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LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVOINS REÇUE
A SUGGESTED MEASURE OF COGNITION
WITHIN THE CONTEXT OF ASSERTION

Morrie Golden

A Thesis
in
The Department
of
Psychology

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Concordia University
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ABSTRACT

A SUGGESTED MEASURE OF COGNITION
WITHIN THE CONTEXT OF ASSERTION

Morrie Golden, Ph.D
Concordia University, 1978

The assessment of unassertiveness in clinical and research settings has typically focused on the measurement of the affective anxiety and behavioral components. Although cognitive belief systems and thinking styles are thought to play a role in assertive expression, to date there are no standardized instruments available to measure cognition within the context of assertion. The present investigation undertook to develop and evaluate such an instrument.

The Cognition Scale of Assertiveness comprises eight items based upon four major cognition themes cited by the literature on assertion as critical mediators of assertion problems. The Scale is scored on a 7-point (strongly disagree to strongly agree) scale. It was given initially to subjects enrolled in a psychology course, together with the Conflict Resolution Inventory (CRI), a valid measure of assertion. The CRI distribution served to categorize high versus low assertives. Results showed that high assertives differed significantly from low in cognition score. High assertives reported a more rational and adaptive belief system and thinking style with regard to assertion.

In subsequent studies, normative, reliability, and additional validity data were obtained in samples of junior college students,
university-level students, and nonstudents. Construct validity was established through contrasting groups of assertives and unassertives, defined by extreme scores on the CR-I and the Rathus Assertiveness Schedule. Although reliability and validity results were poor for the junior college subjects, impressive data occurred for the university and nonstudent populations. Further, cognition scores of these latter two groups discriminated high versus low social anxiety, a factor often linked to the phenomenon of assertion. Finally, the instrument proved to be sensitive to change via assertion training.

Overall, the findings of the present investigation recommend the use of the Cognition Scale of Assertiveness as a reliable and valid measure of cognitive assertion for university students and for non-student samples.
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Within the past few years, considerable attention has been devoted in the behavior therapy literature to methods enhancing the assertive performance of individuals. This trend has been paralleled by an equal or even greater upsurge of interest among the general public, as witnessed by the recent availability of several popular books (e.g. Fensterheim & Baer, 1975; Smith, 1975) and articles (Davidson, 1976; Moriarty, 1975) on the subject. However, assertive training is not a new phenomenon. In fact, it was described in the psychological literature almost 30 years ago (Salter, 1949). Yet, researchers and clinicians are explaining its current popularity in terms of present-day cultural and societal emphases on personal growth and effective interpersonal relationships (Flowers, Cooper & Whiteley, 1975; Lahge & Jakubowski, 1976).

Despite its early appearance, the term assertiveness has still not been defined in a universally accepted manner. Numerous definitions and explanations of assertiveness and assertive behavior have been offered.

Early definitions of assertiveness tended to be rather global and vague. For example, Salter (1949) conceptualized assertiveness as the antithesis of inhibited or nonexpressive behavior. He referred to assertiveness as "excitatory" behavior, implying an active, mobilizing, and energetic state. Liberman (1972) later applied an equally global definition - the ability for self-expression - to describe assertiveness. Wolpe and Lazarus (1966) defined assertive behavior as "all socially acceptable expressions of rights and feelings" (p. 39). They used the
term quite broadly to include not only the negative expressions of anger, resentment, irritation, and disgust, but also the positive expressions of praise, appreciation, joy, and love. Yet, despite this early emphasis on both aspects, the word assertiveness has most often been associated synonymously with aggression, thus bearing a negative connotation (De Giovanni & Epstein, 1978). In general, the behavior therapy literature has not devoted nearly enough attention to the examination of potentially effective methods for helping the client express his positive feelings (Hersen, Eisler, & Miller, 1973). Lazarus (1971) in particular feels that many people are able to criticize, attack, and defend, but are unable to offer the healthy positive emotions in social interactions.

More recent definitions of assertiveness attempt to incorporate Wolpe and Lazarus' (1966) advocacy of personal rights with a consideration for the impact that one's behavior has on others. Alberti and Emmons (1974) stated that assertiveness involves "behavior which enables a person to act in his own best interests, to stand up for himself without undue anxiety, to express his honest feelings comfortably, or to exercise his own rights without denying the rights of others" (p.2). The authors drew an important distinction between assertion, which involves a basic respect for the rights of others, and aggression, which violates them. A rather similar definition to that of Alberti and Emmons (1974) was offered by Lange and Jakubowski (1976).

Questions have been raised in the assertion literature regarding the exact nature and origin of one's so-called personal rights (e.g.
Heimberg, Montgomery, Madsen, Jr., & Heimberg, 1977). Nevertheless, Alberti and Emmons (1974) treat the issue on a very basic level, arguing that all individuals have inborn rights as human beings, regardless of roles or titles, and that all are equal on a human-to-human plane.

In an effort to provide more specific definitions of assertiveness, several authors have described the term within a framework of actual operationalized behaviors. Rathus and Ruppert (1973), for example, noted nine types of assertive behaviors, including greeting others, disagreement, talking about oneself, and asking why. Lazarus (1973b) elucidated four relatively independent response patterns: ability to say no, to ask for favors or make requests, to express positive and negative feelings, and to initiate, continue, and terminate general conversations. Hersen and his colleagues (Eisler, Hersen, & Miller, 1973, 1974; Hersen, Eisler, Miller, Johnson, & Pinkston, 1973) operationally defined assertiveness in terms of specific verbal and nonverbal behaviors. They identified components such as eye contact, response length, affect, and tone of voice as being critical descriptors upon which assertive behavior is judged.

It would appear, however, that defining assertiveness in terms of specific behaviors or response classes can conceivably lead to an infinite number of descriptions. Evidence for this speculation accrues from reports of investigators who have identified numerous assertion situations and component skills above and beyond those presented by the above researchers (e.g., Gambrill & Richey, 1975; Gay, Hollandsworth, Jr., & Galassi, 1975; Hull & Hull, in press; Serber, 1972; Galassi &
Gallissi, Note 1). Thus, to avoid a possible "cluttering" of the assertion literature, the present author favors a functional definition which underlies a full spectrum of relevant situations and behaviors. Such an approach was advanced by Rich and Schroeder (1976).

Summarizing in general the attributes common to operational definitions of assertiveness, Rich and Schroeder (1976) concluded that assertion is "the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through an expression of feelings or wants when such expression risks loss of reinforcement or even punishment" (p. 1082). In this framework the content of an assertive response is not specified. Rather, positive and negative feelings may be expressed or directed toward various goals depending upon the needs, desires, and values of the individual. Perhaps the greatest significance of this definition is the focus placed upon possible negative or punishing consequences of assertion. Indeed, this is one of the major considerations which must be heeded by the individual contemplating assertive action, and by the professional involved in helping clients to increase their assertive skills (Flowers & Booraem, 1975; McGovern, Tinsley, Liss-Levinson, Laventure, & Britton, 1975; Rathus & Ruppert, 1973). It implies the notion that assertiveness is a choice which one makes in a particular situation, and that in making this choice, one must accept responsibility for its outcome (Alberti & Emmons, 1974; Flowers & Booraem, 1975; Lange & Jakubowski, 1976; Rathus, 1975). Thus, an employee may wish to assert himself by refusing to fulfill a certain request of his employer. This behavior,
however, should not be enacted if he is not prepared to perhaps
search for another job. In a general vein, Rathus (1973b) cautioned
therapists that global exhortation of clients to behave more assertive-
ly, as, for example, Salter (1949) suggested, may elicit strong negative
feedback which the client may be unable to handle. An emphasis there-
fore in developing assertiveness is to discriminate situations which
do and do not warrant forthright expression (cf. McFall & Lillesand,
1971).

Within the research literature on assertiveness, numerous studies
have been conducted in varied contexts to investigate its parameters
and determinants. Examinations have been made of potential influencing
factors such as race (Howard, 1975), culture (Kagan & Carlson, 1975),
etnicity (Kipper & Jaffe, 1976), and sex (Hollandsworth, Jr. & Wall,
1977). As well, reports on assertiveness characteristics have appeared
for virtually every age group, including children (Dorman, 1973),
adolescents (Vaal, 1975), adults (Gay et al., 1975) and the elderly
(Edinberg, Karoly, & Gleser, 1977). Studies indicating the successful
application of assertive training have been undertaken within normal
populations (e.g. Flowers & Goldman, 1976; Galassi, Galassi, & Litz,
1974; Gormally, Hill, Otis, & Rainey, 1975; Rathus, 1973a; Rimm, Hill,
Brown, & Stuart, 1974; Weiskott & Cleland, 1977; Winship & Kelley,
1976), and in clinical samples of individuals. The latter have comprised
hospitalized psychiatric patients (e.g. Booraem & Flowers, 1972;
Goldsmith & McFall, 1975; Lomont, Gilner, Spector, & Skinner, 1969;
Longin & Rooney, 1975; Weinman, Gelbart, Wallace, & Post, 1972), non-
hospitalized clients (e.g. Bloomfield, 1973; Percell, Berwick, & Beigel, 1974; Rose, 1977; Wolfe & Fodor, 1977), and specific disturbed groups such as alcoholics (Foy, Miller, Eisler, & O'Toole, 1976; Hirsch, 1975; Scherer & Freedberg, 1976), depressives (Frey, 1976; Maish, 1972), phobics (Goldstein, Serber, & Piaget, 1970; Piaget & Lazarus, 1969), and sexual deviates (Edwards, 1972; Stevenson & Wolpe, 1960). In short, assertive training has been used to treat a wide variety of disturbances. Unfortunately, much of the outcome research noted above is in the form of case studies. Results in these instances are therefore only suggestive of the potential impact of assertive training on certain disorders. Nevertheless, even within the empirical treatment literature, a major problem still remains concerning the clear delineation of client and disorder types that require or benefit from training in assertiveness. This problem focuses on the critically important issue of assessment within the area of assertion.

In general, proper assessment is a vital consideration if clients are to receive effective and appropriate therapeutic procedures. Rich and Schroeder (1976) have noted that difficulties in conducting adequate assessments have plagued and impeded the progress of assertion research. There are two aspects of assessment to which attention must be drawn. One, just mentioned, is the ability to detect the need for training or enhancing assertive skills. The other is to evaluate whether an individual undergoing assertive training is achieving desired response changes; that is, whether the treatment is "working".

It has been suggested that assertiveness is not a unidimensional
phenomenon, but that manifestations occur in three partially independent modalities - affective, behavioral, and cognitive (cf. Hersen, Eisler, & Miller, 1973; Rich & Schroeder, 1976; Schwartz & Gottman, 1976). Further, Curran (1977) has stated that subjects' deficiencies in social skill functioning may reflect idiosyncratic involvement of these modalities; that is, there may be a different basis for the problems of different individuals. In fact, a number of theoretical models have been postulated to explain assertive difficulties, each emphasizing a different dimension or modality. Thus, problems in assertion are conceptualized as specific behavioral skill deficits (skill deficit model, McFall & Twentyman, 1973), inhibition due to conditioned anxiety (conditioned anxiety model, Wolpe, 1958), or inhibition resulting from irrational belief systems and faulty thinking styles (cognitive mediating model, Wolfe & Fodor, 1975).

According to Curran (1977), a thorough assessment of each dimension is necessary in order to adequately classify a subject population. As well, Glass, Gottman, and Shmurak (1976) and Curran (1977) have suggested that proper classification on relevant dimensions is essential to investigate interaction effects between subject characteristics and treatment techniques. These effects have been demonstrated to occur in numerous instances within the general interpersonal skill literature (e.g. Casas, 1975; DiLofoto, 1971; Fremouw & Zitter, 1978; Glass et al., 1976; Meichenbaum, Gilmore, & Fedoravicius, 1971).

In a review of several social skill studies, Curran (1977) stated that a serious methodological flaw has been the neglect of a multi-
channel assessment. Indeed, the need for more comprehensive assessment procedures in behavior therapy in general has been expounded by an increasing number of researchers (Franks & Wilson, 1978; Lang, 1968; Mahoney, 1974). Within the area of assertiveness, assessment procedures have been developed for measuring the affective and overt behavioral components. However, to date, there is no standardized device available to specifically evaluate the cognitive dimension. In this vein, the present investigation was designed to develop a reliable and valid measure of cognition within the context of assertion.

The discussion to follow focuses on several topics concerning assessment in the area of assertion. These include: orientations in the assertion literature regarding the therapeutic indication for assertive training; general methods to assess assertiveness; and specific assessment approaches for each of the affective, behavioral, and cognitive dimensions.

**Indications for Assertive Training**

At present there are discrepant views in the assertion literature as to client or disorder types for which assertive training is indicated. Salter (1949), for example, has been emphatic in stating that all clients require assertive training. He wrote, it is unnecessary to be cautious in the matter of diagnosis...

The diagnosis is always inhibition. The person who comes for help does not know what he wants. There is a blind spot in his reasoning and in his "rules for conduct", no matter how plausible they may seem. (p.104)
Rathus (1975), although not concurring with Salter's (1949) contention that the client is always unaware of what he wants, essentially agrees that most clients appear to need some form of assertive training. Rathus (1975) suggested that since people are social beings, their emotional responses often reflect inefficient methods of handling social relationships. In this vein, DeLo (Note 2) has pointed out the numerous cases frequently seeking help for diverse physical or psychological complaints, the basis of which is actually a deficiency or disturbance in interpersonal functioning.

On the other hand, Flowers, Cooper, and Whiteley (1975) strongly contended that assertion training cannot and should not claim to help all people in all situations. Wolpe (1969), although an advocate of assertive training for most situations where interpersonal anxiety exists, still acknowledged that there are instances in which anxiety or fear may be more effectively treated with other behavioral procedures (e.g. where anxiety is elicited by the mere presence of a particular individual).

Jakubowski and Lacks (1975) suggested that assertion training is appropriate when clients are experiencing the distress of being unable to stand up for their rights and express their honest emotions. However, they emphasized that a client's unassertive behavior is more likely to be manifested in certain specific situations rather than to occur pervasively. Further, Jakubowski and Lacks (1975) pointed out that within a given situation the presence of assertive difficulties may be determined by a number of factors. These include: (a) whether
the client is initiating the interaction or is the recipient of some action; (b) whether the situation requires a type of assertive skill which the client can emit (e.g. expressing anger, refusing requests of others); and (c) whether the other person in an interaction is a controlling source of important reinforcers for the client (e.g. power to give job raises, withhold affection). Thus, the position of Jakubowski and Lacks (1975) is opposed to a global indication of assertive training for all clients regardless of their particular situational characteristics.

A similar position to Jakubowski and Lacks (1975) is taken by MacDonald (1975). She also posited a situation-specific approach to assertion problems and identified several additional factors operating in a given situation that may influence the manifestation of unassertiveness. Her factors involved: degree of intimacy in the situation, valence of the felt emotion, elapsed time following the elicitation of the emotion, perceived status (including sex) of the interpersonal partner, perceived status of self in the situation, and number of observers present.

The situation-specific conceptualization of assertion in general has received considerable empirical support in the literature. Numerous researchers have indeed demonstrated differential performance of assertive behaviors and skills according to variations between and within response classes (e.g. Bellack, Hersen, & Turner, 1978, Eislser, Hersen, Miller, & Blanchard, 1975; Hersen, Eislser, & Miller, 1974; Holmes & Horan, 1976; Kirschner, 1976; McFall & Lillesand, 1971; Nietzel,
Martorano, & Melnick, 1977; Young, Rimm, & Kennedy, 1973). No research support, however, exists for the notion that clients manifest a generalized need for training or facilitation of assertiveness. The implication for assessment purposes, therefore, points to the importance of evaluating individuals on particular samples or instances of their social interactions.

**General Methods to Assess Assertiveness**

Despite the fact that assertiveness as a style of interaction may essentially be considered within any school of personality or psychotherapy (Rathus, 1975), the behavioral school has been virtually unique in its treatment of unassertiveness as a target problem in social functioning. An advantage of conceptualizing assertion in a behavioral frame of reference is that greater emphasis is placed on data-based assessment and systematic analysis. Behavior therapy differs from the more traditional psychotherapies in the attention given to specifying concrete problems and goals and to measuring change in behavior as a result of therapeutic intervention. (King, Liberman, & Roberts, Note 3).

In the present section two general methods will be described as used in behavior therapy to assess assertiveness: clinical interview and self-report assertion inventory.

**Clinical Interview**

A method frequently used in the clinical context to obtain information on assertive behavior is the structured interview. Goldfried and Sprafkin (1976) have suggested that in general a clinical interview
should be employed systematically as a vehicle for sampling the individual's responses in certain situations. They believe that the interview allows for a flexible assessment of reactions and situations. The utility of this method of assessment has been underscored by Jakubowski and Lacks (1975) in cases where clients' initial presenting complaints are not expressed directly as problems in assertion. These authors suggested that such cases are common occurrences in clinical settings.

The structured interview typically examines clients' descriptions of their interactions with significant persons in their environment—for example, relatives, friends, co-workers, employers, salespeople, etc. From these descriptions the therapist may detect aggressive or passive responses in which the client is exploiting or being exploited, dominating or being submissive, belittling or placating others (Alberti & Emmons, 1974). Specific questions may be asked regarding the client's ability to carry out certain assertive tasks; for example, complimenting someone, asking for favors, refusing unreasonable requests (Eisler, 1976). Data may also be recorded regarding the frequency and severity of maladaptive behaviors.

In sum, interviews may indeed represent a viable approach to the assessment of assertiveness, provided they are structured and systematic in their analysis of interpersonal response styles.

**Self-Report Inventory**

Particularly within research contexts, the most common method to assess assertiveness is the self-report assertion inventory. Presently, there are close to a dozen such inventories in existence. Some contain multiple-choice lists of possible behaviors in interpersonal situations,
and request subjects to indicate their most likely response (e.g. Action Situation Inventory, Friedman, 1971; Lawrence Assertiveness Inventory, Lawrence, 1970; Conflict Resolution Inventory, McFall & Lillesand, 1971). Most, however, are rating scales on which subjects estimate how characteristic (Rathus Assertiveness Schedule, Rathus, 1973b) or frequent (e.g. College Self-Expression Scale, Galassi, DeLo, Galassi, & Bastien, 1974; Assertion Inventory, Gambrill & Richey, 1975; Adult Self-Expression Scale, Gay et al., 1975) certain assertive behaviors are for them. A review of the empirical literature on assertive training suggests that the most often used inventories are the Conflict Resolution Inventory (CRI) and the Rathus Assertiveness Schedule (RAS).

The CRI is unique among assertion inventories in that it is the only one which limits its assessment to a particular class of response—in this instance, the ability to refuse unreasonable requests. McFall and Marston (1970) have suggested that this response class is representative of assertion situations in general. The CRI consists of an 8-item face sheet of global impressions of assertiveness and refusal behavior, and a 35-item body of responses to specific refusal situations. The inventory was constructed in a manner consistent with the behavior-analytic approach to assessment (Goldfried & D'Zurilla, 1969) in that the refusal situations were determined by the subject population of initial interest (college students) rather than by the researchers. Systematically devised, reliable (Galassi, Galassi, & Westefeld, 1978), and well validated (Loo, 1971; McFall & Lillesand,
1971; McFall & Twentyman, 1973), the CRI is regarded as one of the most valuable inventories available to date to measure assertiveness (Jakubowski & Lacks, 1975; Rich & Schroeder, 1976).

The RAS is a 30-item scale measuring positive and negative assertiveness. Items were selected from Wolpe (1969), Wolpe and Lazarus (1966), Allport (1928), and Guilford and Zimmerman (1956). Some were also suggested by a college student population for whom the inventory was originally intended. Nevertheless, data showing good reliability (Quillin, Basing, & Dinning, 1977; Rathus, 1973b; Rathus & Nevid, in press; Vaal, 1975; D'Amico, Jr., Sonabend & Haffman, Note 4) and validity (Rathus, 1973b; Vestewig & Moss, 1976; D'Amico et al., Note 4; Futch & Lisman, Note 5) have been reported in "normals" varying widely in age. In addition, validational support was demonstrated in an adult psychiatric population (Rathus & Nevid, 1977).

In general, the use of self-report inventories to assess assertion has received much criticism from several behaviorally oriented researchers. Inventories have been accused of not reflecting actual behavior changes occurring in assertive training treatment (Rose, 1977), not being sufficiently situation-specific (Kirschner, 1976), and being too sensitive to experimenter demand (Holmes & Horan, 1976). Lick and Katkin (1976), however, have suggested that virtually all forms of assessment are vulnerable to methodological limitations. In their view, behaviorists are too hastily rejecting self-report data and are not giving fair consideration to this assessment approach. On a positive note, Hollandsworth, Jr. and Wall (1977) have stated that, in terms of effort
and expense, self-report assertion inventories represent the most practical means of assessing assertiveness in its varied situational contexts.

In sum, structured interviews and self-report assertion inventories may provide useful information for the researcher or clinician regarding an individual's general assertive status. However, they do not direct themselves to any specific dimension of assertiveness. On the contrary, as typically used in the assertion literature, both methods appear to elicit composite indications of functioning on the affective, behavioral, and cognitive levels. Yet, as discussed earlier, it appears more appropriate from clinical and research points of view to assess each dimension separately.

The sections to follow discuss each dimension of assertiveness, its conceptualized role in assertion problems, and its specific assessment.

Affect

Theoretical Importance

By and large, the affect chiefly implicated with regard to assertive functioning is anxiety. One of the earliest models proposed to explain assertive difficulties was Wolpe's (1958, 1969, 1973) conditioned anxiety hypothesis. According to this model, the client is viewed as manifesting anxiety-response habits in interpersonal situations, which inhibit the expression of appropriate feelings and the performance of adaptive behaviors. The inhibited client is then assumed to often feel taken advantage of and frustrated in his quest to attain personal
social goals. Further, unexpressed feelings accumulate within the individual, potentially leaving him in a state of emotional distress. Although Wolpe does not explicitly define the origin of conditioned anxiety responses, he did (1973) describe a case example in which punishment of self-expression lead to timid, unassertive behavior.

Assessment

Procedures to assess anxiety in the assertion research have typically involved self-report instruments and scales of general and social anxiety, and measures of autonomic reactivity within various physiological systems.

Self-report measures. Commonly used self-report instruments of general anxiety have included Taylor's (1953) Manifest Anxiety Scale (McFaul & Marston, 1970), the Wolpe-Lang (1964) Fear Survey Schedule (Hollandsworth, Jr., 1976), and Spielberger, Gorsuch, and Lushene's (1968) State-Trait Anxiety Inventory - Trait Scale (Orenstein, Orenstein, & Carr, 1975). Social anxiety measures often employed in the assertiveness literature have been Watson and Friend's (1969) scales of Social-Evaluative Anxiety (Thorpe, 1975), Endler, Hunt, and Rosenstein's (1962) S-R Inventory of Anxiousness (Aiduk & Karoly, 1975), and social fear items of Geer's (1965) and Wolpe-Lang's (1964) Fear Survey Schedules (Morgan, 1974). Recently Gambrill and Richey (1975) developed an assertion inventory which taps the degree of discomfort experienced in specific situations as well as the probability of assertive responses being made. This measure, however, awaits further use and investigation.

Many researchers have also used simple numerical rating scales
in which individuals undergoing assertive training report the amount of anxiety experienced in simulated social interactions enacted in the laboratory (e.g. Galassi, Galassi, & Litz, 1974; McFall & Marston, 1970; Rimm, Snyder, Depue, Haanstad, & Armstrong, 1976; Wolfe & Fodor, 1977). Typically these scales run from 0 upwards in increments of 1 unit and are anchored at either end by descriptive labels signifying the complete absence or extreme presence of anxiety.

Assessment through the methods of self-report instruments and rating scales has indeed indicated some support for the involvement of anxiety in assertion problems (e.g. Hollandsworth, Jr., 1976; McFall & Marston, 1970; Orenstein et al., 1975; Percell et al., 1974). In general, however, as noted earlier the utility of self-report as an assessment approach has been subject to differing evaluative opinions.

*Physiological measures.* The use of physiological measures of anxiety has been evidenced in a few empirical studies on assertive training. Evaluations have been made of pulse rate (Kazdin, 1975; McFall & Marston, 1970; Thorpe, 1975), blood pressure (Rimm, Snyder, Depue, Haanstad, & Armstrong, 1976), and skin conductance (Rimm, Snyder, Depue, Haanstad, & Armstrong; Thorpe, 1975). In most cases, results have usually shown that these measures did not adequately reflect therapeutic change of the client's anxiety or assertive status.

There are, however, a number of problems with the use of physiological measures of anxiety. One is that individuals tend to show a unique pattern of autonomic reactivity in response to external stimuli (Lacey, 1967). Thus, some may manifest anxiety consistently within the cardiovascular system whereas others may be primarily electrodermal
responders. Measuring a single system, therefore, may not provide a valid indication of an anxiety response. Another problem relates to the fact that although various response classes of assertiveness may be associated with different feeling states, it is not possible at the autonomic level to distinguish most emotional states (Rich & Schroeder, 1976). In this vein, Bandura (1969) has pointed out that different emotional states are subjectively discriminated primarily in terms of the external social situation rather than internal somatic cues.

Behavior

Theoretical Importance

Rather than viewing lack of assertive behavior as a result of conditioned anxiety, numerous researchers primarily regard the unassertive individual as one who does not possess the behavioral skills necessary to adequately perform an assertive response (e.g. Hersen, Eisler, Miller, Johnson, & Pinkston, 1973; McFall & Twentyman, 1973; Turner & Adams, 1977). Hersen, Eisler, and Miller (1973) suggested that many individuals who do not manifest appropriate assertive behavior have never learned the relevant verbal and nonverbal responses. McFall (1976) has referred to other instances of skill deficits resulting from processes such as faulty learning, forgetting or decaying of earlier responses, and traumatic injury.

Assessment

The major assessment approach for this dimension involves an examination of the behavioral performance of assertiveness. Behavioral assessments have been conducted through direct observations in real-
life settings, observations in contrived social situations, and via role-playing (Rich & Schroeder, 1976).

Hedquist and Weinhold (1970) had their subjects record their behavior in naturalistic settings by means of an interpersonal diary. In the diary subjects noted the date, time of day, place, and the persons with whom assertive responses were made. Validity was checked on a random sample of 12 such reports, and no false recording was found. King et al. (Note 3) instructed their clients to complete certain assigned tasks outside of the consulting room, and their performance was observed by research assistants not involved in the actual treatment process.

Contrived behavioral tasks have been employed in a number of contexts. For example, McFall and Marston (1970) devised an in vivo behavioral task in which subjects were telephoned by a confederate to buy a magazine subscription. This was assumed to represent an unreasonable request. Measures taken included the total duration of the call, the time before the first refusal, rated resistance, verbal activity, social skill, and the subject's acquiescence or refusal. Varied forms of this general task were used in several empirical studies on assertive training (e.g. Kazdin, 1974; McFall & Lillesand, 1971; McFall & Twentyman, 1973; Nietzel, Martorano, & Melnick, 1977; Prince, 1975; Rosenthal & Reese, 1976; Thorpe, 1975).

Other contrived tasks have involved live confrontations of subjects by experimental assistants. Typical situations entailed inducing subjects to volunteer for a presumably uninteresting community project
(Holmes & Horan, 1976), to stand up for their rights when shortchanged
(Weinman et al, 1972), and to stop an annoying confederate from inter-
fering with their performance on a puzzle (Friedman, 1971).

The most commonly used behavioral assessment of assertiveness
has been the role-play test. In this test real-life problematic situ-
tions are simulated in the laboratory in a standardized fashion. Sub-
jects typically are asked to interact with a confederate as they would
in real life. Responses are recorded on audio- or videotape and are
rated retrospectively on verbal and non verbal components of assertive-
ness. Galassi and Galassi (1976) have noted that the format of the
role-play assessment varies considerably among empirical studies on
assertiveness. This is evidenced in the mode of presentation (live
versus audiotaped confederate), and in the number of stimulus prompts
(single or multiple) to which the subject responds. Galassi and Galassi
(1976) found, in fact, that variations on these particular modes of
presentation produced differential manifestations of assertiveness
components. Thus, to a certain extent, the information provided by
role-play assessment depends upon the "mechanics" of the procedure.

One of the more important role-play tests was conducted by Eisler,
Miller, and Hersen (1973). As a result of this assessment they were
able to identify specific behavioral components which differentiated
high and low assertive subjects. Hospitalized male psychiatric patients
interacted with a live female confederate in 14 interpersonal encounters
simulating real-life situations. Judges rated several behaviors and
found that high assertives differed significantly from lows in terms
of a shorter latency of response, louder speech, less compliance, more
requests for new behavior, and more appropriate affect. No differences were found for nonverbal measures (e.g. eye contact) despite the fact that such variables have been considered relevant by many researchers and investigators (e.g. Flowers & Booraem, 1975; Galassi, Hollandsworth, Jr., Radecki, Gay, Howe, & Evans, 1976; Lange, Rimm, & Loxley, 1975; Pachman, Foy, Massey, & Eisler, 1978; Rathus, 1972; Serber, 1972). It must be emphasized, however, that Eisler, Miller, and Hersen's (1973) subject pool was limited to psychiatric patients. Evidence in the assertion literature suggests that discrepancies may exist between different populations in the nature of their assertive difficulties (Booraem & Flowers, 1972; Rich & Schroeder, 1976; Turner & Adams, 1977).

In general, many researchers in assertiveness training insist upon the use of samples of overt behavior for assessment purposes (e.g. Jakubowski & Lacks, 1975; Kazdin, 1974; McFall & Marston, 1970; Rose, 1977; Schroeder & Rakos, in press). Nevertheless, there are several problems with the use of behavioral measures, not the least of which is that there is no conclusive evidence regarding their reliability (Heimberg et al., 1977) or validity (Bellack et al., 1978; Lick & Unger, 1977; Rich & Schroeder, 1976). Indeed, observational measures are often biased when subjects are aware that they are being observed (Rich & Schroeder, 1976). As well, task performance in the contrived and role-playing procedures are especially prone to experimental demand influences (Nietzel & Bernstein, 1976). Further, role-playing may be unnatural and artificial for individuals not accustomed to this style.
of behavior (Goldfried & Sprafkin, 1976).

Cognition

Development within Behavior Therapy in General

Originally developed as an outgrowth of findings in the experimental psychology laboratory, behavior therapy has long directed itself to the alteration of simple overt behavioral patterns through the use of classical and operant conditioning procedures. Consideration of introspective, subjective, or cognitive processes was seriously frowned upon and rejected by rigid behaviorists. Understandably, criticism abounded from other clinical circles regarding the rather limited, mechanistic approach of behaviorally oriented psychologists (Breger & McGaugh, 1965; Murray & Jacobson, 1971). The often resulting narrow and temporary effects of behavioral techniques (Gruber, 1971) came as no surprise to these critics who insisted that cognitive processes must be emphasized in the conceptualization and treatment of maladaptive disorders. The evolution of general assessment models within behavior therapy indicates, however, that covert events and cognitions are now occupying positions of greater importance (cf. Morganstern, 1976).

For example, Goldfried and Pomeranz (1968) proposed a comprehensive assessment approach in which mediating processes and cognitions are regarded to be as important as overt behaviors in defining client problems. They described how an individual's system of appraisals or evaluations can affect his functioning psychological state. Lazarus (1973a), noting the relapse of many of his clients, outlined a multimodal behavior therapy model in which evaluation is made of cognitions as one of seven
modes of human functioning. In the cognition modality, Lazarus focused on the insights, ideas, philosophies, and judgments which he assumed to constitute our basic attitudes, values, and beliefs. Mischel (1973) posited an approach to personality emphasizing an interdependence of external environmental events and certain "person variables" that involve a number of cognitive social learning factors. Among these variables included the individual's competencies to construct diverse behaviors under appropriate conditions, his encoding strategies and personal constructs, his expectancies about stimulus and behavior outcomes, subjective values of such outcomes, and his self-regulatory systems and plans. Finally, an extremely vigorous innovator of cognition within the realm of behavior therapy has been Meichenbaum. He proposed (1976b) a cognitive-behavioral assessment framework in which overt behavior is examined together with the self-statements (appraisals, attributions, self-evaluations) that individuals emit prior to, during, and following behavior.

In actuality, the past few years have witnessed a burgeoning of behavior therapy interest and research into the impact of cognitive variables in various disorders (cf. Mahoney, 1974; Meichenbaum, 1973, 1977). To a large extent the impetus for this work stemmed from Ellis' (1962, 1971) rational-emotive school of therapy, which posits an intimate link between our belief systems, emotions, and behavior. In addition, there has been recent questioning about the conceptual bases of behavior modification as traditionally derived from learning theory (e.g. Mahoney, 1974; Meichenbaum, 1976a). Indeed, the findings of nu-
merous researchers have cast doubt on a simple conditioning explanation for the efficacy of many of the standard behavior therapy techniques (e.g. Carlin & Armstrong, 1968; Goldfried & Goldfried, 1977; Hurley, 1976; Watson & Marks, 1971). Rather, there are suggestions that behavioral procedures are successful in that they improve cognitive as well as behavior coping skills and attitudes concerning one's self-efficacy (Bandura, 1977; Bandura, Adams & Beyer, 1977; Beck, 1970; Goldfried, 1971; Meichenbaum, 1976a; Murray & Jacobson, 1971; Ryan, Krall, & Hodges, 1976).

The growing interest in the belief systems, attitudes, appraisals, and general self-statements of individuals has also permeated the area of assertion. Thus, in addition to conditioned anxiety and skill deficit models, a cognitive mediational model has developed to explain unassertiveness.

**Theoretical Importance of Cognition in Assertion**

Lange and Jakubowski (1976) stated that most psychological problems involving assertion have cognitive components. They have found that, in general, the more individuals think rationally, the greater the likelihood of their acting assertively. Lazarus (1973a) has argued that nothing short of coercive manipulation is likely to develop new response patterns that are at variance with people's fundamental belief systems. Indeed, insight, self-understanding, and the correction of irrational beliefs must usually precede behavior change whenever faulty assumptions govern the channels of manifest behavior. (p. 407)
Jakubowski-Spector (1973) suggested that when individuals develop a system of positive beliefs about assertion, they are less likely to feel guilty after they have been appropriately assertive. Indeed, guilt has been indicated to be a potent inhibitor of assertive expression in clients (Goldstein, Serber, & Piaget, 1970). Lange and Jakubowski (1976) stated that a basic positive belief system about assertion would involve the notion that assertion, rather than submission or hostility, enriches life and leads to more satisfying interpersonal relationships. Further, it provides clients with a certain "permission" to be assertive.

The development of irrational belief systems, faulty thinking styles, and other such cognitive disturbances are believed to arise through early socialization messages which bombard the individual from cultural, family, educational, religious, and political sources (Alberti & Emmons, 1974). Thus, people are taught to be tactful, diplomatic, and discreet, often to the extent that expression of feelings is anxiety-, guilt-, and fear-producing (Lazarus, 1971). Instructions are given that polite restraint is the accepted order of things, that we must "turn the other cheek", that we must never inconvenience or refuse to help others (Lange & Jakubowski, 1976). The existence of such cognitive mediators of unassertiveness has been especially noted by researchers and clinicians conducting assertion training with women (e.g. Butler, 1976; Carlson & Johnson, 1975; Wolfe & Fodor, 1975; Jakubowski, Note 6).

**Empirical Evidence for Cognition in Assertion**

One of the most impressive demonstrations of the importance of cognitive factors in assertion difficulties came in a study by Schwartz
and Gottman (1976). These researchers performed a task analysis of assertive behavior in which they attempted to determine the nature of the deficits existing among normals reporting problems in one type of assertion—refusing unreasonable requests. High, moderate, and low assertive subjects were identified on the basis of scores on the Conflict Resolution Inventory, and they were assessed in three situations: one examined their content knowledge of a competent response, another their ability to deliver a response orally under safe and unrealistic circumstances (imagining to model a good assertive response for a friend to learn), and the third their response delivery in a role-play format that simulated reality as closely as possible. Following the latter situation, subjects were assessed on a questionnaire wherein they indicated retrospectively the occurrence of positive and negative self-statements emitted during the rôle-play. Results showed that subjects did not differ either in their knowledge of what constitutes a good assertive response, or in the hypothetical delivery situation. Low assertive subjects did, however, evidence significantly poorer performance than the high assertives in the more realistic role-play situation. Of particular importance was the fact that this event was accompanied very clearly by a greater incidence of negative and a lower incidence of positive self-statements. Concluding from their findings, Schwartz and Gottman (1976) suggested that "the most likely source of nonassertiveness in low-assertive subjects could be related to the nature of their cognitive positive and negative self-statements" (p. 918).

In a study with psychiatric patients, Eisler, Frederiksen, and
Peterson (1978) investigated the relationship of several cognitive variables to the expression of positive and negative assertiveness. Subjects were first defined as high or low assertive through their performance on a behavioral role-playing test. Then, employing a series of self-report measures constructed specifically for the study, the researchers examined differences between the groups in their perceptions of the role-playing partner, their selection of the most effective among a list of response alternatives to the role-playing situations, and their generalized expectations of others in everyday social situations. Findings showed that the low assertives, compared with the highs, perceived the partner as significantly less fair. As well, the lows expected fewer favorable reactions from others in daily social encounters. Finally, it was found that low assertives selected significantly more passive and less socially acceptable responses as the most effective for the role-playing situations. In discussing their results, Eisler, Frederiksen, and Peterson (1978) suggested that unassertive individuals may believe that there is something inappropriate about behaving assertively. Indeed, this would relate to a maladaptive belief system which other investigators have implicated in assertion difficulties. It may also bear relevance to the particular problem-solving strategies with which unassertives may approach assertion situations. In any case, this study adds to the findings of Schwartz and Gottman (1976) that cognitive factors are very much involved in persons experiencing problems with assertive behavior.

Further empirical support for a cognitive mediational hypothesis
of unassertiveness has been reported in other studies as well. For example, Fiedler and Beach (1978) found that, among college females, the probability of performing assertive behavior was related to the subjects' evaluations of the risks involved. Janda and Rimm (1977) discovered with a similar sample that difficulties in learning to refuse unreasonable requests was due in many cases to subjects' perceptions of assertiveness as rude and impolite. Finally, Meichenbaum (1976b) reported a personal communication regarding research by Meijers who demonstrated that socially withdrawn, as compared with socially outgoing, children manifested a higher incidence of negative self-statements and a greater likelihood of appraising social situations as personally threatening.

**Empirical Evidence of Cognition in Social Anxiety**

The importance of cognitive variables in assertion problems has been suggested also, albeit indirectly, through studies of social anxiety. This factor, as discussed earlier, is considered a relevant dimension affecting the manifestation of assertiveness.

Clark and Arkowitz (1975) found that high socially anxious males interacting in a laboratory social situation with confederate females judged themselves to be significantly less skilled and more anxious than low socially anxious males. However, judges rating these interactions recorded no differences between the two groups of males in terms of social skill. Clark and Arkowitz (1975) suggested that the high anxious males were characterized by overly negative self-evaluations.

Smith and Sarason (1975) demonstrated that high as compared to low socially anxious subjects were more prone to exaggerate the negativity of unfavorable interpersonal feedback. In this vein, Curran (1977)
reported a study by O'Banion and Arkowitz (Note 7) which found that high socially anxious individuals had a better memory for negative feedback directed at themselves and a less accurate memory for positive feedback than did low socially anxious subjects.

A number of recent studies examining the impact of social anxiety on social behavior have further shown that the socially anxious individual is highly motivated to avoid the disapproval and gain the approval of others, and generally avoids situations in which the likelihood of negative evaluation exists (Smith, 1972; Smith & Campbell, 1973; Watson & Friend, 1969). The involvement of high approval needs in social anxiety was corroborated in a correlational study by Goldfried and Sobocinski (1975). These researchers also found positive relationships for social anxiety with cognitions relating to the tendency to hold excessively high self-expectations, and to be anxiously overconcerned about future events.

**Ramiifications of Cognition within the Context of Assertion**

The findings of numerous studies in the social anxiety and assertion literatures lend considerable support to the notion that cognitive factors represent a critical dimension of assertive functioning. It indeed appears that a cognitive mediational model explaining difficulties in assertion warrants serious consideration.

Numerous empirical studies on assertive training have recently been conducted to examine the impact of cognitively enriched procedures on the enhancement of assertive behavior. Impressive results have been obtained with such strategies in college students (Galassi, Galassi,
& Litz, 1974; Manderino, 1974), psychiatric patients (Goldsmith & McFall, 1975), and socially isolated low responsive children (Gottman, Gonso, & Schuler, 1976; Jakobchuk & Smeriglio, 1976). In addition, studies have compared treatments involving a cognitive focus with those consisting purely of behavioral components. Results have generally indicated that a treatment involving a cognitive component was at least as effective as one limited only to a behavioral approach (Tiegerman & Kassinove, 1977; Toseland, 1977), and in many cases lead to even more extensive improvements (Glass et al., 1976; Thorpe, 1975; Wolfe & Fodor, 1977; Carmody, Note 8; Linehan & Goldfried, Note 9).

The above outcome studies, in general, have typically focused on modifying negative self-statements, increasing positive self-statements, restructuring irrational belief systems, or improving the problem-solving strategies in subjects with regard to assertion situations. Although these investigations are certainly enlightening of possible cognitive factors underlying unassertive behavior, they do not, however, definitively identify which cognitions are most functional in assertion difficulties (cf. Buchwald & Young, 1969). To this end, the following section summarizes major cognitions suggested in the assertion literature.

**Fear of rejection and need for approval.** In their task analysis of assertive behavior Schwartz and Gottman (1976) found that one of the most characteristic features discriminating low and high assertives was the lows' fear of being disliked. Fears of rejection and disapproval have been intimately linked in social anxiety research with high needs
for social approval (Watson & Friend, 1969). According to Heisler and Shipley (1977), these needs attenuate the unassertives' motivation to risk the anger they might anticipate receiving as a result of asserting themselves. In this regard, Heisler and Shipley (1977) as well as others (Lange & Jakubowski, 1976; Liss-Levinson, Coleman, & Brown, 1975) have emphasized instructing clients to include in their assertive expression empathic statements where attention is paid to the feelings of those receiving the assertive message. This is assumed to reduce the risk of angry counterattacks to the client and to enhance the likelihood of approval and acceptance. Indeed, high needs for approval or inordinate fears of rejection have been implicated by a large number of investigators as critical cognitive mediators of assertion problems (e.g. Corby, 1975; Flowers & Booraem, 1975; Hartslock, Olich, & de Wolf, 1976; Lange & Jakubowski, 1976; Ludwig & Lazarus, 1972; Wolfe & Fodor, 1975).

Overconcern for others. Lange and Jakubowski (1976) have suggested that unassertive individuals seem to unduly concern themselves with the impact that their assertion might have on others. They noted that, in general, often clients who fear that others can induce hurt or misery in them (as through rejection, for example) also hold the reciprocal belief that they can cause others to feel upset, miserable, and distressed. This may relate to the findings of several investigators whose subjects labelled assertion as bad, rude, or impolite (e.g. Butler, 1976; Corby, 1975; Janda & Rimm, 1977). In order to protect others from being the recipients of such "nasty" behavior, clients may thus
decide to restrain themselves and suppress their assertive expression (Lange & Jakubowski, 1976):

Schwartz and Gottman (1976) found that low assertives are more concerned about the feelings, needs, and position of others than they are about their own. With respect to this finding, a basic aim, in fact, of assertive training is to engender within the client a healthy belief system which accepts and encourages the expression of his own personal rights. In general, all assertive training procedures inherently involve a cognitive restructuring in that assertion becomes viewed as a good and highly valued behavior rather than a socially undesirable one (Rich & Schroeder, 1976).

**Negative self-evaluation and perfectionism.** Negative self-evaluation has been suggested by researchers as an important cognitive factor undermining assertive functioning (e.g., Galassi, DeLo, Galassi, & Bastieh, 1974; Nietzel et al., 1977). According to Clark and Arkowitz (1975), negative self-appraisals may result from very high self-expectations of performance. In this vein, Ludwig and Lazarus (1972) noted that perfectionism is a common feature among socially inhibited individuals. Indeed, several aspects of perfectionism have been discussed in the assertion literature:

1. Unassertive persons may hesitate to say something unless they know exactly the right words to say (Alberti & Emmons, 1974). Fears of rejection or embarrassment may be plausible contributors to this maladaptive perfectionistic pattern:

2. The client undergoing assertive training often believes that
he must assert himself all the time (Lange & Jaukowsk, 1976; Paulson, 1975). On the contrary, much has been written in the assertion literature stressing that assertive behavior is a choice, rather than a must, to be exercised with discretion and tact in social situations.

3. Just as the unassertive person is highly self-critical and perfectionistic in his demands upon himself, he also places perfectionistic demands upon others, blaming them for their real or imagined shortcomings (Ludwig & Lazarus, 1972). This tendency to blame others is often seen among those who feel that they lack the skills to properly perform certain tasks (Lange & Jakubowski, 1976). Thus, a client who feels unable to refuse someone's demands, for example, may perceive the other as unfair (cf. Eisler, Frederiksen, & Peterson, 1978), and may want to retaliate because the other "should not be that way".

**Fixed personality make-up.** Often unassertive clients believe that their present problematic situation is unchangeable and permanent (Alberti & Emmons, 1974). In this regard, they may view the cause of their difficulty as longstanding, and may expect the factors responsible for its onset to continue influencing them (Lange & Jakubowski, 1976). Rathus and Ruppert (1973) reported that many clients feel firmly entrenched in their well-established unassertiveness, with no hope for altering other people's impressions of them. This cognition concerning a fixed personality make-up appears to be taken into consideration in the standard planning of assertion training. Rich and Schroeder (1976), for example, stated that all assertive training procedures include some form of cognitive manipulation to induce the healthier expectation that unassertive behavior is learned, can be unlearned, and that
assertive expression can be developed. Inspection of the treatment protocols of several outcome studies on assertive training (e.g. Lawrence, 1970; McFall & Lillesand, 1971; Thorpe, 1975) supports this contention. Indeed a learning approach to maladaptive disturbances is the very foundation upon which behavior therapy has always rested.

Assessment of Cognition within the Context of Assertion

Certainly considerable attention has been devoted recently to the nature and role of cognitions as mediators of assertion problems. Yet, despite this fact, relatively little emphasis has been placed upon developing measures and techniques to assess this dimension.

In one context, some researchers have included among their dependent measures psychometric instruments to assess self-esteem (Linehan & Goldfried, Note 9), self-concept (Tolor, Kelly, & Stebbins, 1976), and self-acceptance (Percell et al., 1974). Such variables, in general, have been conceptualized by Bandura (1976) and Marston (1965) as involving instances of positive and negative self-reinforcing verbalizations. These measures, however, are not specific to the area of assertion.

In this vein, Rosenthal and Reese (1976) assessed their clients' perceptions of assertion (own, others', and own as others see it) by means of a semantic differential technique comprising bipolar adjectives of evaluation, potency, and activity. The semantic differential approach was also used by MacDonald (in press), Mehnert (1974), and Eisler, Frederiksen, and Peterson (1978). MacDonald (in press) evaluated whether her subjects could differentiate the construct of assertion from
aggression and submission. Mehnert (1974) determined subjects' concepts of themselves in relationships with other people. Finally, Eisler, Frederiksen, and Peterson (1978) assessed psychiatric patients' perceptions of their interpersonal partners in a series of role-play situations.

In a format rather novel to behavior therapy, Meijers (cited in Meichenbaum, 1976b) examined the importance of self-statements in socially withdrawn children through the use of a TAT-like assessment approach. These children were shown slides of various social interaction scenes of other withdrawn children. They were then asked to report on their thoughts and ideas regarding certain features displayed in the slides; for example, what was happening, the expected outcome, the possible feelings and thoughts of the children shown, and what these children could do to handle the situation. Thus, by means of a projective device, an attempt was made by Meijers to determine the content of his children's "internal dialogue".

Questionnaire measures have also been employed in the assertion literature to assess cognition. Galassi, DeLo, Galassi, and Litz (Note 10) had their assertive training subjects complete a 13-item evaluation questionnaire, constructed for the most part in a Likert scale format. One item asked the subjects whether they had noticed changes in their attitudes towards self-assertion. Eisler, Frederiksen, and Peterson (1978) constructed a brief 5-item questionnaire assessing their clients' expectations of others' reactions towards them in everyday social situations. On a 10 point scale from 0 to 100% clients were asked to estimate how often they expected others to (a) show fear
of them, (b) show admiration or respect, (c) be pleasant and understanding, (d) try to take advantage of them, and (e) be angry or aggressive with them.

Probably the best measure of cognition to date is one reported by Schwartz and Gottman (1976) for assertive-refusal behavior. These researchers developed a 34-item questionnaire consisting of 17 positive self-statements that would make it easier to refuse an unreasonable request and 17 negative self-statements that would make it harder to refuse. Subjects were asked to indicate on a scale from 1 to 5 how frequently these self-statements characterized their thoughts during a preceding role-play situational test (1 = hardly ever, 5 = very often). The content of the self-statements included cognitive categories such as concern about one's self-image, fear of being disliked, and concern for others' versus one's own feelings, needs, and position. An important drawback, however, of this questionnaire is that responses regarding cognitions which are based on role-play performance may not be valid since role-play tests themselves are typically unstandardized and are of questionable validity.

In general, attempts have been made to assess the cognitive dimension of assertiveness. However, they have fallen short on several accounts of providing a good device that can be used consistently in varied populations to screen subjects for, and to measure changes following, therapy. First, no normative data are reported for any of the above-mentioned cognitive measures. Hence, we cannot relate the status of future subjects or clients to some standard distribution.
Second, most measures have been essentially developed for the purposes of specific experiments. They therefore do not represent "pure", independent measures of cognition. Third, none of the measures have been tested for reliability or construct validity. Finally, none provides a comprehensive assessment of all the major cognitions described earlier to be critical mediators of assertion difficulties.

The purpose of the present study was to develop a composite measure of these cognitions within the context of assertion. The Cognition Scale of Assertiveness (see Appendix A) was devised for use with both student and nonstudent populations. Test-retest reliability and several tests of validity were conducted to determine its acceptability according to common standards of psychological measurement (e.g. Anastasi, 1968). It was intended that the Scale provide a brief, yet relatively "pure", measure appropriate to administer alone or as part of an assessment battery for screening and treatment purposes. The present study followed much of the evidence in the assertion literature and limited assertiveness to a specific subclass of response — refusal behavior. Considerable attention has been given to this behavior in outcome studies on assertive training (e.g. Aiduk & Karoly, 1975; Janda & Rimm, 1977; McFall & Lillesand, 1971; McFall & Twentyman, 1973; Thorpe, 1975; Turner & Adams, 1977; Linehan & Goldfried, Note 9). Indeed, data reported by Schwartz and Gottman (1976) have indicated that the inability to refuse unreasonable requests may be strongly related to assertion problems in general.
METHOD

Development of the Scale

Eight items were constructed based on the four major cognition themes of unassertiveness: fear of rejection; overconcern with others' needs and rights, while little concern about one's own; perfectionism; and belief in a fixed personality make-up. Responses to each item are self-reported on a 1 to 7 (strongly disagree to strongly agree) scale. A neutral point is used in the Scale since it was believed that a response neither endorsing nor denying a particular cognition might provide useful information for the researcher or clinician. Six of the items are phrased such that a higher rating indicated greater problems on the cognitive dimension of assertiveness. For the remaining two items a lower rating indicates such problems. This was intended to reduce the likelihood of response sets biasing the respondents' performance on the Scale. A total composite score for "cognitive unassertiveness" is thereby obtained by reverse scoring these latter two items and summing them together with the absolute scores on the other six items.

After the Scale was initially constructed, consensual validation based on content was achieved through the use of three judges (cf. Jones, 1968; Laughridge, 1975). One was a Ph.D. clinical psychologist with eight years of behavior therapy experience in treating client problems relating to assertion. The other two were doctoral candidates in clinical psychology, both of whose primary interests centered on behavioral social skill training. Each judge was asked to evaluate on a dichotomous basis whether the individual items were appropriate or
not for a cognitive dimension of assertiveness. In the event of a negative rating for a particular item by any judge, that item was excluded from subsequent use. Results from this examination showed that all judges were in agreement as to the salience of each item in the Scale. This indicated that the Scale possesses adequate face validity.

**Pilot Investigation**

An initial test of construct validity was conducted on a heterogeneous group of 126 subjects taking a course in experimental psychology at Concordia University. The subject pool was comprised of full-time and part-time students pursuing an undergraduate degree, and also included individuals who were not enrolled in a degree program. Concordia University, in general, has a large enrollment of nondegree persons. They usually are individuals employed in the community and, as such, for purposes of this thesis, they are classified technically as nonstudents.

The Scale was administered in class as part of an assessment battery for a volunteer research project unrelated to the present study. Included as well in this battery was McFall and Lillesand's (1971) Conflict Resolution Inventory (CRI). Validation of the Cognition Scale of Assertiveness was approached through the method of contrasted groups (Anastasi, 1968). On the basis of an obtained normal distribution of scores on the CRI, high and low assertive groups were formed. They were represented respectively by scores which fell beyond one standard deviation above and below the CRI mean. The mean Scale scores for the
high and low assertive groups were then compared using a nondirectional $t$ test.

A highly significant difference was found, $t(41) = 3.630, p < .001$, between the performance of the high and the low assertive subjects. Inspection of the data revealed that the low assertives indeed reported more difficulties with regard to the cognitive dimension of assertion as described by the Scale.

Preliminary evidence for construct validity was thus obtained in this pilot investigation. It was therefore decided to conduct subsequent studies in which normative, reliability, and further validity data would be generated. Since the subject population in this pilot work was heterogeneous in terms of its student and nonstudent composition, it was also decided to examine the utility of the Scale for these populations separately. Several researchers have stressed the fact that assessment of measures and techniques are needed on diverse populations (e.g. Heimberg et al., 1977; Hersen, Eisler, & Miller, 1973; Rich & Schroeder, 1976). Furthermore, with respect to students, there are indications that the nature of assertiveness may be influenced by factors such as age or educational level (cf. Rathus & Ruppert, 1973). The present investigation therefore studied two populations of students, junior college and university.

Subjects

All subjects in the studies to be reported were volunteers recruited from academic institutions in Montreal. University students and non-students were drawn from Concordia University. The latter subject group
was pursuing interest courses and was not enrolled in a degree or certificate program. A third group consisted of junior college students from Marianopolis and Dawson Colleges. All subjects were requested to complete a general information form on which they stipulated primary occupation and educational status (see Appendix B). The mean ages of the junior college, university level, and nonstudent populations were 17.5 (range 16-19), 22.7 (range 20-31), and 27.2 (range 21-53) respectively. Different samples of each population were used for each study and for each phase within any particular study.

Study 1

Procedure

Normative data. Normative data were collected on 140 junior college, 219 university level students, and on 223 nonstudents. In addition, scores of males and females within each population were considered separately.

Test-retest reliability. Reliability data were obtained over a 2-week interval from 65 junior college, 73 university level students, and from 61 nonstudents. Pearson product-moment correlation coefficients were computed for each population on total scores for the two administrations of the Scale.

Construct validity: Assertiveness. Construct validity of the Scale was evaluated with 140 junior college, 112 university, and 110 nonstudents. In addition to completing the Scale, all subjects took the Conflict Resolution Inventory (CRI) and the Rathus Assertiveness Schedule (RAS). As in the pilot investigation, validation of the Scale
was again approached through the method of contrasted groups. The frequency distributions of scores on the CRI and the RAS were used independently to define high and low assertive subjects in each population. Since both distributions were essentially normal, cut-off points for extreme groups were set at one standard deviation above and below the respective means. The mean Scale scores for high and low assertives with respect to the CRI and to the RAS were then compared.

Results and Discussion

Normative data. Mean and standard deviation scores for each population are shown in Table 1. In each case males scored slightly higher than females. However, nowhere was this difference significant (t tests, all p's > .05). This finding is generally consistent with most reports in the assertion literature regarding sex differences in overall assertiveness measured on self-report inventories (e.g., Hollandsworth, Jr. & Wall, 1977) and behavioral tests (e.g., Kazdin, 1974, 1976; McFall & Marston, 1970).

Test-retest reliability. The Pearson product-moment correlation coefficients for the junior college, university, and nonstudent populations were .538, .711, and .762 respectively. Helmstadter (1964) has suggested that there is no absolute criterion with which to judge the adequacy of a test's reliability. He did, however, recommend evaluating the merit of a particular measure by comparing its reliability coefficient to those of other measures tapping the same "trait". Although no other standardized cognition measures of assertion exist, a number of instruments have been developed which do assess belief
Table 1
Normative Data

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<td>25.27</td>
<td>4.93</td>
</tr>
<tr>
<td>females</td>
<td>85</td>
<td>25.09</td>
<td>6.17</td>
</tr>
<tr>
<td>both</td>
<td>140</td>
<td>25.16</td>
<td>5.70</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>males</td>
<td>121</td>
<td>25.09</td>
<td>6.59</td>
</tr>
<tr>
<td>females</td>
<td>98</td>
<td>23.73</td>
<td>6.44</td>
</tr>
<tr>
<td>both</td>
<td>219</td>
<td>24.46</td>
<td>6.66</td>
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<tr>
<td>Nonstudent</td>
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<td></td>
<td></td>
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<tr>
<td>males</td>
<td>120</td>
<td>23.79</td>
<td>7.35</td>
</tr>
<tr>
<td>females</td>
<td>103</td>
<td>22.69</td>
<td>6.55</td>
</tr>
<tr>
<td>both</td>
<td>223</td>
<td>23.28</td>
<td>7.00</td>
</tr>
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</table>
systems and thinking styles in general (e.g. Fox & Davies, 1971; Jones, 1968; Shorkey & Whiteman, 1977). Relative to the reliability coefficients of such instruments, the Cognition Scale coefficients for both university students and nonstudents indicate adequate consistency of scores, while that of the junior college population does not.

**Construct validity: Assertiveness.** Separate t tests were conducted in each population on mean Scale scores of CRI- and RAS-determined high versus low assertive subjects. Results based on the CRI index are demonstrated in Table 2. Significant differences were obtained for junior college, $t (39) = 2.039$, $p < .05$, university level, $t (40) = 2.138$, $p < .05$, and nonstudent populations, $t (35) = 4.642$, $p < .001$. As seen in Table 2, however, the most impressive data were obtained in the nonstudent group, while less clinically meaningful results occurred in both student groups. Mean differences in cognition scores were small between high and low assertives in junior college; and between high and low assertives in university. Standard deviations, on the other hand, were relatively large. Thus, in these contexts, the diagnostic utility of the Cognition Scale may be limited.

Validity results based on the RAS index are shown in Table 3. Again, significant differences in mean cognition scores were found between high and low assertive junior college, $t (37) = 2.106$, $p < .05$, university, $t (36) = 3.624$, $p < .001$, and nonstudent subjects, $t (33) = 4.5181$, $p < .001$. Inspection of Table 3 reveals similar limitations as before regarding the Scale's validity in the junior college population. Still impressive findings were obtained with nonstudents. However,
Table 2
Cognition Scale of Assertiveness Mean and Standard Deviation Scores for High and Low Assertives Categorized by the Conflict Resolution Inventory

<table>
<thead>
<tr>
<th>Population</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior College</td>
<td>Low assertive</td>
<td>19</td>
<td>27.53</td>
<td>5.67</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>22</td>
<td>23.95</td>
<td>5.52</td>
</tr>
<tr>
<td>University</td>
<td>Low assertive</td>
<td>22</td>
<td>26.55</td>
<td>4.70</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>20</td>
<td>22.60</td>
<td>6.90</td>
</tr>
<tr>
<td>Nonstudent</td>
<td>Low assertive</td>
<td>18</td>
<td>31.83</td>
<td>6.71</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>19</td>
<td>22.37</td>
<td>5.67</td>
</tr>
</tbody>
</table>
Table 3
Cognition Scale of Assertiveness Mean and Standard Deviation Scores for High and Low Assertives Categorized by the Rathus Assertiveness Schedule

<table>
<thead>
<tr>
<th>Population</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior College</td>
<td>Low assertive</td>
<td>18</td>
<td>26.78</td>
<td>5.86</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>21</td>
<td>23.19</td>
<td>4.78</td>
</tr>
<tr>
<td>University</td>
<td>Low assertive</td>
<td>18</td>
<td>27.83</td>
<td>6.06</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>20</td>
<td>21.30</td>
<td>5.05</td>
</tr>
<tr>
<td>Nonstudent</td>
<td>Low assertive</td>
<td>15</td>
<td>30.67</td>
<td>5.34</td>
</tr>
<tr>
<td></td>
<td>High assertive</td>
<td>20</td>
<td>21.50</td>
<td>4.65</td>
</tr>
</tbody>
</table>
results providing greater validational support occurred this time in the university group. Here the mean difference score between high and low assertives was now greater than their standard deviations.

On the basis of these results, it appears that the Cognition Scale possesses good construct validity for the nonstudent and university populations. Validity was not established, however, in the junior college group. It may be that problems in assertiveness for these subjects are more a matter of a skill deficit rather than a cognitive mediating process. Alternatively, cognition may play an important role in assertive difficulties for these students, but their younger age may reflect a basic immaturity in the development of the cognitive dimension so that contrasted groups of high and low assertives may not be discriminable:

In any case, since neither adequate reliability nor validity data accrued thus far for the junior college subjects, it was decided to exclude this group from subsequent studies and focus more attention on the university and nonstudent populations.

Study 2

This study was designed to further test the construct validity of the Scale using social anxiety as a theoretical factor relevant to the cognitive dimension of assertiveness. As discussed earlier, numerous empirical investigations on social anxiety have indeed demonstrated the involvement of those cognitive elements thought to mediate problems in assertion. For purposes of this study, social anxiety was
defined according to Watson and Friend's (1969) Social Avoidance and Distress (SAD) scale.

SAD scale. This is a 28-item true-false inventory measuring (a) tendencies to avoid being with or talking to others, and (b) reported experience of negative emotions such as tension, anxiety, and distress in social interactions. Test-retest reliability over 1 month was .68, a value deemed "sufficient" by Watson and Friend (1969). Construct validity was established through correlations with Taylor's (1953) Manifest Anxiety Scale, social and evaluative parts of the Endler-Hunt (1966) S-R Inventory of Anxiousness, Rotter's (1966) Locus of Control Scale, Alpert and Haber's (1960) Achievement Anxiety Scale, Paivio's (1965) Audience Sensitivity Index, and subscales of Jackson's (1966a, Note 11) Personality Research Form. Additional validity was demonstrated in research by Arkowitz, Lichtenstein, McGovern, and Hines (1975), Borkovec, Stone, O'Brien, and Kaloupek (1974), and Miller and Arkowitz (1977).

Procedure.

The SAD scale and the Cognition Scale of Assertiveness were administered to 167 university students and 113 nonstudents. From the resulting distribution of scores on the SAD Scale in each population, the highest 25% were defined as high-anxious and the lowest 25% as low-anxious subjects. Quartiles were used to classify subjects rather than standard deviation since the SAD scale distribution was positively skewed. The mean Cognition Scale scores of high and low anxious subjects were then compared.
Results and Discussion

Mean difference scores were analyzed using t tests. Results are shown in Table 4. Significant differences were obtained for high versus low socially anxious subjects in both university, t (50) = 5.159, p < .001, and nonstudent t (54) = 3.824, p < .001, populations. High-anxious subjects reported greater problems on the cognitive dimension of assertiveness than their low-anxious counterparts. Thus the Cognition Scale can meaningfully discriminate contrasting groups of high and low socially anxious individuals. In this regard, further construct validity is demonstrated.

Study 3

From the studies reported thus far, support for the Scale has been generated regarding its reliability and validity. The evidence suggests that it may be used as a diagnostic instrument to screen individuals having problems in the cognitive dimension of assertiveness. The utility of an assessment device in practice, however, would depend further on its ability to detect changes occurring through therapeutic intervention. In a final study a controlled test was therefore made of the Scale's sensitivity to change as a result of an optimum assertion training program.

Subjects

Subjects were 15 university students (5 male, 10 female), and 9 nonstudents (all female). They were selected from a pool of 62 volunteers for a program of assertion training offered in the psychology department.
Table 4

Cognition Scale of Assertiveness Mean and Standard Deviation Scores for High and Low Socially Anxious Subjects Categorized by the Social Avoidance and Distress Scale

<table>
<thead>
<tr>
<th>Population</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially Anxious</td>
<td>26</td>
<td>26.73</td>
<td>6.36</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially Anxious</td>
<td>26</td>
<td>18.65</td>
<td>4.82</td>
</tr>
<tr>
<td>Nonstudent</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially Anxious</td>
<td>28</td>
<td>24.25</td>
<td>5.95</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially Anxious</td>
<td>28</td>
<td>17.75</td>
<td>5.71</td>
</tr>
</tbody>
</table>
at Concordia University. All had responded to class announcements, billboard notices, and advertisements in the campus newspaper. Of the initial 62 volunteers, 39 were students (8 male, 31 female), and 23 were nonstudents (5 male, 18 female). Selection into the program was contingent upon the following criteria: (a) obtaining Cognition Scale scores above the mean for university and nonstudent populations (i.e. reporting "cognitive unassertiveness"), (b) not in therapy elsewhere, (c) absence of severe psychopathology, (d) motivation to attend all sessions, and (e) no scheduling difficulties.

Procedure

Initial contact. All respondents who expressed interest in the program were interviewed individually by the author. They were told that the program represented the final stage in a research project which the psychology department had been conducting over the past few years on assertion training. It was described that the procedures to be used had all demonstrated beneficial results when used alone in previous work. Now they were to be used together so that information could be generated regarding the impact of a total treatment package for assertion training. Subjects were also informed that the focus of the program would be to help them acquire skills and gain comfort in asserting themselves.

In the interview, the author ensured that subjects met the screening criteria. As well, a number of forms were completed, including a general information sheet (see Appendix C) and the Cognition Scale of Assertiveness.
**General experimental design.** Subjects were randomly assigned to either an assertion training or a no-treatment control condition, with 12 subjects in each. The experimental period extended over a course of 7 weeks. It was originally intended that separate studies be conducted for the university and nonstudent subjects. However, this plan was abandoned due to an insufficient number of appropriate nonstudent volunteers. Hence a single subject pool was utilized. The dependent measure of interest, the Cognition Scale, was administered approximately 2 weeks before and 1 week after the experimental period.

**Treatment conditions**

**Assertion training.** Assertion training was conducted in two groups of six subjects. There were 7 weekly 2-hour sessions. The treatment consisted of a "package" involving cognitive and behavioral procedures, standardized according to the general formats employed by Linehan and Goldfried (Note 9) and Thorpe (1975). Procedural details from Lønne and Jakubowski (1976), McFall and Twentyman (1973), and Wolfe and Fodor (1975) were also incorporated into the treatment.

Cognitive techniques focused upon identifying and modifying irrational beliefs and negative self-statements, and enhancing positive self-statements. In addition, subjects were aided in problem-solving strategies to define difficult assertion situations, generate possible solutions, and become aware of potential consequences for various actions. Behavioral procedures included therapist and group modeling, coaching, rehearsal, live feedback, and verbal reinforcement. In vivo self-monitoring and homework tasks, both cognitive and behavioral, were
also assigned.

An attempt was made for treatment to cater to the needs of each individual. Yet extensive use was also made of the group process. In general, although the therapist initially took the lead in the application of treatment, group participants became more active agents of their own change as sessions progressed.

No-treatment control. Subjects in this condition were told that a time delay for treatment was necessary due to the fact that more subjects had applied for the program than could be accommodated. One week after the completion of the assertion training groups they were called and reassessed on the Cognition Scale. Reasons were given that reassessment was necessary since more up-to-date information was desired before they began treatment. Assertion training was then offered these subjects.

Therapist. Assertion training was conducted by a male advanced graduate student in clinical psychology. He was "blind" as to the true purpose of the study. His training was behaviorally oriented and he had 3 years of experience in the application of behavioral and cognitive procedures to individuals and groups. His primary interest area was in social skill training. A detailed session-by-session protocol was prepared (see Appendix D), and, in addition, the therapist was assigned to read Linehan and Goldfried (Note 9), Lange and Jakubowski (1976), McFall and Twentyman (1973), Thorpé (1975), and Wolfe and Fodor (1975). Reading and protocol material were reviewed with the author in 6 hourly meetings. Weekly consultation sessions were held as well during the progress of the assertion training group.
Results and Discussion

Of the original 24 subjects who were selected to participate in the study, 8 failed to complete it. Among these 8 were 3 subjects from each of the assertion training groups and 2 control subjects. Data were therefore analyzed for a total of 6 assertion training subjects and 10 no-treatment controls.

In order to determine whether conditions differed from each other on the Cognition Scale prior to treatment, a t test was performed. No significant difference occurred, indicating initial comparability of treatment conditions.

Pre to post difference scores on the Scale were evaluated statistically by means of a t test. Performances of each condition prior to and after treatment are shown in Figure 1. A highly significant difference on change scores was obtained between the assertion training and the no-treatment control groups, t (14) = 5.972, p < .001. Inspection of the data revealed that whereas negligible improvement occurred in control subjects, those receiving assertion training experienced substantial positive change. In fact, the posttreatment mean of assertion training subjects (15.17) represented a value greater than one standard deviation below the mean of "cognitive unassertiveness" for normative samples of university and nonstudent populations (Study 1). Verbal reports obtained following the assertion training program provided corroborative evidence that substantial cognitive change indeed occurred with respect to assertive functioning.

The findings of this study attest to the fact that the Scale is
Figure 1. Cognition Scale of Assertiveness mean scores pre- and posttreatment (AT = Assertion training; C = No-treatment control).
sensitive to change as a result of an empirically derived program of assertion training. Further support is thus indicated for its utility. Implications for the researcher or clinician suggest that the Scale provides a valid means of assessing the status of cognitive factors in outcome work with low assertive individuals.
General Discussion

Trexler and Karst (1973) have commented that the goal of rational-emotive psychotherapy is to change cognitions as well as overt behavior. It appears that their comment is also applicable to behavior therapy (cf. Ledwidge, 1978). Thus, if both behavior and cognition are to be modified, some means of assessing each dimension should be available. Within the area of assertion numerous descriptors of behavior, both self-report and overt, have been developed and used extensively. Yet a valid measure has not existed for researchers and clinicians to gauge the status of their clients' cognitive thinking styles and belief systems. The results of the present thesis suggest the use of the Cognition Scale of Assertiveness as such a measure. Tests of reliability and validity indicated that the Scale conforms to psychometric standards for test use. In addition, the utility of the measure was demonstrated for use in outcome work on assertion training.

Assertion training is not a unitary technique. Rather, effective therapy seems to comprise a number of procedures employed as a treatment package for unassertive individuals (Rimm & Masters, 1974). The package used in the present research (Study 3) consisted of cognitive as well as behavioral components. Evidence suggests that this represents the optimum approach in treating problems of assertion (e.g. Linehan & Goldfried, Note 9). It was not possible to determine from Study 3 what components were responsible for eliciting changes in cognition. Certainly the cognitive procedures may have lead to a modification of self-statements such that more adaptive thinking.
styles and belief systems ensued. Indeed cognitive therapy has shown much promise in the treatment of a variety of problems (e.g. Goldfried, Linehan, & Smith, 1978; Moleski & Tosi, 1976; Shaw, 1977; Thorpe, Amatu, Blakey, & Burns, 1976; Trexler & Karst, 1972; Wein, Nelson, & Odom, 1975). However, cognitive changes may not only occur through specific cognitive interventions. There are suggestions in the assertion literature that behavioral techniques may produce cognitive changes as well. For example, MacDonald (1975) has stated that rehearsal may be a very effective procedure for eliciting self-attitude change. Ludwig and Lazarus (1972) offered that rehearsal and homework assignments assist the client in learning a more rational and adaptive form of "self-talk". Cognitive changes have also been implicated in the course of self-monitoring (Carmody, Note 8), coaching (Schwartz & Gottman, 1976), and modeling (Wolpin, 1975). All of these behavioral procedures are frequently used and well-researched components of assertion training. Nevertheless, definitive evidence regarding the impact of these or any other techniques on cognition is presently lacking because no measure has been available to assess this dimension of assertiveness. The Cognition Scale may thus aid in identifying components of assertion training that produce cognitive change. In this regard, it may also prove to be useful in testing the efficacy of new procedures or approaches developed in the future to enhance cognitive assertive functioning.

Although it is possible that an individual presenting himself for assertion training may manifest difficulties in the behavioral, affective, and cognitive dimensions of assertiveness, it is perhaps more likely
that a particular aspect of the problem will be paramount. Thus, an individual may show disturbances or deficits primarily in the cognitive dimension. In this vein, Wolfe and Fodor (1975) argued that irrational beliefs constitute the major difficulty of women in assertion training. Curran (1977) has stated that one of the critical shortcomings of the social skill literature is that minimal attention is paid to defining specific subject populations based on the particular nature of their difficulty. Emphasis is increasingly being placed on a subject-treatment interactional approach to therapy. Paul (1967), probably best of all, summarized the task for treatment research: The goal is to find out "what treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances?" (p.111).

The Cognition Scale of Assertiveness may perhaps aid in providing some answers to this crucial question.

The results of the studies conducted in the present thesis demonstrated the reliability, validity, and utility of the Scale for university-level students and nonstudents. Although for some problems (e.g. small animal phobias) a focus on student populations is not regarded as clinically relevant (Bernstein & Paul, 1971), there are suggestions that assertion problems in students are indeed of major importance and concern (Martinson & Zerface, 1970; Rathus & Ruppert, 1973; Galässi, DeLo, Galassi & Litz, Note 10; Shmurak, Note 12). In the present investigation, however, data were obtained that did not support the use of the Scale with younger, junior college level, students. Reasons for this finding are not easily identifiable. Yet there exists at least two possibilities.
One is that cognitions may be important factors in the assertive functioning of these individuals, but the endorsement or relevance of certain belief systems and thinking styles is inconsistent. This possibility is suggested by results showing a low test-retest reliability coefficient for the junior college population. Another possibility is that the cognitive dimension is not firmly established at this particular age or educational level. In this regard, Study 1 revealed poor construct validity for the Cognition Scale in junior college students. These two hypotheses, however, need not be completely independent. Individuals at the junior college level are certainly faced with situations very different from those experienced while in secondary school. Many adjustments are required by students entering this phase of academic life. Typically demands are made for greater personal independence and self-discipline. Interpersonal relationships take on a new meaning as dating, for example, becomes more prominent and as more mature behavior is expected by authority figures. In short, new thinking styles and belief systems may be supplanting the old and, until they do, the students may be in a state of "cognitive flux". Certainly more research is needed in the area of assertion with younger individuals. Empirical findings suggest that "normal" adults experiencing problems in assertion may be hampered by maladaptive belief systems (e.g. Linehan & Goldfried, Note 9). Investigations with hospitalized adult psychiatric patients stress the need to treat actual behavior skill deficits (e.g. Hersen, Eisler, Miller, Johnson, & Pinkston, 1973). Yet not nearly enough is known about the nature of assertion difficulties in populations of
adolescents, for example, or children.

The fact that social anxiety reflected cognitive problems of individuals with respect to assertion merits some consideration in this discussion. Although Wolpe (1958) originally conceptualized lack of assertive behavior as being a manifestation of conditioned interpersonal anxiety, this position has not gone unchallenged in the assertion literature. Some criticism stems from the lack of success in increasing assertive behavior through an anxiety-reduction procedure such as systematic desensitization (Thorpe, 1975). However, although this technique is effective in many types of problems, it is not usually the treatment of choice for anxiety elicited in social interactions (Wolpe, 1973). Criticism of the conditioned anxiety model has also arisen from research demonstrating results contrary to an anxiety-inhibition hypothesis. For example, Morgan (1974) found that several of his subjects reported high social fearfulness concomitantly with high assertiveness. He speculated that these individuals may be behaving assertively so as to conform with social expectations and thus gain social reinforcement. Indeed, Gambrill and Richey (1975) defined a group of assertives which they labelled "anxious-performers". Furthermore, they found that such individuals were notable among clients who sought assertion training. Thus, whereas the anxiety-inhibition model of unassertiveness may not be entirely correct, the likelihood still exists that anxiety may play some role in assertion problems. Persons may know what to say and how to say it, but may feel terribly uncomfortable and anxious in situations calling for assertive behavior. Gambrill and
Richey (1975), in fact, stated that one's anxiety appears to be a better predictor of potential clinical candidacy than the frequency with which actual assertive behaviors are emitted.

The relationship of "internal variables" to overt behavior is certainly open to question. The literatures on fear (e.g. Lang, 1969; Lick & Katkin, 1976; Rachman & Hodgson, 1974) and on assertion (e.g. Holmes & Horan, 1976; Kazdin, 1976; Twentyman & McFall, 1975) are consistent in that low correlations are typically found between these factors. This does not, however, indicate that one is more or less important than another in understanding and treating the particular problem. Self-reports, physiological indices, and behaviors reflect different response systems, each of which may react differently according to the individual and to the situation (Goldfried & Sprafkin, 1976). Further research is necessary to study their complex interactions in determining the functioning states of individuals. In this regard, the presently developed Cognition Scale may aid future investigations into the complex phenomenon of assertiveness.

It is interesting to hypothesize about the ramifications of the particular cognitions sampled in the Scale for assertion situations in general. The focus of the Scale was on a limited subclass of assertion—refusal of unreasonable requests. Yet, as noted earlier, this specific type of assertiveness may be strongly related to general assertion problems. Indeed, most clinical and empirical investigations on assertion training deal with refusal behavior if not solely, then as a major target of their therapeutic endeavors. In the present thesis construct validity
was established for the Scale on the more global Rathus Assertiveness Schedule. Hull and Hull (in press) derived 12 factors from their factor-analytic study of this self-report inventory. These involved instances of both positive and negative assertiveness. Although the present results cannot determine whether the sampled cognitions are relevant for isolated classes of assertiveness other than refusal behavior, the data do indicate that the Scale is valid for assessing general assertion per se. Future research would be warranted to investigate the utility of the Scale in studies of other subclasses of assertive behavior.

A final consideration concerns the content of the Scale. Items were generated from a careful analysis of the assertion literature. The aim of this investigation was to develop a composite and brief measure of cognition in assertion. Its brevity was determined with the harried researcher (and subject-client) in mind. The validity of the Scale confirms the importance of the four cognition themes (fear of rejection, overconcern for others, perfectionism, belief in a fixed personality make-up), combined, in assertion problems. It is certainly possible that additional themes may arise through future systematic investigations. Modifications to the structure of the instrument may then be attempted. Avenues of research on the Scale may also examine specific parameters of each cognition so that more information may be gleaned regarding such issues as its origin, development, maintenance, and treatment. Hopefully this thesis represents an impetus to further explore the extremely complex but crucial area of cognition within the context of assertion.
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APPENDIX A

Cognition Scale of Assertiveness

INSTRUCTIONS: This is an inventory of feelings and beliefs about dealing with requests that others make of you. I would like you to consider each statement, and to indicate how strongly you agree or disagree with it at this time. Please mark in the space next to each statement the number best describing how you feel, according to the following code:

1. I Strongly Disagree
2. I Moderately Disagree
3. I Slightly Disagree
4. I Neither Disagree Nor Agree
5. I Slightly Agree
6. I Moderately Agree
7. I Strongly Agree

1. Generally speaking, no one has the right to make a request of me which I consider unreasonable.

2. The fact that I might have had trouble "saying no" to people in the past probably means that my personality make-up will not allow me in the future to go against someone else's wishes.
3. If I were to refuse an unreasonable request from someone and he/she became annoyed with me, I would probably wish that I hadn't refused in the first place.

4. Someone who makes unreasonable requests of others can only expect to be told off in no uncertain terms.

5. If I do not wish to comply with a request which someone has made of me, I should go ahead and "say no" even if I might not feel perfectly adept at saying it. (R)

6. Refusing to do what someone else asks of you is a sure way of losing friendships.

7. If someone became angry with me because I did not fulfill their request, I should not feel upset because I have the right to refuse what I don't want to do. (R)

8. If I refuse a request which someone has made of me, this means that I have rejected him/her as a person.

(R) = Reverse scored
APPENDIX B

Subject Information Sheet
for Studies 1 and 2

AGE

SEX

OCCUPATION

EDUCATIONAL STATUS

PLACE OF BIRTH

YEARS IN CANADA

LANGUAGE USUALLY SPOKEN
APPENDIX C

Subject Information Sheet
for Study 3

NAME: ___________________________ EDUCATIONAL STATUS: ___________________________

ADDRESS: ___________________________ OCCUPATION: ___________________________

PLACE OF BIRTH: ___________________________

TELEPHONE NUMBER(S): ___________________________ YEARS IN CANADA: ___________________________

AGE: ___________________________

SEX: ___________________________

MARITAL STATUS: ___________________________

LANGUAGE USUALLY SPOKEN: ___________________________

IN Volvement (past or present) in group or individual therapy: ___________________________

What times are convenient for you to come to Concordia:

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APPENDIX D

Assertion Training Treatment:

Session-By-Session Protocol

Session 1:
- Introduce principles and mechanics of group
  - length (7 sessions, 2 hours each)
  - theme (skill and cognitive deficits)
  - not a sensitivity or encounter group;
    behaviorally-oriented; dealing with everyday
  difficult situations. Weekly progression so
  attendance important. Cohesion built on group
  acceptance, trust, honesty, confidentiality,
  support, positive feedback.
  - need for self-monitoring, homework
  - techniques used (role-playing - standard situations
    and personal experiences; modeling, feedback, etc.)
  - advantages of group treatment

Members introduce themselves and give some brief background
on area of study, work, residence for example. Ask how
they felt about introducing and talking about selves. Use this
as example of anxiety and assertion.

Mini-lecture on assertion: definition
- causes of nonassertion
- need for practice
Role-play of standard situation with leader (antagonist) and group member (protagonist). Leader demonstrates assertive response. Discuss how it is assertive - introduce and describe importance of verbal and nonverbal components.

Do assertive role-play of another standard situation.

Group and leader comment on components.

Redo role-play demonstrating unassertive, aggressive responses. Show distinction between assertion/unassertion/aggression.

Consequences of each for "actor" and "acted upon".

Discussion of rights, choices; responsible assertive behavior.

Ask group about their own personal examples of assertive, unassertive, aggressive behavior.

Assign record-keeping of assertive, nonassertive situations (e.g. date, time, place, who present, what happened, duration)

Assign homework (for this session might be to observe other people interact; note verbal and nonverbal messages; define as assertive, unassertive, aggressive)
Session 2: Brief review of homework

Brief discussion of record-keeping

At this stage, analysis of homework, record-keeping determined by level of group. More complex as sessions progress. In general, reward success. If failure, what prevented assertion, what might do to improve. Save personal situations for later role-play, etc.

Problem-solving approach to difficult situations:

a general cognitive strategy for assertion.

Role-play of standard situation; 2 members of group – others observe. Group, therapist coaching, feedback, reinforcement. Role reversal.

Once getting into it, whole group practices in dyads or triads. Group coaching, reinforcement.

Assign record-keeping as before.

Homework

Buddy system encouraged (e.g. members can call each other between sessions to reinforce, or get friend to help monitor)
Session 3: Brief discussion of homework and record-keeping

Irrational beliefs, self-statements, and other cognitive involvements.

Demonstrate situation: maladaptive thoughts, what results
: appropriate thoughts, what results

Cognitions not treated as intellectual exercise, but get to gut.

Present situation to member; ferret out maladaptive thoughts, do rational restructuring.


Work up to group role-playing in dyads or triads.

Assign record-keeping as before.

Homework (once a day go through cognitive restructuring process for difficult situation that happened that day)
Session 4: Discuss homework and record-keeping

Emphasize cognitions again.

Role-play etc. of members' personal situations.
Coaching of cognitions and behaviors.

Assign record-keeping (start to include self-statements)

Homework

Sessions 5 and 6: Discuss homework and record-keeping

Continuation of cognitive-behavioral approach.
Role-play etc. of personal situations.

Assign record-keeping (cognitive-behavioral)

Homework

Session 7: Discuss homework and record-keeping
Continuation of cognitive-behavioral approach.
Role-play etc. of personal situations.

Review of principles, cognitions, problem-solving, etc.
Stress continuation of record-keeping, environmental structuring for social reinforcement.
Review of what has changed in members and how difficult situations in the future can be handled through use of procedures discussed and practiced in group.