This article compares and contrasts psychoanalytic and cognitive-behavioral approaches to anger intervention. Related research is discussed and a cognitive-behavioral model of anger intervention is presented. The model views anger as an affective stress reaction consisting of four factors: physiological arousal, antagonistic cognitions, environmental stimuli, and behavioral reactions. The article also examines occupational therapy assessment and treatment goals on the basis of the cognitive-behavioral model and recommends stress management activities and techniques for helping clients control the factors that mediate their anger.

Treatment Approaches and Related Research

Anger has been attributed to many causes and many treatments of anger have been proposed. Some therapists say, “Hold your anger in; if you can’t say something nice, don’t say anything at all.” Proponents of the ventilationist view (cf. Berkowitz, 1973) say, “Vent your anger; if you hold it in, it will make you sick.”

Ventilationist View

Physicians, philosophers, and scholars have struggled with the meaning and treatment of anger for centuries. During the fourth century B.C., Aristotle suggested the use of catharsis. Theatergoers supposedly experienced catharsis, a purging of the soul of violent passions, when they witnessed Greek drama (Koncni, 1984). Centuries later, during the late 1800s, Freud incorporated the concept of catharsis into his clinical practice with hysterical patients. While his clients were under hypnotic suggestion, Freud mentally guided them back in time to the original scene of their psychic trauma. He then encouraged them to express the pent-up emotions associated with the event that had not been adequately discharged when the actual event had occurred. He reported numerous cases in which the hysterical symptoms disappeared after the catharsis episode (Breuer & Freud, 1966). However, Freud became disillusioned with the method because it appeared successful only with clients who could be hypnotized—a small fraction of his patient population.

By the 1920s, Freud had developed the dual-instinct theory. According to this theory, Eros, the life instinct, which encompasses the sexual instinct, seeks the perpetuation of life. Thanatos, the death instinct, which encompasses the aggressive drive, seeks to re-
The theories underlying the use of activities for venting anger have been criticized by experts in learning theory, human aggression, and occupational therapy (Bandura, 1973; Baron, 1977; Barris, Kielhofner, & Watts, 1983; Geen & Quanty, 1977; Novaco, 1986; Tavris, 1982; Zillmann, 1983). Human aggression is not essentially innate, nor is it genetically or instinctively preordained. Contrary to Lorenz, Patterson (1974) has shown that participation in sports does not necessarily decrease a person's hostility. In fact, Patterson related sports activities to increased hostility and aggressiveness and stressed that human beings, because of their advanced cognitive ability can control the innate or instinctive aspects of function.

Much of the supporting evidence used by ventilationists is derived from research with animals. Theorists that generalize these results to humans, whose
functional control is largely cortical, have been criticized (Bandura, 1973). The “evidence” from studies using human subjects to support the ventilationist view consists almost exclusively of anecdotes and case reports. Controlled studies are lacking. Tedeschi (1983) has concluded that due to its greater complexity, which is partly the result of the development of language and tools, the perspective on human social behavior has shifted from a biological to a sociocultural focus.

After reviewing the literature, Baron (1983) concluded that the cathartic approach was limited. Aggression was not necessarily reduced after so-called cathartic activities (e.g., watching violent films, engaging in vigorous physical exercise). Rather, cathartic effects, if they occurred at all, seemed to take place only under highly specific circumstances (Geen, Stonner, & Shope, 1975). In particular, these effects occurred only in situations where angry persons either witnessed or caused harm to provoking individuals (Konecni & Ebbesen, 1976). In addition, cathartic effects appeared to be short-lived. In summary, it seems that future aggression can be deterred through catharsis only at the expense of venting present aggressive feelings. Such findings suggest that catharsis is far less useful in deterring overt aggression than had been previously assumed.

Finally, theorists and researchers in occupational therapy have questioned the use of activities as a way to express unconscious material and pent-up emotions (Barris, Kielhoffsner, & Watts, 1983). The ventilationist approach directly contradicts the use of activities to promote adaptive behavior. In addition, I think that venting activities consume treatment time better spent on the development of adaptive skills needed for coping with anger-producing situations. The development of adaptive skills would also lessen the probability of anger escalation, a potential side effect of the venting method of anger intervention.

Cognitive-Behavioral View

Human aggression appears to be a predominantly learned form of social behavior acquired as a result of a complex interaction between social, situational, and environmental factors (Bandura, 1983; Dengerink & Covey, 1983). The psychoanalytic view assumes that anger and aggression are always linked in some way (i.e., where there is anger, there is a need to aggress) and that this aggression may be expressed either outwardly toward others or inwardly against oneself. Cognitive-behavioral approaches, however, suggest that multiple interactions occur between the two constructs: One can be angry and aggress, one can be angry and not aggress, or one can aggress and not be angry. Novaco (1985) views anger as an emotional state defined by the presence of physiological arousal and cognitions of antagonism. He also asserts that anger is neither necessary nor sufficient for aggression to occur. Whether or not one becomes aggressive after being annoyed is thought to be a function of various social learning factors such as reinforcement contingencies, expected outcomes, and modeling influences. These same social learning factors also influence the occurrence of aggression independent of anger. Differing histories of reinforcement may be responsible for different uses of aggressive behaviors by various persons (Dengerink & Covey, 1983). Thus, it is possible to become aggressive without becoming angry, as with a paid killer or as with some hunters and experienced combat soldiers for whom killing is a well-learned behavior.

Because aggression is primarily learned, it can be modified. Just as one can be taught to behave aggressively when one is angry, one can be taught to behave in a nonaggressive manner when one is angry. Persons who have learned to have their needs fulfilled by exhibiting anger and aggression are likely to feel a decrease in anger arousal and an increase in positive mood after aggressing. Several investigators (Dengerink & Covey, 1983; Hokanson, Willers, & Koropsak, 1968; Stone & Hokanson, 1969) have concluded that the participation in almost any activity that reduces negative treatment from others is capable of producing similar arousal reduction in a provoked person. Conversely, there is no single method to elicit arousal reduction that will work for all provoked persons. In fact, people with past experiences of feeling anxious or guilty after being hostile or aggressive will not experience cathartic arousal reduction after aggressing; they will achieve a calmer state of mind by retreating from the scene of conflict, conceding the point of contention, or making light of the situation through the use of humor.

Humans learn when it is best to aggress and when it is best not to aggress. They also are capable of using their cognitive abilities to self-induce anger arousal (Bandura, 1973; Bandura, 1983). People ruminate over insulting and irritating situations, and such ruminations can result in the escalation of anger. For example, in response to a snippy co-worker, one's personal cognitions, also called self-talk, could be, “Who does she think she’s talking to? This is the third time this week that she has snarled at me. The next time I see her, I’m going to give her a piece of my mind!” This attitude can result in an escalation of anger and possibly the initiation of aggressive behavior. Straus, Gelles, and Steinmetz (1980) concluded in their study of domestic violence that, within a family, verbal aggression increases the likelihood of physical aggression. Screaming at one’s mate while being angry serves to increase the probability of physical violence.
One can also reverse the escalating process through a different kind of self-talk, that is, by reinterpreting perceived insults or annoyances in a manner that calms one down and possibly even elicits empathy towards the annoyer (Baron, 1983; Feshbach, 1984; Zillmann, 1983). For example, a person could respond to a snippy co-worker by thinking, "I wonder what's bothering her? She must be upset about something. She didn't mention that her child has been very sick. The next time I see her, I'm going to ask her if there is something I can do to help." This alternative perspective and accompanying cognitions could culminate in a decrease in anger and increase in helping behavior.

Our cognitive appraisal of a situation has direct bearing on our subsequent behavior. This finding has been substantiated by numerous studies (Bandura, 1973; Ferguson & Rule, 1983; Mallick & McCandless, 1966; Zillmann, 1983). Personal cognitions affect not only anger but other feelings as well. If one perceives trespassing or injustice, one is likely to feel angry. If one perceives the loss of something of value, one is likely to feel sad. If one anticipates that bad things are going to happen, one is likely to be anxious or fearful. For example, if a depressed person ponders the loss of self-esteem or the loss of companionship, he or she is more prone to feeling sad. Intense thoughts of unfair treatment, on the other hand, would elicit feelings of anger. Although the primary emotion of a depressed person is sadness, a depressed person is still capable of experiencing a myriad of other feelings, including anger (Berkowitz, 1983). Our thoughts and feelings interact with each other and can change instantaneously.

As I discussed earlier, psychoanalytic therapists theorize that depression is the result of anger turned inward. Their therapy often consists of encouraging clients to direct their anger outward, away from themselves, to the "real" target of their anger. Once this has been done, the client's mood and activity level is predicted to become elevated. However, therapists espousing a cognitive-behavior approach could argue that the increased mood and activity level is due to the increased physiological arousal and energizing quality of anger. This arousal is what empowers one to act on one's condition (i.e., assert oneself or problem-solve) rather than assume a passive, helpless stance.

Both types of therapists agree that anger is related to an array of disorders, but they differ in their theoretical explanation of the relationship. Ventilationists view anger and aggression as expressions of innate drives and unconscious pent-up emotions that must be expressed to prevent self-destructive processes. Proponents of a cognitive-behavioral approach may see anger and aggression as a learned response to perceived provocation and frustration. Alternative responses include ignoring the situation, submitting to the provoker, or withdrawing from the interaction. Moreover, some people, for ethical reasons, might prefer an intervention method that encourages non-aggressive responses.

Aggressive acts, as proposed by ventilationists, can result in emotional and physical harm, particularly when a person's anger escalates. Furthermore, such acts reduce inhibitions, thereby legitimizing aggression and possibly making future assaults in a similar situation easier (Aronson, 1980). For these reasons, it seems imperative that occupational therapists challenge the ventilationist rationale for using aggressive activities with angry clients.

Intervention Model

A cognitive-behavioral approach proposed by Novaco (1979) views anger as an affective stress reaction. Novaco designed an anger intervention model based on theories of human stress and stress management. Anger-prone clients are instructed in the management of specific factors related to anger so that they can prepare themselves to handle potential anger-producing situations.

Novaco stated that stress is a condition that occurs when demands, also called stressors, outweigh a person's coping resources. The frequency, intensity, and duration of stressors play a role in how well a person adapts to stressors. If one is not able to adapt effectively, a stress reaction is triggered. One possible stress reaction is anger. Anger can be part of a learned style of coping with life's stressors and has been linked to a number of stress-related disorders affecting mental and physical health, interpersonal relationships, work performance, and lawful behaviors.

Anger is maladaptive when it disrupts information processing, specifically our ability to think clearly and make good judgments. Maladaptive anger can result in unnecessary aggression—often a regrettable response. However, if handled appropriately, anger can serve as a warning signal that stressors are exceeding resources. Anger arousal can be used to "energize" a person to meet a threat or challenge.

Anger is theorized to be influenced by the following factors: (a) physiological arousal, (b) cognitive processes, (c) environmental stimuli, and (d) behavioral reactions (Laws, 1986; Novaco, 1985). The first factor, physiological arousal, ranges from low levels of sleep to high levels of excitement. The ability of sensory stimulation to guide behavior is poor when arousal is very low or very high. At low levels, sensory messages don't get through; at high levels, too many messages demand processing. This U-shaped func-
tion of the relationship between arousal and effectiveness of performance explains why cognitive and sensory performances are best at moderate levels of arousal (Zimbardo, 1979). During high arousal, a fight-or-flight response is activated, characterized by increased blood pressure, tightened muscles, and quickened respiration. One feels tense and is physically primed to attack. Speech during such arousal is usually louder and faster. According to Novaco's model, a person is considered angry only if he or she is in this heightened state of arousal.

The second factor, cognitive processing, refers mainly to personal cognitions related to anger. These cognitions can be subdivided into thoughts before a demand is made, called expectations, and thoughts after a demand is made, called appraisal. Expectations refer to oneself as well as to others, such as one's rights versus another's, intentions and responsibilities of the involved parties, and rules of fair play. Also included here are thoughts about (a) one's resources to meet a demand and (b) the expected outcome or consequences of one's actions. The appraisal or interpretation of a demand also refers to (a) thoughts regarding the intentions of others, (b) one's resources for dealing with anger-related stress effectively, and (c) the perceived consequences of the available coping strategies. In addition, the severity of a perceived threat is appraised.

Expectations are also based on previous appraisals of related circumstances. Persons expecting to be treated unfairly, are more likely to appraise demands made of them by others as unfair and more likely to be angry. An angry person's self-talk centers around thoughts of trespasses, injustice, frustration, and possibly aggression. Rumination over past and present appraisals of injustice and trespasses increase anger arousal (Zillmann, 1983). The increased arousal present during anger, in turn, interferes with the ability to think clearly and, therefore, to communicate and problem-solve effectively.

The third factor influencing anger, environmental stimuli, refers to persons, places, or things that elicit angry responses. In the same way that food can elicit salivation in dogs, certain stimuli can elicit anger in individual persons (Averill, 1983). For example, an unruly family member or costly car repair bill may elicit anger, whereas a favorite chair or cuddly household pet may elicit a calm, composed response.

The fourth factor influencing anger, behavioral reactions or mode of expression. One can attack verbally (scream, shout, cry), and/or physically (hit, throw, smash). One can withdraw and not speak or act out, or one can exhibit some coping strategies, including problem-solving behaviors, social skills, or specific stress reduction activities (relaxation breathing, positive self-talk). For example, instead of allowing the anger to trigger a belligerent response to a critical boss, an employee can use anger as a cue to get in touch with a friend to discuss ways of effectively dealing with the conflict.

These four anger factors never function independently of each other. They are interactive and vary with persons, places, and situations, depending on a number of variables, including one's physiological makeup, cognitive functioning, and learning history. The interaction mentioned earlier between physiological arousal and cognitive processing is an example of this interdependence.

Occupational Therapy Practice
To function in everyday life, a person must be able to perform skills that enable him or her to engage in a variety of adaptive behaviors. If anger regularly interferes with an individual's ability to perform adaptive behaviors, it is the responsibility of the occupational therapist to assist such a person in the management of anger (Grogan, 1985).

Novaco's model of anger intervention lends itself to occupational therapy practice for a number of reasons: The model is based on theories that are already familiar to occupational therapists; thus, incorporation into present practice is readily possible (Barris & Kielhofner, 1986). Methods of assessment used, including interviews, paper-and-pencil inventories, direct observation of interactions with persons and things, and daily logs, are also familiar to occupational therapists. Needed information is collected from the client and relevant others (i.e., other staff or family members and friends), again consistent with present practice. In addition, assessment and treatment procedures can be performed with one client on an individual basis or with small groups of clients. This two-fold approach provides the programming flexibility often needed in occupational therapy clinics. As far as treatment is concerned, many occupational therapists already assist clients in ways to better cope with stress, which is the main goal of this model. Another strength of this model is that it lends itself to scientific investigation. Several studies have already revealed positive results (Novaco, 1979; Novaco, 1985), and research on this model is continuing (Laws, 1986).

Assessment. In applying this model to clinical treatment, an assessment is made to determine whether a person's anger is adaptive or maladaptive. The client is asked questions concerning the frequency, intensity, duration, and consequences of anger episodes. The greater the magnitude of each of these dimensions, the more maladaptive the anger.

If the anger is deemed maladaptive, the clients' willingness and ability to change their behavior and to
control their anger is also determined. Because clients play a major role in their therapy, it is important to determine the degree to which they are willing to take responsibility for their own behavior and for the needed behavioral change. The greater the clients' desire to change, and the more actively involved they are in therapy, the greater is the probability that the necessary changes will occur.

Once the therapist has made a preliminary assessment of the adaptiveness of a client's anger and of the client's willingness to change, specific information is collected regarding the role each anger factor plays in the client's past and present anger episodes and in the stress affecting his or her life. This information forms the core of the treatment plan.

In assessing physiological arousal, the therapist focuses on the clients' awareness of their actual arousal levels and their understanding of the dynamics of arousal in anger. For example, a client could be asked, "Do you feel a difference in your heart rate when you are angry as compared to when you are calm?" or "Does your body feel tense or relaxed?" or "How is your voice different when you are angry?" The therapist can also ask such questions as, "Do you do anything in particular to calm yourself down when you feel tense or angry, or do you pretty much let things run their course?" The therapist notes physical and medical conditions that may be related to stress and anger (i.e., cardiovascular diseases, gastrointestinal disorders, muscle aches, premenstrual syndrome, and low blood sugar). The therapist collects information about the client's general health practices (i.e., diet, daily exercise and rest, and medicinal and recreational drug use) to determine their possible relationship to the client's anger.

Cognitive processing during episodes of anger can be assessed by recording the client's thoughts just prior to, during, and following the episodes. The therapist takes note of the degree of rumination over anger-producing situations and documents the client's awareness of the role of cognition in anger by determining through questions the client's understanding of how thoughts affect behavior and his or her general knowledge of the dynamics of anger and stress. The therapist also assesses the level of empathy the client displays regarding the needs, feelings, and experiences of others. For example, the client could be asked, "What sorts of thoughts went through your head when you got in an argument with your boss last month?" and "What do you do when you find yourself thinking about things that upset you? Do you find your anger building and building, or are there things that you do to calm yourself down?" The therapist could also ask, "What sorts of thoughts calm you down?"

The environmental stimuli need to be assessed with regard to needed changes in the client's environment and in the stress affecting his or her life. This information forms the core of the treatment plan. Behavioral reactions that occur during episodes of anger (i.e., verbal response, physical attack, withdrawal) need to be documented by the therapist. The types and level of coping skills exhibited by the client are also assessed (i.e., communication, social interactions, parenting, problem solving, stress management). For example, a client could be asked, "How do you react when you are angry? Do you scream, throw things, go for a walk, call a friend, or go out for a drink?"

**Treatment.** The goals of treatment are to increase the client's resources for coping with stress and, if possible, to decrease the demands made on the client. Treatment is accomplished by first increasing the client's awareness of the relationship between anger and stress and then increasing the client's effective use of stress management techniques for coping with anger-producing situations.

The treatment process has six stages: First, the therapist explains the approach being used to the client, including the client's responsibility for his or her own change; stress and its relation to anger; the anger factors, and the use of anger to cue task-oriented stress management behaviors. Second, the therapist plans activities that will increase the client's awareness of his or her own personal arousal, cognitions, environment, and behaviors during episodes of anger. Third, the therapist may be required to model adaptive coping strategies for handling stress and anger, particularly with regard to needed changes in behavior. Fourth, the therapist has the client rehearse these procedures. Fifth, the therapist supplies the client with feedback on his or her performance after the rehearsal of these procedures. Finally, the therapist develops assignments that the client can complete between treatment sessions to practice newly acquired coping strategies away from the clinic. A performance report can be obtained from the client at the next treatment session.

Treatment objectives for physiological arousal are (a) to increase the clients' awareness of their actual arousal during episodes of anger and (b) to increase the clients' use of arousal control methods for lowering arousal during episodes of anger. To increase their awareness of anger arousal, clients participate in activities that provide them with opportunities to experience and then label sensations asso-
ciated with high and low states of arousal. For example, exercises, games, and dancing can be orchestrated to provide the necessary range of arousal sensations. Clients are then exposed to activities (listening to soothing music, going on calm walks, and engaging in tactile activities, including contact with pets and loved ones) and techniques (i.e., progressive relaxation, meditation techniques) that can be used to lower arousal levels. Leisure activities can also be explored as a means of promoting relaxation.

The client is then provided with opportunities to practice arousal control. In this stage, clients are encouraged to use arousal reduction techniques and activities after engaging in arousal-producing activities. For example, a military veteran with a history of drug addiction and angry outbursts at work could be instructed to use relaxation procedures and activities during stressful situations. This procedure provides an alternative to drug use enabling the client to manage stress and may possibly prevent maladaptive expressions of anger at work.

A note of precaution is worthy of inclusion here. Although some persons report that certain activities (e.g., exercising and wedging clay) cause their anger to dissipate, others claim that such activities cause an escalation in their anger. This paradox can be explained as follows: An excited state can be maintained for only a limited period of time before a state of exhaustion, a calm state, ensues. As long as the individual concentrates on performing the exerting activity and does not ruminate over angry thoughts, a state of calm will ultimately result. However, if in the course of exertion, angry thoughts are the focus of concentration, escalation of anger is likely to follow. Therefore, if a client chooses to incorporate an arousal-increasing activity into his or her anger control repertoire, the therapist must direct the client to the appropriate cognitions. Before moving on to intervention at the cognitive level, clients first work on controlling their arousal. In fact, cognitive processing tends to be best at moderate levels of arousal. Once one is able to control one's arousal, access to cognitive abilities is easier.

Treatment objectives with regard to cognitive processing involve teaching clients to increase their awareness of anger-producing stress and then to control their thoughts during such episodes. Values clarification activities can be used to increase the clients' awareness of the rules of fair play and beliefs they hold with regard to their interactions with others and their environment (Simon, Howe, & Kirschenbaum, 1972). Activities can also be used to increase clients' empathy and tolerance for others (Sarason & Sarason, 1984). These latter activities could help clients increase their abilities to (a) understand the perspectives of others and (b) establish realistic expectations for themselves and others—abilities anger-prone persons often lack (Bauer & Twentyman, 1985).

Cognitive intervention of angry thoughts could also be achieved by encouraging clients to decrease negative cognitions directed at themselves and to increase positive, task-oriented, problem-solving thoughts. Cognitive restructuring activities can be used to change maladaptive cognitions and prevent negative ruminations. Such activities can include the use of humor to change negative thoughts and formal, thought-stopping procedures commonly used in cognitive-behavior therapy (McKay, Davis, & Fanning, 1981). Diversional activities can be used to divert one's attention from negative cognitions that feed nonproductive high arousal. Once arousal is decreased to a moderate level, attention can then be directed toward thoughts that are more conducive to effective problem solving and communication. Specific diversional activities could include using crafts, talking with a friend or relative, watching television, gardening, or other activities that the client enjoys and which are not associated with negative cognitions. For example, a construction worker with a recent upper extremity amputation could be instructed to make positive statements about himself when he feels frustrated over his difficulty in learning prosthetic manipulations. He could practice saying, "I can do this: I need to calm down and take my time." In addition, while conducting prosthetic training, his therapist could give priority to helping him relearn manipulations that he needs to succeed at activities that supplied him with satisfaction and positive thoughts in the past.

To aid clients in controlling anger responses, therapists encourage clients to explore past episodes of anger to identify environmental stimuli that have the potential to provoke anger. After identifying these stimuli, clients are encouraged to develop strategies for controlling their exposure to such stimuli (i.e., altering their jobs, family environments, friends, or staying away from provoking stimuli). For example, an adolescent girl who repeatedly acts out when discussing her household responsibilities and weekend privileges with her father soon after he has arrived home from work could be instructed in ways to decrease interactions with him at such times. Other times could be arranged and structured so that she could be productively prepared (i.e., they could talk of her plans for the weekend after the father has rested and the daughter has eaten).

The main treatment objective with behavioral reactions is to teach clients stress management skills that will allow them to cope with anger-related stress. For example, skill deficits in communication, social interaction, time management, parenting, and/or problem solving, are remediated through the use of activities occupational therapists use in the instruc-
tion of stress management (Davis, Eshelman, & McKay, 1982; Wilkinson & Canter, 1982). Thus, a learning disabled child could be guided in the use of problem solving strategies for dealing with frustrating situations. When the child starts to get upset, she could ask for help or take a break until she has calmed down. Once calm, she could practice listing possible solutions needed to complete a frustrating project.

It is important when formulating a treatment plan to remember that, although each factor requires attention, the factors rarely, if ever, function independently. It is evident that because of the interrelatedness of these factors many activities can be used to meet the treatment objectives of several anger factors. For example, planning and completing a wooden bird feeder could serve to stimulate calming thoughts of working in the garden, hearing birds in the yard, and taking care of wild animals. Obtaining directions and assistance from others in the construction of the bird feeder could provide opportunities for developing a number of cognitive and behavioral skills (i.e., skills in social interaction, communication, problem solving, time management, etc.).

In summary, although the psychoanalytic approaches to anger intervention appear to have had merit in the past, deficits in such approaches have been discovered. An alternate approach, based on cognitive-behavioral theories and research, has been developed. This approach lends itself to being used in the occupational therapy treatment process with anger-prone clients and allows for state-of-the-art client care.

References


