sad.

A lifeline completed in a group therapy context can be very powerful. Each group member narrates his or her own life using the lifeline as an anchor. (It may be used as a visual aid while telling one's story, but this isn't necessary.) Saying one's story to others is important because it allows others to accept and validate one's experiences.

Saying one's story aloud allows narrators to hear themselves. Hearing one's own story is an instance of self-perception. One learns about oneself by observing one's own behavior and constructions. Thus, the therapist's role is to draw the narrator into an active process of recognizing who he or she is. In this way, grief therapy can be a process of self-perception and self-definition.

There are several strengths of the meaning reconstruction approach. First, this is ultimately an existentially oriented approach to a peculiarly existential dilemma of human life. It begins with people's search for meaning in the face of loss. Second, it encompasses a variety of techniques with the goal of helping grieving persons to make sense of their lives again. Third, serious research efforts have been made within this school of thought to validate the approach and to examine such issues as the applicability of treatments to different types of losses and grievers.

On the other hand, this approach might be criticized as placing too much emphasis on the cognitive and volitional aspects of the person. Such emphasis might be done at the expense of affective, feeling aspects.

III. THEORETICAL BASES

Grief therapy, whether utilizing the tasks of mourning or focusing on the reconstruction of one's meanings, can be understood as an opportunity for heightened self-perception. Recent studies have indicated that at least 70% to 85% of bereaved persons typically engage in a search for meaning in their lives following a death. This means that for most people bereavement holds the potential to be a time when they are looking at such existential questions as "What is the purpose of my life?" and the corollary "Who am I, after all?"

While completing the many therapeutic experiences described earlier, grieving persons observe their own responses to the urgent experience of death and loss. With the therapist's aid, they can examine their own answers to existential questions and learn who they are. If therapists explicitly foster such self-perception, grieving persons have unique opportunities to redefine themselves.

Both a grief therapy centered on the tasks of mourning and one focused on a reconstruction of one's personal meaning allow the person to redefine oneself through observing one's responses to the existential questions posed by the urgent experience of death and loss. However, the two approaches have very different theoretical roots. William Worden's scheme of the four tasks of mourning is firmly grounded in psychodynamic theory. This is most evident in his emphasis on the importance of "working through" the tasks. It seems clear that working through is meant in the psychoanalytic tradition of repetition, elaboration, and amplification.

The meaning reconstruction approach, on the other hand, is rooted in George Kelly's constructive alternativism. Kelly emphasized that everyone construes events in his or her own way. Indeed, we construe ourselves. Constructive alternativism is an existential theory in the sense it assumes no special motivational force in people and no essential human nature. Rather, we are what we do. Humans are self-determining: we are nothing more than what we make of ourselves. Our responses to loss are special instances of such reconstruction of ourselves and of the meaning of our lives.

A search for meaning typically addresses two questions. An early question in this process seems to be "Why? What is the meaning of this death (loss)?" A somewhat later question is "What can I learn from this experience?" or "What is the meaning of this experience in my life?" In 1998, Davis, Nolen-Hoeksema, and

Larson studied over 200 people who had lost loved ones to a slow, progressive death (mainly by cancer). Their work indicates that a search for meaning is really two separate processes: an earlier making sense of the loss and a later finding benefits from the loss. Thus, a search for meaning may be developmental. A shift from making sense of the loss to finding some benefit from it should be a goal in a course of grief therapy.

Neimeyer has defined the reconstruction of one's meanings following a loss to include six elements. First, it is an attempt by the grieving person to find new meanings both in one's own life and in the death of the loved one. Second, these new meanings are integrated into the grieving person's overall scheme of things. Third, any construction of meaning is an interpersonal (and personal) process. Therefore, group therapy with grieving persons can be very fruitful. Fourth, meaning is always found within a cultural context. Finding meaning after a loss must include cultural traditions and rituals of bereavement and grieving. Next, personal meanings are tacit and preverbal as well as explicit and articulated. Simplistic assumptions of therapy as a rational and verbal process may not be particularly applicable to grief therapy. Finally, meaning is not a cognitive "product," it is a process.

The process of grieving had, in the past, been conceptualized as having an ending. Several theorists proposed that following a set of "stages," grieving persons could be expected to reach some sort of resolution. John Bowlby called such a resolution "reorganization." Colin Murray Parkes referred to it as recovery. It was thought by some (notably George Engel) that after having gone through the cycle of a full year following a death the "normal" grief process would end. Contemporary views of grieving do not emphasize such time-delineated resolutions. Catherine Sanders has strongly argued that the bereavement process does not have clear-cut starting and stopping points but is a free-flowing process. She has proposed that the process is best described as consisting of permeable phases rather than fixed stages. Neimeyer has likewise proposed that there are three phases in a typical grieving process: avoidance, assimilation, and accommodation. Such a grief cycle lasts a lifetime.

IV. OUTCOME RESEARCH

Since 1975, when the first controlled research of such therapy appeared, there have been at least 23 empirically based outcome studies of grief therapy. A significant caveat must be underscored before a discussion of this body of literature can be described. Many of the controlled investigations of grief therapy have not described the theoretical models of the therapy being reported. This stands in stark contrast to the vast body of psychotherapy outcome studies in general. Psychotherapy outcome research usually describes the effectiveness of, for example, a behavioral, a client-centered, or other specific approach to a given problem. The lack of such specificity limits the evaluation of grief therapy.

Barry Former and Robert Neimeyer completed a meta-analytic review in 1999 of 23 controlled outcome studies. Their findings showed that grief therapy outcomes have been better when clients are younger (rather than older) and when clients' grieving has gone on for a longer period of time and is complicated (as opposed to therapy soon after the death). Perhaps the most robust finding is that grief therapy for traumatic death is highly effective. That is, a person who has lost someone to a violent, accidental, or otherwise unexpected death may be the most likely candidate for a positive outcome of a course of grief therapy.

Therapy outcome research in the future may be improved by focusing on several specific issues. First, outcome measurement may be more accurate if it is done after some time has passed as well as immediately after therapy. Very often clients report an increase in their discomfort at the end of a series of grief therapy group sessions. Perhaps a consolidation of learning about oneself needs to occur. Likewise, a course of therapy may serve as the beginning of a search for meaning whose outcome does not occur until some time has passed.

In addition, outcome measures may need to be more specific than they generally have been. The majority of studies to date have used global indicators of improvement such as depression, anxiety, and physical symptoms. It may be more valid to measure specific indicators of grief that are grounded in contemporary theoretical models and empirical research.

V. SUMMARY

The experience of loss, particularly through death, is usually a confusing experience that triggers a search for meaning in the majority of bereaved persons. Grief therapy, especially in a group context, can provide grievers with a scheme of mourning and recovery such as the one provided by working through the four tasks of mourning. These are accepting the reality of the loss, acknowledging

the pain of the loss, adapting to an environment in which the deceased is missing, and emotionally relocating the deceased and moving on with life. Grief therapy can also aid the griever in reconstructing the meaning of one's life. This can be done with several techniques. One such technique is to review one's life with a special emphasis on placing the meaning of the loss into one's lifeline and defining oneself following the loss.

See Also the Following Articles

Self-Control Therapy ■ Self-Help Groups ■ Trauma Management Therapy

Further Reading

Neimeyer, R. A. (1998). *Lessons of loss: A guide to coping*. New York: McGraw Hill.

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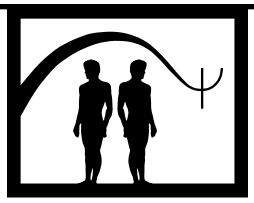

Group Psychotherapy

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GLOSSARY

general systems theory The basic theory of understanding groups; groups are seen as "organized complexities," or "systems" that are the product of the dynamic interaction among their parts rather than the sum of their absolute characteristics. Neither the resultant whole nor its new characteristics can be fully explained by the nature of the parts themselves.

group dynamics This refers to the interactional patterns within groups. This includes group-level experiences such as group cohesion based on seeing the group as attractive and helpful and that provides an important supportive function. Group norms evolve from the group interaction with guidance from the leader that give stability and safety within the group. Members will also adopt group roles based on their own outside behaviors that will provide important learning experiences in the group interaction.

1. Group dynamics also embraces the concept of therapeutic factors. These provide supportive and motivating experiences that create a powerful change environment.
2. Supportive factors:
   a. Universality by understanding that others have had similar experiences
   b. Feeling acceptance by the group
   c. Experiencing altruism by helping each other
   d. Developing a sense of hope that change is possible
3. Self-revelation factors:
   a. Self-disclosure
   b. Catharsis
4. Learning factors
   a. Modeling on others
   b. Vicarious learning through watching others
   c. Guidance through suggestions from others
   d. Education from the experiences of others
5. Psychological work factors
   a. Interpersonal learning from group interaction
   b. Insight into one's own patterns

psychodynamics This is a broad concept referring to the psychological operations that govern thoughts and behaviors and of which the individual may not be consciously aware. In particular, from a therapeutic perspective, the psychodynamic tradition described the presence of wishes in the context of relationships (for example to be more assertive) that may lead to fears of the response of others (for example being rejected) or of response of self (for example, remaining passively silent). These patterns are seen as arising from early experiences.

All these features of the group dynamics develop from within the membership as they relate to each other. The therapist's principle function is to create a positive and safe group culture in which these therapeutic experiences can take place. Therapy then truly takes place, not from the wisdom of the therapist, but from the interpersonal learning among the members. These processes will be

found in all groups to a greater or lesser extent. They will be used in various ways depending on the group model that is being used. In psychoeducational treatment models there is a class room-like atmosphere to learn a skill such as assertiveness, or to become informed about a diagnostic syndrome such as the symptoms and problems associated with bulimia nervosa. The group dynamics will be operating more or less in the background. Cognitive-behavioral models make more use of the group process through active discussion and challenge around the efforts to address negative thoughts about self or address behaviors such as obsessive–compulsive patterns. Interpersonal and psychodynamic group models make extensive use of group-based learning among the members. This spectrum of group models, each with its own set of unique techniques may give the group literature a scattered feeling. However, the important common base is the power of group interaction to support and promote change for a wide range of conditions.

I. DESCRIPTION OF TREATMENT

Group psychotherapy is a widely used treatment modality. However, there are many types of groups for different conditions and often several models of groups for a particular condition. This makes a description of the field somewhat complex, and even the term "group therapy" relatively lacking in meaning except that several people are meeting together. Group psychotherapy is widely used as an intensive treatment modality to address psychological issues especially those involving unsatisfactory interpersonal patterns. Group therapy is also used in a more structured manner to address negative cognitions, to learn skills such as assertiveness, and for psychoeducational purposes. This wide range of group applications involves the use of groups that are conducted in quite different ways.

This article begins with an overview of the effectiveness of group therapy and the sorts of problems that can be treated in groups. This includes the question of how many group sessions are needed to be helpful. Then an overview of basic group theory is provided emphasizing the importance of considering the whole group as the vehicle for treatment. This is followed by a discussion of the generic processes that occur as a group develops. Different types of group models are then reviewed and what problems each is designed to address. Finally, there is a description of how group programs can be developed for use in larger systems of health care.

Group therapy has been studied extensively and in particular there have been a number of large and comprehensive studies over the last decade. A recent survey of 23 high-quality randomized outcome studies found effect sizes (a statistical measure of change) in a range of 0.76 to 0.90. This means that treated patients were doing significantly better than 78 to 82% of control patients who did not receive active treatment. The clinical literature derived from regular treatment settings suggests similar outcome changes. A number of studies have directly compared the results of group therapy and individual therapy for a similar patient population and using the same theoretical treatment model. With very few exceptions, both modalities have about the same clinical outcome across a wide range of clinical applications.

The list of conditions treated in groups is extensive. Virtually all models of individual therapies have been used in group therapy. The highest use of intensive group models is with the more common conditions of depression, anxiety states, eating disorders, and personality disorders. Groups of a more supportive nature are widely used as an adjunctive treatment for more severe and chronic conditions such as bipolar disorder and schizophrenia.

II. THEORETICAL BASES

There is a clearly articulated theoretical basis for group therapy based on general systems theory. The major difference between individual therapy and group therapy from a process viewpoint is the presence in groups of a range of relationships rather than the single relationship of individual therapy. This makes groups a more complex treatment system and has led to the idea of therapy through the group process as opposed to therapy of the individual in the group or therapy provided solely by the leader. The role of leader in a group is quite a different task than the role of the individual therapist. The leader must be monitoring each member as well as the general climate of the group.

A group becomes an entity when there are identifiable patterns of connections among the members. Before that occurs the group is simply a number of people more or less together. Systems theory provides a model for describing the properties of a group. Organized complexities, or "systems," are the product of the dynamic interaction among their parts rather than the sum of their absolute characteristics. The whole group and its characteristics cannot be explained by the nature of the parts (the leader and the members) but by how they interact. This dynamic interaction can be understood as the flow of factual and emotional information across a series of boundaries.

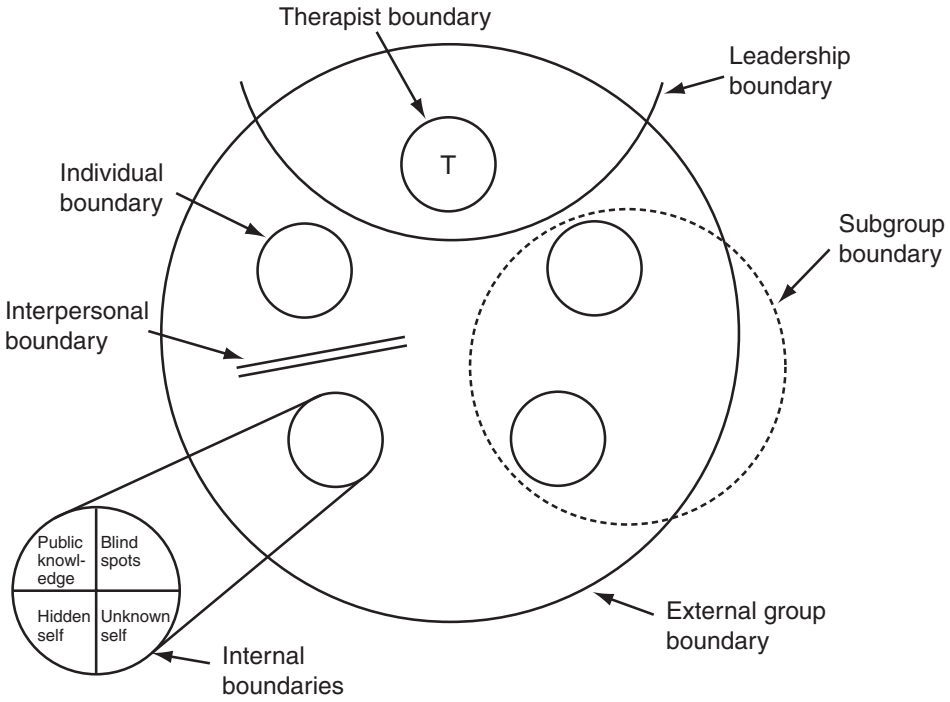

FIGURE 1 The group system. A schema of important boundary structures in groups. From MacKenzie, K. R. (1997). *Time-managed group psychotherapy: Effective clinical applications.* Washington, D.C.: American Psychiatric Press, Inc. Reproduced by permission.

The term "boundary" is being used in a double sense. Boundaries can be conceptualized in physical terms: Closing the door of the group for the first session is a powerful message that a group has been created; the number of members in a group will have an influence on its process. However, of greater interest to an understanding of the group process is the idea of the boundary being created by an awareness of transactions across the boundary and particularly of differences on either side of the boundary. For example, an early phenomenon in therapy groups is the awareness of universality, as the members understand that they share many common symptoms, experiences, or emotions. Technically this could be seen as the development of an external boundary to the group: "We in this room are a special category of people who can understand each other," as opposed perhaps, to the perceived lack of understanding of spouses or friends outside the group. The nature of boundary regulation is expected to vary over time as the group proceeds. The format of a time-limited closed group provides an ideal model for application of group systems concepts.

The concept of group psychotherapy as treatment through the group process does not mean that a psychodynamic model must necessarily be used. If several members are participating together, the nature of their interaction cannot be ignored in trying to understand the effectiveness of the treatment. It is useful to distinguish the difference between the psychodynamics of the internal processes going on inside the individual and the group dynamics that are going on among the members and leader.

The boundary structures form a hierarchy of levels: A minimum list includes the whole group as a unit in its external context, interactional phenomena occurring between members including the leader(s), and the internal psychological processes within each member. Many group therapy research reports confuse or ignore these levels in their analyses. They may provide a full discussion of the technical strategies and outcome but no information regarding the group process through which it occurred. Figure 1 gives a visual portrayal of the most important boundaries.

1. *The whole group external boundary:* This defines the properties of the whole group that must be dealt with as collective in nature. This perspective of the whole group has direct application to pregroup decisions. For example, a group composed of all members experiencing the same disorder is likely to have an experience of early cohesion. The whole group focus also

includes stability of membership and attendance patterns including closed or open group models. Behaviors such as extragroup socializing and breeches of confidentiality transgress the external boundary and may have an important influence on outcome. The external boundary also includes a consideration of the properties of the whole group such as cohesion, group climate/atmosphere, or group development that are derived from the overall membership.

The idea of group roles is also a group-level conceptualization because the role designation is based on a process of negotiation between the individual and the collectivity. The same person might behave quite differently in a different group. There are four basic roles.

a. *Sociable role:* Someone who assumes this role tends to be friendly and supportive, seeking to keep relationships on a positive tone. They are eager to help others sometimes to their own disadvantage. They play an important function in promoting cohesion and engagement and are comfortable with emotions, especially positive emotions. Their role is particularly important as the group forms.

b. *Structural role:* These are members who are active in organizing the group. They tend to emphasize cognitive ideas and the need for the group to stay on-task and may be seen as controlling. They are of value to the group in keeping a focus on therapeutic work.

c. *Divergent role:* These members are challenging and questioning and often take an oppositional stance. They play an important function of making the group address important issues. They are comfortable with negative emotion that promotes interaction but are in danger of being isolated by the group. Their involvement is particularly important in the differentiation stage of the group described later.

d. *Cautionary role:* These group members are reluctant to participate and are anxious about revealing much of themselves. They are in danger of being ignored by the group or being subtly criticized for not participating. They may highlight for the group the dangers of becoming overinvolved.

2. *The subgroup boundary:* It may be useful to understand the role of subgroups. These may consist of clusters of members who create helpful or hindering effects on a group. Subgroups within the same group may respond quite differently to specific therapeutic models according to characterologic features. These considerations may have an important bearing on composition decisions. For example, a group with quite diverse levels of symptomatic dysfunction among the members may have trouble developing cohesion because of the disparity in the sorts of issues they bring to the group.

3. *The leadership boundary:* Leadership involves both the choice of a particular theoretical model to be used and the technical style used to deliver that model. The role of leader plays an important function in groups but with different implications than in individual therapy. The leader may be seen as a director or authority and more remote because the leader's activity must be shared with all members. The more complex situation of co-leadership offers the opportunity for collaboration or competition around theoretical beliefs or technical strategies. Different theoretical models will bring with them implications for group leadership. For example, group behavioral therapy may have quite high levels of process control through the use of structured procedures and review of homework, whereas group psychodynamic therapy is likely to have quite low levels. The theoretical model may be given credit for effectiveness that is actually due primarily to the nature of the process component.

4. *Therapist boundary:* The therapist is also present as a person with personal characteristics that may have an important impact on the group or some of its members just as in individual therapy. In the case of co-therapists, the leakage of subtle messages between them will be closely watched by the members, especially if there is a female–male pair. Self-disclosure by the therapist(s) may go beyond that prescribed by the technical model being implemented but driven by the interactional pressures of the group.

5. *The interpersonal boundary:* Most of the action in groups occurs between the members. Later in this chapter there is a discussion of the impact of group composition and size on interpersonal patterns in a group. An interpersonal learning cycle that is based on disclosure and feedback among the members is also described. All groups develop norms, general ideas about how the group should function. Often the leader is active in specifically discussing how the group can most effectively operate, an issue discussed later under the heading of Group Development. However, groups also develop their own set of norms; one clear example is how a group for adolescents will carry on the group with their own agendas in parallel with those of the therapist. Addressing these differences may provide most of the therapeutic learning. Once established, norms tend to persist even if there is a major turnover of membership.

The role adapted by the leader has a major impact on the nature of group interaction. Skill-based groups, such as some forms of cognitive training for challenging negative cognitions, may be conducted with a classroom atmosphere and little discussion. At the other end of the

spectrum, process-oriented groups may pay less attention to outcome application and focus primarily on the meaning of group process. The research literature suggests that neither extreme is optimum. The group process can provide non-specific support and motivation that enhances group goals. Application to real-life situations forces the need to address resistance to change. The group therapist must be aware that group process is always going on whether overtly or covertly and will have a positive or inhibiting effect on outcome.

6. *Internal member boundaries:* Therapists vary considerably regarding the level of attention to enacted interpersonal behaviors versus internal processes depending on the theoretical model being used. But of course there is much going on inside each group member that may or may not be revealed. Tapping such internal phenomena may provide useful information for understanding both the individual and the impact of group events on each member. The importance of such findings is not restricted to psychodynamic models.

III. APPLICATION

A. Group Development

There is substantial evidence from the group process literature for the phenomena of group development. Indeed, research findings indicate that those groups that follow a developmental sequence produce better outcome for the members. The most basic description of group development consists of a four-stage model of engagement, conflict, interpersonal work and termination. Additional stages have been described that would fit either as subunits under the broad heading of interpersonal work or as identifying issues regarding greater independence from the leader. The group development perspective is a powerful metaposition from which to understand group-level events. In the following description of group development, strategically helpful interventions that augment the characteristics of each stage are described. Although the specific applications must be adapted for any particular group, the basic positioning of therapeutic intent will help to maximize the outcome.

Group development is most evident in closed time-limited groups of 3 to 6 months duration. This format is widely used, making an understanding of group development a particularly helpful theoretical perspective for the clinician. The stage descriptions that follow are based on this type of group format, and important therapist tasks for each stage are described.

Open-ended groups will go through minidevelopmental stages when membership is altered. This is most evident in regard to the new member(s) but the entire group also participates because group roles may be lost or challenged by the changes. Some groups, such as acute crisis groups, may change membership with each session but compensate for this with a higher level of group structure.

Assessment and preparation tasks are discussed first for, although they are not formally part of the group development sequence, they are part of the early tasks that the leader must address.

1. Assessment

The first set of tasks in assessment is to identify the predominant diagnostic difficulties. The purpose of this is to establish what treatment approach will be most likely to be effective in this specific clinical setting. A closely related task is to match to the extent possible what type of group (or other treatment) is likely to be most effective. The goal is to maximize the accuracy of prediction of who will benefit from what type of treatment.

The second set of assessment objectives is to develop a focus for treatment. This will begin with a review of the most troublesome symptoms. Going through these in some detail is helpful because the discussion serves as an acknowledgement of the reality of symptoms. Often patients will feel that previous caregivers or family members have not understood what they are experiencing. It is particularly helpful to go through a careful chronology in relation to life events or other stress-precipitating triggers.

Most patients present for treatment in the context of some type of stress. This is most frequently in relationship to interpersonal events. A review of an interpersonal inventory of important people may reveal associations that even the patient is only vaguely aware of. The principle focus will be on current spouse/partner, current extended family, and current friendship circle. Past significant intimate relationships, nuclear family of origin, and extended family of origin will help to understand the quality and patterning of interactions over time. Major themes can be elicited by inquiring about three relationship dimensions: the overall tone of a relationship in terms of affection versus negativity/anger, the status of control versus submission of both participants, and whether relationships tend to be overinvolved versus underinvolved in nature. An understanding of the management of the spectrum of emotions will be important. Finally, an effort to identify chronic stresses, the nature of living arrangements, finances, friendship circle,

and involvement in community activities provides an assessment of the social context.

Because groups by their very nature involve interpersonal functioning, it is useful to go beyond syndrome diagnosis by applying the interpersonal inventory to identify basic interactional patterns and triggering events. The use of brief questionnaires may provide useful information, especially in regard to interpersonal patterns. From this database it is possible to develop target goals to provide a focus for clinical work. This task should be addressed from a position of neutrality and cognitive clarity about issues that have emerged during the assessment. It is helpful to elicit real-life examples and the role the patient plays in these. A direct approach to this sensitive task ensures the patient that he or she is being understood but also that the important issues will not be avoided. It is helpful to specifically connect symptoms to triggering circumstances. The overall goal is to establish a serious working engagement at an early point with initiative coming from the patient, not just the clinician.

Following one or two individual assessment interviews, a final decision is required regarding the suitability of the patient for the type of group being planned. It would be better to delay treatment for a more suitable type of group than begin the patient in a group where integration might be difficult. From the other perspective, the clinician needs to consider the impact of the member on the group. Groups are generally able to absorb quite a range of problems. However, particular care should be taken to identify potential outriders, especially patients with a strong negative and autonomous controlling style. They are able to shut down group process, and the therapist has a double responsibility, to the individual and to the group. Some studies suggest that such patients do better in individual therapy.

2. Preparation

The empirical literature is clear that careful preparation leads to early group cohesion and therefore to fewer early dropouts and better eventual outcome. A systematic introduction to the nature of group therapy is indicated. This can be done verbally or preferably with the assistance of a brief handout. This might include mention of the research basis for group therapy and a brief description of how to get the most out of the experience. Some of the myths about groups may be discussed. For example the notion that it is a second-rate treatment, that people will be put on the hot seat, that talking with people who have similar problems will make everyone worse, and that the group will get out of control as sometimes portrayed in the media. Frankly discussing these issues along with any questions the patient might have will be reassuring.

There are multiple tasks for the therapist before the group commences. These include a careful description of the proposed treatment and clearly setting a time frame, including the date of the final session. This has the added advantage of uncovering problems in attendance that might preclude a patient joining this particular group. It is useful to emphasize the patient's role in defining patterns concerning issues to be addressed and in participating in the group interaction. If the group is to be process oriented the importance of working with other group members should be emphasized and the less active role of the leader in facilitating group interaction. If the group is of a structured nature, the pattern of sessions should be described as well as the role of specific homework tasks.

3. Developing a Focus for Treatment

The choice of issues to focus on is a central task in the pregroup interviews. The therapist can function as a helpful technical resource always trying to cite the patient's own words in describing issues. The use of descriptive language rather than interpretive comments makes it more palatable to discuss dysfunctional patterns. Being direct about this task brings relief at being understood and often clarifies the patient's own partial awareness of difficulties. If questionnaires are used it is helpful to give the patient copies of the results. Various treatment models will emphasize specific types of goals as described later.

Effective goals should be seen as important and relevant to the patient. They should be realistically achievable for the treatment model offered and the time frame of treatment. They should emphasize changes the patient can make, not that others have to make. It is important to elicit collaborative discussion and to state clearly that the goal of treatment is to address these issues. The past may be used as a template, but application must be addressed in the present both in the group and outside.

Group rules or expectations should be addressed specifically. These include the importance of regular and punctual attendance and tardiness. A full and clear discussion about the absolute necessity of confidentiality is essential, as any member joining a group will be concerned about this. There needs to be a clear guideline in regard to extragroup socializing. This will be stringent for most groups but on the other hand may be encouraged in groups that are largely supportive in nature. The important task is to be very clear about the

expectations in this regard. Some mention that the members must not come under the influence of alcohol or non-prescription drugs is useful for the rare occasion when such events happen. It is also wise to clarify whether or not active concurrent individual psychotherapy is to be allowed.

Careful pretherapy preparation promotes early cohesion and reduces chances of early dropouts. It establishes a bond with the therapist that provides motivation in early sessions and a sense of security that the leader is in control though not controlling.

4. Engagement Stage

The initial task when starting a new group is to create a sense of membership in the group. The members of successful groups report an increasing feeling of belongingness over the first few sessions. The leader should take a modestly active stance particularly directed at stimulating intermember communication patterns. This can be done in an unobtrusive manner by brief interventions such as "Have others had this sort of experience," "John, you look as if you understand what Mary is talking about," and so on.

This simple strategy will facilitate interaction between members and away from the leader. This promotes the emergence in the group of important supportive therapeutic factors. The first of these is the experience of universality, that others have similar problems, ideas, and experiences. This process is enhanced when the group has been composed according to some common theme, such as a specific diagnosis, or an experience such as having trouble dealing with a death. The second therapeutic factor is that of experiencing acceptance. Many people seeking psychological help feel blocked in some way with interpersonal difficulties and real or feared concerns about not being adequate or being rejected. In a beginning group there is a strong need to be understood which is why similarities need to be stressed. The experience of feeling understood and becoming part of the group forms a foundation for self-acceptance and enhanced self-esteem. This process inevitably involves acts of altruism, of people helping each other. This allows the individual to feel appreciated and valued. These three mechanisms converge to produce the generation of hope that change is possible.

The initial group environment will be to some extent a reflection of the care taken in the assessment and preparation procedures described earlier. One method of enhancing these connections is for the leader to suggest at the beginning of the first session that people introduce themselves in terms of what they want to focus on in the group. This automatically links a working focus with the engagement task.

Initial factual self-disclosures are important, not so much for their content, as for the process of participating and for the recognition of common issues and problems. This creates a sense of safety and acceptance that will be reflected in increasing group cohesion. The sense of groupness consolidates the group external boundary and can be reinforced by comparisons between events within the group and with those outside. A common theme is the uniqueness of sharing personal issues and the difficulty of doing this outside. At an internal level, participation in the developing group system is accompanied by an early sense of well-being at finding that one is accepted and understood which has the effect of encouraging greater self-disclosure as well as improving a sense of self-esteem.

The tasks of the engagement stage have been met when all members have demonstrated a firm sense of commitment and have participated to some extent with important self-disclosure. This is usually accomplished in the first three or four sessions. Within the process development, there will also be a content focus on revealing problems. The leader can encourage this but primarily in terms of increasing information, not solutions. The group needs to have a sense of consolidation before addressing issues more deeply. Attention to these initial engagement functions is important in all groups. They provide a powerful set of common factors that have been demonstrated to predict better outcome in highly structured groups as well as in process-focused groups.

Most group dropouts occur in the first four sessions. This is primarily linked to whether or not the patient feels engaged in the group. Measures of the therapeutic alliance to the group, of the alliance with the leader, and of group cohesion are important predictors of dropouts. The sequence of careful assessment, preparation of the member for the group, and the management of the first few sessions are key to reducing dropout rates. This is particularly important because a group that begins to lose members also becomes demoralized, and this may initiate a process of continuing attrition.

5. Conflict Stage

The positive collaboration of the engagement stage then shifts to an atmosphere of interpersonal tension that is characterized by a more confronting and challenging quality that may have an angry or resentful component. The essential task is to develop patterns for conflict resolution and tolerance of a more negative atmosphere. This stage is a necessary component for the

developing group. The term "differentiation" has been used to emphasize the importance of self-assertion and self-definition that underlie the process. The interactional themes tend to shift from ones of commonalties to those of differences. This addresses the potential liability that the engagement stage group may have of avoiding difficult but important issues. The challenge within the group is accompanied by a parallel internal challenge regarding negative or shameful feelings about self. Generally, the confrontive style is also demonstrated toward the therapist as the collective group seeks to differentiate itself from the leader. This includes a reworking of group norms that now become the "property" of the group, not just the leader. This stage often has a somewhat adolescent quality of challenge for challenge's sake.

The leader can assist this stage by showing interest in the issues arising and endorsing the importance of addressing them. Explicit acknowledgement may be made that tensions in the group are a positive sign that important topics are being addressed. Almost inevitably some of the negative atmosphere will be directed at the leader. This often takes the form of not getting enough guidance (in process-oriented groups), or of too much focus on tasks and not enough on process (in highly structured groups). The principle task of the leader is to acknowledge the issues being presented and encourage open discussion about them. A defensive response will tend to shut down the group and result in a demoralized atmosphere.

The therapist needs to appreciate that this is a normal group phenomenon, not an individual member issue. The energy within this stage of the group can be channeled into expanding an understanding of the details concerning the difficulties that members are addressing. The therapist may use this stage to increase the expectation of applied work in the group. This may be of an introspective or interpersonal nature or of expectations in terms of applying behavioral or cognitive strategies. The member is thus encouraged to challenge self as well as other group members. This lays the basis for greater self-introspection later. A group that is not demonstrating the features of the conflict stage by the sixth session is falling behind the expected curve and is in need of examination.

The first two stages of engagement and conflict provide the experiences required to develop a deepened sense of group membership and participation. The group is able to provide support and acceptance, while also able to confront issues. In terms of group development, these are early phenomena, but they also begin to address core difficulties regarding trust and acceptance and with difficulties surrounding assertive behaviors that are commonly found in people experiencing psychological distress. Self-esteem is often improved, and symptoms begin to ease. Early response is a strong predictor of later outcome. Group members who are not beginning to respond during the first 6 weeks in a closed weekly format need special attention. Helpful strategies would be to maintain a consistent focus on their comfort in the group, further exploration of the nature of the issues they are addressing and efforts to keep them actively involved in group discourse. Often approaches by other group members may be as useful as those directly from the therapist. The leader may use techniques such as "What do others make of the issues Henry is raising," or "Can anyone help Marilyn sort out the tensions she is describing in her marriage." It is not helpful to assume that the situation will improve in the later part of the group.

6. Interpersonal Work

The group is now equipped to address individual problematic matters in a more vigorous manner. The focus tends to shift to greater introspection and personal challenge. This promotes increased closeness among the members as they align in the exploration of more difficult common issues. This stage of the group is likely to stimulate themes central to interpersonal functioning such as tolerance of intimacy, management of control–dependency in relationships and fears of becoming overinvolved in relationships and losing a sense of self.

The importance of the therapeutic alliance and cohesion has been discussed earlier with the supportive working factors that are operative. A supportive group environment promotes a sense of safety that allows more challenging interactions. As the group moves into the interpersonal work stage these factors begin to give way in importance to the working alliance factors that place greater demands on the members to deepen the level of participation in the group.

A practical way of conceptualizing the interpersonal work stage of the group is based on recent detailed process research. As the sense of security in the group grows there is an increase in personal self-disclosure and catharsis. This elicits feedback from other members regarding this new information. Tolerating discrepant feedback is correlated with change in maladaptive patterns and promotes a process of interpersonal learning. This occurs on two levels. The actual interchanges in the group help to clarify interpersonal patterns and thus lead

to modification of those aspects that produce difficulty. This process leads to enactment within the group of a change of style. At the same time, an internal process of self-examination is triggered that results in changes in real life outside relationships. Success in these relationships provides a reinforcing cycle of positive experiences that serves to diminish symptom distress.

7. Termination

This stage may occur at varying points in the development of a group depending on the circumstances promoting or impeding development. It will have greater salience in groups that have developed a strong interactive milieu, that have met at least for several months or in an intensive format, and that end together. Endings are often a problematic area for people seeking psychotherapy. It is common for complicated grief issues to emerge; some members may experience acute anxiety around themes of abandonment or rejection, or of not getting enough. Termination confronts the members with the issue of assuming responsibility for managing one's self. These termination themes incorporate basic maturational tasks that are central to the human condition.

Paradoxically, the imposition of a time limit creates an arena in which such lifelong issues can be directly experienced and addressed. Termination issues are often avoided in psychotherapy. A systematic approach to managing termination will ensure that all members participate in the process. The ending of a closed time-limited group offers an opportunity to systematically maximize an exploration of the important issues related to loss.

The leader should make it clear as a patient enters a group exactly what the time line is expected to be. If it is a closed time-limited group the ending date should be clearly identified at the beginning. About 4 weeks from the end the topic of termination needs to be introduced and discussed. The theme of termination will be lurking throughout all subsequent sessions, and the therapist can be active in identifying it and encouraging further discussion. The final session is best focused primarily on termination reactions. This may be woven in with other termination matters such as relapse prevention material. An ending set of go-arounds with each member saying something by way of good-bye to all other members evokes many supportive and validating comments. A follow-up visit in a few months time is useful and provides an incentive to continue with personal therapeutic work. It should be on an individual basis, not a group meeting.

The description of the change process in psychotherapy groups described earlier applies to all types of groups, not just those using an interpersonal model. In individual therapy, the interactional process is not as complex and under greater control by the therapist. The distinction between a cognitive and a psychodynamic individual session is obvious. In group therapy, there is a large informal interactional process that has been shown to have a significant impact on output. Therapy through the group process is not just a theoretical concept; it is enacted inevitably in any group treatment. A recent survey of process research in behavioral and cognitive groups has provided provocative findings. Some studies specifically found no correlation between a change in negative cognitions and outcome. Others found that characteristics of the group process, mainly cohesion/alliance measures, or patient characteristics accounted for as much or more predictive power regarding outcome than technical strategies. These findings suggest that clinicians employing a more highly structured treatment model need to be alert to the implications of selection and process impacts on outcome. Group process dynamics provide a supportive and motivational component quite apart from the impact of technical strategies.

8. External Structural Factors

Clinical experience suggests that numerous external factors will have a significant impact on the process of group development. The number of sessions available will in part determine how far the group can progress. For example, a group restricted to six or eight sessions is unlikely to move beyond engagement tasks because it will shift directly from engagement to preparing for termination. Inpatient groups or crisis intervention groups that have changing membership almost every session will not be able to progress beyond the engagement stage. Highly structured groups that are designed for psychoeducational purposes, or for specific skill training such as assertiveness, may be limited in the amount of interaction that occurs and will therefore show weak developmental progress.

The therapist for such brief groups may need to be relatively active to keep the group at the appropriate level. The leader needs to calibrate interventions therefore toward encouraging early-stage tasks that make full use of the supportive cluster of therapeutic factors that encourage group interaction and promote cohesion around addressing problems or topics that are external to the group itself. Trying to push such groups forward into more conflictual or introspective work will inhibit achievement of the goals of the group and may lead to dropouts.

The interactional capacity of the members chosen for the group will also have an impact on the speed at which it can develop. For example, groups for schizophrenic patients generally show a developmental process measured in months or years. Groups operating in a corrections environment where there are high levels of control and distrust will have difficulties developing an initial cohesive group. Groups for more difficult populations such as personality disorders are often treated in a brief group format but usually with a behavioral or cognitive model in which group interaction is contained in the service of information or skill focus.

A traditional format for group psychotherapy has been the longer-term slow/open group format in which members are added only when an opening becomes available. In such groups, the working atmosphere of the group is maintained with fluctuations related to tension and resistance as important issues are addressed. Any change of group membership will force the group to address engagement issues, but in such an ongoing working group with a small membership change there is not usually a major shift in atmosphere. This process might be more realistically understood as one in which the new member goes through the stage processes to rise to the level of interactional work of the ongoing group.

9. Role of the Group Therapist

The therapist is in a position to manage group development by selecting a particular theoretical model or group format, and by virtue of intervention techniques strategically selected to promote group development. The therapist should consider, before the group begins, the extent to which the more challenging atmosphere of the differentiation stage is best managed. For time-limited groups this is the most critical period.

Groups that follow a highly structured psychoeducational or behavioral format generally choose to stay in a classroom or seminar atmosphere throughout their course and make less use of interaction among the members. Group interaction would be noted and managed to maintain a working atmosphere but not explored. The focus needs to stay on the material being presented with encouragement of active group discussion around the material and elicitation of examples but not intimate personal self-disclosure. Leaders need to beware of slipping into a more intimate therapeutic mode.

Cognitive-behavioral models more commonly use engagement stage interaction actively to reinforce learning through the interpersonal process while managing differentiation issues without exploring them in detail. The goals of such groups will be addressed primarily through application to outside circumstances, and the group may be used to rehearse new behaviors. The therapist may, for example, manage leader challenge by acknowledging the issues, appreciating that different viewpoints are helpful, but using the process to highlight the value of recognizing negative thought styles. This requires a clear distinction between group dynamics and psychodynamics. Paradoxically, the early structure of these groups promotes a rapid sense of security leading to cohesion that moves the group toward the differentiation stage quite rapidly.

Interpersonal groups will encourage member-to-member interactions from an early point and thus promote a strong sense of groupness. Groups employing an interpersonal or psychodynamic model are designed to use the group process as a major therapeutic vehicle. The leader will want to promote the differentiation stage and use it as an opportunity for interactional learning. The goal is to have the group move through the engagement and differentiation stages vigorously but without delays so that maximum time will be available for the interpersonal work stage before termination issues need to be addressed. Thus the developmental format forms a semistructured background that will guide therapist interventions.

Providing some structure within the first few sessions has been shown to increase levels of self-disclosure though care needs to be taken that the structure does not dampen individual initiative. In all types of time-limited groups there are advantages to creating a cohesive atmosphere quickly suggesting that consideration be given to introducing a modest degree of structure in early sessions. For example, the first two or three sessions of an interpersonal group for depression might be structured around discussion of the experiences of the members with depression. This might be followed by psychoeducational input regarding the signs and symptoms of depression, and a go-around discussion regarding what factors seem to be involved in triggering or maintaining the depression. Such structure has two goals: to elaborate on issues pertinent to the presenting diagnosis, and to provide a vehicle for rapid involvement in group interaction.

Several studies have found that the intentions of the therapist are a good predictor of outcome. This suggests that the actual overt behavior of the therapist is modulated by a range of implicit messages that surround and enhance the specific interventions. It would be wise for the therapist to specifically consider what therapeutic techniques would have the most impact at

regular intervals. These same studies however, also indicate that the impact of the therapist's intentions will be modified by the group climate, implying the need to monitor the atmosphere of the whole group regularly. As an example, in one study, therapist intentions to develop an interpersonal focus and provide group structure generally were associated with later group outcome. However, the same intentions in the presence of a group climate with significant conflict did not have an effect on outcome.

The therapist is also in a position to model interventions congruent with stage tasks. For example, early in a group the therapist will model empathic and supportive techniques to build an interactional atmosphere of trust. As the group moves into the differentiation stage, the therapist may model a somewhat more confrontational style. In the interactional work stage, the therapist may, if anything, increase levels of interventions with a greater depth of focus on individual member issues. During termination, the therapist may provide a model of openness to termination themes and a comfort in addressing them directly by focusing on important issues concerning self-sufficiency and loss.

10. Models of Group Therapy

It is estimated that there are several hundred types of groups. It would be unrealistic to describe even a small portion of them in detail. Table 1 provides an outline for placing a group model within a spectrum of possible groups.

In terms of the rows of "Time frame" and "Group entry" in the table, the models go from relatively unstructured through to time-limited and closed groups, to variable intensive group formats. GCBT and IPT-G represent more recent models developed for use in empirical research studies that are now widely used in general clinical use. They have the benefits of clinically oriented manuals and strong empirical validation that still allow the therapist reasonable room for individuality. Several studies have found that clinicians who use a defined model and adhere to the manual achieve better outcome results. The Yalom model differs from IPT-G through greater emphasis on the importance of "here-and-now" process interpretations. The literature makes frequent reference to this model though in practice it takes a variety of forms. The description of therapeutic factors is particularly useful in orienting the new clinician to general principles of group leadership. The empirical base is less robust because of the absence of a formal manual. Psychodynamic group psychotherapy differs from the Yalom model primarily through the additional use of individual transference-oriented interpretations.

In terms of group composition, GCBT and IPT-G both focus on specific diagnostic clusters. Within the large encompassing criteria defined in the columns of the table, there is a multitude of formal adaptations for different target populations. The Yalom and Psychodynamic models tend to focus on goals related to interpersonal issues and to select members for a particular group on the basis of their level of interpersonal functioning.

Recent strong evidence indicates that patients with higher levels in the quality of their intimate relationships do better with an interpretive approach, whereas those with more imbalanced or chaotic levels of interpersonal relationships do better with a supportive approach. The interpretive group model focuses on unconscious processes and early relationships that is designed to increase anxiety and regression, and the supportive group model emphasises basic group common factors such as universality, altruism, and cohesion and focuses on adaptation to the patient's current life. More interesting, these same studies found that the level of psychological mindedness predicted better outcome in both supportive and interpretive models.

In the remaining rows in the table, it is clear that support groups have their own unique features. For the other four columns there is a general trend from left to right for lower therapist activity, structure, and homework, and higher process focus and affect evocation. Mediating strategies move from external to internal focus.

To take depression as an example, GCBT groups emphasize a detailed examination of symptoms. The goal is to identify and change negative thought patterns that are a major feature of the illness. For panic disorder, there is a focus on learning control of the physiological symptoms and challenging the tendency to avoid anxiety-producing situations. Specialized protocols are used for other anxiety subcategories such as phobias and obsessive–compulsive disorder. IPT-G groups place the major focus on the quality of relationships and general socialization patterns with some attention to the origins of these difficulties. Yalom and Psychodynamic groups will focus in detail on relationship patterns and to varying extent on internal conflictual tension. Intensive personal therapeutic work with applied application to outside circumstances is anticipated in all these types of groups. GCBT generally uses specific homework assignments whereas the other models expect current application of change to be reported back into the group. This expectation of personal responsibility

TABLE 1
Comparison of Time-Limited Group Models

Model features	*Support groups*	*Group cognitive-behavioral therapy (GCBT)*	*Interpersonal therapy for group (IPT-G)*	*Yalom model interpersonal psychotherapy*	*Psychodynamic group psychotherapy*
Time frame	Open ended	Time limited	Time limited	Time limited Longer term	Time limited Longer term
Group entry	Open	Closed	Closed	Open/closed	Open/closed
Composition criteria	Variable, often by condition or circumstance	Common diagnosis or situation (i.e., binge eating, depression)	Common diagnosis or situation (i.e., binge eating, depression)	Common interactional capacity	Common interactional capacity
Formal pregroup preparation	Low	Moderate/high (Incorporated into early sessions)	High (Incorporated into early sessions)	Low/moderate	Low/moderate
Therapist style	High activity	High activity	Moderate activity	Low/moderate activity	Low/moderate activity
Group structure	Moderate/high	High (Programmed sessions)	Moderate (Problem areas/goals established and actively kept in focus)	Low/moderate	Low/moderate
Extragroup socializing	Encouraged	Permitted, perhaps encouraged re assigned tasks	No	No	No
Process focus	Variable	Low group process focus; (managed to preserve a teaching environment)	Moderate group process focus (managed to preserve group integrity, not interpreted)	High "here-and-now" group process focus (interpreted re interpersonal conflict)	High "here-and-now" group process focus (interpreted re interpersonal and intrapsychic conflict)
Homework	Informal	Written homework and behavior change expected	Changing interpersonal/social patterns expected	Not formally prescribed	Not formally prescribed
Mediating strategies	Variable: Adapted to the common composition criteria	Identify and block negative cognitions	Identify and alter current interpersonal/social coping	"Here-and-now" interpersonal learning existential awareness	Identify and understand interpersonal and intrapsychic conflicts
Focus on affect	Variable	Low/moderate	Moderate (identification of excessive or blocked affect re current interpersonal tensions)	Moderate/high	Moderate/high

in the therapeutic process contrasts with the use of medication.

It is common to find a combined approach of medication and psychotherapy. Again using depression as an example, some symptomatic relief is expected in the first couple of weeks whereas the impact of psychotherapy becomes more evident by the beginning of the 2nd month.

IV. DESIGNING PROGRAMS

There is an increasing interest in the development of group programs in larger service systems. A larger flow of patients provides the opportunity to develop group programs for the most frequent diagnostic populations. Efforts to implement group programming often have had difficulties largely due to a failure to develop a comprehensive program. Nonetheless, the current focus on the development of organized service systems for a defined population base provides an opportunity for a resurgence in the use of group psychotherapy models. To maximize this opportunity it will be necessary to address potential resistance in both the attitudes of clinicians and the organization of service systems. The present health care context contains many of the same accessibility pressures that occurred during wartime and with the development of community mental health clinics. These periods were times of great enthusiasm for groups. For similar service demands and economic reasons, there are again strong pressures to treat a given clinical population in the most cost-effective manner.

There is a well-established literature concerning the way in which patients use psychotherapy services. Much of this information dates back before the major changes in health care delivery of the 1990s decade in the United States. In practice most patients attend relatively few sessions. By the end of 2 months, almost all service systems indicate that only about 20% of those entering will still remain in active treatment. Once this remaining cohort has reached the 6-month point, it is likely that attendance will continue for a longer period. It is worth noting that this curve is based on data collected prior to the major impact of managed care systems.

Empirical outcome studies have been quite consistent in their findings. Most patients respond quite quickly to formal therapy with over 50% improvement within the first 2 months. The rate of response continues to rise, though at a somewhat slower rate over the next 4 months so that by the 6-month point there is a 75% response rate. By the end of 2 years the improvement curve has risen slowly to 85%. This curve reflects an impressive response to psychotherapy, better than many medical treatments. This perspective on the predictable rates of change of a larger clinical population is a valuable guide in the development of clinical service programs.

The first step in designing a group program is to address the large percentage of patients who present with acute stress-precipitated depression and anxiety, generally more than one half of new assessments. This population can be effectively managed with therapy of up to about eight sessions. The brief time and the high turnover rate make this category less than ideal for the use of groups. However, several specific models have been developed for this purpose using crisis intervention theory. For example, a rapid access group may meet weekly, or more often, with an expected change in membership every session. The sessions are highly structured with a series of go-arounds so individual members are mainly the focus, with the group offering feedback, ideas, and encouragement. Practical goals will be set for each member to work on between sessions. A limit is set for maximum attendance, probably not more than eight sessions, but these may be spread over 3 or 4 months. Such groups are designed for supportive work to address a current issue, not for exploratory psychotherapy. The leaders need to keep this in mind even though the group may become surprisingly evocative at times. This type of group has much in common with inpatient ward groups. Referral criteria would need to specify that the group is not able to contain serious acute potential for self or other physical harm. Experienced co-therapists are indicated, at least one of whom should be quite knowledgeable about community mental health resources. This is not a group for neophyte leaders.

The next segment of a group program would deal with more intensive but time-limited groups in the 12- to 20-session range. This is the range that has been applied in most of the formal individual and group time-limited literature. More ambitious intensive therapy goals can be addressed. All time-limited models emphasize the importance of establishing specific goals. An active therapist stance is required to keep to the focus and still maintain a strong working alliance. This requires a careful assessment process to develop a collaborative agreement about focus as well as to prepare and motivate the patient for therapeutic work.

Time-limited groups should be developed for the most common diagnostic categories. Most of these models are relatively complex, and specific training in both the model and its application in a group format is required

for their successful application. Groups may also be formed, not so much by diagnosis, as by situation. Examples of these would be grief groups, divorce/separation groups, and preretirement groups. These groups vary in their balance between group process and leader-centered informational content. The therapist needs to be clear about what model is being used.

General interpersonal groups share many of the techniques of the just-mentioned groups but place more emphasis on learning from the group interaction. This approach is particularly helpful for issues of self-esteem and entrenched dysfunctional interpersonal patterns. Assessment procedures would focus on the more complex issues involved. Although these assessment procedures are based on an understanding of earlier childhood experiences, the application of them is maintained primarily on current situations. These groups offer more possibilities of process complications and require leaders who are experienced in such techniques.

Finally, a range of groups dealing with specific topic areas in an educational/skill development format may be considered. Although the range of possibilities is large, some examples would include eating disorder psychoeducational groups, stress management groups, assertiveness training groups, family communication groups, and childhood development groups. These formats make less use of the group process and tend to be leader centered. Nonetheless, the group format provides general properties of the supportive therapeutic factors that reinforce motivation and amplify learning. Leaders require less intensive training in group therapy but must be alert to group management problems. Ready access to clinical supervision is advised.

This leaves a much smaller number of patients with more severe levels of dysfunction often involving longstanding characterologic features or treatment resistant conditions. Group methods are particularly appropriate for this population as the group format provides a strong containing quality that serves to dampen reactivity. Longer time frames would be appropriate, often in the 6- to 8-month range. There is a double goal in these programs. First is active treatment, and second is to decrease use of intensive treatment services such as acute admissions and emergency room presentations. Some programs have had success with long-term maintenance programs for this population.

Most communities have support groups for many conditions. These are generally adapted over time to address the specific features of a condition. The most familiar and largest example of this is Alcoholics Anonymous with the emphasis on abstinence and the need to address the alcoholic's sense of personal power by insistence on the acceptance of being subject to a higher power. It is recommended that the professional clinician be familiar with support group resources in the community and maintain a collaborative referral relationship and be available to self-help organizations when their members present with problems beyond the group's capacity to manage. It is also recommended that the self-help strategies be respected and that there not be efforts to turn them into amateur clinicians, a move that would undercut their value as self-help leaders.

This emphasis on specific models has a sound rationale. The use of a group format and the imposition of a time limit combine to pose limitations on what can be accomplished. Specific models provide clear guidelines to follow that are generally outlined in clinical manuals. These serve to keep the therapist on track, and outcome research indicates that following such guidelines results in more predictable positive outcomes. Most manuals primarily deal with positioning strategies for the therapist, leaving reasonable room for clinical flexibility. Some of these use a classroom atmosphere that provides greater emphasis on the learning of designated material. It is likely that clinicians will be increasingly expected to justify their choice of model in the light of empirical knowledge, as well as their competence to provide it.

V. SUMMARY

A. Group Programming

It is likely that the development of expanded group programs will become widespread in larger treatment systems. In this process, it is important that care be taken in matching patient characteristics to the programs available, or perhaps more important, that programs be developed for the sorts of problems presented by the patients. There are clear indications that many administrators favor tightly controlled models with scripted sessions. These can be conducted by therapists with less training and are easier to document. As a counterbalance to this, patients are becoming increasingly knowledgeable and outspoken about the sorts of treatments that are available and the indications for their use. In the long run, this is likely to serve as an important influence on program development.

There is reasonable evidence that longer-term treatment or maintenance programs can significantly reduce utilization of intensive resources. However, at the same

time, clinicians need to recognize that the majority of patients do well with much shorter treatment. This reflects in part a truly unfortunate but major split in the group psychotherapy community between a dedication to longer-term process-oriented approaches for senior clinicians in the field, and training in only quite structured models for many clinicians entering the field.

B. Group Research

There has been a remarkable increase in the quality of group research over the last decade. The importance of early group cohesion and a positive therapeutic alliance (to both the group and the leader) are now well established and need further investigation only in relationship to other variables. Similarly the concept of group development has substantive support in the time-limited closed group clinical literature with modest support regarding prediction of outcome. It is no longer possible to claim that process-oriented groups have little or no empirical validation as often stated in the service literature. An intensive psychodynamically oriented milieu program has demonstrated significant response for patients diagnosed with borderline personality disorder and other personality disorders. The clinical belief that patients with more severe functional status do better with a supportive approach has been validated, but also that those patients functioning at a higher level of interpersonal relationships do better with a dynamically informed interpretive approach of a time-limited nature. The value of structure in the early group has been reconfirmed as well as the importance of identifying at an early point, preferably during assessment, important issues to serve as a focus for treatment.

This research foundation can be developed further with attention to several research strategies. The nature of the group process is an important variable in all types of groups and needs to be regularly reported. Several studies indicate that aspects of the group process predict outcome as well or better than the hypothesized technical strategies in structured groups. Given the general positive outcome in almost all groups studied, a focus on linking patient, therapist, and process variables should now be of high priority. Assessments of characterologic traits predict outcome in relationship to therapeutic strategies, but there is much more to be learned about these phenomena. Single-point assessment of group process is not of value, sequential measures are necessary to be meaningful. External ratings from video/transcript sources are needed to balance the current preponderance of member and therapist ratings. Leadership/therapist studies are weak and few between.

C. Group Training

Given the earlier program and research scenarios, to equip clinicians entering the field there are several guidelines concerning the nature of group training programs. It seems absolutely crucial that clinicians be prepared to apply a range of group models. There is overwhelming evidence that both structured and process-oriented formats are effective. On the structured side, expertise in applying cognitive and behavioral strategies is required. These have demonstrated effectiveness for depression, anxiety, and eating disorder syndromes, the most common presenting complaints. However, it is also evident that applying these techniques in a group setting benefits from an applied knowledge of group dynamics. This is particularly relevant to the early group where the development of a cohesive working atmosphere enhances outcome.

In terms of dynamically informed process-oriented group therapy the effectiveness literature is equally strong. Clinicians should be particularly trained in the indications for use of supportive versus interpretive models. Personality disorders also respond to the process-oriented approach. Many day/evening/inpatient milieu programs use a combination of structured modules and process-oriented groups. These programs generally use the same therapists for both components. This has a strong added advantage that the therapists will be acutely aware of the different strategies being employed and can implement them in a knowledgeable manner.

Group training needs to be grounded in basic group theory that applies to all types of groups. This is most effective when it is actively related to clinical technique and therapeutic strategies. Training should also involve an experiential component as a member of a group. This does not imply the need for treatment, but rather the importance of appreciating the power of group process on the individual. It is of great value in understanding the response of members to group events and to be aware in advance of possible situations in which interventions may be required. An experienced individual therapist may not necessarily make the transition to group therapy easily. Group therapy makes use of the group as a therapeutic agent, and the individual therapist may experience a sense of loss at the greater therapeutic distance from the individual members.

Therapists may also feel a loss of control of the therapeutic process. The same issues arise if a program therapist is supervised by a senior clinician who is not familiar with group theory and practice.

See Also the Following Articles

Anxiety Disorders: Brief Intensive Group Cognitive Behavior Therapy ■ Behavioral Group Therapy ■ Cognitive Behavior Group Therapy ■ Individual Psychotherapy ■ Psychodynamic Couples Therapy ■ Psychodynamic Group Psychotherapy ■ Self-Help Groups ■ Supportive-Expressive Dynamic Psychotherapy

Further Reading

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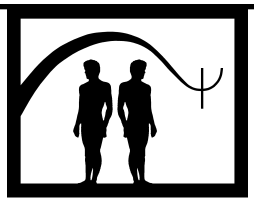

Guided Mastery Therapy

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GLOSSARY

defensive behaviors Behaviors that people use to cope with an activity about which they do not feel confident and that limit the proficiency and/or flexibility of performance.

self-efficacy Peoples' beliefs in what they can do and how strongly they believe it.

Guided mastery therapy is focused on changing clients' self-efficacy. This article will present the treatment process, the theoretical bases of guided mastery, and its empirical bases.

I. DESCRIPTION OF TREATMENT

A. General Strategy

Guided mastery therapy focuses on changing clients' self-efficacy, that is, the clients' beliefs in what they can do and how strongly they believe it. It is assumed that actual performance or nonperformance of challenging tasks is the most potent determinant of the self-efficacy related to these tasks. With this emphasis on performance, it is not surprising that guided mastery first and foremost has been used in the treatment of the anxiety disorders, which are characterized by avoidance and other performance deficits. This presentation of guided mastery will therefore concentrate on the use of guided mastery for anxiety-related problems and largely be based on Stuart Lloyd Williams' formulation published in 1990.

In guided mastery, agoraphobic clients are assisted and guided as they enter grocery stores, enter freeways by car, or ride the bus; height phobic clients are helped as they enter a balcony of a tall building; and social phobics are guided to order and eat in a café. The therapist acts as a field expert, not only encouraging clients to perform tasks, but also guiding performance according to the principles of the self-efficacy model. The overall principle is to promote a positive feedback circle between performance and self-efficacy. Tasks are selected and structured so that they may lead to a maximal increase and generalization of self-efficacy, leading to further improvements in performance. Therapists remain alert to the actual performance of each client as well as to the way clients process the experience. For enhancement of self-efficacy, it is important that clients attribute performance successes to their own capabilities and not to external circumstances or aids. Therapists guide clients to perform progressively more difficult tasks as rapidly as possible according to

the principles: first to increase their level of performance, then to increase their proficiency and flexibility of performance, and, finally, to stimulate independent performance.

B. Case Example

The typical course of treatment is illustrated in the following example: Per suffers from severe bridge phobia. He is not able to walk or drive a car across bridges. When he is reminded of bridges or sees a bridge, he engages in vivid imagery of himself falling from the bridge. As a first task, Per agrees to walk accompanied by the therapist to the start of a 100 meter long bridge that crosses a river. The bridge is equipped with a lane for pedestrians and has 1 meter high railings on both sides. Next, Per agrees to walk 10 meters onto the bridge with the therapist walking beside him holding his arm. After successful completion of this task the therapist models the behavior unaccompanied and asks Per to do the same. After several intermediate steps, Per is able to walk alone to the middle of the bridge, which is his most feared place. His performance is awkward and restricted; still he tenses his muscles, stares at a distant point, and avoids moving close to the railing next to the river, The therapist models more appropriate behaviors and instructs Per concerning their performance: "Relax your legs, feel the ground under your feet." Before and after each task, self-efficacy is probed on a 0 to 100 percent certainty scale. Also, 0 to 10 scaled anxiety ratings are collected, especially when working with the awkward and restricted behaviors. Finally, Per is able to perform the criterion task: to lean over the railing and look into the water, holding his hands behind his back.

C. Increase Performance Level

The example illustrates several of the techniques used as part of the strategy to increase performance level rapidly. The main purpose of joint performance is to promote self-efficacy by reassuring clients that assistance is available if they should lose control. Thus, clients usually do more when accompanied than they would have been able if initially asked to engage in these behaviors by themselves.

Therapeutic tasks can be modeled overtly and through verbal coaching. The therapist in the example both demonstrates how to perform the difficult task and verbally coaches the client concerning awkward and restrictive behaviors. When people have difficulty initiating treatment behavior, treatment tasks are divided into more easily achievable subtasks. Performance of each subtask is set as a proximal goal. The *setting of proximal goals* enhances self-efficacy by making clear what has to be done, by making performance successes possible, and by providing immediate feedback of success upon subgoal attainment. Therapy may also involve graduated exposure to treatment settings. In the case of Per, for example, after successfully confronting the 100 meter bridge, he would be encouraged to use a larger bridge. Additionally, the technique of giving physical and mechanical support is illustrated by the therapist holding Per's arm the first time he walks onto the bridge.

D. Increase Proficiency and Flexibility of Performance

Anxious people typically engage in defensive behaviors to help themselves cope with an activity about which they do not feel confident. Such behaviors may include clinging to the shopping cart when in a supermarket, holding one's breath at tense moments, or—as Per did—tense his muscles and stare at a distant point when walking on a bridge. In this way, people limit their proficiency and flexibility of performance. Proficiency of performance refers to the ability to perform without defensive rituals. Flexibility refers to the ability to do tasks in varied ways, without self-restrictions on the range of performance. It is assumed that these defensive behaviors maintain a state of low self-efficacy because they prevent the person from receiving positive feedback, as well as the belief that performance successes are due to the defensive behaviors and not to their own effectiveness. This conceptualization is explained to patients as a rationale for dropping these behaviors. Defensive behaviors are identified by observing clients' performance and by asking what they do to help themselves cope with the threatening activities. It is amazing how quickly anxiety arousal often declines on dropping defensive behaviors. Anxiety ratings provide a sensitive moment-to-moment indication of progress, and are particularly useful when working with defensive behaviors.

E. Stimulate Independent Performance

Initially, guided mastery involves accompanying patients into feared situations and providing assistance and guidance. This ensures that clients actually initiate therapeutic activities, that they progress rapidly, that the

therapists can observe the use of defensive behaviors, and that the therapist can immediately assess the clients' cognitive processing of performance information. However, the goal of therapy is for clients to become confident that they can function without assistance. To promote independent performance three principles are followed. First, the lowest level of assistance necessary for success is provided. Clients are accompanied and assisted only on tasks they would find difficult to do on their own. Second, assistance is faded out as soon as possible. Finally, patients are trained to be their own therapists. The principles of guided mastery are explained to the patients during therapy in order to enable them to apply the guided mastery approach on their own. The principles may also be discussed in group sessions with patients receiving guided mastery.

F. General Aspects

Performance levels are raised because proficiency and flexibility in coping behavior tend to increase as a by-product of each success. Therapists collect self-efficacy ratings (0–100 certainty) both before, during, and after performance in order to select appropriate tasks and to examine how mastery experiences have been interpreted by clients. As regards the therapeutic relationship, the guided mastery therapist adheres to the humanistic principles that are typical of various forms of psychotherapy: to show an optimal amount of empathy, warmth, and respect. The style of therapy is collaborative rather than directive and confrontational.

II. THEORETICAL BASES

Guided mastery therapy is based on self-efficacy theory. This theory holds that cognitive processes play a dominant role in the acquisition and retention of new behavior patterns. New behaviors may be learned by observing others. The effect of the model's behavior also influences learning. Efficacy expectations are distinguished from outcome expectations. An efficacy expectation can be defined as a person's conviction that he or she can successfully execute the behavior required to produce certain outcomes, whereas an outcome expectation is the estimate that a given behavior will lead to a specific outcome.

A main assumption of the self-efficacy model is that psychological procedures, whatever their form, serve as a means of creating or strengthening expectations of personal efficacy. Self-efficacy may be affected by verbal persuasion, vicarious experience (seeing another person cope with the task), imaginal enactment (imagining oneself doing it), or emotional arousal, but direct performance accomplishments are believed to provide the most convincing evidence that one possesses the needed abilities. Thus, although the self-efficacy model is based on cognitive processes, it postulates that change is achieved mainly through behavioral performance.

Performance inhibitions and deficits are obvious features of anxiety, and, as mentioned above, the self-efficacy model has been applied to the analysis and treatment of anxiety disorders. People perceive threat and become anxious when they believe that they are powerless in the face of a threatening stimulus. This belief may either be based on efficacy or on outcome expectations: People can experience threat because they lack a sense of efficacy in achieving the behavior required to avert the dangerous events, or because they believe that the events are uncontrollable. Theorists from various orientations generally agree on these statements. However, self-efficacy theory also claims that anxiety and anxiety disorders are primarily maintained by low self-efficacy that one is able to exercise personal control, and not by beliefs that the threatening events themselves are uncontrollable. Recently, the concept of self-efficacy has been extended to covert activity. It is supposed that an individual's perceived ability to control and dismiss scary thoughts may be an important determinant of anxiety.

This general view of anxiety is reflected in self-efficacy models of specific clinical disorders. For instance, the self-efficacy model holds that agoraphobia is maintained by beliefs that one lacks the capabilities required to perform the feared activities. Low self-efficacy is maintained by avoidance behavior and by performing feared activities in an awkward and restricted way. By contrast, cognitive therapy models hold that agoraphobia results from catastrophic misinterpretations of bodily sensations. Agoraphobic avoidance is construed as safety behavior, designed to avert the occurrence of uncontrollable events such as having a heart attack or going crazy. Both of these models contrast with behavioral accounts, where agoraphobic avoidance is seen as a way of reducing anxiety and panic. With regard to panic disorder, self-efficacy for exercising control over scary thoughts is suggested as an important target of treatment.

There is an interesting mismatch between the general self-efficacy model of anxiety and the principles of anxiety treatment. In the general model, it is assumed that self-efficacy is enhanced by demonstrations that one is able to behaviorally prevent the occurrence of a threatening, aversive event. In guided mastery practice one relies heavily on demonstrations that one is able to

overcome the tendencies to avoid feared activities or to use defensive behaviors during performance. Direct evidence that one is able to exert personal control over the occurrence of a threatening event is seldom involved. Thus, self-efficacy with respect to overcoming avoidant and defensive tendencies and self-efficacy with respect to behavioral control over threatening events should be conceptually separated. This distinction may lead to more differentiated treatment interventions.

III. EMPIRICAL STUDIES

A core assumption of guided mastery therapy is that performance guided by the principles of the self-efficacy model is more effective than pure exposure treatment, that is, performance without such assistance. For height phobia, driving phobia, and snake phobia, guided mastery has been found to be more effective than mere exposure. With respect to agoraphobia, the results are mixed and less promising. In agoraphobic individuals who could perform the exposure tasks, but only under intense anxiety, performance-related anxiety declined more among those who received guided mastery than among those who received exposure. However, the two groups were not different on a measure of self-efficacy. Another study of agoraphobic individuals with little avoidance but intense performance-related anxiety did not find any differences between a guided mastery condition and an exposure condition. One study has compared cognitve therapy and guided mastery for severely agoraphobic subjects, and found cognitive therapy to be associated with better outcome on several measures 1 year after the end of treatment.

Concerning mediating mechanisms, the self-efficacy model states that phobia-related fear and avoidance behavior are maintained by low self-efficacy. Anticipated anxiety/panic and danger are assumed to be effects of low self-efficacy. Furthermore, the self-efficacy model predicts that changes in self-efficacy will lead to changes in these variables. Several of these predictions have been found for height-phobic patients. With regard to agoraphobia, the findings related to these predictions appear to depend on the research methods used. When ratings of the cognitive variables are anchored in specific behavioral tasks, self-efficacy predicts approach behavior, even when other factors such as previous behavior, anticipated anxiety, anticipated panic, catastrophic beliefs, and subjective anxiety are held constant. Catastrophic beliefs do not predict treatment effects when these other variables are controlled. However, when self-report cognitive measures not anchored in specific situations are used, and the analyses are based on the temporal sequence between predictors and outcome, the results are consistent with a cognitive therapy model and inconsistent with a self-efficacy model. Overall, a self-efficacy analysis of agoraphobia has not been clearly supported.

IV. SUMMARY

Guided mastery therapy focuses on changing clients' self-efficacy: clients' beliefs regarding what they can do. It is assumed that actual performance or nonperformance of challenging tasks is the most potent determinant of self-efficacy related to these tasks. Therapists act as field experts, guiding clients to perform problem-related tasks according to the principles of the self-efficacy model. Therapists are alert to the actual performance of clients as well as to the way clients process the experience. For enhancement of self-efficacy, it is important that clients attribute performance successes to their own capabilities and not to external circumstances or aids. Therapists guide clients to perform progressively more difficult tasks in order to increase levels of performance, to increase the proficiency and flexibility of performance, and to stimulate independent performance.

See Also the Following Articles

Efficacy ■ Homework ■ Outcome Measures ■ Panic Disorder and Agoraphobia ■ Self-Control Desensitization

Further Reading

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Habit Reversal

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GLOSSARY

awareness training A component of habit reversal in which the client learns to identify each occurrence of the habit behavior.

competing response training A component of habit reversal in which the client learns to engage in an incompatible behavior contingent on the occurrence of the habit behavior or on antecedents to the habit behavior.

differential reinforcement of alternative behavior (DRA) A procedure in which an acceptable behavior is reinforced so that it will increase and replace a problem behavior.

differential reinforcement of other behavior (DRO) A procedure in which reinforcers are delivered for the absence of a problem behavior during intervals of time.

habit disorder A repetitive behavior that does not typically serve any social function but occurs with sufficient frequency or intensity to cause distress to the client or significant others. Habit disorders include nervous habits (such as thumbsucking, nail biting, hair pulling), tics (such as head jerking, facial grimacing), and stuttering (word or syllable repetition, prolongation of word sounds, blocking).

social support A component of habit reversal in which a significant other is enlisted to help the client control the habit behavior. The social support person prompts the client to use the competing response when the client engages in the habit behavior, and praises the client for engaging in the competing response and for refraining from engaging in the habit behavior.

I. DESCRIPTION OF TREATMENT

Habit reversal was developed by Nathan Azrin and Greg Nunn in 1973 as a treatment for nervous habits and tics. In 1974, these researchers also utilized habit reversal to treat stuttering. In the original study there were four major components to the habit-reversal procedure: awareness training, competing response practice, habit control motivation, and generalization training.

A. Awareness Training

Awareness training consists of a number of procedures designed to teach the client to become aware of every instance of the habit behavior as it occurs or when it is about to occur. The client needs to be aware of each instance of the habit in order to use the competing response contingent on the habit. In the response description procedure, the therapist instructs the client to describe the movements involved in the

habit. In the response detection procedure, the therapist teaches the client to identify each instance of the habit that occurs in session. In the early warning procedure, the client identifies and practices detecting the earliest signs or movements of the habit. In the competing response practice procedure, the client learns to engage in an incompatible behavior for a few minutes to heighten awareness of the muscles involved in the habit. In the situation awareness training procedure, the client identifies the antecedents or circumstances (situations, persons, places) in which the habit is most likely to occur.

B. Competing Response Practice

Through competing response training, the therapist instructs the client to identify a behavior that is physically incompatible with the movements involved in the habit and to engage in this behavior for one to three minutes each time the habit occurs or when the client is about to engage in the habit. The competing response involves isometric tensing of the muscles involved in the habit. The competing response is socially inconspicuous, so the client can engage in the behavior without disruption of ongoing activities. Examples of competing responses include the following. For nail biting, thumbsucking, hair pulling, or any habit involving the hands, the competing response involves holding the hands down at the side and making a fist or grasping objects. For a head jerking tic, the competing response involves isometric contraction of the neck muscles by pulling the chin in and down. For an oral habit such as mouth biting, the competing response involves lightly clenching the teeth. For stuttering, the competing response (called regulated breathing) involves slow, deep breathing with a slight exhale before speaking. The client practices the competing response in the therapy session and is instructed to engage in the competing response any time the habit occurs or is about to occur once the client leaves the session.

C. Habit Control Motivation

With these procedures (including habit inconvenience review, social support, and public display procedures), the therapist attempts to increase the client's motivation to get rid of the habit, thus making it more likely that the client will comply with the treatment procedures. With habit inconvenience review, the therapist reviews with the client all of the ways in which the habit is inconvenient or embarrassing. In the social support procedure, the therapist calls the client on the phone at regular intervals and provides praise for the clients's efforts and success in controlling the habit. The therapist also engages the assistance of a significant other (such as a parent, spouse, other family member, or friend) to help the client succeed in controlling the habit. The social support person praises the client when the habit is not occurring and praises the client for using the competing response. The social support person also reminds the client to use the competing response when an instance of the habit is observed. For young children, the social support person might need to manually guide the child through the competing response if the child does not initiate it independently. In the public display procedure, the client demonstrates his or her control over the habit in front of the therapist and significant others.

D. Generalization Training

The purpose of generalization training is to teach the client how to control the habit in everyday situations. The therapist first has the client practice the competing response until the client is using it correctly in session and then spends up to 30 minutes engaging the client in conversation while the client practices the competing response contingent on the occurrence of the habit. The therapist provides social support during this 30 minutes of practice by praising the client for the correct use of the competing response and reminding the client to use the competing response if the habit occurs and the client does not initiate the competing response independently. The therapist also uses symbolic rehearsal procedures in which the client imagines situations in which the habit typically occurs and imagines himself or herself successfully using the competing response in those situations.

The habit-reversal procedure is typically implemented in a small number of sessions (or one long session) with followup phone calls or booster sessions as needed. For example, in 1998 John Rapp and his colleagues used habit-reversal procedures to treat chronic hair pulling in three adolescents. Following two initial treatment sessions with clients and their parents, Rapp and colleagues then conducted booster sessions in the following months when clients were having difficulty successfully using the procedure. In each booster session, the therapist met with the clients and their parents, reviewing and practicing the procedures. In this study, the habit-reversal procedure was successful with one to three booster sessions.

II. THEORETICAL BASES

The success of habit reversal appears to be tied to the consistent use of the competing response contingent on the habit behavior or in anticipation of the habit behavior. Two mechanisms may be responsible for the success of the competing response in decreasing the occurrence of habit behaviors. One explanation is that use of the competing response contingent on the habit behavior works through a punishment process. One type of punishment involves the application of aversive activities contingent on the problem behavior. If the competing response is an aversive activity, then the behavior it follows (the habit behavior) will be punished and thus decrease in frequency. A second explanation is that the competing response is an alternative behavior that occurs and replaces the habit behavior. After the client learns to engage in the competing response in therapy sessions, use of the competing response is then reinforced by the therapist in the session and by the social support person outside of the sessions. The increase in this incompatible behavior then supplants the occurrence of the habit behavior. Unfortunately, it is not clear which conceptual explanation has the most validity. In all likelihood, the effectiveness of the competing response may be explained by a combination of these mechanisms.

The success of the social support procedure is due to the use of verbal prompts and two forms of differential reinforcement. Reminding the client to use the competing response amounts to a verbal prompt for the correct behavior. Providing praise to the client for the correct use of the competing response involves differential reinforcement of alternative behavior (DRA). The alternative behavior that is being reinforced in the DRA procedure is the competing response. Providing praise to the client for the absence of the problem behavior involves differential reinforcement of other behavior (DRO). In the DRO procedure, also called differential reinforcement of zero rate of behavior, a problem behavior (the habit behavior) is decreased when reinforcement is provided at periodic intervals for its absence.

III. APPLICATIONS AND EXCLUSIONS

Since the development of habit reversal in 1973, the procedure has been used to treat a wide variety of habit disorders in adults and children. Habit reversal has been applied to motor and vocal tics associated with Tourette Syndrome and other tic disorders. It has been applied to habits involving the hands such as thumbsucking, nail biting, hair pulling, scratching, and skin picking and to oral habits such as teeth grinding, mouth biting, lip chewing, and tongue protrusion. Habit reversal has also been applied to stuttering exhibited by adults and children as young as 6 years of age.

Because habit reversal requires the client to detect each occurrence of the habit behavior and use a competing response contingent on the habit, habit reversal can be used only by individuals who are capable of understanding the procedure, have the ability to carry out the procedure, and are motivated to use the procedure (they state that they want to stop the habit and are willing to use the procedures). The procedure may be ineffective with young children or with individuals with mental retardation because these individuals may not understand the procedure, may not be capable of carrying it out, or may not want to change their behavior.

Social support procedures may enhance the effectiveness of habit reversal with children when parents are diligent in prompting their child to use the competing response and praising the child for using the competing response and refraining from the habit behavior. However, when habit behaviors such as thumbsucking or hair pulling occur primarily when the child is alone, the parent may be unable to provide social support successfully. In such cases habit reversal may need to be supplemented with adjunct procedures, or other procedures may need to be used instead of habit-reversal procedures.

IV. EMPIRICAL STUDIES

Following the initial studies by Nathan Azrin and Greg Nunn in 1973 and 1974, much research has documented the effectiveness of habit-reversal procedures for the treatment of nervous habits, tics, and stuttering. In addition to showing that habit reversal is effective, researchers have also shown that simplified versions of habit reversal are effective. For example, in 1985 Ray Miltenberger, Wayne Fuqua, and Tim McKinley showed that awareness training and competing response training were effective in treating motor tics exhibited by adults. In 1985 Miltenberger and Fuqua further showed that awareness training and competing response training were effective in the treatment of nervous habits exhibited by adults. In 1996, Doug Woods and colleagues showed that awareness training

and the use of a competing response were also effective in the treatment of tics in children.

A number of researchers have shown that awareness training, competing response training, and use of social support are effective in the treatment of habit disorders in children. For example, in 1993, Joel Wagaman and his colleagues showed that these habit-reversal components successfully decreased stuttering in children, and in 1998, John Rapp and his colleagues showed that these procedures decreased chronic hair pulling in adolescents.

Other researchers have demonstrated the limitations of habit reversal with young children and individuals with mental retardation. In a study by Ethan Long and colleagues in 1999, habit reversal was not effective in the treatment of nail biting and other oral-digital habits exhibited by individuals with moderate to severe mental retardation. However, Long and colleagues found that the addition of differential reinforcement and response cost procedures following habit reversal decreased the habit behaviors for their participants. In these procedures, the participant was surreptitiously observed from another room, and, when the habit did not occur for an interval of time, the researcher entered the room and provided a reinforcer such as candy or money (differential reinforcement). When the habit was observed to occur, the researcher entered the room and removed some of the reinforcers (response cost). Other researchers have also shown that differential reinforcement and response cost are effective procedures when habit reversal fails to decrease habit behaviors in young children.

V. CASE ILLUSTRATION

The following case example illustrates the succesful use of habit reversal with a 10-year-old girl, Jennifer, who engaged in chronic hair pulling to the point of having bald areas on her head. Jennifer's mother spent up to 30 minutes every morning fixing Jennifer's hair so that the areas of hair loss would not show, thus preventing Jennifer from being embarrassed at school by the hair loss. By their own report and the fact that they traveled a great distance for treatment, Jennifer and her parents were highly motivated to stop the hair pulling. They attended six therapy sessions over the course of nine days. The therapy sessions were conducted in such a short period of time because the client and her family had to travel a long distance to receive treatment. Outpatient treatment sessions would typically be conducted on a weekly basis.

The first session consisted of a behavioral assessment interview in which the therapist asked questions about the exact nature of the hair pulling, the antecedents of the hair pulling (where and when it happens, circumstances and people present, thoughts and feelings of the client preceding the hair pulling), and the consequences of hair pulling to identify or rule out any form of social reinforcement (e.g., attention) that might play a role in the maintenance of hair pulling. In this initial interview, the therapist also asked about the client's history, onset, course, and severity of the hair pulling, how the hair pulling was affecting the clients' lives, and the clients' motivation to eliminate the hair pulling. For Jennifer, hair pulling occurred in her classroom when she was taking a test or concentrating on other activities, and it occurred at home when she was studying or engaged in sedentary activities such as watching TV or lying in bed. There did not appear to be any form of social reinforcement for the hair pulling, for she often engaged in the behavior without others being aware of it. The initial assessment suggested that Jennifer was a good candidate for habit reversal and that adjunct procedures were probably not necessary. Had motivation been a problem or had there been some form of social reinforcement for the hair pulling, then these problems would have to be addressed with adjunct procedures. The first session ended with a description of the habit-reversal procedure to be implemented in subsequent sessions.

In the second session, awareness training and competing response training procedures were implemented with Jennifer and her parents. The therapist implemented the response description procedure by having Jennifer describe the hair pulling movements and then engage in these movements without actually pulling out any hair. Jennifer described and demonstrated all of the different ways in which she pulled her hair and the behaviors leading up to pulling out a hair strand. These precursor behaviors involved running her fingers through her hair, moving her hair back and forth between her first finger and her thumb, isolating one strand, and pulling the strand of hair with a plucking movement by holding on to the hair at its base. Jennifer demonstrated the behaviors from start to finish, ending with a simulated plucking movement.

After response description was complete, the therapist implemented response detection. Response detection is more difficult to implement with habit behaviors that typically do not occur around other people because clients will not naturally engage in the behavior in the session. Response detection is easier to conduct

with tics or stuttering because these behaviors will usually occur a number of times in the session, providing clients with opportunities to practice identifying their occurrence. With hair pulling (as with thumb sucking, nail biting, and other habits involving the hands) the therapist must have clients simulate the occurrence of the behavior during the response detection component of awareness training. The therapist instructed Jennifer to simulate her hair pulling movements in session about 10 times. During these simulations, Jennifer was told to imagine herself in various situations that she had identified as being antecedents for hair pulling. The therapist also had Jennifer simulate some of the activities associated with hair pulling while simulating the hair pulling movements. For example, she sat at a desk with paper in front of her and simulated taking a test while reaching up to pull her hair, or she sat on the floor against a wall simulating waiting her turn for an activity in gym class at school and simulated hair pulling in that position.

While she simulated the hair pulling movements, the therapist instructed Jennifer to stop at various points in the movement and notice how her arm felt or observe the position of her arm in space as it approached her head. Drawing her attention to the sight and feel of her arm at various points in the movement was intended to heighten her awareness of the hair pulling movement and make it more likely that she would detect the incipient hair pulling movements when they occurred in the natural environment.

The situation awareness training component of awareness training was begun in the first session when the therapist asked Jennifer and her parents to identify all of the circumstances in which hair pulling occurred. It was continued in this session as Jennifer simulated hair pulling in those situations or imagined hair pulling in those situations. Jennifer was also asked to identify thoughts and feelings that were antecedents to hair pulling. However, she could not identify any specific thoughts or feelings that preceded the behavior. It is not uncommon for children to be unable to identify thoughts and feelings as antecedents to a habit behavior; adults have been found to be better at providing such information. It is useful to obtain information on thoughts and feelings as antecedents to hair pulling or other habit behaviors because the occurrence of these thoughts or feelings may then cue the client to engage in the competing response to prevent subsequent occurrence of the habit behavior.

Before the second session was over, Jennifer and her parents were introduced to the concept of the competing response and the rationale for its use. The therapist told them that the competing response provides an alternative, inconspicuous activity to engage the hands so that the hair pulling cannot occur. The competing response, called the "exercise," was to be a behavior that was physically incompatible with hair pulling, that was easy to carry out, that was inconspicuous so that it did not draw attention to Jennifer, and that could be carried out for at least a few minutes each time hair pulling occurred or was about to occur. After introducing the concept and the rationale for its use, the therapist identified a number of different competing responses that Jennifer might consider using. The therapist then asked Jennifer and her parents to pick a few of the competing responses (or to identify other ones) that they were most comfortable using. Jennifer chose holding a pencil while at school, grasping a cushball while at home, and making a fist at her side to be used when she did not have an object to grasp. The therapist informed Jennifer and her parents that they would discuss the competing response and practice it in the third session.

The third session was devoted to practicing the competing response and social support procedures. Between sessions 2 and 3, Jennifer and her parents bought a cushball and other small items that she might grasp as part of her competing response and brought these items to the session. To practice the competing response, Jennifer simulated the hair pulling movements and then immediately engaged in the competing response for about one minute. After a couple of simulations of the complete hair pulling movements followed by the use of the competing response, Jennifer was instructed on subsequent trials to stop earlier in the hair pulling movement and engage in the competing response. For example, she was to initiate the competing response as soon as her hand touched her hair, as soon as her hand was raised above her shoulder, as soon as her hand was raised above her waist, and as soon as her hand was lifted off of her lap. By engaging in the competing response earlier and earlier in the movement toward hair pulling, Jennifer is more likely to catch herself before actually pulling a hair and engage in the competing response to prevent hair pulling outside of the therapy session.

Jennifer next practiced the competing response contingent on hair pulling movements as she simulated situations that were antecedents for hair pulling. By practicing the competing response while simulating natural situations, use of the competing response is more likely to generalize to natural situations outside

of the therapy session. Within this session, Jennifer practiced 12 to 15 times the competing response contingent on simulated hair pulling with instructions and praise from the therapist. During the course of this practice, the therapist introduced the concept and rationale for the use of social support.

The therapist told Jennifer and her parents that, although it was Jennifer's responsibility to detect each occurrence of hair pulling and use the competing response, she was more likely to be successful if her parents helped her. To help her, her parents must do three things. First, they should prompt her to "do your exercise" if they observed her engage in hair pulling but failed to use the competing response on her own. Second, they should provide praise when they observed Jennifer using her competing response. Finally, they should provide praise when they observed that Jennifer was not engaging in hair pulling, especially in situations that were usually antecedents for hair pulling. After describing the social support procedure, the therapist then instructed the parents to practice the procedures in session. The therapist asked Jennifer to simulate hair pulling without using the competing response a few times so that the parents had an opportunity to prompt her to do her exercise. The therapist then had Jennifer practice her competing response so that the parents had an opportunity to praise her for using it. The therapist also had Jennifer simulate an activity in which she usually pulled her hair and refrain from hair pulling to provide the parents an opportunity to praise her for the absence of hair pulling. The therapist observed the parents use the social support procedures and provided praise and any corrective feeddback as necessary. At the end of the session, the therapist instructed Jennifer to use her competing response any time she engaged in hair pulling or was about to engage in hair pulling outside of the session. The therapist also asked the parents to provide social support outside of the session by prompting and praising Jennifer as they had learned in the session.

In the fourth, fifth, and sixth sessions, the therapist and clients discussed their use of the competing response and social support procedures outside of the sessions. The therapist provided praise for reports of accurate use of the procedures and answered any questions about use of the procedures. Additional session time was devoted to further practice of the competing response contingent on simulated hair pulling in a variety of simulated situations and the use of social support procedures by the parents. In the final sessions, the therapist also helped the clients plan use of the procedures in their home and school environments once therapy sessions were terminated. The therapist and clients discussed Jennifer's typical daily routines at home and at school and planned use of the procedures at high-risk times in both settings. The therapist proposed scenarios that involved problems in implementing the procedures and worked with the clients to identify solutions to the possible problems. Finally, the therapist and clients worked out a plan to enlist the support of Jennifer's teacher as a social support person at school and defined the teacher's responsibilities in that role.

Once therapy sessions were terminated, the clients contacted the therapist at periodic intervals via e-mail and telephone to describe progress and to ask questions. Jennifer and her parents used the procedures consistently with few problems and reported that hair pulling had been almost completely eliminated for the 10 months since the therapy sessions were terminated. Jennifer's hair has grown in so there are no longer any bald areas, and she no longer requires her mother to fix her hair every morning to hide hair loss.

VI. SUMMARY

Habit reversal is a treatment for habit disorders and consists of a number of component procedures implemented on an outpatient basis in one or a small number of treatment sessions. Clients first learn to detect each instance of the habit behavior through awareness training procedures. They then learn to engage in a competing response contingent on the occurrence or anticipation of the habit. Motivation procedures such as social support help clients successfully utilize the competing response to control the habit. Generalization strategies help clients continue to be successful in controlling the habit outside of therapy sessions.

See Also the Following Articles

Classical Conditioning ■ Competing Response Training ■ Conditioned Reinforcement ■ Differential Reinforcement of Other Behavior ■ Negative Practice

Further Readings

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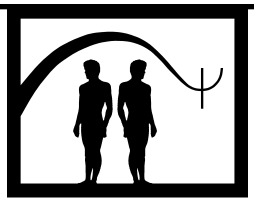

Heterosocial Skills Training

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GLOSSARY

chaining Training an individual to complete a complex, multistep behavior by reinforcing each of the substeps for their occurrence in the proper order (chaining may also be done in reverse, starting with reinforcement of the final step).

heterosocial Relating to interpersonal interactions between opposite sex individuals.

operant conditioning Training behavior by manipulating an individual's environment. In a simple version of operant conditioning, desired behaviors are increased via reinforcement, while undesired behaviors are decreased via punishment.

shaping Training an individual to complete a complex behavior by reinforcing successive approximations of the target behavior.

social learning theory A theory of human behavior in which environmental influences on behavior are supplemented by cognitive processes including modeling, imitation, and self-reinforcement.

Heterosocial skills training (HSST) is one of many approaches to improving psychological functioning grounded in operant conditioning and social learning models of human behavior. Within that context, heterosocial skills can be thought of as the social behavior repertoire necessary for successfully initiating, maintaining, and terminating social relationships with persons of the opposite sex in a socially sanctioned manner. Heterosocial skills training, then, is any effort to introduce, increase, or refine those behaviors in an individual.

I. DESCRIPTION OF TREATMENT

Heterosocial skills training is both easy and difficult to describe as treatment. It is easy to describe because nearly everyone agrees on what general components are required in the intervention. It is difficult to describe because there is no generally accepted definition of heterosocial skill and its behavioral substrates, nor is there a generally accepted notion of when such skills deficits indicate dysfunction. The latter point notwithstanding, however, HSST is a multimethod approach to assisting clients with minimal or maladaptive dating behaviors. A good beginning for heterosocial skill interventions involves identifying a client's specific heterosocial skill deficits and appropriate remedies. Unfortunately, as just noted, there is little general agreement on, and thus no definition of, the particular deficits associated with heterosocial anxiety. One thing that most researchers and clinicians agree on, however, is that heterosocial skill deficits appear to be a mix of behavioral, cognitive, and emotional concerns. As an example, in 1986 Adrian

Furnham indicated that the most reliable heterosocial problems gleaned from studies of self-report questionnaires were fear of negative evaluation (cognitive and emotional concerns) and a lack of an understanding about how to interact with a person of the opposite sex (behavioral concerns). Fortunately, behavioral interventions have been shown to be very effective in myriad disorders that contain cognitive and emotional components. In fact, theorists would predict that acquiring and using new behaviors, both in the therapy room and daily life, would lead to anxiety reduction and perhaps even reinforcement and pleasure. For example, increased enjoyment in heterosocial situations may result in increased positive cognitions about dating situations.

Assessment of potential heterosocial skill deficits usually includes self-report measures and role playing. Representative self-report measures include the Situation Questionnaire (SQ) developed in 1968 by Lynn Rehm and Albert Marston, the Survey of Heterosexual Interactions (SHI) developed in 1975 by Craig Twentyman and Richard McFall, and the Survey of Heterosexual Interactions for Females (SHI-F) developed in 1978 by Carolyn Williams and Anthony Ciminero. Each of these measures lay out a variety of heterosocial situations, and clients rate how difficult it would be to handle the situation on a 7-point scale. The SQ and the SHI are both appropriate for men (based on content), and the SHI-F is for women. Other related constructs that might be assessed with self-report are fear of negative evaluation and self-consciousness. The advantages of self-report measures include ease of administration and, so long as clients are honest, a reflection of clients' genuine beliefs regarding their own skills, capacities, and coping abilities. Unfortunately, a number of researchers, both in and out of the social skills world, have indicated that broad, general self-report measures can be poor predictors of actual behavior.

Naturalistic observation and ratings of role-playing exercises may be truer tests of actual behaviors, but these too come with a number of associated difficulties. In 1990, Debra Hope and Richard Heimberg noted that the utility of role plays varies based on whether the role play is assessed via an overall global rating or via specific, easily measured or counted behaviors such as duration of eye contact. Global ratings of social skill made by objective observers, friends, and interaction partners are more likely to correlate with participants' self-reports of dating anxiety than are ratings of specific behaviors. Some investigators have found modest correlations between global measures of social skill and anxiety and certain discrete behaviors (e.g., talk time and eye contact). However, as Ariel Stravinsky indicated in 2000, it is not entirely clear whether these global ratings have any relation to a person's actual behaviors in real situations. Also, as Hope and Heimberg point out, most studies do not find significant differences between groups of dating-anxious and non-anxious participants on more than a few, if any, specific behaviors. The specific behaviors that do differentiate between groups in one study often will not show differences in another study of similar design. Thus, finding the behavioral correlates of social skill has been difficult.

Several explanations have been advanced to account for the difficulty in assessing social skill. First, a dating-anxious person's social behavior is influenced by the behavior of the interaction partner. For example, in 1985 Stephen Faraone and Richard Hurtig found that anxious men's appropriate verbalizations were less likely to evoke a positive response from female conversation partners than those of non-anxious men. In other words, two men who had the same frequency of appropriate verbalizations had different impacts on their female conversation partners based on how anxious those men felt. Second, considering that most studies of specific behaviors simply count the frequencies of identified behaviors, there is little consideration as to quality of the behavior. It may not be the raw frequency of a behavior that determines its social utility; timing and other aspects of quality may matter more. Such subtle factors may be incorporated into more global ratings. Finally, it seems likely that there is more than one way to be socially skillful. Different individuals may employ dramatically different behaviors, all of which can be effective.

Regardless of these theoretical and practical problems with assessment of social skill, a number of specific behaviors are typically targeted in HSST. According to Jeffrey Kelly's 1982 book on social skills training, the behavioral repertoire should include eye contact, smiling, head nodding, synchronizing facial expressions, laughing, asking conversational questions and making self-disclosures, complimenting, following-up on and acknowledging statements, and requesting dates. Speech duration and voice qualities (pitch, loudness, and flow) were also regarded as important, and other researchers have indicated that behaviors indicating a genuine interest in the other person ("you" statements and questions) are important predictors of peer ratings of social competence. Although we will not go into detail, for assessment purposes each of these behaviors must be clearly defined (operationalized) so as to be accurately counted, and some consideration is due to whether more is better or whether the relationship is curvilinear (too little and too much are both problematic). A clinician attempting

to assess heterosocial skill via role play can increase the accuracy of the ratings by videotaping.

As a final note regarding assessment, it bears mentioning that physical attractiveness appears to play a significant role in peer and other ratings of social competence. Although some aspects of physical appearance are relatively fixed, behavioral interventions are possible at this level, too, and have often focused on clothing style, grooming and hygiene, complexion, weight, and other modifiable aspects of appearance.

Once assessment is complete, as Peter Trower indicated in 1986, a generic HSST protocol consists of instruction, modeling, rehearsal, coaching (including feedback and reinforcement), and homework. Instruction, according to Trower and others, is the process of describing the skills in question and the functions they serve. The skills are broken down into behavioral components to facilitate practice and learning. Modeling takes advantage of the average person's ability to learn from the example of others. Through modeling, clients are able to see the entire sequence of desired behaviors from start to finish with the expectation of adding the pieces they lack in their own repertoire. Modeling can be done by the clinician, through video tapes, recorded dialogue, and prose (more lifelike modeling is preferable). Following instruction and modeling, the client is given the opportunity to rehearse new skills in role plays. The goal is to practice a variety of scenarios until the intervention criteria have been met and continue to be met in novel situations. Throughout the rehearsal phase, the clinician is providing coaching in the form of guidance, feedback, and reinforcement, which can be enhanced with videotape review sessions. The key to rehearsal and coaching is short and frequently repeated role plays that maximize practice opportunities. With each role play, the clinician should positively reinforce what was done well (however much or little that may be) and prompt for new or alternative behaviors where needed. Finally, homework is essential to the transfer of training from the therapy room to the client's daily life. As such, homework assignments usually entail having the client try the new skills in real situations outside the therapy room.

Positive outcome for HSST is a combination of decreased heterosocial anxiety and increased heterosocial competence (both self-report and clinician rated), and improved dating activity in the natural environment. In addition, many learning theorists would suggest that clients should be able to detect when they are performing a particular heterosocial skill or set of skills well versus poorly. In that way, clients can become their own coaches and internalize reinforcement.

Although minimal dating among college students has been the major focus of HSST research, other potential uses have been investigated over the years. For example, a number of researchers have used HSST as an intervention with rapists and child molesters. The basic hypothesis, summed up by William Whitman and Vernon Quinsey in 1981, is that without necessarily ascribing an etiological role to heterosocial skill deficits in sexual deviation, it seems clear that poor social skill constitutes an important clinical problem for many sex offenders such that adopting acceptable heterosexual behavior patterns may help reduce maladaptive, illegal, and violent behavior. In addition, in 1998 Douglas Nangle and David Hansen recommended HSST for adolescents engaging in high-risk sexual behavior. In this application, HSST would be focused on bolstering the skills necessary for adolescents to be competent in enacting the sexual decisions they make for themselves. Application of HSST techniques, then, appears to be limited only by the scope of heterosocial situations.

Although the emphasis here has been heterosocial skills training, there is no reason to think that HSST principles would not apply to same-sex dating situations. Adjustments for any cultural and individual differences can be easily incorporated.

II. THEORETICAL BASES

Without attempting a comprehensive history, it is worth beginning this discussion with a brief history of social skills training (SST) in general. Both the phrase and the approach date back to the 1960s and 1970s when clinicians and researchers working with persons diagnosed with severe and persistent forms of mental illness began to focus on the role of adequate social functioning in recovery and rehabilitation. Reflecting on the development of SST, William Anthony and Robert Liberman noted in 1990 that improvement in the individual's ability to master the challenges and problems inherent in everyday life was an important part of successful long-term rehabilitation. Early SST investigators assumed that, for the most part, patients were trying to do their best; thus, problems in rehabilitation were not grounded in resistance or lack of motivation, but rather in a deficit of some sort (e.g., a skill deficit). In other words, the impetus for SST was the realization that persons battling with severe psychiatric vulnerabilities could be adequately medicated in a seemingly stable environment and still fail to maintain adequate functioning. What was missing, however, was not the motivation or desire for wellness, but rather the skills to act well in the world.

Application of behavioral psychology—particularly the methods surrounding experimental analysis of behavior—to clinical concerns was central to SST's development. Clinicians began to see that behaviors could be developed through shaping, chaining, and other forms of operant conditioning. In the psychiatric hospital, experiments manipulating environmental contingencies led to the development of token economies and other behavioral interventions. Those experiments provided evidence that comprehensive social learning programs (in combination with adequate but not excessive medication) could be more powerful than stand-alone medication regimens and milieu-based interventions. As Clive Hollin and Peter Trower wrote in 1986,

> In the history of SST, two … advances within psychology were crucial. The first of these was renewed interest in the process of human social learning, culminating in a full social learning theory. As well as environmental influences on behaviour, social learning theory also places emphasis on cognitive processes such as modeling, imitation, and self-reinforcement. … (And), in keeping with the philosophy of learning new behaviours, the movement was also away from a traditional pathology, or "medical," model in which behaviours are to be eliminated, and towards a "constructional approach" in which new, socially acceptable and competent behaviours are trained.

The general concept of SST interventions, then, grew up around the idea that human behavior is flexible and responsive to subtle (and not-so-subtle) environmental contingencies. Abnormal behavior need not arise from a "broken brain," but rather can reflect the normal operations of a contingency-driven behavior regulation system. The earliest SST interventions for social anxiety were based on the presumption that the anxiety is related to deficient verbal and non-verbal social skills that lead to poor outcomes in social situations. Those poor outcomes serve to discourage further social interaction so as to avoid further pain. The proverbial vicious cycle is then created and maintained—avoiding anxiety-provoking situations prevents the acquisition of the skills needed to generate successful social outcomes. Thus, SST interventions were believed to increase these behavioral skills, thus removing the underlying cause of the anxiety and increasing the probability of successful social outcomes.

Heterosocial skills training reflects a multimethod approach, based on the principles elucidated earlier, to assist clients with heterosocial skills deficits. The intervention is intended to build the repertoire necessary for successful dating outcomes. Note that referring to heterosocial skills deficits as minimal dating is not meant to undercut its importance. Establishing intimate social and sexual relationships is an important goal for most people, and some authors have argued that failure to do so in adolescence is a major precursor of serious psychological disorders in adulthood. In addition, minimal dating and dating anxiety are major sources of real-life concern for the population on which most of the research has been done, namely college students. For example, in 1978, Hal Arkowitz and his colleagues reported that 50% of their 3,800-student sample indicated interest in a dating skills program and 31% of the sample claimed to be "somewhat" to "very" anxious about dating. One could probably assume that similar (or perhaps greater) numbers apply to those who have gone through a divorce, been widowed, been involved in inpatient psychiatric care, and so on. Thus, although the research has focused on samples of convenience, the results are likely important for a much broader population.

Consistent with the earlier discussion, the heterosocial skills deficit model assumes that certain individuals lack important components of the behavioral repertoire needed to perform in social situations involving the opposite sex. (As a side note, there are some data indicating that heterosocial skill deficient men tend to be deficient in same-sex interactions as well. That pattern does not appear to be the case for women.) The general result is that anxiety develops and builds in heterosocial situations as a result of rejection or inadequate social performance. That, in turn, leads to avoidance of those situations. In other cases, such as when an individual does not have the skills to find desirable heterosocial situations or attempt to interact within them, social isolation may develop in the absence of anxiety. Several authors, including Randall Morrison and Alan Bellack, have also noted that heterosocial skill repertoires need not necessarily be faulty for a person to suffer in social settings—what appears to be a skill deficit might actually be inadequate social cue recognition. That is, failure in output (inappropriate behavior) may be the product of failure of input (misunderstanding the situation), rather than lacking behavioral capacity. If, as an extreme example, a person mistakes cues of attraction for cues of hostility and acts accordingly, the end result is not likely to be a dream date. Such cue recognition training can be included in HSST.

III. EMPIRICAL STUDIES

In 1998, Nangle and Hansen pointed out that the number of heterosocial skills articles published in major

American psychology journals has declined from a peak of about 15 from 1975–1979 to a low of about 3 from 1990–1994. Reviews of the literature, including the 1977 reviews by Curran and Hal Arkowitz and the 1990 review by Debra Hope and Richard Heimberg mentioned earlier, generally conclude that HSST is effective for improving scores on the various dependent measures used in the research. Unfortunately, the studies are also consistently criticized for a number of reasons. The first is that the dependent and independent variables are not consistent across studies, thus making it difficult to interpret the findings and draw useful generalizations. From an independent variable perspective, participant selection and categorization methods are often poor, consisting, for example, of asking college students about their dating frequency. As several authors have mentioned, this generates a "high-frequency dating" category that might include someone who has gone out on 10 fun and interesting dates with a number of different partners as well as someone who has gone out on 10 minimal dates with a partner whose basic appeal is that he or she is still around after the first few dates. In addition, the studies are criticized because they typically have not included adequate no-treatment control conditions, have assumed generalization of the relevant skills rather than testing for it, have shown small effect sizes, and have inadequate assessment and training of individual-specific skill deficits.

Despite the criticisms, there are a number of sound studies supporting the efficacy of HSST. In 1975 James Curran reported the results of a controlled study in which minimally dating college men and women were exposed to HSST, systematic desensitization (SD), or no treatment. Participants completed self-report instruments and semistructured interactions (with an experimental confederate) both before and after the interventions. The active interventions were in a group format with six sessions (75 min each) over a 3-week period. Specific behaviors (e.g., giving and receiving compliments, listening skills, and nonverbal communication) were targeted by HSST which consisted of instruction, modeling, rehearsal, coaching, and homework. SD participants received a comparable amount of therapist contact with a procedure designed to reduce heterosocial anxiety via graduated exposure exercises. In the control conditions, clients received no treatment at all, or relaxation training not specifically geared toward heterosocial anxiety. The results indicated reductions in self-reports of anxiety and increased social competence as rated in the semistructured interactions for both the HSST group and the SD group, but not for either of the control groups.

Elaborating on those results during the same year, Curran and Francis Gilbert reported a similar study in which the therapy was an individual format and in which participants kept diary records to monitor "real-life" changes. The design also included a 6-month follow-up. The results were as expected. Self-reports and observer ratings of anxiety decreased from pre- to posttesting for the HSST and SD groups but not for controls. HSST participants were rated as more socially skillful than SD participants and at 6 months the HSST were rated as more socially competent than any other group. Perhaps most important, both HSST and SD participants reported increases in dating activity in their natural environments.

Overall, the results indicate that HSST increases perceptions of social competence and decreases anxiety. SD also demonstrated that ability, but was outpaced by individualized HSST at 6-month follow-up in at least one study. These well-designed studies, which include adequate controls, multifaceted assessment, and at least some follow-up provide a solid foundation for HSST efficacy claims. Although that speaks in favor of specific HSST effects, there is some evidence that simple practice improves heterosocial skills as well. In 1974, Andrew Christensen and Hal Arkowitz were able to generate improvement in both self-report measures and actual dating frequency by randomly pairing volunteer men and women for a number of practice dates; there was no actual training or intervention on the part of the researchers. Participants merely paired up, went out, and in the end reported feeling and acting better in dating situations. In a series of three studies, one each in 1982, 1983, and 1984, Frances Haemmerlie and Robert Montgomery demonstrated that largely unstructured but positively biased interactions with members of the opposite sex was a viable option for treating dating anxiety. Thus, one hypothesis that can be drawn from the literature—one that generalizes across the different active treatment modalities (i.e., SST, SD, practice dating)—is that skill rehearsal in and of itself, structured or unstructured (but in a relatively safe and positive context), plays an important role in overcoming dating anxiety. Of course, not all dating anxiety is alike. For some there will be more pronounced behavioral deficits while for others the skill set will be intact but the presence of dysfunctional cognitions will get in the way of dating success. The relative success of HSST will thus depend on how thoroughly each of these areas has been assessed and incorporated into the intervention.

Regarding the use of HSST as an intervention for sexual deviance, the results indicate that self-reports and observer ratings of social competence increase with treatment compared to control. However, non-HSST methods such as covert sensitization also affect social competence, a surprising finding that may speak to the non-specific effects of structured therapeutic

interactions. The results on actual physiological arousal in target scenarios are inconclusive, and there are no data on the ultimate impact on convicted offenders. Thus, HSST works in its direct application but has not been conclusively shown to affect the related and generally more important constructs of arousal and recidivism.

It is worth noting that other data exist that inform questions of the efficacy of HSST as a treatment for dating anxiety. For example, in 1993 Debra Hope and her colleagues reviewed a number of studies that used SST to treat social phobia. These data are particularly relevant because those studies assumed that social skills deficits underlie social phobia (a diagnostic category under which dating anxiety might properly be subsumed). According to Hope and her colleagues, all the studies reviewed showed skill improvement for social phobics from before treatment to after. Unfortunately, only one of the studies compared SST to a reasonable no-treatment control (specifically, wait-list control) and the results of that study showed no difference between groups.

IV. SUMMARY

This article began with the notion that heterosocial skills are difficult to define and that behavioral deficits probably interact with other non-behavioral phenomena, especially emotion and cognition, to disrupt dating success in some people. HSST grew out of theoretical interests in social learning theory and approaches that emphasize remediating deficits, not just eliminating symptoms. The weight of the evidence suggests that minimally dating individuals can find assistance with heterosocial skills training. HSST is not the only treatment for minimal dating, given that systematic desensitization and practice dating show similar effects.

See Also the Following Articles

Assertion Training ■ Behavior Rehearsal ■ Chaining ■ Communication Skills Training ■ Operant Conditioning ■ Role-Playing ■ Structural Analysis of Social Behavior

Further Reading

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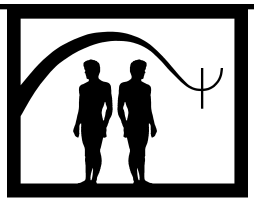

History of Psychotherapy

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GLOSSARY

moral therapy A system of treatment promoted in the early 19th century by Philippe Pinel in France and Samuel Tuke in England. Moral therapy stressed humane treatment of the insane, and use of rational persuasion, occupational activities, and recreational engagement. Moral therapy was most appropriately delivered in the philanthropic, tranquil setting of the asylum.

psychological disaggregation In the schema of Pierre Janet, a lowering of psychological energy and barriers, resulting from psychological trauma, that produced symptoms and other psychological phenomena including paralysis, somnambulism, and trance states.

structural model Sigmund Freud's second model of the human mind, including three mental apparatuses. Id was the domain of unmodified drive impulses and primitive modes of thinking; ego was the executive agent of the mind, using memory, perception, thought, emotion, and motor activity; superego was the repository of parental and societal ideals, morals, and restrictions.

topographic model Sigmund Freud's first model of the mind. The model described three systems. System Cs, the conscious, contained those ideas and feelings of which a person was overtly aware; system UCs, the unconscious, contained memories, ideas, and feelings which could not be brought into awareness; system PCs, the preconscious, was the reservoir for thoughts that were not in awareness at a given moment, but which could be called to awareness with effort.

From the dawn of civilization, human beings have been subject to disorders of thought, emotion, and behavior. The assumptions of modern society that such problems originate in the mind are fairly recent concepts. The development of current ideas about human psychological development, the sources of psychopathology, and the place and nature of psychotherapy begin in ancient times. Following their path leads one through the magical thinking of the Middle Ages, the rationalism of the Enlightenment, the drama of the psychoanalytic movement, and the splintering of psychoanalytic thought to modern postanalytic ideas of the nature of mental distress and its treatment.

I. EARLIEST APPROACHES

Although evidence left by preliterate societies seems to tell that shamans dealt with what we would today

identify as mental illness, and although Hindu physicians as early as 1400 BC described various forms of insanity and prescribed kindness and consideration, the beginnings of planned therapy for mental disorders probably lie in Greek culture. Hippocrates was among the first to view mental illness as a natural phenomenon and approach it without superstition.

Priest–physicians, who made Aesculapius their god, enlisted his aid through "divine sleep, divine feasts, the sacred performances." In their temples, called *aesculapia,* they used rest, diet, massage, baths, exercise, and a hygienic life to achieve their desired ends. In particular, they employed a type of mental suggestion called incubation: The patient would lie down on the floor on a pallet. Aesculapius would reveal himself in a dream, which either healed the disease or advised the treatment to be followed. Sometimes the attendants used ventriloquism to aid the patient's conversation with Aesculapius. The god's dictates were interpreted through the personal associations of the interpreter, not the patient. Hippocrates probably worked at one of these temples.

Plato suggested that mental disorders were the result of love, great trouble, and interventions by the Muses. He advised the curative effect of words, their "beautiful logic." Greco-Roman tradition advocated analogous therapies, and suggested innocuous deception to free patients from groundless fears. They did permit and recommend more punitive approaches in severe cases. Later Roman practices, however, focused on herbs and other somatic treatments. With the spread of the Roman empire, the Greek spiritual and psychological methods virtually disappeared.

II. THE CHRISTIAN ERA

The early Christian church, through its first millenium, emphasized the importance of forbearance to pain and the mutability of earthly pursuits. The Middle Ages saw an evolution of faith-healing through organized theology. Through this period, there was no unifying theory of physiology or disease; barber-surgeons and dentists practiced medieval medicine without control or regulation. Magic and alchemy were the science of the time. Mental illness was most often regarded as a defect of spirit divorced from therapeutic intervention.

The Christian era did, however, bring about the development of hospitals with a humanitarian motivation. Religious doctrines of patience, pity, and the possibility of absolution from guilt set in motion a spirit that would later nurture the development of the precursors of psychotherapy. In the thirteenth century, Pope Innocent III initiated the medieval hospital movement, which brought humaneness and tranquility to the treatment of simpletons and madmen. The monastic tradition of treatment through loving care was directed to those suffering from mental afflictions.

In 1725 the Franciscan monk Bartholomeus Anglicus (Bartholomew) wrote *De Proprietatibus Rerum* (Of the Nature of Things). The seventh book of this encyclopedic tome dealt entirely with mental illnesses. For the treatment of melancholics, Bartholomew recommended,

> such patients must be refreshed and comforted and withdrawn from cause of any matter of busy thoughts and they must be gladded with instruments of music and some deal be occupied.

Although Bartholomew spoke for his fellow Franciscans, his attitudes stood in opposition to the inquisitors of France and to the Dominican orders, who aided local courts in adjudicating cases of sorcery and witchcraft, often directed against the insane. The force of the Church's crusade against Satan fell disproportionately on the mentally ill throughout the Middle Ages.

III. RATIONALISM AND MORAL THERAPY

By the 1700s, intellectualism had taken root in Europe as a popular philosophy. Adam Smith, Johann Wolfgang vonGoethe, Jean-Jacques Rousseau, and other philosophical giants pled for the right of man to improve his lot through the application of civilization's accumulated knowledge. In England, the Deists viewed God as more benevolent than the punitive power of their medieval predecessors. Humanitarianism encompassed the aim of improving social relations at large, and hence conferred sanction on emotional and social problems as worthy of philosophical and scientific attention. A similar curiosity about the nature of the human soul became a thread in early neurology and psychology. Medical science, however, was still far too underdeveloped to make much progress even in the milieu of such open-minded attitudes.

By the mid-eighteenth century in England, William Cullen viewed many diseases as the result of neurosis, including insanity, somnambulism, painful dreams, and hysteria. The Quakers, a small but influential group, were instrumental in the treatment of the insane. William

Tuke, a tea merchant, convinced the Society of Friends in 1796 to establish a retreat at York, where the mentally ill could receive care on the basis of the humane spirit of Quakerism. Their afflictions were treated with a regimen of personal encouragement and routine work.

Across the English Channel, the philosophical and political forces that drove the French Revolution in the late eighteenth century also led to the emancipation of the insane from incarceration. Philippe Pinel was particularly influential. Appointed superintendent of the infamous Saltpêtrière, a prison for paupers and lunatics, he released the inmates from their chains in 1793, and treated them instead with kindness and respect. Many won their release from the institution. Pinel forbade violence toward the inmates in favor of persuasion. For maniacal fury, for example, he prescribed, "bland arts of conciliation or the tone of irresistible authority pronouncing an irreversible mandate."

In Europe and North America, the nineteenth century was the era of asylums. Germany built institutions at Saxony, Schelswig, and Heidelberg; France featured Bicêtre, Saltpêtrière, and Charenton; in the United States, treatment occurred at Bloomingdale, McLean, and the Friends' Asylums. The spread of moral therapy, based in the approaches of the French and English Enlightenment, convinced a number of physicians that insanity could be cured. In 1826, Dr. Eli Todd of the Hartford Retreat in Connecticut reported curing 21 of 23 cases he admitted. Others reported similarly remarkable outcomes. In the flush of enthusiasm that all mental illness could be curable, more asylums were built. Eventually, the statistics were found to be fraudulent and the pendulum swung against the asylum movement. But the door had been irreversibly opened to earlier recognition of mental illnesses and the allocation of resources for their treatment. Drs. Thomas Kirkbridge and Isaac Ray, at meetings of the Association of Medical Superintendents of American Institutions (predecessor of the American Psychiatric Association) between 1844 and 1875 enacted a series of resolutions embodying these evolving attitudes. Insanity, they resolved, is a disease to which everyone is liable, and which is as curable as other diseases. They discouraged the use of physical restraint and advocated activity, occupation, and amusement.

Rudolf Virchow's (1821–1902) cellular theory of disease established the nervous system as the seat of both somatic and mental activity, and brought neurology into the mainstream of nineteenth-century medicine. As a result, the nervous patient became one deserving of medical recognition and attention. Neurologists began to accept hysterics and neurasthenics as patients. The restrictive social mores of the Victorian era gave rise to no shortage of such patients for care and study. These shifts in patient profile and clinical practice also served to move the insane into the doctor's office and away from exclusive assignment to the asylum.

Among those adventurous enough to undertake the treatment of hysterical patients were two Parisians, Jean Martin Charcot (1825–1893) and Pierre Janet (1859–1947). Charcot, a pathologist, was instrumental in initiating the scientific study of hypnotism. Janet, his pupil at the Saltpêtrière, directed his studies toward neurology, and specifically to hysteria. Under hypnosis, hysterical patients recalled long-forgotten memories, suggesting the existence of a separate type of consciousness from that which is active in everyday awareness. Janet believed that trauma led to a "psychological disaggregation," a lowering of psychological energy and barriers, that produced symptoms and other psychological phenomena including paralysis, somnambulism, and trance states. The split-off ideas became "emancipated" from their original stimulus and gained a life of their own as neurotic symptoms. He used hypnosis as a means to enter this other world of consciousness and direct the patient's perception and behavior.

IV. THE PSYCHOANALYTIC MOVEMENT

Charcot and Janet attracted many students from across Europe. Among these was the young Sigmund Freud (1856–1939). After graduating from the University of Vienna, Freud studied the biology of the nervous system under mentors including Ernst Brücke. Unable to support himself as a scientist, he opened a practice in neurology and found himself fascinated by his patients with hysteria. In 1885, he traveled to Paris to study with Charcot and Janet. He learned how to use hypnosis to treat the symptoms of hysteria, but was more interested than his teachers in the stories his patients related while in their trances. Back in Vienna, he found a kindred spirit in Josef Breuer, who believed that the secret to unraveling hysteria lay in allowing them to speak freely about their recollections, a technique that would give rise to free association.

In listening to these tales, Freud went a step further than Janet's psychology of dissociation, and postulated a dynamic quality of the mental apparatus through which unacceptable ideas were split off by some yet-undefined mechanism to reappear as psychological and behavioral symptoms. The recall of these memories

under light hypnosis allowed the repressed emotions to be expressed, resulting in at least transient relief of symptoms. He and Breuer took their first steps to describe the mechanisms of these processes in the cases published as the *Studies in Hysteria* in 1894.

Freud postulated that painful ideas were turned away from conscious awareness to avoid mental distress (unlust, or "un-pleasure"). The ideas were converted into symptoms through pathology that was exclusively psychological, not physiological. He identified repression as a mental activity that had to be overcome. Freud and Breuer eventually parted company over differences of opinion about Freud's emphasis on sexuality as a driving force behind emotion and behavior.

By 1910, Freud had developed the major ideas that would form the core of psychoanalytic thinking. He identified the unconscious as the seat of most mental activity. He postulated the pleasure principle, which drove the human organism to maximize pleasure while minimizing unpleasure. He identified the mental mechanisms that yielded the tales and images of dreams. From these, he extrapolated the mechanisms of psychological defenses. He began to study not only dreams but also parapraxes, wit, obsessions, and phobias for the meaning of their content.

In his first model of the human mind, the topographic model, Freud divided mental activity into three domains: The conscious, which he called the system Cs, contained those ideas and feelings of which a person was overtly aware. More revolutionary was the larger system UCs, the unconscious mind, which contained memories, ideas, and feelings that could not be brought into awareness. The preconscious, the system PCs, was the reservoir for thoughts that were not in awareness at a given moment, but which could be called to awareness with effort. The energy source for this apparatus was the drive. Originally, the drive was considered to be an internal somatic entity, aimed at self-preservation and sexual expression. At this early stage, the only drive was the libidinal drive.

The human organism, Freud postulated, sought to maintain a constancy of pleasure and a minimum of suffering. Drive would seek its own expression, but reality would often impede its attainment of its desires. Under these circumstances, the mind would use memory and dreams to fulfill drive wishes. This model accounted for much, but left many behaviors and emotions unexplained. Two subsequent developments expanded the theoretical and clinical power of psychoanalysis. First, Freud defined a second drive, the aggressive drive, which sought destruction and separation. Second, he augmented the topographic model with the structural model. Now the mental apparatus included the id, ego, and superego. Id was the domain of unmodified drive impulses and primitive modes of thinking. Ego was the executive agent of the mind and the vehicle for the implementation of drives, using memory, perception, thought, emotion, and motor activity among its tools. Superego was the repository of parental and societal ideals, morals, and restrictions on activity and thought.

This schema allowed for a broad-ranging explanatory model. Drive impulses initiated in the id, demanding satisfaction. Ego would try to gratify id, but might run into limitations of reality or restrictions of society. In such cases, ego would need to turn back and tame the id. This conflict between ego and id could generate a panoply of unpleasant emotions and maladaptive behavior. In the opposite direction, ego's confrontations with reality on the behalf of id strivings would generate conflicts as well. Superego represented an internalization of those elements of power and judgment from the environment. It provided the mind with guideposts for ideals and restraint. However, superego could thus stand in opposition to ego, generating a different kind of internal conflict.

A. Freud's Followers

These powerful and revolutionary ideas, articulated by the eloquent and charismatic Sigmund Freud, attracted much attention worldwide, and a dedicated circle of followers in Vienna. Karl Abraham extended Freud's sketchy ideas about human development into major contributions in the realm of character formation. Such contemporary designations as the easygoing "oral" personality and its controlling, possessive "anal" counterpart, are products of Abraham's work. Sandor Ferenczi, a passionate follower of Freud, was less interested in pure theory and urged experimentation with treatment. He advocated "active therapy," in which the analyst would deliberately promote or discourage the patient's specific activities. He promoted deliberate mobilization of anxiety in the treatment to make it more available for analysis.

B. The Dissenters

Others of the Vienna group found Freud's ideas inadequate or limiting, and advocated dissenting viewpoints. While Freud dreamed that mental activity would one day be explainable on the basis of neurologic principles, his work remained exclusively psychological. Alfred Adler sought actively for a unifying theory of biologic and psychological phenomena. He postulated the aggressive drive as the source of energy used by an

individual to overcome organic inferiorities through compensation (and hence gave birth to the phrase inferiority complex). Where Freud took sexuality and the Oedipal situation as literal motivations for development and behavior, Adler regarded them more in the symbolic sense. On the technical level, he engaged patients face to face in free discussion, rather than free association on the couch to an unseen analyst.

Otto Rank stressed emotional experiences over the intellectual constructs of psychoanalysis. He postulated that birth trauma was a universal human experience, and that the individual was forever seeking to return to intrauterine bliss. Healthy development could occur when, through later successful experiences of separation, the child is able to discharge this primal anxiety. Pathological states resulted from a fear of the womb and conflict with the wish to return. Rejecting the id and superego, he postulated the existence of will and counter-will as positive and negative guiding influences toward separateness. He ultimately turned his focus away from individual psychology and psychopathology to the realm of art and the soul.

Most prominent among the dissenters was Carl Jung, who originally clung to the Freudian vision in the extreme. Freud became strongly invested in Jung as his protègé and eventual heir to his position in the psychoanalytic movement. Jung began to extend Freudian principles to ideas that had excited him earlier including myth and legend. Freud had certainly done the same, invoking the tales of Oedipus and Electra, and analyzing the art of Michelangelo. But where he saw parallels or analogies, Jung saw a direct continuity of archaic material gathered into the collective unconscious. This storehouse of human experience, he posited, contains primordial images and archetypes that represent modes of thinking that have evolved over centuries. Jung saw Freud's view as too limited. Symbols, which were vehicles for the expression of wish and conflict for Freud, represented for Jung unconscious thoughts and feelings that are able to transform libido into positive values. The techniques derived from these values include active imagination, where the patient is encouraged to draw fanatasied images and to associate more deeply by trying to depict the fantasy precisely.

Working at the forefront of the elucidation of the unconscious and the drives, Freud and his immediate successors devoted their efforts to understanding and analysis of the id. The success of their psychoanalytic techniques in addressing previously untreatable problems, brought broad appeal to psychoanalysis, and brought to the analysts patients with conditions more complex than hysteria. Questions of how the id is tamed and what happens to its drive energy propelled the next generation of theoreticians and clinicians to focus more directly on the ego.

V. EGO PSYCHOLOGY

In retrospect, it is Sigmund Freud's daughter Anna Freud (1895–1982) who is often identified as the first voice of ego psychology. Encouraged by her father to extend the study and practice of psychoanalysis to children, she is best known for elucidating the defense mechanisms by which the ego masters the environment, the id and the superego, and which are the shaping forces of each individual's psychopathology. The names and definitions she assigned are still the benchmark terminology of psychoanalytic psychology: repression, suppression, denial, reaction formation, undoing, rationalization, intellectualization, sublimation, symbolization, and displacement. Still, however, she maintained that analysis of the ego paled by comparison with analysis of the id.

The promulgation of ego psychological theory fell to a generation of analysts who were mostly refugees from Hitler's advance through Europe, and who had to postpone their major work until they could resettle in the 1930s: Ernst Kris, Rudolph Lowenstein, Rene Spitz, and chief among his peers, Heinz Hartmann (1894–1970). A trainee of Freud's, Hartmann undertook the expansion of his mentor's model to explain some of its lingering questions: What was the origin of ego? How did ego tame id, which was powered by the potent energy of the drives? What was the purpose of the aggressive drive? What role did these structures and forces play in normal development?

For Hartmann, the unifying process of human psychological development was adaptation, a reciprocal relationship between the individual and his or her environment. The outcome of successful adaptation is a "fitting together" of the individual with the environment. Conflict is thus neither the cause nor the outcome of psychopathology, but a normal and necessary part of the human condition. In Hartmann's model, the ingredients of ego and id are present at birth in an undifferentiated matrix. Normative conflicts with the environment separate out ego from id. Defense mechanisms are tools for adaptation to the environment by either alloplastic means (changing the environment) or autoplastic ones (changing the self).

Because psychic structures enable the individual to be less dependent on the environment, structure formation serves adaptation. Superego is one outcome of

adaptation to the social environment, a product of continuing ego development. Id, ego, and superego continue to separate by the process of differentiation. Within the ego, primitive regulatory factors are increasingly replaced or supplemented by more effective ones.

There is also a conflict-free sphere of ego development. Certain capacities have an inherent capacity for expression and growth, promoting adaptation to the environment without need to invoke conflict. In the motor sphere, these capacities include grasping, crawling, and walking. In the mental realm, they encompass perception, object comprehension, thinking, language, and memory.

Ego psychology used the language of Freud's original drive–structure model, and maintained most of its core assumptions. It stretched the explanatory capacities of the model and allowed for the treatment of cases previously impervious to psychoanalysis. Because these patients exhibited more interpersonal problems than strictly intrapsychic ones, and because the model of ego development was contingent on interactions with the personal and social environment, the door was opened to schools of thought that described something broader than a one-person psychology. Even while ego psychology was developing further in the 1930s, the school of object relations was branching off.

VI. THE OBJECT RELATIONS SCHOOL

A. Melanie Klein

Melanie Klein (1882–1960) studied under Sigmund Freud. With Freud's encouragement, she undertook the psychoanalysis of children. Finding the free association technique useless in such young patients, she originated the use of the content and style of children's play to understand their mental processes. Like many early psychoanalysts, she used her observations from the clinical sphere to generate theories of human development and psychopathology.

Klein's earliest papers shared and expanded Freud's emphasis on libidinal issues. The child, she noted, spins elaborate fantasies about food, feces, babies, and other aspects of the mother's body. Attempting to explore these curiosities, the child is inevitably frustrated, resulting in rage and fears of castration. Unlike her mentor, Klein found the seeds of the oedipal constellation in the first year of life as the disruption of weaning precipitates a turn to the father. In her view these urges take on a genital coloration. The harsh self-criticism that accompanies these fantasies is a precursor of the superego. She eagerly adopted Freud's emphasis on aggression in the 1920s. By the early 1930s, aggression had come to overwhelm all other motives in her schema. Even the seeking of pleasure and knowledge was defined as a desire for control and possession: "The dominant aim is to possess himself of the contents of the mother's body and to destroy her by means of every weapon which sadism can command." The oedipal conflict was recast as a struggle for destruction and power, and a fear of retaliation, rather than a search for forbidden love.

Freud had posited that fantasy was a defensive substitute for real gratification. Klein's elaborate mental processes resided in a world of unconscious *phantasy,* one which is inborn and constitutes the basic substrate of all mental processes. In this world of phantasy, the child houses vivid and detailed images of the insides of the mother's body and his or her own, filled with good and bad substances. He or she becomes focused on attempts to obtain good objects like milk, children, a penis, and to eliminate or neutralize bad objects such as feces.

Over the decade from the mid-1930s to the mid-1940s, Klein elaborated a model of development. The infant's earliest organization, which she called the paranoid position, involves the separation of good objects and feelings from bad ones. Mother is perceived only in terms of her good (providing) and bad (withholding) parts. By the middle of the first year, the infant is able to perceive the whole mother and experiences depressive anxiety as a result of his or her aggressive feelings toward the mother's bad parts. The child attempts to compensate by way of phantasy and reparative behavior. The Oedipus complex is a vehicle for such attempts at reparation.

Klein's ideas represented more than just a furtherance or modification of the Freudian model. They were entirely revolutionary. Klein left Germany in 1925 for England, where she stayed until her death in 1960. Her provocative ideas split the British Psychoanalytic Society, and eventually the entire international psychoanalytic community, as they blossomed into the various theories of object relations.

B. Margaret Mahler

Margaret Mahler (1897–1985) began her career as a pediatrician in Vienna. Like many of her peers, she was fascinated by the theories of the psychoanalytic movement and applied them to her work with children. She soon found, however, that the classical model was unable to explain much of what she observed. The linearity

of the drive structure model failed to encompass the richness and variety of emotional experience of the developing child. Her model instead emphasized the specific relationship between child and mother, and hypothesized that drives are not the root of interpersonal relations, but the result of them.

Just as Hartmann was proposing that id and ego begin in one undifferentiated state, Mahler posited that the child is born with an initial state of undifferentiated energy. It is by virtue of attachment to good and bad self objects that this energy differentiates into libido and aggression. The central theme of the developmental process is the need for the child to differentiate himself or herself from others to achieve autonomy and individuation. Such differentiation requires separation from the object(s), entailing a struggle between the wish for independence and the urge to return to the comfortable state of fusion. Mahler outlined a detailed agenda for psychological development:

1. The normal autistic phase occupies the first few weeks of life. The newborn is oblivious to stimulation, and lacks any capacity for awareness of other objects. He or she sleeps most of the time and is concerned only with tension reduction and need satisfaction.
2. The normal symbiotic phase lasts until about age 4 to 5 months, and is marked by an increased sensitivity to external stimuli. The infant is dimly aware of mother as an external object able to reduce tension. She is not yet a separate object, but rather part of a dual unity. Experiences are either all bad or all good. Nodes of good and bad memory traces form in the undifferentiated matrix of ego and id.
3. The differentiation subphase lasts until about 10 months of age, and begins with what Mahler called "hatching." The child is alert, and begins to search and explore the world beyond the mother–child orbit. He or she acquires the ability to differentiate internal and external sensations. With the developing ability to discriminate between self and object comes the ability to distinguish objects from each other. Stranger anxiety at about age 6 months is a marker of this capacity.
4. The practicing subphase begins with the capacity to crawl. The child's interests extend to inanimate objects. For Mahler, "psychological birth" coincides with the capacity for upright locomotion. The child takes pleasure not only in his or her own body, but also in the acceptance and encouragement of adults. In practicing walking, the child uses mother as home base, going out and returning. For successful completion of this subphase, mother must strike a balance between supportive acceptance and a willingness to relinquish possession of the child.
5. The rapprochement subphase (15 to 24 months) is marked by the child's realization that he or she is a small person in big world, and that mother is a separate person. Language is a key skill in negotiating these currents, as the child alternates between "wooing" mother with needy clinging and rejecting her with hostile negativity. Mother's reaction is again critical to the outcome of the struggle. Successful resolution of this subphase was as important to Mahler as Oedipal resolution was to Freud.
6. The phase of libidinal object constancy, the ideal outcome of all earlier development, should be reached by age 2 or 3 years. Now the child forms a stable concept of himself or herself and others. These concepts require the unification of the heretofore divided perceptions of good and bad objects. The libidinal and aggressive drives that have become cathected to these dichotomous representations must now be merged. In a context of parental response that reinforces the perception of constant objects, the child is now in possession of stable and adaptable psychic structures for the rest of his or her life.

C. W. R. D. Fairbairn

Both Klein and Mahler elaborated schemes of development and psychopathology that relied on the classical unit of energy, the drive impulse, for their motivation. By the early 1940s, W. R. D. Fairbairn rethought the whole problem of motivation. Like Klein, he saw libido as inherently object-seeking, and conceived of ego structures as powered by object-directed energy. Just as Hartmann had formulated the ego in terms of natural adaptation, Fairbairn saw the roots of relation-seeking in biological survival. All human behavior, he concluded, derived from the search for others. Psychopathology, in this scheme, was not the outcome of misdirected drives, but of disturbed relations with others.

Unsatisfactory relations with real objects (e.g., parents) would lead to the creation by the ego of compensatory internal objects. If the environment is filled with unsatisfying or frustrating objects, the ego becomes filled with so many fabricated objects that it becomes fragmented. Ego then splits this population into good or ideal objects and bad (exciting or rejecting) objects. Splitting of the ego results from the child's attempts to maintain the best possible relations with a suboptimal mother, and continue through adult life if not somehow corrected. The psychoanalytic setting and process provide the opportunity for restoring to the ego a capacity

to make full and direct contact with others, thereby restoring psychological health.

D. D. W. Winnicott

D. W. Winnicott, who produced most of his work between about 1945 and 1970, took the object relations movement yet a step further from the one-person psychology of the classical model. Some of the catch phrases of his terminology have found their way into the everyday language even of those who have heard of their author.

In Winnicott's formulation, the infant begins life unable to integrate the disparate pieces of his or her experience with his or her environment. Mother ideally provides a holding environment for these early experiences. Mother, impelled by biologic dictates of adaptation, is absorbed with her baby for the first few months of its life. When the infant is stimulated (by hunger or cold, for example), he or she conjures up an image of an object to meet those needs. The sensitive and devoted mother provides exactly that object; the infant believes he or she has created it, and finds comfort in this power. This confidence is necessary for the emergence of the individual.

Mother also sees the baby and reflects its emotions and behavior, functioning as mirror of baby's experience. If the baby is seen, then he or she exists. Finally, mother must be sensitive to the developing child's need to be alone in a quiet, unintegrated state at times, in order to integrate experience and to develop a tolerance for aloneness.

By the end of the first few months, the child begins to learn about reality of the external world, and the limits of his or her own power. Reality itself does much of this work, but mother contributes through her gradual withholding of actions shaping the world to her infant's needs. Underlying these interactions is the child's natural push toward separateness. In order to adapt, the child learns to express his or her needs through gestures and utterances.

Mother can fail here in two ways: She may fail to provide hallucinated objects, or she may fail to tolerate the child's formless quiet states. The former failing leaves the child insecure and anxious. The latter fault fragments the child's experience. As his or her personal time is subjugated to parental intrusion, he or she becomes overly attuned to the claims of others, and his or her person fragments into a true self and a false self. The latter force aims toward compliance. The false self protects the true by hiding it, but deprives the child of a necessary sense of authenticity.

A critical tool on this path of development is the transitional object. Such an object, usually illustrated with a teddy bear or blanket, is one that the child believes he or she has created out of imagination to fill a need. The adult ideally does not question its origin, and simultaneously acknowledges its existence in the real world. This deliberate or intuitive ambiguity helps the child negotiate a transition from a world where he or she is at the center to one where he or she coexists with others. Even as the child's views of reality solidify, this configuration is never discarded. It remains a state of mind valuable for creativity and fantasy in healthy adult life.

Interactions in Winnicott's world are based not on drive needs, but on the perceptiveness of the parents and the developmental needs of their child. The gratification of drive derivatives, to which he gives only lip service, are less important than the attitude of the provider. Just fulfilling needs does not allow for the development of a healthy, true self. He redefines aggression not as a destructive drive impulse, but as a general state of vitality and motility. The origin of psychopathology is in conflict, not conflict between aggression and libido, or among drives, psychic structures, and reality, but conflict between the true and false selves. The object of psychotherapy is to free the true self from its bondage and allow the emergence of the genuine person.

VII. SELF PSYCHOLOGY

The theories of object relations were successful in addressing the limited ability of ego psychology and defense analysis to address the problems of those patients whose problems lay deeper than those of the classical neuroses. A different approach to the same challenge gave rise to self psychology. In the 1960s, Heinz Kohut was a prominent figure in the mainstream of psychoanalysis. Erudite, articulate, and charismatic, he was widely assumed to be the heir to Heinz Hartmann's mantle as the leading spokesman for ego psychology. But his disappointment in the limitations of classical and ego psychologies led him to follow his curiosity in a new direction.

Kohut began by redefining the observational position of the analyst. Exploration of the external world, Kohut reasoned, requires an outwardly directed observational stance. Exploration of the internal world, the realm of psychotherapy, requires an empathic, introspective stance. He rejected the objective mechanical formulations of the ego and object relations psychologies, promoting instead a vantage point from within the patient's experience.

Psychopathologies, from this perspective as well as from most object relations perspectives, were seen not as the emergence of oedipal wishes, but as the reactivation of early needs the satisfaction of which in childhood should have served as the basis for healthy development. Self psychology went further to assert that unempathic interventions in psychoanalysis repeated early traumata. Symptoms and unpleasant affects represented fragmentation products of an injured self. Psychoanalysis, then, should properly focus not on the meaning of the products, but on the reconstruction of what precipitated their emergence in the transference, and on the genetic precursors of this constellation.

Whereas the object relations theorists continued at least to pay lip service to the classical drives, and maintained their allegiance to the structural model, Kohut ultimately rejected the need for the constructs of drive, id, ego, and superego. Instead, he formulated normal and pathological development and function around the single notion of the self. The nuclear self, which is present at birth, develops structures that allow it to take over functions previously needed from outside. This structure building happens by maturational transformation of what is internally given, and by the process of transmuting internalization, whereby functions of objects are metabolized into the self.

Self psychology, like object relations psychology, emphasizes the primacy of objects in healthy and pathological mental function. The objects in self psychology, however, are not separated from the self, but exist in the context of a self-selfobject matrix. The selfobject is an intrapsychic concept, describing how the self experiences the specific functions provided by others en route to the attainment of development goals. The need for selfobjects never disappears, but matures from infantile neediness to mature adult intimacy.

The self that emerges was described by Kohut as the bipolar self, bridging two poles. The pole of self-assertive ambitions contains the capacities for self-esteem regulation, the enjoyment of mental and physical activity, and the pursuit of goals and purposes. Its development requires a mirroring selfobject. This pole is paired with the pole of values and ideals, which is associated with self-soothing, the regulation of feelings, the capacity for enthusiasm and devotion to ideals larger than the self. The development of this pole is promoted by an idealizable selfobject. Between the poles there exists a tension arc that gives rise to innate skills and talents, including empathy, creativity, humor, wisdom, and the acceptance of one's own mortality.

Psychopathology results from imbalances between the poles of the self, and these imbalances are themselves the product of deficient selfobject experiences. Psychotherapy identifies these deficits by empathic reading of the transference. Therapeutic correction requires both interpretation of the selfobject needs and their successful reenactment in the therapeutic dyad.

VIII. POSTANALYTIC SCHOOLS

The evolution of classical psychoanalytic theory into ego psychology, object relations, and self psychology was propelled by expanding clinical experience, and by failures of older paradigms to explain a widening circle of psychopathologies encountered in therapy. In the closing decades of the twentieth century, forces outside the boundaries of the psychotherapy drove further changes. The culture of medicine demanded reproducible techniques and empirical validation. Third-party funding and the growing perception of the patient as a partner in the therapeutic enterprise promoted briefer and more active forms of therapy. The two most notable schools to arise in this context have been cognitive and interpersonal therapies.

A. Cognitive Therapy

Cognitive therapy was developed by Aaron Beck at the University of Pennsylvania in the early 1960s. Trained in traditional psychoanalysis, he became impatient with its results, and devised a structured, short-term present-oriented psychotherapy for depression. Other forms were developed by Albert Ellis (rational emotive therapy), Arnold Lazarus (multimodal therapy), and Marcia Linehan (dialectic behavioral therapy).

The cognitive model proposes that distorted or dysfunctional thinking influences a person's mood and behavior, and that such distortions are common to all psychological disturbances. Realistic evaluation and modification of thinking is used to produce rapid improvement in mood and behavior. Enduring improvement results from modification of the core beliefs underlying the dysfunctional thinking.

In practice, cognitive therapy emphasizes the collaboration and active participation of both patient and therapist. It is goal-oriented, problem-focused, and time-limited, but ultimately aims to make the patient his or her own therapist. Highly structured sessions teach the patient to identify, evaluate, and respond to dysfunctional thoughts. By elucidating patterns in

multiple circumstances, cognitive therapy offers the opportunity to change the underlying core beliefs and effect lasting change.

B. Interpersonal Psychotherapy

Interpersonal psychotherapy (IPT) was developed in the 1970s by Gerald Klerman as a time-limited treatment for depression, particularly for use in research. Its initial success in depression led to modifications for subtypes of mood disorders, and for nonmood disorders including substance abuse, eating disorders, social phobia, panic disorder, and borderline personality disorder.

IPT makes no etiologic assumptions about psychopathology, but uses connections between current depressive symptoms and interpersonal problems as a pragmatic treatment focus. The therapist links symptoms to the patient's situation in the context of one of four interpersonal problem areas: grief, interpersonal role disputes, role transition, or interpersonal deficits.

Grief may be the reaction to the loss of an individual, or to a more abstract loss. The therapeutic focus is to facilitate mourning and the establishment of new activities and relationships. Interpersonal role disputes consist of conflicts with significant others. IPT explores the nature of the dispute and the relationship, and helps the patient find options to resolve it. If these efforts fail, patient and therapist look for ways to circumvent the conflict or end the relationship. Role transition, a change in life status, is addressed by helping the patient recognize the benefits and challenges of the new role, the positives and negatives of the old role. Interpersonal deficits are traits and behaviors that prevent an individual from establishing or maintaining satisfying relationships. IPT trains such a patient in means to conduct more successful relationships.

IX. SUMMARY

Before the seventeenth century, insanity was attributed to supernatural influences. Although most responses consisted of religious interventions or extrusion of the sufferer from society, there were always some who sought to provide treatment instead. The rise of the scientific method during the Enlightenment, and the social and political forces of democracy that accompanied, began to foster an inclination to address mental disorders with caring, activity, and communication. In the nineteenth century, the results included moral therapy and asylums.

The closing decades of the 1800s brought the attention of neurologists to illnesses including hysteria and schizophrenia. Hypnosis represented a first step toward the understanding of mind and brain. Sigmund Freud, the most notable figure in this thread, listened carefully and creatively to the hypnotic recollections of his hysterical patients, and drafted the first theories of unconscious mental processes. Over the course of decades, his thinking evolved into a complex and powerful schema of psychic structures and their functions.

Whereas Freud and his immediate associates focused on the analysis of id urges and drive derivatives, the first generation of successors to the psychoanalytic movement focused on the role of the ego. Anna Freud and Heinz Hartmann elucidated its defensive and developmental features. Psychoanalysis became a more powerful treatment as a result.

The success of psychoanalysis, both in its original drive model and in the form of ego psychology, led practitioners to apply its principles to an ever-expanding patient population, including individuals with preoedipal problems, and to children. The result was a rethinking of the role of the human environment in the development of the individual and in the genesis of psychopathology. The object relations school, represented most significantly by Melanie Klein, Margaret Mahler, W. R. D. Fairbairn, and D.W. Winnicott, elaborated theories of human interaction that furthered the explanatory reach of psychoanalysis.

In a later split from ego psychology, Heinz Kohut found classical theories of structure and drive inadequate to explain or treat too many of his patients. Breaking the classical mold completely, he rejected virtually all the underpinnings of classical, ego, and object relations psychologies, and defined self psychology. This system focuses on the development of the bipolar self through the use of selfobjects, and defines all psychopathology in terms of disturbed selfobject functions.

The successes of psychoanalysis bred psychoanalytically based psychotherapies from the 1940s on. By the closing decades of the twentieth century, clinical, scientific, and social forces propelled the emergence of a number of nonanalytic psychotherapies, including cognitive therapy and interpersonal psychotherapy, which focus on contemporary issues of perception and response, while mapping a route to permanent psychic change.

See Also the Following Articles

Behavior Therapy: Theoretical Bases ■ Education: Curriculum for Psychotherapy ■ Oedipus Complex ■ Psychoanalytic Psychotherapy and Psychoanalysis, Overview ■ Research in Psychotherapy

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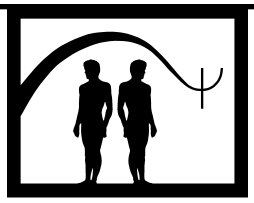

Home-Based Reinforcement

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GLOSSARY

fading The process of gradually removing prompts as the behavior continues to occur in the presence of a controlling stimulus.

interval schedule A schedule in which a reinforcer is made contingent on the passage of a particular duration of time before the first response to occur after that period of time is reinforced, (a) fixed-interval—schedule in which duration is always the same (b) variable interval—schedule in which the time interval varies about a given average duration.

reinforcement A process in which a behavior is followed by the presentation of a stimulus and as a result, produces an increase in the future probability of that behavior.

response cost A procedure in which a specified reinforcer is lost contingent upon behavior and, as a result, decreases the future probability of that behavior.

target behavior The behavior of interest, or the behavior to be altered.

Home-based reinforcement is a procedure used to modify the school-based behavior of children and adolescents through the use of contingencies delivered in the home. This article presents a description of the procedure along with the theoretical basis and empirical support for its use.

I. DESCRIPTION OF TREATMENT

Home-based reinforcement (HBR) procedures involve providing consequences for behavior that occurs in school settings. However, unlike traditional school-based contingency management procedures in which consequences are controlled and delivered by school personnel, consequences for school-based behavior in HBR are controlled and delivered by a parent, guardian, or other caretaker in the child's home environment. HBR is typically used with children and adolescents and is usually initiated by school personnel or clinicians who seek an improvement in school attendance or academic performance or seek a decrease in school-based disruptive behavior. Although HBR has been implemented in many different ways (described later in Section III), a general template for implementation is as follows.

First, the clinician, with the help of the child, the child's teacher, and the child's parent, identifies behaviors targeted for acceleration or reduction. Likewise, the teacher and parent (with input from the child) agree on daily goals for acceptable performance with respect to each targeted behavior. Each of the daily goals is operationally defined so the teacher and child are clear as to whether or not the child has achieved the

goal for that particular day. After target behaviors and daily behavioral goals are identified, the clinician establishes a simple observation system. In the observation system, the teacher monitors the occurrence of the targeted behavior(s) and determines if the daily behavioral goals are achieved.

After the targets, goals, and observation system are established, the remainder of the HBR program is explained to the parent and teacher. This is done by (1) having the teacher send a letter to the parents describing the procedure, or (2) having the clinician facilitate a face-to-face meeting with the teacher and parent. Using either method, the program is explained as follows.

Each of the daily goals, corresponding to the target behaviors, is listed on an observation sheet that is given to the teacher. At the end of each school day, the teacher indicates whether or not the child achieved each of the daily goals. The teacher shares this information with the student and places the information on a note that is sent home daily with the child. The parent receives the note, signs it, and returns it to the teacher via the child on the next school day.

On receiving the note, the parent(s) provides consequences for school behavior. If all daily goals are successfully reached, the parent praises the child and provides the child with a previously agreed-on consequence such as snacks, privileges, or other tangible items to which the child does not typically have access. If all daily goals are not successfully reached, the parent and child discuss what could be done differently to ensure success the next day, and the parent provides a previously agreed-on consequence such as a loss of privileges. If the child fails to bring a note home, this is treated as a day in which all daily goals were not met and should be consequented accordingly.

Although the program is best implemented by having the child receive feedback via the home note on a daily basis, sustained good performance warrants the gradual elimination of the feedback system to promote treatment maintenance. Although a variety of fading procedures have been used, the clinician could recommend that the frequency of notes being sent home first decrease from daily to one note every second or third day, to once per week, and finally to once per month. In using this fading procedure, the clinician should explain to the teacher and parents that all behavior exhibited by the child since the last home report is considered when determining whether the child has met his or her daily goals. Again, a change in the frequency of notes being sent home should only be implemented if the child is consistently meeting his or her target goals. Fading should not be implemented if the child is not consistently meeting his or her daily behavioral goals.

II. THEORETICAL BASIS

Home-based reinforcement is based on operant learning theory. Specifically, it is thought that the presentation or removal of certain stimuli have the ability to alter behavior when delivered in a response contingent format. Reinforcers are stimuli that produce increases in the future probability of behavior. Reinforcers can include stimuli that are added to the environment (e.g., providing praise contingent on a child's good behavior) or removed from the environment (e.g., a parent's candy-buying behavior is reinforced when his or her child stops screaming "Buy me candy!"). In contrast, punishers are stimuli that produce decreases in the future probability of behavior. However, like reinforcers, punishers can include stimuli that are added to the environment (e.g., painful stimulation is received when the child touches a hot stove) or removed from the environment (e.g., a child's toy is briefly taken away when he or she is destructive with the toy). In all cases, reinforcement and punishment are defined by their outcome on behavior. If the behavior increases in strength, the stimulus following the behavior is classified as a reinforcer, and if the behavior decreases in strength, the stimulus following the behavior is classified as a punisher.

Reinforcers and punishers exert more or less control on the behavior depending on various levels of deprivation, satiation, and other establishing operations experienced by the person. When paired with previously established reinforcers, neutral stimuli (i.e., noncontrolling stimuli) can come to function as reinforcers or punishers in their own right.

In HBR, the reinforcers and punishers are initially the consequences provided at home (i.e., earned or lost privileges, snacks, tangibles). However, delivery of the reinforcing consequences is often paired with praise or positive marks on the home note. This pairing process results in such stimuli also becoming reinforcers that may provide more proximal control over the school behavior. Although operant theory is quite clear that learning will be most efficient if consequences immediately follow behavior, HBR begins with a more temporally distal consequence because the children's parents have better access and control over a wider array of consequences for which the child