

Personality Correlates and Situational Determinants
of Self-Report and Role-Play Assertion

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ABSTRACT

PERSONALITY CORRELATES AND SITUATIONAL DETERMINANTS OF SELF-REPORT AND ROLE-PLAY ASSERTION

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Whereas previous studies have focused on personality correlates or situational context as important factors in assertion, the present study examined both the individual and combined effects of personality functioning and situational context as possible influences on assertion. Personality variables studied were fear of disapproval, interpersonal anxiety, self-esteem, locus of control, and depression. Ninety-six male and female undergraduates completed a battery of personality inventories, self-report (RAS, CSES) and role-play (modified BAT-R) measures of assertion.

Consistent with prediction, individuals who reported themselves as most assertive also reported less fear of disapproval, less interpersonal anxiety, greater self-esteem, and less depressive symptomatology.

Level of assertion related most strongly to Personal, Social, and, surprisingly, Physical Self subscales of the Tennessee Self-Concept Scale. More assertive individuals also responded least like psychiatric patients, in general, and neurotic patients in particular, on items previously shown to differentiate clinical from nonclinical samples. No relationship was found between self-report level of assertion and locus of control.

Contrary to prediction, personality measures and role-play assertion were unrelated. Interpersonal anxiety was, however, shown to interact with situational context in determining overall level of assertion. Situational factors studied were type of assertive situation (positive vs. negative), as well as sex (male vs. female) and familiarity (familiar vs. unfamiliar) of the stimulus-person. Scores on the Social Anxiety and Distress Scale were used to dichotomize individuals into high- and low-anxiety groups.

As predicted, situational effects were both more pronounced and markedly different for high- versus low-anxiety individuals. Findings suggest that assertiveness-training programs might do well to emphasize different types of interpersonal situations for individuals varying in initial level of anxiety.

Results support the relevance of both cognitive-personality functioning and situational context as important factors in understanding assertive versus nonassertive behaviour. Findings also indicate that relationships among personality variables and assertive behaviour may be obscured by failure to consider specific aspects of the situational context within which the individual is required to assert. The

differential likelihood of anticipated, negative consequences for self-assertion -- both vis-a-vis external, social reactions from others and internal, psychic conflicts over aggression -- are discussed as possible factors underlying situational influences on assertion.

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INTRODUCTION

During the past decade, the subject of assertiveness and assertiveness-training has received increasing attention from researchers and clinicians. This rapid rise in interest is apparent both in the growing number of assertiveness-training programs that have sprung up across North America, as well as in the immense acceleration of books and articles that have recently been written.

In an extensive review of the assertiveness-training literature, Brown and Brown (1980) note that of 344 reports published in the 35-year time period between January 1942 and December 1977, "fully 63% ... have appeared since 1975, and between 83% and 84% have appeared since 1972" (p. 266). Similarly, Harris and Brown (1979) observe that the recently growing popularity of assertiveness-training as a major topic of interest for therapists, researchers, and writers "is evidenced by the fact that articles related to assertiveness indexed in Psychological Abstracts increased from 20 in 1973 to 60 for the first six months of 1977 with a total of 191 in this 4¹/₂-year period" (p. 181).

A careful review of the content of the assertiveness literature reveals, however, that despite the increasingly large number of works being written, the range of assertiveness issues being studied has remained surprisingly narrow. To date, the majority of theoretical, descriptive, and empirical works on assertion have been concerned primarily with issues related to:

1. the definition of verbal (content) and nonverbal (stylistic) components of assertive behaviour;
2. the development of new and improved measurement techniques for screening individuals in need of assertiveness-training and/or for evaluating the outcome of treatment intervention, and

3. the design, implementation, and evaluation of numerous assertiveness-training programs, most of which employ a wide variety of treatment procedures (e.g., rehearsal, role-playing, therapist-modeling, coaching, instructions, group feedback, cognitive restructuring, and homework or 'in-vivo' assignments).

A number of excellent review articles (Bodner, 1975; Galassi & Galassi, 1978; Heimberg, Montgomery, Madsen, & Heimberg, 1977; Hersen & Bellack, 1976; Hersen, Eisler, & Miller, 1973; Jakubowski & Lacks, 1975; Rich & Schroeder, 1976) provide comprehensive summaries of work in these areas.

The importance of these issues notwithstanding, it is interesting to note that, in contrast, very little attention has been paid to examining the potential cognitive-personality variables which may be associated with the initial development and/or subsequent maintenance of assertive versus nonassertive behaviour. The marked paucity of research in this area is particularly surprising when one considers the heavy emphasis placed on these factors by early theoretical and clinical originators of the assertiveness concept (Salter, 1949; Wolpe, 1958). More recent authors have also emphasized the potential importance of cognitive-personality variables as psychological determinants and/or sequelae of individual differences in assertiveness (Hammen, Jacobs, Mayol, & Cochran, 1980; Heimberg & Becker, 1981; Hersen & Bellack, 1976; Kelly, Kern, Kirkley, Patterson, & Keane, 1980). A brief historical review of the literature on assertiveness and assertiveness-training should serve to highlight this point, while at the same time providing some insight as to the types of cognitive-personality variables one might expect to bear relevance to assertive behaviour.

Historical Perspective

Andrew Salter. In 1949, Andrew Salter published his book Conditioned Reflex Therapy. This book has since come to be regarded as the beginning of an ever-growing literature on assertiveness and assertiveness-training. Although Salter (1949) himself did not use the word assertiveness, his work does provide what are now generally accepted to be the first clinical descriptions of assertive and nonassertive behaviour. These descriptions of what Salter (1949) termed 'excitation' (assertion) and 'inhibition' (nonassertion) are important in that they provide the basis for most later definitions. They will thus be reviewed here in some detail, with subsequent definitions to be discussed at a further point in the Introduction.

According to Salter (1949), the essence of excitation was the honest, spontaneous, and direct expression of emotion. An excitatory (assertive) individual was said to be one who enjoyed emotional freedom -- one who not only felt but felt free to communicate and act upon these feelings. In contrast, the inhibitory (nonassertive) individual was said to be one who had learned to suppress his/her emotional expressivity. This inhibition was said to result from an emotional conditioning which took place during childhood and which Salter (1949) described as analogous to the classical, conditioned-reflex learning first outlined by Pavlov (1927, 1928) in his work with dogs. ✓

Salter (1949) argued that humankind was, by nature, an emotional animal with a tendency to give free expression to feelings, impulses, and desires. During childhood, however, the individual learned to temper these expressions with social restraint. If this restraint was not excessive, the person reached adulthood having attained a healthy balance between self-expression and inhibition. If, however, the child's frequent attempts

at self-expression were repeatedly met with parental anger or disapproval, then excitation became linked with the initial fear and discomfort aroused by his/her parents' punishing response. The individual thus learned to conceal or distrust his/her own tendency towards self-expression, an inhibition which persisted into adulthood and showed itself in a wide array of interpersonal situations.

For Salter (1949) then, the central determinant of nonassertiveness in adults was an early history of parental disapproval, followed by a consequent fear of disapproval later on. This fear was also said to elicit strong feelings of anxiety in situations involving other people, particularly in situations where assertion of one's own thoughts and feelings was likely to conflict with other people's views.

According to Salter (1949), a subsidiary but important aspect of inhibition was low self-esteem. This characteristic was also said to derive from the individual's past history of disapproval for self-expression. Salter (1949) argued that because the inhibitory individual had learned to suppress his/her own psychological experiences, he/she also learned to devalue his/her own sense of self. Thus, even as an adult, the inhibitory individual remained dependent upon other people's positive evaluations for his/her own feelings of self-worth. Disapproval by others persisted, therefore, as an object of continued fear not only because of past childhood associations but because positive evaluations by others were needed to bolster feelings of low self-esteem.

Salter (1949) maintained further that the key to increasing an individual's level of excitation was to change the way in which this person felt and thought about him/herself. He argued that as long as the individual continued to lack confidence in his/her own self-worth, it

seemed likely that this person would continue to feel reluctant to express this self to others -- to insist that what he/she felt had credence.

Feeling good about oneself was thus viewed by Salter (1949) as crucial to one's ability to assert oneself openly, honestly, and spontaneously with other people.

According to Salter (1949), the way to increase a person's feelings of self-worth was to change the manner in which this individual interacted with others -- in effect, to encourage those behaviours which he/she feared the most. Salter (1949) argued that by deliberately forcing oneself to act in an emotionally-expressive manner despite one's conditioned fears, one would gradually come to feel more self-confident, less anxious, and less fearful of disapproval in situations involving other people. In this way, the individual would eventually come to regain his previously lost capacity for spontaneous self-expression. This transition from inhibition to excitation was said to occur via a process referred to by Salter (1949) as 'retroactive inhibition' whereby newly-learned assertive responses would, as a result of continued practice, gradually come to inhibit previously-learned patterns of emotional and behavioural inhibition. This proposed mode of treatment, with its heavy emphasis on the continued practice of assertive behaviour both within and outside the therapy milieu, is now generally regarded as the forerunner to modern-day, behavioural approaches to assertiveness-training.

Joseph Wolpe. In 1958, Joseph Wolpe published a book entitled Psychotherapy by Reciprocal Inhibition in which he too advocated the use of 'assertiveness-training' as an important treatment modality. Whereas Salter (1949) viewed assertive behaviour as both a means and an ends, Wolpe (1958) saw it not as a goal in itself but more as a mechanism for

overcoming interpersonal anxiety. That is, in cases where anxiety was usually evoked in the presence of other people, 'assertiveness-training' was considered by Wolpe (1958) to be the treatment of choice.

Wolpe (1958) maintained that the way to eliminate interpersonal anxiety was to teach the individual an emotionally incompatible response. For Wolpe (1958) assertiveness was this response. He argued that, with continued practice, assertive behaviour would soon come to inhibit anxiety in much the same way as anxiety had initially inhibited assertion. Wolpe (1958) termed this process of mutual effect 'reciprocal inhibition', a process similar to that previously described by Salter (1949) as 'retro-active inhibition'.

In contrast to Salter (1949), Wolpe (1958) did not elaborate the specific childhood conditions through which interpersonal interactions might originally come to elicit fear. Nor did he devote much attention to the type of parental responses that might be associated with later difficulty in self-assertion. Like Salter (1949), Wolpe (1958) did maintain, however, that assertiveness and interpersonal anxiety were inversely related, and that anxiety in interpersonal situations was likely to stem from fear of disapproval.

Recall that for Salter (1949) the key to increasing excitation (assertion) was to encourage positive feelings about oneself. In contrast, Wolpe (1958) did not invoke the concept of increased self-esteem as a necessary mechanism for overcoming interpersonal fear and inhibition. He did maintain, however, that in addition to lowered anxiety one benefit of increased assertiveness was likely to be greater self-esteem. For Wolpe (1958), as well as for Salter (1949), assertiveness and self-esteem went hand-in-hand.

Recent authors. This idea of an association among assertiveness, fear of disapproval, interpersonal anxiety, and self-esteem is one which has persisted throughout the assertiveness literature. A number of more recent writers have, for example, suggested that the fear of being disapproved of by others may be a prime factor in inhibiting self-assertion (Kahn, 1979; Kelly et al., 1980; Kipper & Jaffé, 1978; Ludwig & Lazarus, 1972; Pitt & Roth, 1978; Tryon, 1978; Wolpe, 1970). These writers view nonassertion as a type of avoidance strategy whereby the individual limits self-expression in an attempt to minimize the risk of interpersonal conflict and the consequent negative evaluations by others which may ensue. Implicit in this conceptualization is the assumption that nonassertive individuals both anticipate and fear disapproval by other people.

Another variable which continues to be cited in relation to difficulty in self-assertion is that of interpersonal anxiety. Some authors have, in fact, incorporated the notion of low interpersonal anxiety into their definitions of assertive behaviour. For example, Wolpe (1969) defines assertive behaviour as the "outward expression of practically all feelings other than anxiety" (p. 61), while Leah, Law, and Snyder (1979) note that "assertive behaviour involves the direct expression of feelings, preferences, needs or opinions, enabling a person to stand up for his rights without undue anxiety" (p. 443). Similar definitions have also been put forth by others (Alberti & Emmons, 1970; Gulanick, Howard, & Moreland, 1979; Materi, 1977; Shelton, 1977).

More so, perhaps, than for any other factor, the relationship between assertiveness and interpersonal anxiety continues to be viewed as bidirectional. On the one hand, high interpersonal anxiety is said to interfere with the expression of thoughts and feelings while reductions

in interpersonal anxiety are said to bring about increases in assertive behaviour (Latimer, 1977; Wolpe, 1969; Wolpe & Lazarus, 1966). Conversely, increases or decreases in assertiveness are said to result in opposite changes in interpersonal fear (Bourque & Ladouceur, 1978; Côtler, 1975; Friedman, 1971; Phillips & Groves, 1979; Stevenson & Wolpe, 1960; Wolpe & Lazarus, 1966). This latter line of reasoning has provided a major rationale for assertiveness-training, leading some clinicians to advocate training in assertive responses for individuals who report high interpersonal anxiety even in the absence of reported difficulty in self-assertion (Bloomfield, 1973; Booraem & Flowers, 1972; Phillips & Groves, 1979; Stevenson & Wolpe, 1960).

Another variable which continues to be mentioned as a factor of potential relevance for self-assertion is that of self-esteem. As with interpersonal anxiety, some writers have incorporated the notion of self-esteem into their definitions of assertiveness. For example, Lazarus (1971) defines assertiveness as the ability to express both negative and positive feelings in a forthright and self-confident manner, while Shelton (1977) notes that a common strain throughout the professional literature on assertiveness is the idea that assertive behaviour involves "the confidence to stand up for oneself" (p. 465). Other authors have gone so far as to equate assertiveness with feelings of high self-esteem (Fensterheim & Baier, 1975; Wilk & Coplan, 1977).

High self-esteem has, at the same time, been referred to as both a necessary prerequisite and most likely consequence of assertive behaviour. For example, Pitt and Roth (1978) note that "a person's self-concept is a critical aspect of assertive behaviour. When a person experiences self-worth, assertive behaviour is more likely to be a consequence.

Conversely, behaving assertively can lead to increased self-confidence, and a more positive self-evaluation" (p. 275). A similar argument has been suggested by others (Alberti & Emmons, 1970; Butler, 1976; Cameron, 1951; Cotler, 1975; Jakubowski-Spector, 1973; Kelly, Frederiksen, Fitts, & Phillips, 1978; Kelley et al., 1980; Valentich & Gripton, 1977; Weiskott & Cleland, 1977). This notion of assertiveness as a 'self-enhancing process' (Degiovanni & Epstein, 1978; Piercy & Ohanesian, 1976) has also constituted a major rationale for assertiveness-training.

Feelings of low self-esteem have, on the other hand, been said to interfere with assertive behaviour (Rathus, 1975). For example, Alden and Cappe (1981) have suggested that "nonassertion and its concomitant anxiety arises in part from negative self-evaluation" (p. 103). Other writers have argued that nonassertive individuals may find themselves giving in to other people's demands because they lack the self-confidence necessary to assert themselves in social situations (Gelber, 1967; Weiskott & Cleland, 1977). Failure to assert oneself may, in turn, lead to further loss of self-esteem making it more difficult to assert oneself on subsequent occasions.

Another potentially important factor that has often been mentioned with reference to assertiveness is 'locus of control'. As defined by Rotter (1966), locus of control refers to a generalized expectancy that one's outcomes (rewards) are contingent more upon one's own actions (internal locus of control) or more upon outside factors such as luck, fate, or other people (external locus of control). Although Wolpe (1958) made no mention of this construct, Salter (1949) did note that the non-assertive individual was more likely to be externally-, as opposed to internally-, oriented in his/her interactions with the world. This high

externality was said to be evident in the nonassertive individual's lack of initiative in social situations, in his/her tendency to rely upon other people's thoughts and opinions for guidance, and in his/her preference for letting other people take the lead and do things for him/her. In contrast, the assertive individual was described as having a basic trust in his/her ability to get what he/she needed from the environment through direct action upon his/her interpersonal world.

More recently, proponents of assertiveness-training have argued that one benefit of increased assertiveness is greater control over one's interpersonal life (Bower & Bower, 1976; Cotler & Guerra, 1976; Edwards, 1972; Jakubowski, 1977; Lange & Jakubowski, 1976; Lapointe & Rimm, 1980; Phillips & Groves, 1979; Wilk & Coplan, 1977). A logical extension of this argument is that people who assert themselves with others should feel more in control (i.e., internal locus of control). Conversely, individuals who feel they can control their personal outcomes (internals) may be more likely to develop and use the assertive skills necessary to manipulate their social world (Appelbaum, Tuma, & Johnson, 1975; Doherty & Ryder, 1979). In contrast, individuals who feel they have little control (externals) may not bother to assert themselves even in situations where increased self-assertion could lead to greater interpersonal control. An inverse relationship between assertiveness and locus of control would, thus, be predicted (Borges & Laning, 1979).

A final variable to be discussed with reference to assertion is that of depression. Although Wolpe (1958) did not invoke the concept of depression in his early writings on assertion, Salter (1949) did describe the inhibitory (nonassertive) individual as notably discontented, unhappy, and insecure. In Salter's (1949) own words, "depression means excessive

inhibition" (p. 152).

Modern-day behaviour theorists such as Lewinsohn (1974a, 1974b, 1975) have also argued that nonassertiveness may play a central role in the onset of depression. The rationale here has been that individuals who fail to assert themselves with other people end up receiving relatively little positive reinforcement from their environment, a paucity which may lead to feelings of depression. An inverse relationship between assertiveness and degree of depression would thus be expected (Libet & Lewinsohn, 1973).

Seligman's (1975) 'learned helplessness' model of depression also predicts an inverse relationship to assertion. According to this model, individuals who experience relatively little control over their environments should feel depressed. If, as has been argued elsewhere, non-assertive individuals do lack control over their interpersonal world, then feelings of depression should be more prevalent among this group than among more assertive individuals. An inverse relationship between degree of assertiveness and level of depression would again be predicted.

To summarize, both recent and early writings on assertiveness suggest that high assertion should be related to minimal fear of disapproval, low interpersonal anxiety, high self-esteem, internal locus of control, and less frequent feelings of depression. What, then, is the empirical evidence to support these hypothesized relationships? In the following section, research findings on assertiveness and the five variables outlined above will be reviewed.

Review of the Research Literature

Fear of disapproval. A number of studies have examined the issue of whether individuals low in assertiveness also have higher fear of disapproval. Although these studies have relied almost exclusively on

self-report measures of assertion they do provide at least initial support for an inverse relationship between assertion and fear of disapproval.

Using the Rathus Assertiveness Schedule (RAS; Rathus, 1973), Orenstein, Orenstein, and Carr (1975) found a significant negative correlation between assertiveness and 'fear of negative evaluation' on the Geer (1965) Fear Survey Schedule. RAS scores also correlated negatively with 'social fear' (e.g., fear of being criticized, ignored, rejected, or disapproved of by others) on Wolpe and Lange's (1964) Fear Survey Schedule III (Hollandsworth, 1976; Morgan, 1974). In addition, Hollandsworth (1976) found a significant negative correlation between 'social fear' and scores on the Adult Self-Expression Scale (ASES; Gay, Hollandsworth, & Galassi, 1975), another self-report measure of assertion. A similar relationship to 'social fear', using both the ASES and Gambrill and Richey's (1975) Assertion Inventory has been reported (Hollandsworth, 1979). Finally, low scores on the College Self-Expression Scale, another assertion inventory (CSES; Galassi, Delo, Galassi, & Bastien, 1974), have been shown to correlate with high 'fear of negative evaluation' on Watson and Friend's (1969) FNE scale (Deffenbacher & Payne, 1978; Kern & MacDonald, 1980). Correlations between assertiveness and fear of disapproval range in magnitude from $-.24$ (Morgan, 1974) to $-.62$ (Kern & MacDonald, 1980), depending upon the specific measure used.

Additional support for a relationship between level of assertiveness and fear of disapproval comes from studies which have looked at the kinds of statements which individuals make to themselves while responding 'out loud' to behavioural, 'role-play' tests of assertion. High-assertive individuals, categorized on the basis of self-report scores, have been shown to make more positive and fewer negative self-statements in

comparison to low-assertive individuals responding to identical role-play situations (Bruch, 1981; Gorecki, Dickson, Anderson, & Jones, 1981; Schwartz & Gottman, 1976). The self-statements which most clearly differentiated high- from low-assertive individuals were those which reflected concern about negative self-image and fear of being disliked.

The only study to examine the relationship between fear of disapproval and assertive behaviour per se is that of Kern and MacDonald (1980). These researchers report a significant but low ($r = -.18$, $p < .05$) inverse relationship between assertiveness on the College Women's Assertion Sample, their own role-play measure of assertion, and scores on Watson and Friend's (1969) FNE scale. This one behavioural study provides only weak support for an inverse relationship between assertion and fear of disapproval. Furthermore, that the research was limited exclusively to females leaves unanswered the question of whether assertive behaviour and fear of disapproval are related within the combined male/female population. Given that fear of disapproval is a central construct in theories of assertion (Salter, 1949; Wolpe, 1958), further work in the area seems warranted.

Interpersonal anxiety. Both Wolpe (1958) and others (Bourque & Ladouceur, 1978; Cotler, 1975; Friedman, 1971; Wolpe & Lazarus, 1966) have argued that assertion is inversely related to interpersonal anxiety. Studies attempting to explore this relationship have, however, relied primarily on global measures designed to tap anxiety aroused across a wide array of both social and nonsocial situations. Caution is therefore indicated in interpreting the results of these studies with reference to assertion and interpersonal fear.

Nonetheless, Gay et al. (1975) do report lower scores on the

Taylor Manifest Anxiety Scale (TMAS; Taylor, 1953) for individuals who score high on the ASES. Similarly, lower scores on the Spielberger State-Trait Anxiety Inventory -- Trait Scale (Spielberger, Gorsuch, & Lushene, 1968), have been found for high RAS individuals. Nonassertiveness on Bates and Zimmerman's (1971) Social Constriction Scale (SCS) has also been shown to correlate positively with anxiety on the Multiple Affect Adjective Check List (MAACL; Zuckerman & Lubin, 1965). In addition, Kern and MacDonald (1980) report significant inverse relationships among the CSES, the Conflict Resolution Inventory (CRI; McFall & Lillesand, 1971), and two other self-report measures of anxiety (modified Self-Report Inventory of Anxiousness -- Endler, Hunt, & Rosenstein, 1962; Autonomic Perception Questionnaire -- Mandler, Mandler, & Uviller, 1958). All of the above studies were conducted with undergraduate students.

Similar findings have been reported using psychiatric patients of mixed diagnostic categories (e.g., neurotic, psychotic, personality-disordered, and so on). Shows, Gentry, and Wyrick (1974) report a significant positive correlation between nonassertiveness on the SCS and anxiety scores (Research Scale A) on the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1951). Percell, Berwick, and Biegel (1974) note a significant negative correlation between assertiveness on the modified Interpersonal Behavior Test (IBT; Lawrence, 1970), a self-report measure, and TMAS scores for women but not for men.

Studies which have used behavioural, role-play measures provide only equivocal support for a relationship between assertion and anxiety. To illustrate, Pachman and Foy (1978) found that anxiety scores on the MAACL for male alcoholic inpatients were negatively correlated with

overall assertion and positively correlated with compliance to unreasonable requests (i.e., nonassertion). Correlations among anxiety and other behavioural measures were nonsignificant. Kern and MacDonald (1980) also note that relationships among role-play scores on the CWAS and self-report measures of anxiety were either nonsignificant or opposite in direction to those predicted.

Self-report studies of assertion and interpersonal anxiety provide some support for a relationship between these variables. Lindquist, Lindsay, and White (1979) report that scores on the RAS and CSES were inversely related to scores on Watson and Friend's (1969) Social Anxiety and Distress (SAD) scale. Their heterogeneous sample included heroin addicts, non-heroin drug addicts, psychiatric patients, and college students. Kern and MacDonald (1980) report significant negative correlations with interpersonal anxiety (Scale II) on Richardson and Tasto's (1976) Social Reaction Inventory, while Burkhart, Green, and Harrison (1979) note significant negative correlations with interpersonal anxiety on the Endler S-R Inventory of General Trait Anxiousness (S-R GTA; Endler & Oka, 1974). The latter two studies were comprised entirely of undergraduate students.

While self-report studies have typically found low ($r = -.27$, $p < .01$; Kern & MacDonald, 1980) to moderate ($r = -.61$, $p < .001$; Lindquist et al., 1979) correlations between assertion and interpersonal anxiety, role-play studies have generally yielded nonsignificant results. Eisler, Miller, and Hersen (1973) report that male psychiatric patients, categorized into low- and high-assertiveness groups based on behavioural ratings, failed to differ on the Willoughby (1934) Personality Schedule, a clinically-derived measure of interpersonal fear. Similarly, Kern and

MacDonald (1980) found no significant correlation between interpersonal anxiety on the Self-Report Inventory of Anxiousness (SRI; Endler et al., 1962) and role-play responses on the CWAS, while Burkhart et al. (1979) found no relationship between interpersonal anxiety on the S-R GTA and any of six, behavioural role-play indices of assertion. As Burkhart et al. (1979) note, "these results leave in doubt the relevance of ... (interpersonal) ... anxiety to assertive behaviour" (p. 382), while at the same time suggesting the need for further research to clarify its role more precisely.

Self-esteem. Studies of assertiveness and self-esteem have again been limited primarily to self-report measures of assertion. Nonetheless, these studies do provide preliminary support for the hypothesis that individuals high in assertion also have greater feelings of self-esteem.

High assertiveness on the CSES and ASES has been shown to correlate positively with self-confidence and negatively with self-abasement (Galassi et al., 1974; Hollandsworth, Galassi, & Gay, 1977) on the Adjective Check List (ACL; Gough & Heilbrun, 1965). Significant relationships among nonassertiveness on the SCS, low self-confidence, and high abasement have also been noted (Bates & Zimmerman, 1971). Assertiveness scores on the RAS and CSES have further been shown to vary inversely with self-abasement scores on the Jackson (1974) Personality Research Form (Green, Burkhart, & Harrison, 1979). These results are all based on data derived from university students.

High assertiveness on the RAS, AI, and IBT has also been found to correlate positively with self-acceptance scores on the California Psychological Inventory (CPI; Gough, 1957) both for college students (Harris & Brown, 1979) and for psychiatric outpatients (Percell et al.,

1974). In addition, Rathus and Nevid (1977) note that therapists' ratings of their patients' self-confidence levels were positively correlated with patients' assertiveness scores on the RAS.

In contrast, undergraduate students who scored poorly on the RAS and CSES had less positive self-concepts (Tolor, Kelly, & Stebbins, 1976) on the Tennessee Self Concept Scale (TSCS; Fitts, 1965). Lapointe and Rimm (1980) note that women who scored poorly on the RAS also had more catastrophizing and irrational feelings about their own self-worth. In addition, low scores on Lorr and More's (1980) Assertiveness Scale were associated with low self-esteem, leading the authors to conclude that assertive behaviour is "associated with a positive attitude toward the self" (p. 133).

Additional support for a relationship between assertion and positive feelings about the self comes from a study by Alden and Cappe (1981). While nonassertive male and female undergraduates, classified on the basis of self-report (AI) scores, "functioned more like trained raters using stringent evaluation standards ... (to rate their performance in role-play situations) ... assertive subjects were more self-accepting" (Alden & Cappe, 1981, p. 113) and tended to rate their performance more positively in comparison to independent observers.

Unlike self-report studies, the only two studies to relate behavioural, role-play assertion to self-esteem have yielded uniformly negative results. Lapointe and Rimm (1980) note that feelings of self-worth in depressed females were unrelated to assertive behaviour in four, role-play situations. Pachman and Foy (1978) also report nonsignificant differences between high and low self-esteem males (alcoholic inpatients) in five 'vocationally-related' role-play situations. Both the above

studies are limited, however, in terms of their use of clinical, same-sex participants and with respect to the small number of situations sampled. Some caution is thus warranted in generalizing the results of these studies to male and female nonpatients, with further research using non-clinical samples and a wider range of role-play situations needed to clarify the relationship between self-esteem and assertive behaviour.

Locus of control. Research on assertiveness and locus of control has also been confined almost exclusively to paper-and-pencil measures of assertion. Unlike studies which suggest a relationship to fear of disapproval, interpersonal anxiety, and self-esteem, research on locus of control has produced largely equivocal findings.

Hersch and Scheibe (1967) report that individuals who described themselves as most assertive on the Adjective Check List (Gough & Heilbrun, 1965) were more internally-oriented on Rotter's (1966) Internal-External Locus of Control Scale. Locus of control scores were unrelated, however, to assertiveness ratings on the CPI (Gough, 1957) while correlations with assertiveness on the CSES (Borges & Laning, 1979), ASES (Gay et al., 1975; Tanck & Robbins, 1979), and a self-report inventory designed specifically for use with adolescents (Pentz, 1980) were also nonsignificant. In contrast, Appelbaum et al., (1975) note that 'internals' scored significantly higher on the RAS, while Bates and Zimmerman (1971) report a significant positive correlation between externality and nonassertiveness on the SCS. Significant inverse relationships among I-E scores and assertiveness on the RAS, CSES, and CRI have also been reported (Hartwig, Dickson, & Anderson, 1980).

Behavioural studies of assertiveness and locus of control fail to provide strong evidence of a relationship between these variables. In a

study of ninth grade adolescents, Pentz (1980) found no relationship between locus of control (I-E) scores and either 'role-play' or 'in-vivo' measures of assertion. Similarly, Doherty and Ryder (1979) found no relationship between wives' I-E scores and degree of assertiveness in role-play situations designed to simulate marital-conflict interactions. In contrast, husbands who scored high in internality also obtained higher assertiveness ratings.

Finally, Schwartz and Higgins (1979) note that while more internally-oriented undergraduates were rated by trained, independent observers as more able to refuse unreasonable requests (i.e., greater negative assertion), differences between 'internals' and 'externals' in eight, role-play situations assessing "the ability to act assertively in general social situations" (p. 688) were nonsignificant. In light of the generally mixed findings provided by self-report and role-play studies of assertion, further research on locus of control seems warranted.

Depression. Research on depression has provided fairly consistent support for an inverse relationship with assertion. Nonassertiveness on the SCS correlated positively with depression on both the MMPI (Shows et al., 1974) and the MAACL (Bates & Zimmerman, 1971). In addition, Rathus and Nevid (1977) note that therapists' ratings of their patients' happiness were positively correlated with patients' scores on the RAS. Sanchez and Lewinsohn (1980) also report that level of depression, monitored on a daily basis using the Depression Adjective Check List (Lubin, 1965), was inversely related to psychiatric patients' self-reported daily rate of assertive behaviour.

Studies of clinically-depressed females have shown that post-treatment increases in assertion, following assertiveness-training, are

associated with concomitant decreases in depression on the Beck Depression Inventory (BDI; Beck, Ward, Mendelsohn, Mock, & Erbraugh, 1961). This finding has been reported using the RAS (Frey, 1976; Lapointe, 1977; Lapointe & Rimm, 1980), the CSES (Hayman & Cope, 1980), and the AI (Sanchez, Lewinsohn, & Larson, 1980) to measure assertion. In contrast, pre-treatment correlations between depression and assertion were nonsignificant (Hayman & Cope, 1980; Lapointe & Rimm, 1980). Significant negative correlations between assertion and BDI scores have, however, been found in studies using nonclinical samples (Langone, 1979; Lea & Paquin, 1981).

Role-play studies have been divided in their findings. Pachman and Foy (1978) note a significant inverse relationship between depression on the MAACL and overall assertion on a modified version of the Behavioral Assertion Test (BAT; Eisler et al., 1973). Participants were male, alcoholic inpatients. In contrast, Lapointe and Rimm (1980) found no relationship between depression on the BDI and degree of role-play assertion in female, psychiatric patients. Finally, in a treatment study of depressed females increases in behavioural, role-play assertion following assertiveness-training were associated with decreases in depression on the BDI but no significant changes on the MMPI clinical scale of depression (Rehm, Fuchs, Roth, Kornbluth, & Romano, 1979).

While research on assertion and depression provides some support for a relationship between these variables, studies in the area have, with few exceptions (Bates & Zimmerman, 1971; Langone, 1979; Lea & Paquin, 1981), been limited exclusively to psychiatric patients. These studies tell us little, then, regarding the potential relationship between assertion and feelings of depression in the 'normal', nonclinical population. Further research on nonpatient samples, using behavioural as well

as self-report indices of assertion, is clearly indicated.

Statement of Purpose

The main goal of the present thesis is to expand current knowledge regarding the cognitive-personality dimensions of assertive versus non-assertive behaviour. Specifically, this thesis will explore the relationship of assertiveness to fear of disapproval, interpersonal anxiety, self-esteem, locus of control, and depression in a non-clinical sample of male and female university students, using both self-report and role-play measures of assertion. Clarification of these relationships could enhance our understanding of assertive versus nonassertive behaviour, while at the same time providing empirical support for theories which hypothesize relationships among these variables.

A second aspect of this study concerns the possible mediating effect of cognitive-personality variables on situational factors previously found to influence assertive behaviour. Various authors have argued that the degree to which an individual asserts may depend primarily upon the situational context involved (Jakubowski & Lacks, 1975; MacDonald, 1975). For example, level of assertion may be influenced by the type of assertion called for (e.g., the expression of negative versus positive feelings), the sex or status of the person with whom one would like to assert, the intimacy or degree of familiarity characterizing one's relationship with this person, the degree of control (perceived or actual) over reinforcing events in one's life that this person holds, and/or the number of observers present at the time (Jakubowski & Lacks, 1975; MacDonald, 1975). This emphasis on situational factors is representative of the situation-specific view which posits that assertion is not a global, personality-trait but rather a behaviour more likely to occur for all people in some

situations than in others (Eisler, Hersen, Miller & Blanchard, 1975; McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973; Rimm, Snyder, Depue, Haanstad, & Armstrong, 1976). Indeed, research evidence supports the idea that assertion does vary depending upon the situational context involved. For example, people have been shown to behave more assertively in situations involving positive as opposed to negative assertion (Eisler et al., 1975; Hamilton & Maisto, 1979; Hersen, Bellack, & Turner, 1978; Pitcher & Meikle, 1980; Zielinski, 1978; Zielinski & Williams, 1979), females as opposed to males (Hersen et al., 1978; Higgins, Alonso, & Pendleton, 1979; Pitcher & Meikle, 1980; Stebbins, Kelly, Tolor & Power, 1977; Zielinski, 1978; Zielinski & Williams, 1979) and unfamiliar as compared to familiar stimulus-persons (Eisler et al., 1975; Hamilton & Maisto, 1979; Zeichner, Wright, & Herman, 1977; Zielinski & Williams, 1979).

While both situational and personality variables have been studied separately relative to level of assertion, the potential interaction between these variables has not yet been examined. It is this issue which constitutes the second major focus of this thesis. Given that both personality and situational variables have been shown to influence level of assertion, it seems likely that situational influences on assertion may vary depending upon the individual's level of cognitive-personality functioning. For example, reduced assertion in negative situations may be more pronounced for high-anxiety individuals.

A second goal of this thesis, then, is to examine the potential mediating effect of one aspect of cognitive-personality functioning — that is, interpersonal anxiety — on situational determinants of assertion. This will be done by assessing the role-play behaviour of individuals who

differ in level of interpersonal fear (i.e., high vs. low anxiety groups) and who are exposed to identical role-play situations varied in terms of assertion-related, contextual factors -- that is, type of assertion (positive vs. negative), sex (male vs. female), and familiarity (familiar vs. unfamiliar) of the stimulus-person. If interpersonal anxiety and situational factors both influence level of assertion, then situational influences on role-play behaviour should differ for high versus low anxiety individuals. Use of this approach could provide an important link between global and situation-specific views of assertion, while at the same time providing a feasible means for predicting the relative degree of difficulty likely to be experienced by different individuals required to assert themselves in similar situations. Consistent with previous research, greater assertion in positive situations, with females, and with unfamiliar stimulus-persons was also predicted.

Methodological Considerations

In this section, basic approaches to the definition of assertion will be reviewed. A brief discussion of measurement procedures most commonly used to assess assertiveness follows. The rationale for assessment techniques chosen for use in this study is included.

Definitions of assertion. The first major difficulty involved in research on assertion is the question of what exactly constitutes assertive behaviour. Attempts to define assertion have ranged from global, 'characterological' definitions in which assertiveness is defined as a generalized response-tendency (e.g., Salter, 1949) to more precise, behavioural definitions in which some attempt is made to delineate the specific response-classes best subsumed under the category of assertive behaviour (e.g., Lazarus, 1973).

Despite a general lack of agreement regarding the exact meaning of the term 'assertiveness', an examination of the relevant literature does reveal a number of common themes. In keeping with Salter's (1949) original definition of assertion (excitation) as the honest, spontaneous, and direct expression of emotion, more recent definitions have also emphasized emotional expressivity as a key element of assertiveness (Bates & Zimmerman, 1971; Butler, 1976; Galassi et al., 1974; Hersen & Bellack, 1976; Lapointe & Rimm, 1980; Lazarus, 1971; Materi, 1977; Morgan & Leung, 1980; Paulson, 1975; Percell et al., 1974; Pitt & Roth, 1978; Rathus & Nevid, 1977; Rathus, 1975; Rimm & Masters, 1974; Scott, 1979; Shelton, 1977; Wolpe, 1969; Wolpe & Lazarus, 1966). For example, Lazarus (1971) defines assertion as "the forthright and honest expression of one's basic feelings" (p. 116), while Rathus and Nevid (1977) refer to "the expression of oneself in a manner that is consistent with the way ... (one) ... feels" (p. 81). These and similar definitions (Butler, 1976; Bloomfield, 1973; Galassi et al., 1974; Hersen & Bellack, 1976; Kelly et al., 1978; Materi, 1977; Percell et al., 1974; Shelton, 1977; Wolpe, 1969) all emphasize the point that assertion involves the ability to express both positive (e.g., praise, appreciation, and affection) and negative (e.g., anger, resentment, and annoyance) feelings. These two categories -- commonly referred to as 'positive' and 'negative' assertion, respectively -- parallel Wolpe's (1969) original use of the terms 'commendatory' and 'hostile' assertion. Salter's (1949) original definition has since been expanded to include the expression of beliefs, opinions, preferences, and needs, as well as emotions per se (Alberti & Emmons, 1970; Bower & Bower, 1976; Cotler, 1975; Deluty, 1979; Gulanick et al., 1979; Harris & Brown, 1979; Hollandsworth et al., 1977; Jakubowski, 1977; Jakubowski-Spector, 1973;

Lange & Jakubowski, 1976; Lange, Rimm, & Loxley, 1975; Leah et al., 1979; Manis, 1977; Sansbury, 1974).

A second aspect of assertiveness involves the emphasis on interpersonal communication (Alberti & Emmons, 1970; Fensterheim & Baier, 1975; Gay et al., 1975; Norton & Warnick, 1976; Pearson, 1979), with proponents of assertiveness-training typically maintaining that one goal of increased assertion is the facilitation of interpersonal communication (Brown & Brown, 1980; Cotler, 1975; Fiedler & Beach, 1978; Lazarus, 1971; Rimm & Masters, 1974). Since assertion takes place within an interpersonal context, a key element has also been one of self-disclosure (Fensterheim & Baier, 1975; Ludwig & Lazarus, 1972; Morgan & Leung, 1980).

A third point is that self-disclosure has typically been viewed as a means of fulfilling interpersonal goals (Alberti & Emmons, 1970; Brown & Brown, 1980; Gulanick et al., 1979; Rich & Schroeder, 1976; Smith, 1975). Assertion has been seen not only as a way of fostering interpersonal intimacy (Butler, 1976) but also as a way of fulfilling personal needs and maintaining high levels of reinforcement in situations where one's own needs and wants conflict with those of other people. A few recent definitions emphasize its instrumental or goal-directed nature.

Rich and Schroeder (1976) note that "assertive behavior is the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through an expression of feelings or wants" (p. 1082). Brown and Brown (1980) state that assertive behaviour "is concerned primarily with the acquisition of personal reinforcement" (p. 265). Similarly, Doherty and Ryder (1979) observe that assertion involves "attempts to modify the interpersonal partner's behaviour in order to maintain or enhance one's interests" (p. 2213), while MacDonald (1978) defines assertion as "the

open expression of preferences ... in a manner causing others to take them into account" (p. 890). This emphasis on the use of assertive behaviour to attain personal goals in interpersonal situations is central to definitions of assertion as standing up for rights in situations involving other people (e.g., Alberti & Emmons, 1970; Carlson & Johnson, 1975; Galassi et al., 1974; Jakubowski, 1977; Jakubowski-Spector, 1973; Kahn, 1979; Lazarus, 1971; Lange et al., 1975; Leah et al., 1979; MacDonald, 1978; Manis, 1977; Materi, 1977; Percell et al., 1974; Shelton, 1977; Smaby & Tamminen, 1976; Wolpe, 1969; Wolpe & Lazarus, 1966). A key platform for assertiveness-training has, in fact, been that assertive behaviour allows the individual to maintain personal dignity (Shelton, 1977), increase personal power (Lapointe & Rimm, 1980), and enhance interpersonal effectiveness (Cotler, 1975; Duehn & Mayadas, 1976; Kahn, 1979; Lapointe & Rimm, 1980) by providing the social skills necessary to manipulate one's social environment to maximum advantage (Phillips & Groves, 1979).

To summarize, global definitions of assertion have focused on the ability to express one's thoughts and feelings in interpersonal situations such that one's needs and preferences are both effectively communicated and adequately fulfilled. The expressive, interpersonal, communicative, and instrumental nature of assertiveness have all been emphasized. Although such common aspects may prove useful in providing a conceptual framework for understanding assertive versus nonassertive behaviour, they offer little help towards operationalizing assertiveness in a manner precise enough to allow for its accurate observation and assessment. Recent attempts to delineate the specific response-categories involved in self-assertion offer more promise in this direction.

Lazarus (1973) has argued that assertion involves four separate response-classes: the ability of (1) saying "no," (2) asking favours or making requests of other people, (3) expressing positive and negative feelings, and (4) initiating, maintaining, and terminating social interaction. Similar categories have been proposed by Butler (1976) who uses the terms 'limit-setting', instead of the ability to say "no," and 'self-initiation', instead of making requests and initiating social interaction. Other authors (Lore & More, 1980; Lore, More, & Mansueto, 1981) use 'social assertiveness' to refer to the ability to initiate, maintain, and terminate social interaction, while the ability to refuse unreasonable requests is called 'defense of rights'. Additional categories involve the ability to express personal limitations, differences of opinion, and replies to criticism (Firth & Snyder, 1979; Gambrill & Richey, 1975; Leah et al., 1979; Rathus & Ruppert, 1973).

Factor-analytic studies of assertiveness scales (Futch & Lisman, 1977; Galassi & Galassi, 1979, 1980; Gambrill & Richey, 1975; Gay et al., 1975; Heimberg & Harrison, 1980; Hull & Hull, 1978; Kipper & Jaffe, 1978; Law, Wilson, & Crassini, 1979; Nevid & Rathus, 1979; Rathus & Nevid, 1977) provide empirical support for the idea that assertion involves a wide array of inter-related but partially independent interpersonal behaviours (Lore & More, 1980; McFall & Lillesand, 1971; Rich & Schroeder, 1976). These behaviours include (1) asking favours and making requests, (2) setting limits and refusing unreasonable requests, (3) stating opinions, (4) expressing negative feelings, (5) expressing positive feelings, (6) standing up for personal rights, and (7) taking initiative in social situations.

Measures of assertion. Self-report inventories have the advantage

of allowing the researcher to sample an almost unlimited range of behaviours in a relatively short period of time. This advantage, coupled with their ease of administration and scoring, may explain why questionnaires are the most commonly-used means of assessing assertive behaviour (Bodner, 1975; Booraem & Flowers, 1978; Jakubowski & Lacks, 1975).

Assertion inventories have been widely-used to screen individuals for participation in assertiveness-training programs, to document changes in assertiveness following treatment intervention, and to assess level of assertiveness relative to other variables.

Since the appearance of the first assertiveness questionnaire (Wolpe & Lazarus, 1966), at least 16 other paper-and-pencil measures have been developed (Galassi & Galassi, 1980). Of these, the two scales which have enjoyed the most widespread popularity are the Rathus Assertiveness Schedule (Rathus, 1973) and the College Self-Expression Scale (Galassi et al., 1974). "These instruments are the most commonly used of the self-report inventories and appear to have generated the greatest amount of data concerning psychometric properties" (Galassi & Galassi, 1980, p. 44). Both are suitable for use with university students, having been designed and standardized for use with college students. In addition, the RAS and CSES possess the same level of readability (Andrasik, Heimberg, Edlund, & Blankenberg, 1981) both for directions (grades 10-12) and test items (grades 8-9). The RAS and CSES were chosen for use in this study based on the above considerations. A more detailed description of these scales is provided in the Method section.

Following the example of Tolor et al. (1976), two separate self-report measures were used. This was done to control for possible deficiencies in either inventory and to enhance confidence in any.

relationships obtained. The RAS, generally considered a more global measure of assertion, was used to elicit initial involvement in the study. The CSES, which encompasses a much wider and more clearly-specified range of interpersonal situations (e.g., family, friends, strangers, business relations, and authority figures) was administered with other experimental measures in a later session. Self-report inventories used to assess fear of negative evaluation, interpersonal anxiety, self-esteem, locus of control, and depression are described in the Procedure. The rationale for the choice of each measure is also provided.

Another frequently-used means of assessing assertion is the behavioural, role-play test (e.g., Eisler et al., 1973; MacDonald, 1978; McFall & Twentyman, 1973; Smye & Wine, 1980; Warren & Gilner, 1978). This test requires that participants respond 'out-loud' to a series of interpersonal situations designed to simulate real-life encounters with other people. Situations are presented via audio-tape, video-tape, or through live-narration. Responses are audio- or video-taped for later scoring by trained raters. Nonverbal or 'paralinguistic' components are assessed (e.g., eye contact, body movement, facial expression, latency and duration of response, volume and fluency of speech, and affective tone of voice), as are verbal content (e.g., compliance to unreasonable requests, expressions of praise and appreciation, requests for new behaviour) and overall level of assertion. Emphasis is thus placed on style, or how the message was delivered, as well as the message itself.

Empirical support for this approach is provided by studies which have shown stylistic and content components to differentiate assertive from nonassertive individuals, previously categorized on the basis of overall assertion (Bellack, Hersen, & Turner, 1978b; Eisler et al.,

1973, 1975; Romano & Bellack, 1980; Rose & Tryon, 1979; Skillings, Hersen, Bellack, & Becker, 1978). Paralinguistic and content variables have also been emphasized in training-programs designed to increase assertive skill (Alberti & Emmons, 1976; Butler, 1976; Sansbury, 1974; Serber, 1972; Wolpe & Lazarus, 1966).

Like self-report inventories, role-play procedures have the advantage of allowing for the quick, easy, and economical observation of a wide variety of assertive behaviours assessed across a wide range of interpersonal situations. Unlike self-report inventories, which estimate the probability that an individual will behave assertively, role-play measures allow the researcher to assess the actual quality of response. Use of a behavioural role-play test in addition to self-report inventories thus allows for two conceptually different approaches to the study of assertion and cognitive-personality functioning.

That previous studies in this area have been limited almost exclusively to self-report measures of assertion probably reflects a difference in the theoretical underpinnings of the self-report and role-play techniques. Self-report inventories have usually been associated with a 'response-inhibition' model of nonassertiveness (Salter, 1949; Wolpe, 1958, 1969), or the idea that cognitive-personality factors inhibit self-assertion. In contrast, role-play measures are more strongly associated with 'response-deficit' (Lazarus, 1971) theory, or the idea that nonassertive individuals lack the behavioural skills necessary for self-assertion. While the response-inhibition model posits fewer assertive responses in less assertive individuals, the response deficit model predicts poorer assertive responses or less-skilled behaviour. A more detailed discussion of the response-inhibition (know how but cannot)

versus response-deficit (know not so, cannot) controversy, is provided by Alden and Cappe (1981), Bruch (1981), Eisler, Frederiksen, and Peterson (1978), Fiedler and Beach (1978), Green et al. (1979), Hammen et al. (1980), Linehan, Goldfried, and Goldfried (1979), and Schwartz and Gottman (1976).

Of the current role-play measures available, a modified version of the Behavioral Assertiveness Test -- Revised (BAT-R; Eisler et al., 1975) was chosen for use in this study. A number of reasons guided this choice. First, the test is the most widely-used and extensively-researched role-play measure of assertion. Second, it is the only one to contain "more than a token representation from the positive-assertiveness domain" (Green et al., 1979, p. 17). Third, it provides for the use of familiar and unfamiliar stimulus-persons of both sexes, a stimulus manipulation essential to the second goal of this thesis -- that is, examination of the potential interaction between cognitive-personality variables and three situational determinants of assertion. Fourth, the measure is easily adapted for use with both male and female university students. And fifth, the test possesses a well-specified scoring system (Eisler et al., 1975) with individual ratings on a number of paralinguistic and content components, as well as an overall assertiveness score.

As noted previously, audio-tape (Burkhart et al., 1979; Green et al., 1979; Warren & Gilner, 1978), video-tape (Hamilton & Maisto, 1979; Strye & Wine, 1980), and live (Bellack, Hersen, & Turner, 1979; Bourque & Ladouceur, 1978; Romano & Bellack, 1980) stimulus-presentations have all been used. Participants' responses have usually been audio-taped (Burkhart et al., 1979; Green et al., 1979; Warren & Gilner, 1978) or video-taped (Bellack et al., 1979; Bourque & Ladouceur, 1978; Romano &

Bellack, 1980) for later scoring. Although verbal prompts delivered by a live confederate would seem to parallel more closely assertive interactions outside the laboratory situation, standardized prompts delivered via a tape-recorder represent a more efficient and economical assessment technique (Galassi & Galassi, 1976). Furthermore, in one of the few studies to examine the effect of role-play variations on assertive behaviour (e.g., Galassi & Galassi, 1976; Nietzel & Bernstein, 1976; Westefeld, Galassi, & Galassi, 1980), no significant differences were found between live and taped-stimulus presentations in either assertive content or paralinguistic components such as response length (Galassi & Galassi, 1976). An audio-taped presentation of stimuli was therefore chosen for use in this study.

Responses were also audio-taped. Although video-tape has the advantage of allowing the experimenter to score additional, nonverbal components (e.g., eye contact, body movement, facial expression, and so on), the extra time, cost, and equipment involved in this procedure seems unwarranted. These additional components are not only harder to score, but less effective in differentiating assertive from nonassertive individuals (Eisler et al., 1973; Heimberg, Hammen, Goldberg, Desmarais, & Blue, 1979). Furthermore, the use of audio-tapes eliminates the risk that individual differences in physical attractiveness could influence judges' ratings of assertive skill (Glasgow & Arkowitz, 1975). Finally, audio-tapes were felt to better preserve the anonymity of participants in a situation where student raters might be familiar with the students being rated. Increased anonymity was thought to be an important factor both in soliciting initial participation and in ensuring unbiased ratings of assertive skill.

Summary

A primary goal of this thesis was to examine the relationship between individual differences in assertion and five aspects of cognitive-personality functioning -- that is, fear of negative evaluation, interpersonal anxiety, self-esteem, locus of control and depression. It was predicted that individuals who scored highest in assertion would also be characterized by less fear of negative evaluation, less interpersonal anxiety, greater self-esteem, a more internal locus of control, and less depressive symptomatology. Self-report inventories were used to assess these variables.

Assertion was measured using both self-report and role-play measures. Two self-report measures of assertion were utilized -- the Rathus Assertiveness Schedule and the College Self-Expression Scale. A modified version of the Behavioral Assertiveness Test -- Revised (BAT-R) was used to assess role-play assertion. Both paralinguistic and content variables were scored, in addition to overall level of assertion.

A second major goal was to examine the potential interaction between personality and situational correlates of assertion. Role-play scores on the modified BAT-R were varied along three contextual dimensions previously found to influence level of assertive behaviour. These were type of assertion (positive vs. negative), sex of the stimulus-person (male vs. female), and familiarity of the stimulus-person (familiar vs. unfamiliar). Respondents were dichotomized into low- and high-anxiety groups using self-report scores. It was predicted that if both interpersonal anxiety and situational context relate to an individual's level of assertion, then situational influences on role-play assertion should be different for low- versus high-anxiety individuals. Consistent with

previous research, greater assertion in positive situations, with females, and with unfamiliar stimulus-persons was also predicted, regardless of level of interpersonal anxiety.

METHOD

Subjects

Participants were 96 English-speaking undergraduates (48 males, 48 females) solicited from psychology classes at Concordia University, Montreal during the 1981-82 spring semester. English was the mother-tongue for 79% of the total sample (males, 72%; females, 87%) with all participants having been educated in English for at least 10 years. Participants ranged in age from 19 to 52 years ($M = 23.99$, $SD = 5.64$), with a median age of 22 years. The mean age of male ($M = 23.29$, $SD = 3.54$) and female respondents ($M = 24.69$, $SD = 7.13$) did not differ significantly ($F(1, 94) = 1.48$, $p > .05$). Participation was on a voluntary basis with no monetary reward.

Measures

Assertion inventories are described first, followed by summaries of self-report inventories used to assess cognitive-personality functioning. The two assertion inventories presented are the Rathus Assertiveness Schedule (RAS) and the College Self-Expression Scale (CSES), described in this order. The Fear of Negative Evaluation Scale (FNE), Social Anxiety and Distress Scale (SAD), Tennessee Self Concept Scale (TSCS), Internal-External Locus of Control Scale (I-E) and Beck Depression Inventory (BDI) follow as indices of cognitive-personality functioning. A modified version of the Behavioral Assertiveness Test -- Revised (BAT-R), a role-play measure of assertion, completes the description of measures administered to participants in this study.

RAS. The Rathus Assertiveness Schedule (Rathus, 1973) is a 30-item questionnaire designed to measure an individual's tendency towards

emotional inhibition or assertive self-expression in a variety of business and social situations. Questions are based on situations derived from Wolpe (1969) and Wolpe and Lazarus (1966), on items modified from Allport (1928) and Guilford and Zimmerman (1956), and on situations reported by college students as involving verbal behaviours which they "would have liked to exhibit but refrained from exhibiting because of fear of aversive social consequences" (Rathus, 1973, p. 400). The scale is scored in a positive direction such that higher scores indicate greater assertion.

The RAS was selected because of its previous widespread use in research on assertion and an abundance of psychometric data attesting to its good reliability and validity (Appelbaum, 1976; Appelbaum et al., 1975; Blanchard, 1979; Burkhart et al., 1979; Green et al., 1979; Harris & Brown, 1979; Heimberg & Harrison, 1980; Hollandsworth et al., 1977; Hull & Hull, 1978; Mann & Flowers, 1978; Nevid & Rathus, 1978, 1979; Orenstein et al., 1975; Quillin, Besing, & Dinning, 1977; Rathus, 1973; Rathus & Nevid, 1977; Vaal, 1975; Vestewig & Moss, 1976). The RAS is also simple to use, quick to administer, and easy to score. An average of 6 minutes is required to complete the schedule (Jakubowski & Lacks, 1975).

CSES. The College Self-Expression Scale (Galassi et al., 1974) is a 50-item inventory designed to assess an individual's tendency to express both positive and negative feelings in interpersonal situations involving family, friends, strangers, business relations, and authority figures. Items on the scale are derived or modified in part from works by Lazarus (1971), Wolpe (1969), and Wolpe and Lazarus (1966). High scores reflect greater assertion.

Like the RAS, the CSES is simple to use, easy to score, and quick to administer requiring an average of about 8 minutes to complete.

(Jakubowski & Lacks, 1975). Considerable reliability and validity data have also been reported (Burkhart et al., 1979; Callner & Ross, 1976; Galassi et al., 1974; Galassi & Galassi, 1974, 1975, 1979; Galassi, Hollandsworth, Radecki, Gay, Howe, & Evans, 1976; Green et al., 1979; Kern & MacDonald, 1980; Kipper & Jaffe, 1976, 1978; Schwartz & Gottman, 1976; Skillings et al., 1978; Stebbins et al., 1977; Wyrick, Gentry, & Shows, 1977). The CSES has also been used extensively in research on assertion.

FNE. The Fear of Negative Evaluation Scale (Watson & Friend, 1969) is a 30-item inventory designed to measure concern about unfavourable evaluations by other people. Test-retest reliability has been shown to be adequate, while evidence of good construct validity has also been reported (Watson & Friend, 1969). The FNE has been used previously in research on assertion (Craighead, 1979; Deffenbacher & Payne, 1978; Hammen et al., 1980; Kern & MacDonald, 1980; Tiegerman & Kassinov, 1977; Wolfe & Fodor, 1977). Higher scores on the FNE indicate greater fear of negative evaluation.

SAD. The Social Anxiety and Distress Scale (Watson & Friend, 1969) is a 28-item inventory designed to measure an individual's tendency towards feelings of subjective anxiety and the consequent avoidance of social situations. Evidence of good reliability and validity has been provided (Watson & Friend, 1969). The SAD has also been used previously in studies on assertion (Golden, 1981; Hammen et al., 1980; Kirchner, Kennedy, & Draguns, 1979; Lindquist et al., 1979; Nietzel, Martorano, & Melnick, 1977; Tiegerman & Kassinov, 1977). High scores indicate high social anxiety and distress.

TSCS. The Tennessee Self Concept Scale (Fitts, 1965) is a 100-item

questionnaire designed to measure attitudes and feelings about the self. It is the most comprehensive, well-standardized, and widely-used measure of self-esteem currently available (Robinson & Shaver, 1973). Adequate reliability and high construct validity have been reported (Fitts, 1965). Despite its length, the TSCS is easy to use and requires only 10-20 minutes to complete (Fitts, 1965). Use of the TSCS in two other studies of assertion has been reported (Fiedler, Orenstein, Chiles, Fritz, & Breitt, 1979; Materi, 1977). The scale is scored in a positive direction, with high scores (i.e., Total Positive) indicating high self-esteem.

Unlike other self-esteem inventories (see Robinson & Shaver, 1973), the TSCS has the advantage of being multidimensional in nature. In addition to overall self-esteem (i.e., Total Positive), it provides for scores on five, different dimensions of self -- Physical, Moral-Ethical, Personal, Family, and Social Self. Use of the TSCS thus allows for examination of a number of potentially interesting but previously untested, additional hypotheses regarding level of assertion and self-esteem. Specifically, the TSCS allows the researcher to test the prediction that level of assertiveness is more strongly related to feelings about one-self as a person (Personal Self) and in relation to other people (Family and Social Self), than to feelings about one's body (Physical Self) or moral-ethical and religious position (Moral-Ethical Self).

Two forms of the TSCS are available. The Clinical and Research Form was chosen for use in this study because it not only provides data obtainable on the alternate Counseling Form but also includes 'empirical scales' indicative of how one views oneself relative to psychiatric patients of various, psychodiagnostic groups (e.g., neurotic, psychotic, and personality-disordered). Inclusion of these additional subscales

provides a further means of exploring relationships among assertion and cognitive-personality functioning. Comparison of scores on the Neurosis subscale for low- versus high-assertive individuals could, for example, provide additional support for previously-reported inverse relationships between these variables (Bates & Zimmerman, 1971; Hernandez & Mauger, 1980; Orenstein et al., 1975; Shows et al., 1974; Vestewig & Moss, 1976).

Finally, inclusion of two subscales designed to measure defensive responding (e.g., the Self Criticism and Defensive Position subscales) allows for control of the possible confounding effects of response-bias, introduced through the use of subjective, self-report measures of assertion and cognitive-personality functioning.

I-E. The Internal-External Locus of Control Scale (Rotter, 1966) is a 29-item inventory designed to assess the degree to which an individual views the consequences (rewards) that accrue to him/her as contingent largely upon his/her own behaviour (internal locus of control) or as primarily under the control of external factors (external locus of control) such as fate, luck, or other people. The I-E was chosen because it is the most widely-used and extensively-researched measure of locus of control (Robinson & Shaver, 1973). It is quick and easy to administer, has good reliability and validity (Joe, 1971; Lefcourt, 1966; Phares, 1976; Rotter, 1966; Strickland, 1977), and is the only locus of control scale previously used in studies on assertion (Appelbaum et al., 1975; Bates & Zimmerman, 1971; Borges & Laning, 1979; Doherty & Ryder, 1979; Gay et al., 1975; Pentz, 1980; Rimm, Hill, Brown, & Stuart, 1974; Schwartz & Higgins, 1979; Snyder, 1973). The I-E is scored in a negative direction, with higher scores indicating a more external locus of control.

BDI. The Beck Depression Inventory (Beck et al., 1961) is a

clinically-derived self-report measure "designed to include all symptoms integral to the depressive constellation and at the same time to provide for grading the intensity of each" (Beck, 1967, p. 188). The scale is faster and easier to use than most other depression inventories, a factor which may account for its widespread application. The BDI has been used in over 100 published studies (Beck & Beck, 1972), including those on assertion (Frey, 1976; Hayman & Cope, 1980; Lapointe, 1977; Lapointe & Rimm, 1980; Rehm et al., 1979; Sanchez et al., 1980). The psychometric properties of the scale have been widely investigated, with good construct validity evidenced by correlations with other depression inventories (Seitz, 1974), with interview rating-scales (Hammen, 1980; Schwab, Bialow, & Holzer, 1967), and with clinical ratings of depression (Beck, 1967; Beck et al., 1961; Metcalfe & Goldman, 1965). Although originally designed for use with psychiatric patients, the BDI has also been shown to be a reliable, valid, and useful measure of depression in college students (Bumberry, Oliver, & McClure, 1978; Hammen, 1980). Higher scores on the BDI reflect a greater severity of depressive symptomatology.

BAT-R. Role-play assertion was assessed using an adapted and modified version of the Behavioral Assertiveness Test -- Revised (BAT-R; Eisler et al., 1975). The original BAT-R contains 32 scenes designed to simulate real-life interactions with other people. Fewer scenes (16 or less) have, however, typically been used. Two scenes from each of the eight categories (see Appendix 1) were randomly chosen for use in this study. Two practice scenes, omitted from the data analysis, were also included.

Role-play scenes were designed to elicit a variety of assertive responses across a wide range of interpersonal contexts (Eisler et al.,

1975). Scenes varied along three contextual dimensions: (1) type of assertion, (2) sex of the stimulus-person, and (3) familiarity of the stimulus-person. Half the scenes involved negative assertion, or expressions of anger, criticism, or disagreement; the other half involved positive assertion, or expressions of praise, appreciation, or affection. In half the scenes, the stimulus-person was male; in the other half, female. Eight scenes involved assertion with a familiar person; eight involved assertion with a stranger.

Order of scenes was randomized within two blocks. Each of the eight categories or combinations of role-play dimensions (e.g., male positive familiar, male negative familiar, and so on) occurred once within a single block. Block presentation was counterbalanced. Half the participants responded to the scenes in natural order (Block 1, Block 2), while the other half received the scenes in reverse order (Block 2, Block 1). A more detailed description of the role-play test is provided in the Procedure.

Procedure

Participation was solicited during classtime, following verbal permission from instructors. The 'Request for Student Participation', read out-loud to each class, is shown in Appendix 2.

The RAS was administered to students who indicated a desire to take part. A 'Personal Data Sheet' (Appendix 3) was completed by each participant.

Within a few weeks, participants were contacted by phone and arrangements made for completion of the study. The testing was done on an individual basis, requiring approximately $1\frac{1}{2}$ hours per respondent.

Upon arrival to the experimental session, each participant completed

a 'Consent Form' (Appendix 4). Half the respondents (24 males, 24 females) received the questionnaires next, followed by the modified BAT-R (Order 1). The remaining participants (24 males, 24 females) completed the modified BAT-R before the questionnaires (Order 2). Self-report and role-play measures were preceded by written instructions (Appendix 5).

Sixteen 6 x 6 Latin squares (Meyers, 1979) were used to randomize the order in which questionnaires were administered to individual respondents. This was done to control for possible sequential effects due to order of testing.

Role-play scenes were recorded on 3³/₄ i.p.s. (9.5 cm) audio-tape and presented on a Sony TC-106 reel-to-reel tape-recorder. Responses to role-play scenes were audio-taped on 3³/₄ i.p.s. (9.5 cm) tapes, using a Philips EL-3541A/52C reel-to-reel tape-recorder. Volume and tone level were set at constant levels for all respondents, both when presenting the stimulus-tape and recording responses.

The experimenter remained seated next to the respondent throughout the role-play procedure to operate the audio-tape equipment. The stimulus-tape was stopped at the end of each scene and re-activated once the individual had completed his/her response. The second tape-recorder, used to record participants' responses, was allowed to run throughout the role-play administration.

Upon completion of both self-report and role-play measures, participants were debriefed and advised to watch for bulletins, to be posted in the psychology building, at the start of the fall semester, notifying them of the availability of written results. Provision was made to mail results to participants who anticipated being away. Respondents were thanked for their participation and dismissed.

Scoring of Modified BAT-R

Role-play responses were scored twice, once by a trained research-assistant (official rater) and once by the author (reliability rater). Both raters were 'blind' as to respondents' scores on the self-report inventories. Training consisted of: (1) familiarization with basic assertiveness concepts (Alberti & Emmons, 1970), (2) familiarization with scoring criteria for the modified BAT-R, to be presented below, and (3) instruction and actual practice in rating role-play responses, obtained by scoring practice scenes on the modified BAT-R until inter-rater reliability was sufficient ($r > +.90$) to allow the female research-assistant to work independently of the experimenter.

Responses to all 16 role-play scenes were scored for overall assertion and four, paralinguistic or nonverbal behaviours: latency to respond (in sec), duration of speech (in sec), ratio of speech disturbances to words, and degree of affect. Four content variables were also scored, two for each of the eight positive and eight negative scenes. Content variables were as follows: praise and positive behaviour (positive assertion scenes), compliance and new behaviour (negative assertion scenes). The role-play measures, similar to those employed in previous role-play studies of assertion (e.g., Eisler et al., 1973, 1975; Hersen et al., 1978; Skillings et al., 1973), have been shown to differentiate assertive from nonassertive individuals, categorized using self-report and clinical ratings of assertion (Bellack et al., 1978b; Bourque & Ladouceur, 1978; Eisler et al., 1973, 1975; Gorecki et al., 1981; Heimberg et al., 1979; Romano & Bellack, 1980; Rose & Tryon, 1979; Skillings et al., 1978).

To ensure accurate scoring, only one measure was rated for each audio-tape playback. Responses were replayed as often as necessary to

obtain what were felt by the raters to be accurate judgments of behaviour. Scoring criteria were as follows:

1. Latency of response. Time elapsed from the end of each scene to when the respondent began to speak was recorded in seconds using a stop-watch.
2. Duration of speech. Length of time spoken was recorded for each scene in seconds, using a stopwatch.
3. Ratio of speech disturbances to words. Number of speech disturbances, including stutters, pauses (less than 3 seconds), repetitions, and expletives such as an: 'ah', 'um', and so on (Mahl, 1956) was recorded for each scene. Ratio of speech disturbances was computed by dividing the number of speech disturbances by the number of words spoken.
4. Appropriate affect. Affect was scored on a scale of 1 (very flat, unemotional, or inappropriate tone of voice) to 5 (full and lively intonation appropriate in tone to the positive or negative context of the scene).
5. Praise. Expressions of admiration, approval, or gratitude were scored on an occurrence/nonoccurrence basis for each of the eight, positive scenes.
6. Positive behaviour. Spontaneous offers to perform some positive act for the stimulus-person were scored on an occurrence/nonoccurrence basis for each of the eight, positive scenes.
7. Compliance. Compliance was scored on an occurrence/nonoccurrence basis for each of the eight, negative scenes. Compliance involved failure to resist the stimulus-person's position.
8. New behaviour. Requests for new behaviour by the stimulus-person were scored on an occurrence/nonoccurrence basis for each of the eight, negative scenes.

9. Overall assertion. Level of overall assertion was scored for all 16 scenes using a scale of 1 (very nonassertive) to 5 (very assertive). Both paralinguistic and content variables were considered in making this rating.

Reliability of Role-Play Measures

Inter-rater reliability was assessed for each of the nine behavioural measures. Reliability checks were derived from procedures previously described in role-play studies of assertion (e.g., Eisler et al., 1973, 1975; Hersen et al., 1978; Skillings et al., 1978). Inter-rater reliabilities for latency, duration, ratio, affect, and overall assertion were computed by calculating Pearson Product-Moment correlation co-efficients between mean ratings assigned to all 96 individuals on each variable by raters 1 and 2. The proportion of inter-rater agreement provided reliability estimates for praise, positive behaviour, compliance, and new behaviour. Inter-rater agreement was calculated by dividing the total number of agreements per measure by the total number of ratings assigned. Agreements were instances in which both raters judged the specified behaviour to have occurred.

RESULTS

Results for the self-report inventories will be presented first, followed by findings for the role-play measures. Results for the seven, self-report inventories center around the relationship between assertiveness, assessed using the RAS and CSES, and cognitive-personality functioning, measured by the SAD, FNE, TSCS, I-E, and BDI. Also included in this section are the relationships observed among assertion and specific subscales on the TSCS.

Results for the role-play measures focus on the relationship of role-play assertion to cognitive-personality functioning, measured as above. The effects of situational variables on assertion are also assessed, both by themselves and in relation to interpersonal anxiety on the SAD. Situational variables studied include the type of assertive situation, as well as the sex and familiarity of the stimulus-person involved. A summary of both self-report and role-play findings concludes the Results section.

Self-Report Inventories

Preliminary analysis of the self-report inventories revealed no significant effects due to order of test or scene administration, indicating that counterbalancing procedures employed in the study were successful. Self-report data for the entire sample of 96 respondents were combined for further analysis.

Results for both assertion inventories (RAS, CSES) revealed less social anxiety and distress, greater self-esteem, less fear of negative evaluation, and less depressive symptomatology for more assertive individuals. Assertion scores on the CSES were most strongly related to the Social and Personal Self subscales of the TSCS. High-assertive

individuals were also less likely to endorse items on the TSCS characteristic of psychiatric patients in general (General Maladjustment subscale) and neurotics in particular (Neurosis subscale).

Attempts to statistically control for the potential confounding effects of defensive responding (Defensive Position subscale) on self-report inventories failed to alter the basic pattern of significant relationships among variables. The most notable change was that assertion no longer correlated significantly with less depressive symptomatology.

A more detailed presentation of results follows.

Preliminary Analyses

Order effects. Preliminary analysis of self-report inventories revealed no significant multivariate effects due to order of test, $F(6, 87) = .43, p > .05$, or scene administration, $F(6, 87) = .36, p > .05$. Nor was there a significant interaction between order factors, $F(6, 87) = .66, p > .05$. The RAS was excluded from this analysis as it was always completed in class, prior to the role-play administration. Self-report data for the four combinations of test by scene administration were pooled for further analysis.

Effect of sex and age. Multivariate analyses of variance for all seven self-report inventories revealed a significant multivariate effect for sex, $F(7, 88) = 3.46, p < .01$, with significant univariate effects on the RAS, $F(1, 94) = 4.62, p < .05$, and FNE, $F(1, 94) = 7.90, p < .05$. Males ($M = 16.04, SD = 19.00$) scored significantly higher than females ($M = 5.71, SD = 27.37$) on assertion, while females ($M = 13.67, SD = 7.56$) scored significantly higher than males ($M = 9.77, SD = 5.92$) on fear of negative evaluation. Since most measures did not show significant sex differences, data for male and female respondents were combined. Only

self-esteem correlated significantly with age ($r = +.28, p < .05$).

Relationships Among Assertion and Personality Inventories

The primary goal of this thesis was to examine the relationship between assertiveness and cognitive-personality functioning, specifically fear of disapproval, interpersonal anxiety, self-esteem, locus of control, and depression. Pearson Product-Moment correlation coefficients computed among the two assertion and five personality inventories revealed three main findings (Table 1). First, with the exception of locus of control, all correlations are highly significant even when alpha is adjusted to take into account the large number of correlations tested (see Harris, 1976; Larzelere & Mulaik, 1977). Second, all relationships are in the predicted direction. Individuals who scored highest in assertion also reported less social anxiety and distress, greater self-esteem, less fear of negative evaluation, and less depressive symptomatology. Third, the pattern of correlation is identical for the RAS and CSES ($r = +.73, p < .001$). Somewhat stronger associations to the CSES may reflect that this inventory was administered with the personality measures while the RAS was administered separately in class. Differences between correlation coefficients for the two assertion inventories were non-significant. A test of the significance of the difference between correlation coefficients for correlated samples (Ferguson, 1971) was used to make these comparisons.

Relationships Among Assertion and TSCS Subscales

Frame of reference subscales. Table 2 shows significant positive correlations among the two assertion inventories and all eight 'frame of reference' subscales. Again, the pattern of correlation is identical for the RAS and CSES with two exceptions. Compared to the RAS, the CSES is

Table 1

Product-Moment Correlations Among Assertion
and Personality Inventories

Personality inventory	Assertion inventory	
	RAS	CSES
FNE	-.39***	-.47***
SAD	-.47***	-.54***
TSCS	.43***	.49***
I-E	-.12	-.20 ^a
BDI	-.27**	-.31***

Note. A two-tailed multistage Bonferroni procedure (Larzelere & Mulaik, 1977) was used to test the significance of this and all correlational data presented in matrix form. αF_w reflects the family-wise Type 1 error rate; αT_w is the Type 1 error rate per test. N was 96 for all analyses. {

^aBorderline significance; $\alpha T_w < .05$. Borderline significance indicates results for which the null hypothesis $H_0: \rho = 0$ would be rejected according to the conventional hypothesis-testing procedure.

** $\alpha F_w < .05$; $\alpha T_w = .005$.

*** $\alpha F_w < .01$; $\alpha T_w = .001$

Table 2

Product-Moment Correlations Among Assertion Inventories
and 'Frame of Reference' Subscales on the TSCS

Self-concept subscale	Assertion inventory	
	RAS	CSES
Internal frame		
Identity	.39***	.41***
Self Satisfaction	.42***	.42***
Behavior	.37***	.51***
External frame		
Physical	.41***	.43***
Moral-Ethical	.28**	.30**
Personal	.37***	.45***
Family	.27**	.24**
Social	.36***	.51***

** $\Delta F_w < .05$; $\Delta T_w = .00312$.

*** $\Delta F_w < .01$; $\Delta T_w = .00062$.

more strongly related to the Behavior, $t(93) = 2.14$, $p < .05$, and Social Self subscales, $t(93) = 2.29$, $p < .05$. Significantly stronger associations to the CSES are also observed for the Social and Personal Self subscales as compared to Family, $t(93) = 2.99$, $p < .01$ and $t(93) = 2.51$, $p < .05$ respectively, and Moral-Ethical Self, $t(93) = 2.38$, $p < .05$ and $t(93) = 1.99$, $p < .05$ respectively. All other comparisons are nonsignificant.

Empirical subscales. Table 3 demonstrates that individuals who scored highest on assertion also responded least like the various psychodiagnostic groups on items previously found to differentiate psychiatric patients from nonpatient samples. This pattern was predominant for the General Maladjustment and Neurosis subscales. Higher scores on assertion did not, however, correlate significantly with "level of adjustment or degree of personality integration" (Fitts, 1965, p. 5). Results for the RAS and CSES were again similar.

The relationship between assertion and Defensive Position (DP) is of particular interest. High scores on DP may indicate "a positive self-description stemming from defensive distortion" (Fitts, 1965, p. 5). While most participants (91%) were well within the normal range of minimally defensive responding, the relationship between assertion and DP scores does suggest that individuals who scored highest in assertion may have been characterized by a more positive response-bias. A more positive response-bias could partially account for significant relationships among assertion and personality-functioning since low SAD, FNE, and BDI scores were also related to higher scores on DP (Table 4). Self-esteem (i.e., Total Positive on the TSCS) was excluded from this analysis since correlations with DP tend to be spuriously high due to overlapping items (Fitts, 1965). Correlations among personality variables and Self

Table 3

Product-Moment Correlations Among Assertion Inventories
and 'Empirical' Subscales on the TSCS

Self-concept subscale	<u>Assertion inventory</u>	
	RAS	CSES
Defensive Position	.26**	.33***
General Maladjustment ^a	.40***	.47***
Psychosis	-.27**	-.33***
Personality Disorder ^a	.27**	.32***
Neurosis ^a	.41***	.44***
Personality Integration	.01	-.03

^a General Maladjustment, Personality Disorder, and Neurosis are inverse scales. High scores indicate responses least similar to those given by individuals of that psychiatric grouping.

** $\alpha_F < .05$; $\alpha_T = .00417$.

*** $\alpha_F < .01$; $\alpha_T = .00083$.

Table 4

Product-Moment Correlations Among Personality Inventories
and Two Measures of Defensive Responding

Personality inventory	Defensiveness subscale ^a	
	Defensive position	Self criticism
FNE	-.43***	.19
SAD	-.45***	.04
I-E	-.20 ^b	.07
BDI	-.52***	.12

^aDefensive Position (DP) and Self-Criticism (SC) are scored in opposite directions. High DP and low SC both indicate high defensiveness. Scores on DP and SC were inversely related ($r = -.34$, $p < .001$).

^bBorderline significance; $\Delta T_w < .05$.

*** $\Delta F_w < .01$; $\Delta T_w = .00125$.

Criticism, a less subtle index of defensiveness (Fitts, 1965), were non-significant (Table 4). Neither the RAS ($r = +.05$, $p > .05$) or CSES ($r = +.11$, $p > .05$) correlated with Self Criticism.

Summary. Higher scores on assertion (RAS, CSES) were related to less social anxiety and distress (SAD), greater self-esteem (TSCS), less fear of negative evaluation (FNE), and less depressive symptomatology (BDI). Correlations with locus of control (I-E) were nonsignificant. Higher scores on assertion were also related to more positive performance on all eight, 'frame of reference' subscales of the TSCS and all 'empirical' subscales with the exception of Personality Integration. Correlations among assertion, personality inventories, and the Defensive Position subscale of the TSCS suggest that a positive, response-bias may partially explain significant relationships among assertion and personality functioning.

Relationships Among Assertion and Personality Inventories With Defensive Position Controlled

In light of observed relationships to Defensive Position, assertion and personality variables were re-examined using partial correlation (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) to statistically control for the possible confounding effect of defensive responding (Table 5). Despite a reduction in absolute magnitude, the pattern of correlation among assertion and personality inventories remains virtually unchanged (see Table 1 for comparison). Assertion still correlates most strongly with low social anxiety and distress, high self-esteem, and low fear of negative evaluation. Correlations with locus of control, and now depression, are nonsignificant.

Table 5

Partial Correlations Among Assertion and Personality Inventories With Defensive Position Controlled

Personality inventory	Assertion inventory	
	RAS	CSES
FNE	-.32***	-.39***
SAD	-.40***	-.47***
TSCS	.38***	.40***
I-E	-.07	-.15
BDI	-.16	-.18

*** $r_F < .01$; $r_T = .001$.

Relationships Among Assertion and TSCS Subscales
With Defensive Position Controlled

Frame of reference subscales. Table 6 shows that relationships among assertion and internal 'frame of reference' subscales remain significant, although somewhat reduced in magnitude, once the effect of DP is removed (see Table 2 for comparison). The pattern of correlation for the RAS and CSES is again similar with one exception. Scores on the CSES correlate more strongly with Behavior than do scores on the RAS, $t(93) = 2.18$, $p < .05$. Behavior also correlates more strongly with the CSES than do either the Identity, $t(93) = 2.55$, $p < .05$, or Self Satisfaction, $t(93) = 2.18$, $p < .05$, internal 'frame of reference' subscales.

Relationships among assertion and external 'frame of reference' subscales are also somewhat reduced in magnitude and significant now only for Physical, Personal, and Social Self. The pattern of correlation is again similar for the RAS and CSES, except for a significantly stronger association between Social Self and CSES, as compared to RAS, scores, $t(93) = 2.32$, $p < .05$. Social and Personal Self are again more strongly associated to the CSES than are either Family, $t(93) = 3.96$, $p < .001$ and $t(93) = 2.97$, $p < .01$ respectively, or Moral-Ethical Self, $t(93) = 3.02$, $p < .01$ and $t(93) = 2.40$, $p < .05$ respectively. Physical Self also correlates more strongly with CSES scores than does Family Self, $t(93) = 2.59$, $p < .05$. All other comparisons were nonsignificant.

Empirical subscales. Table 7 demonstrates that with DP controlled, relationships among assertion and 'empirical' subscales remain significant only for the General Maladjustment, Neurosis and, in the case of the CSES alone, Psychosis subscales (see Table 3 for comparison). That is, high-assertive individuals were less likely to endorse items previously found

Table 6

Partial Correlations Among Assertion and 'Frame of Reference' Subscales With Defensive Position Controlled

Self-concept subscale	Assertion inventory	
	RAS	CSSES
Internal frame		
Identity	.29**	.28*
Self Satisfaction	.34***	.28*
Behavior	.28*	.43***
External frame		
Physical	.34***	.33**
Moral-Ethical	.16	.14
Personal	.28*	.33**
Family	.15	.07
Social	.26*	.42***

* $\Delta F_w < .10$; $\Delta T_w = .00625$.

** $\Delta F_w < .05$; $\Delta T_w = .00312$.

*** $\Delta F_w < .01$; $\Delta T_w = .00062$.

Table 7

Partial Correlations Among Assertion and 'Empirical'
Subscales With Defensive Position Controlled

Self-concept subscale	Assertion inventory	
	RAS	CSES
General Maladjustment ^a	.31**	.36***
Psychosis	-.21 ^b	-.26*
Personality Disorder ^a	.16	.18
Neurosis ^a	.34***	.31**
Personality Integration	-.04	-.10

^aHigh scores on these subscales indicate responses least like those given by individuals from that psychiatric grouping.

^bBorderline significance; $\Delta T_w \angle .05$,

* $\Delta F_w \angle .10$; $\Delta T_w = .010$.

** $\Delta F_w \angle .05$; $\Delta T_w = .005$.

*** $\Delta F_w \angle .01$; $\Delta T_w = .001$.

to distinguish psychiatric patients in general, and neurotics or psychotics in particular.

Summary. Use of partial correlation to control for the possible confounding effects of defensive responding did not change the basic pattern of significant relationships among variables. Despite a reduction in absolute magnitude, assertion scores on both the RAS and CSES still correlated significantly with low social anxiety and distress, high self-esteem, and low fear of negative evaluation. Partial correlations with depressive symptomatology were nonsignificant, as were those for locus of control. Relationships among assertion and TSCS subscales were also reduced in magnitude but remained significant for all three internal (Identity, Self Satisfaction, Behavior) and three of five external (Physical Self, Personal Self, Social Self) 'frame of reference' subscales. Relationships to both the RAS and CSES were now significant only in the case of the General Maladjustment and Neurosis 'empirical' subscales of the TSCS.

Role-Play Measures

Preliminary analysis of role-play measures showed no significant effects due to order of test or scene administration, supporting the efficacy of counterbalancing procedures used in this study. Role-play data for all 96 respondents were pooled for further analysis.

High inter-rater reliability was observed for all nine role-play measures. Contrary to prediction, no significant relationships were found among role-play measures of assertion and cognitive-personality functioning, assessed using self-report inventories.

Situational variables were found to influence level of overall assertion with greater assertion in positive situations, with females, and

with unfamiliar stimulus-persons. Interpersonal anxiety (SAD) interacted with situational variables, producing markedly differential effects on overall assertion for high- versus low-anxiety individuals. A more detailed presentation of results follows.

Preliminary Analyses

Reliability. The reliability of role-play measures was assessed by examining the degree of concordance between scores assigned by rater 1 (official rater) and rater 2 (reliability rater). Pearson Product-Moment correlation coefficients were computed for overall assertion and paralinguistic measures of latency, duration, ratio of speech disturbances, and affect. These correlations indicate high inter-rater reliability for all five measures (Table 8). Inter-rater agreement is also high for the four content measures of role-play assertion (Table 8). Only ratings assigned by rater 1 (trained, research assistant) were used in examining the relationship of role-play assertion to personality-functioning. This was done to avoid the potential effect of experimenter-bias which could be introduced by utilizing the reliability rater's (i.e., the author's) scores.

Order effects. No significant multivariate effect was found for order of test, $F(9, 84) = 1.11, p > .05$, or scene administration, $F(9, 84) = .34, p > .05$. Nor was there a significant interaction between order factors, $F(9, 84) = .56, p > .05$. Role-play data for all four combinations of test by scene administration were pooled for further analysis.

Effects of sex and age. A multivariate analysis of variance for sex produced no significant main effect, $F(9, 86) = .95, p > .05$. Role-play data for males and females were combined. None of the nine, role-play measures correlated significantly with age.

Table 8

Inter-Rater Reliability of Role-Play
Measures of Assertion

Role-play measure	Product-Moment Correlation ^a	Proportion of inter- rater agreement ^b
Paralinguistic		
Latency	.99	
Duration	.99	
Ratio	.99	
Affect	.94	
Overall	.94	
Content		
Praise		.98
Positive Behaviour		.99
Compliance		.97
New Behaviour		.98

^a Degree of correlation between mean scores on that measure assigned to each respondent by raters 1 and 2.

^b Total number of agreements divided by total number of positive or negative scenes.

Relationships Among Personality Inventories and Role-Play Measures

Pearson Product-Moment correlation coefficients computed among personality inventories and role-play measures revealed no significant relationships among variables, even using conventional hypothesis-testing procedures (Table 9). More stringent testing procedures, using multistage Bonferroni analysis (Harris, 1976; Larzelere & Mulaik, 1977), were not pursued.

Use of partial correlation (Nie et al., 1975) to control for the possible confounding effects of sex, age, and Defensive Position failed to alter the basic pattern of nonsignificant relationships among variables. Role-play measures were also unrelated to self-report inventories of assertion. The only exception was a significant partial correlation between overall assertion and RAS scores ($r = +.33$, $p < .05$).

The Effect of Personality and Situational Variables on Role-Play Assertion

The second major goal of this thesis was to examine the potential mediating effect of cognitive-personality functioning on situational determinants of assertion. Of all five personality variables included in this study, anxiety is the one most frequently discussed with reference to assertion. Social anxiety and distress was thus chosen for use in exploring the potential interactional effects of personality and situational variables on role-play assertion. Scores on overall assertion provided a summary measure of assertion. Inter-relationships among overall assertion and other role-play measures are provided in Appendix 6.

Design. Overall assertion was analyzed using a four-way univariate analysis of variance with repeated measures on three factors. The design consisted of one crossed subject-factor (anxiety level) and three crossed

Table 9

Product-Moment Correlations Among Personality Inventories
and Role-Play Measures of Assertion

Role-play measure	<u>Personality inventory</u>				
	FNE	SAD	TSCS	I-E	BDI
Latency	-.02	.10	.03	-.07	-.03
Duration	.04	-.13	.08	-.12	.07
Ratio	.11	-.08	-.08	-.12	.16
Affect	-.07	.00	.15	-.08	-.05
Overall	-.05	.00	.17	.04	-.08
Praise	.14	.02	.01	-.08	-.02
Positive Behaviour	.02	-.16	-.01	.10	.09
Compliance	-.06	-.10	.09	-.12	-.14
New Behaviour	.03	-.07	.19	-.10	.02

situational-factors (situation type, sex of the stimulus-person, and familiarity of the stimulus-person) which were repeated for each respondent (Table 10). Participants were dichotomized at the median into low ($n = 49$) and high ($n = 47$) anxiety groups using scores on the SAD.

Situational effects. Significant main effects were found at the .001 level for all three situational variables of situation type, sex, and familiarity (Table 10). Assertion was higher in positive situations, with females, and with unfamiliar stimulus-persons. Means and standard deviations are presented in Table 11. Low- and high-anxiety individuals did not differ significantly in overall assertion.

A significant two-way interaction between situation type and sex, $F(1, 94) = 6.07$, $p < .05$ revealed that increased assertion in positive situations was evident only when interacting with males, $F(3, 92) = 36.50$, $p < .001$. Scheffé tests (Ferguson, 1971) were used to make all post-hoc comparisons between means.

A significant three-way interaction between situation type, sex, and familiarity, $F(1, 94) = 6.89$, $p < .01$, showed further that greater assertion in positive situations when interacting with males occurred only with unfamiliar stimulus-persons, $F(7, 88) = 38.05$, $p < .01$ (Figure 1). With familiar males, assertion did not increase significantly in positive situations over and above that observed in more negative situations. Respondents were more assertive with females than with males in all situations, except those involving negative assertion with a familiar stimulus-person.

Interactions between personality and situational variables. All three-way interactions between level of anxiety and situational variables were significant (Table 10), indicating the markedly differential effects

Table 10

Anova Summary Table for the Effect of Personality and Situational Variables on Level of Overall Assertion (Modified BAT-R)

Source	df	MS	F
Between			
Level of anxiety (A)	1	.004	.01
Error b	94	.750	
Within			
Type of situation (T)	1	17.437	36.55***
T x A	1	.185	.39
Error w	94	.477	
Sex of stimulus-person (S)	1	28.105	76.34***
S x A	1	.605	1.64
Error w	94	.368	
Familiarity of stimulus-person (F)	1	9.637	24.04***
F x A	1	.613	1.53
Error w	94	.401	
T x S	1	2.029	6.07*
S x F	1	.725	1.69
T x F	1	.196	.53
T x S x F	1	2.313	6.89**
A x T x S	1	2.915	8.72**
A x T x F	1	1.855	5.00*
A x S x F	1	2.407	5.63*
T x S x F x A	1	.360	1.07

*p < .05

**p < .01

***p < .001

Table 11

Means and Standard Deviations for Main Effects
(Modified BAT-R)

Main effect	<u>M</u>	<u>SD</u>
Type of situation		
Positive	3.62	.50
Negative	3.36	.78
Sex of stimulus-person		
Female	3.67	.67
Male	3.29	.61
Familiarity of stimulus-person		
Unfamiliar	3.59	.63
Familiar	3.37	.65
Level of Anxiety		
Low	3.48	.65
High	3.48	.63

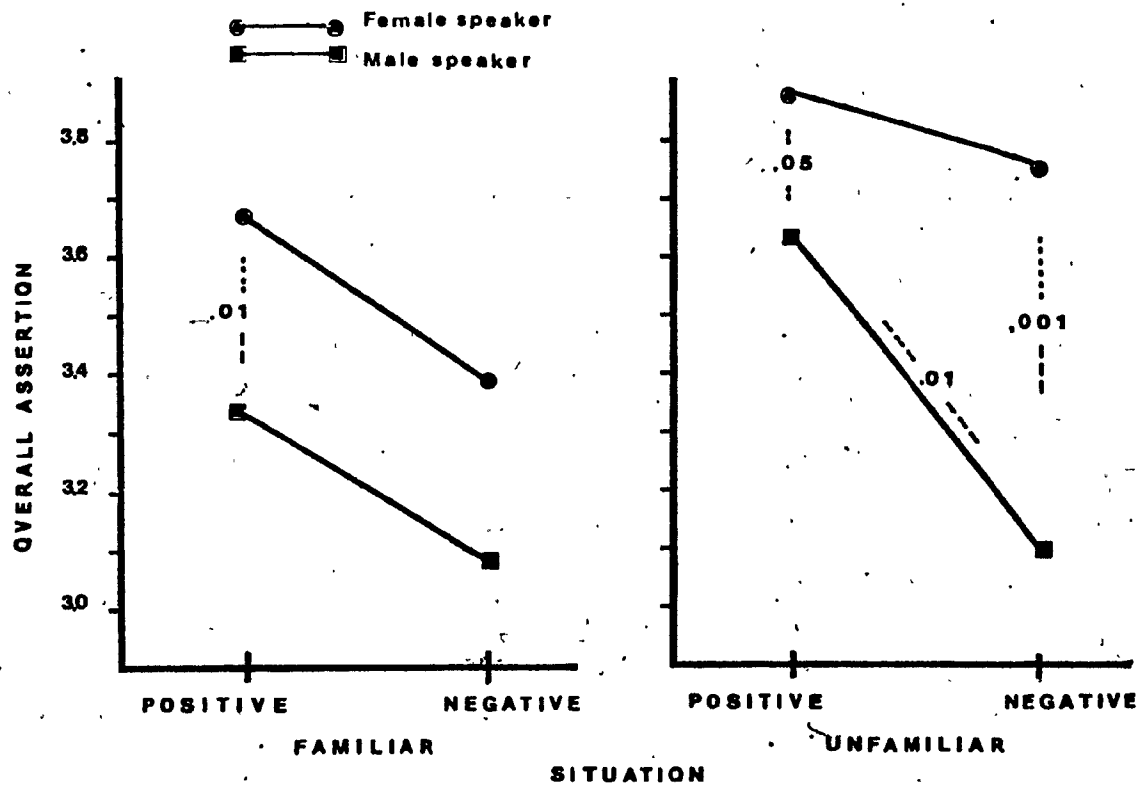


Figure 1. Effect of type of situation, sex of the stimulus-person, and familiarity of the stimulus-person on Overall Assertion.

of situational variables on assertion for high-versus low-anxiety individuals. A significant three-way interaction between anxiety level, situation type, and sex, $F(1, 94) = 8.72, p < .01$, revealed essentially opposite effects for the two groups (Figure 2). High-anxiety respondents were significantly less assertive in negative situations with males, as compared to both positive situations with males, $F(7, 88) = 33.47, p < .01$, and negative situations with females, $F(7, 88) = 38.56, p < .01$. In contrast, low-anxiety respondents were significantly less assertive in positive situations with males, $F(7, 88) = 27.35, p < .01$, and in negative situations with females, $F(7, 88) = 16.35, p < .05$, as compared to situations involving positive assertion with females.

A significant three-way interaction between anxiety level, situation type, and familiarity, $F(1, 94) = 5.00, p < .05$, revealed more pronounced situational influences for high-versus low-anxiety individuals (Figure 3). No significant situational differences were observed in the low-anxiety group. In contrast, high-anxiety respondents were significantly more assertive with unfamiliar stimulus-persons in positive, as compared to negative, situations, $F(7, 88) = 22.45, p < .01$. High anxiety individuals were also more assertive with unfamiliar stimulus-persons in positive situations, as compared to positive situations involving more familiar others, $F(7, 88) = 19.03, p < .05$.

Finally, a significant three-way interaction between anxiety level, sex, and familiarity, $F(1, 94) = 5.63, p < .05$, revealed further differential influences for situational factors on high- versus low-anxiety respondents (Figure 4). While high-anxiety respondents were more assertive with familiar females than with familiar males, $F(7, 88) = 28.97, p < .01$, low-anxiety respondents did not differ significantly in this respect.

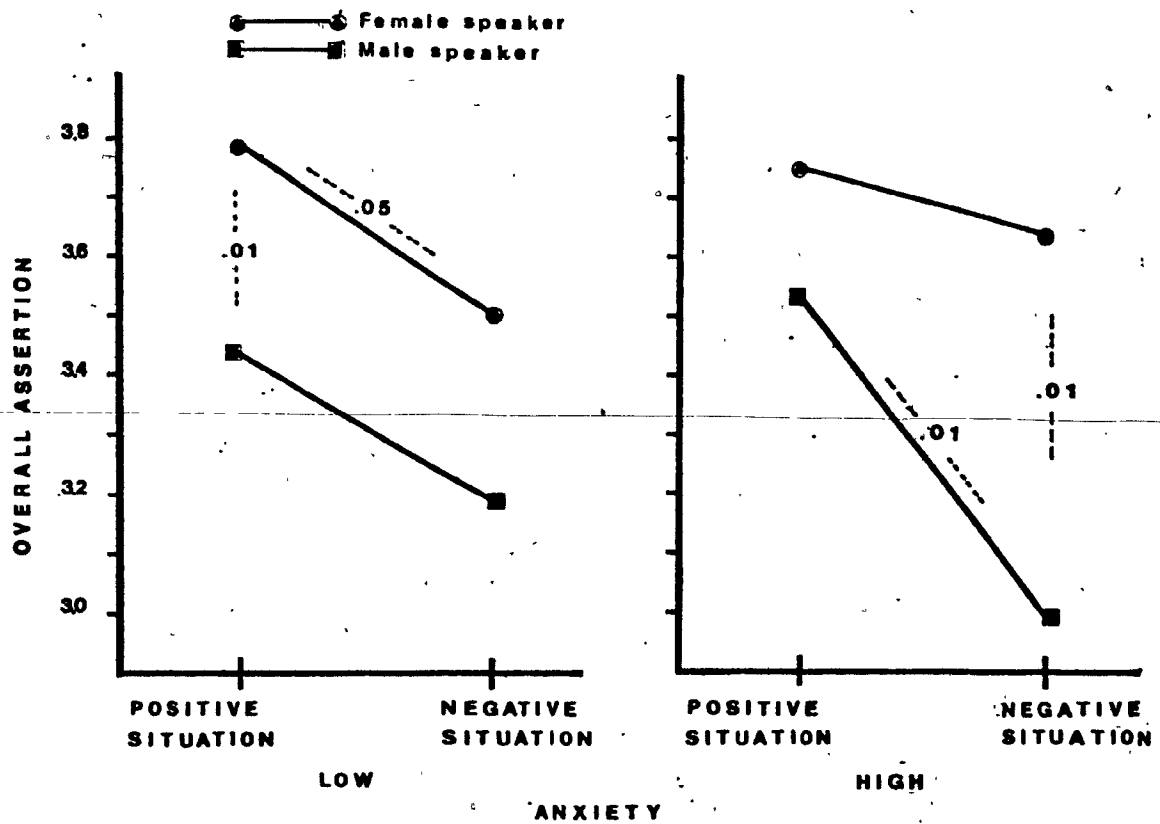


Figure 2. Effect of interpersonal anxiety, type of situation, and sex of the stimulus-person on Overall Assertion.

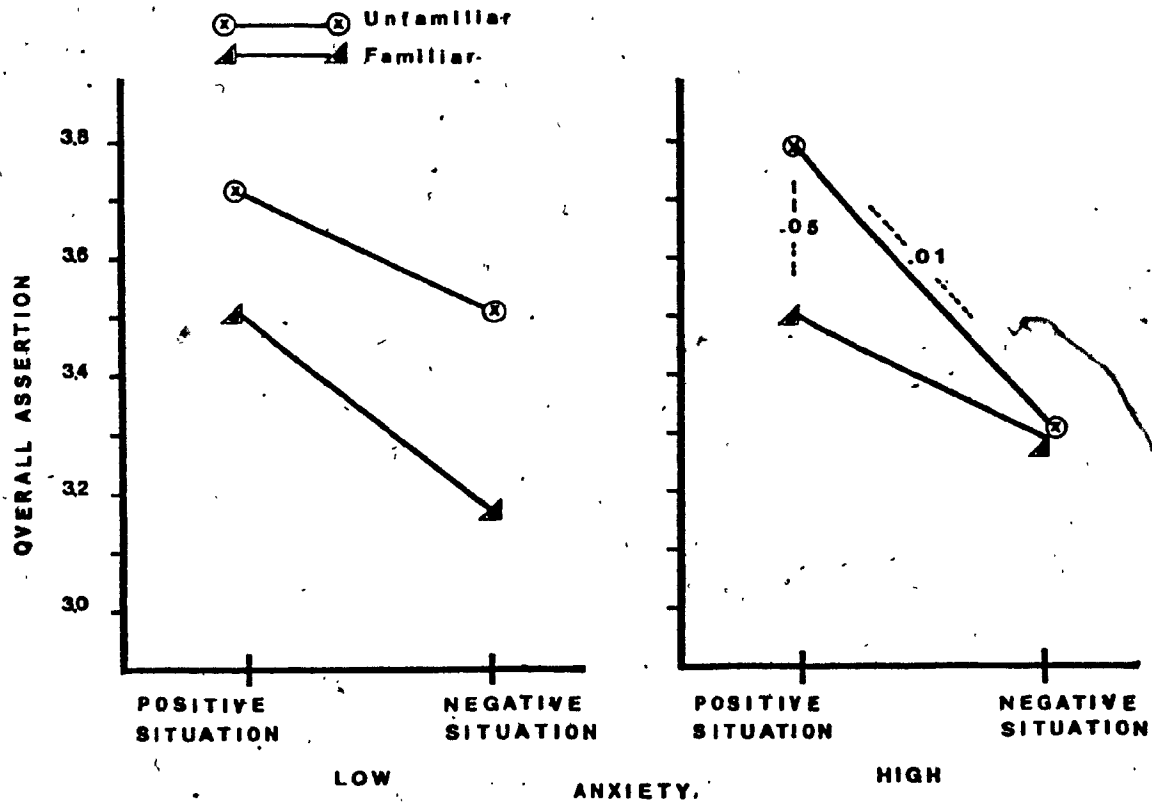


Figure 3. Effect of interpersonal anxiety, type of situation, and familiarity of the stimulus-person on Overall Assertion.

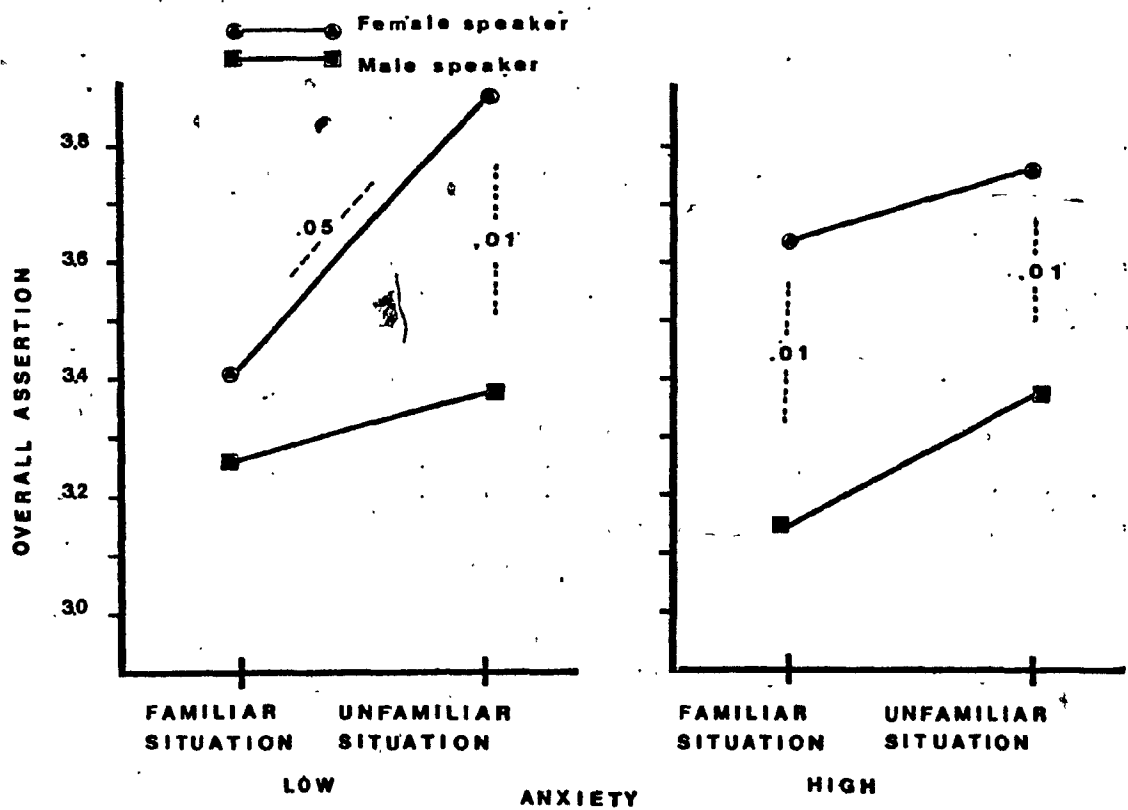


Figure 4. Effect of interpersonal anxiety, sex of the stimulus-person, and familiarity of the stimulus-person on Overall Assertion.

Low-anxiety individuals were more assertive with unfamiliar as compared to familiar females, $F(7, 88) = 18.68, p < .05$. The only significant situational effect common to both low, $F(7, 88) = 30.15, p < .01$, and high, $F(7, 88) = 24.42, p < .01$, anxiety individuals was greater assertion with unfamiliar females than with unfamiliar males.

Summary. Consistent with past research, overall assertion was higher in positive situations, with females, and with unfamiliar stimulus-persons. Greater assertion in positive situations was due primarily to situations involving unfamiliar males. Respondents were more assertive with females in all situations, except those entailing negative assertion with a familiar person.

Interpersonal anxiety was found to interact with situational variables in determining level of overall assertion. Situational influences were not only different but more pronounced for high- versus low-assertive individuals. The only situational effect common to both high- and low-anxiety groups was greater assertion with unfamiliar females than with unfamiliar males.

Summary of Self-Report and Role-Play Findings

Individuals who scored highest on the RAS and CSES also reported less social anxiety and distress, greater self-esteem, less fear of negative evaluation, and less depressive symptomatology. Correlations with locus of control were nonsignificant. Higher scores on assertion were also related to more positive performance on both internal (Identity, Self Satisfaction, Behavior) and external (Physical, Moral-Ethical, Personal, Family, Social) 'frame of reference' subscales on the TSCS. In addition, high assertive individuals were less likely to endorse items characteristic of psychiatric patients, in general, and neurotics, in

particular, as evidenced by significant correlations among assertion and five of the six 'empirical' subscales of the TSCS. Degree of Personality Integration did not correlate significantly with assertion.

Use of partial correlation to control for the possible confounding effects of defensive responding on self-report data did not substantially alter the pattern of significant relationships observed among variables. Other than a slight reduction in magnitude of relationships, the only notable changes were as follows: (1) assertion and depression no longer correlated significantly, (2) significant relationships among assertion and external 'frame of reference' subscales were retained only for Physical, Personal, and Social Self, and (3) relationships among assertion and 'empirical' subscales were significant only for the General Maladjustment, Neurosis, and in the case of the CSES alone, Psychosis subscales.

Results for the nine, behavioural role-play measures showed no significant relationships among assertion and any of the five, personality inventories. Role-play and self-report measures of assertion were also unrelated. Situational variables of situation type, sex of the stimulus-person, and familiarity of the stimulus-person were, however, found to influence overall level of role-play assertion both alone and in combination with degree of interpersonal anxiety. Assertion was highest in positive situations, with females, and with unfamiliar stimulus-persons. Greater assertion in positive situations was due primarily to situations involving unfamiliar males, while greater assertion with females was evident in all situations except those involving negative assertion with a familiar person. Interpersonal anxiety interacted with all three, pairwise combinations of situational variables, producing effects which were both different and more pronounced for high- versus low-anxiety

individuals. The only situational influence common to both high- and low-anxiety groups was greater assertion with unfamiliar females, as compared to males.

DISCUSSION

A major goal of this thesis was to examine the relationship between level of assertiveness and cognitive-personality functioning. Results support the hypothesis that individual differences in assertiveness are related to the more general, psychological functioning of the individual. Self-report data reveal that adults who report themselves as most assertive also experience less interpersonal anxiety, greater self-esteem, less fear of disapproval, and less depressive symptomatology compared to less assertive individuals. Assertive individuals were also less likely to respond like psychiatric patients on 'empirical' subscales of the TSCS.

While role-play data fail to substantiate a linear relationship between level of assertiveness and cognitive-personality functioning, they do provide evidence of a link between personality-functioning and situational variables as influences on assertive behaviour. Interpersonal anxiety and situational variables interacted in determining the overall levels of role-play assertion exhibited by high- and low-anxiety respondents. That high- and low-anxiety individuals showed different patterns of assertive behaviour when compared across similar role-play scenes highlights the importance of both personality and contextual factors in understanding assertive versus nonassertive behaviour. A more detailed discussion of self-report and role-play findings follows.

Self-Report Levels of Assertion and Personality Functioning

Results for the two assertion inventories utilized in this study support the hypothesis that individual differences in assertion are related to more general aspects of an individual's personality functioning. As predicted, higher scores on the Rathus Assertiveness Schedule

and College Self-Expression Scale were associated with less social anxiety and distress, higher self-esteem, less fear of negative evaluation, and less depressive symptomatology. These findings are consistent with previous studies on personality correlates of assertion (e.g., Deffenbacher & Payne, 1978; Kern & MacDonald, 1980; Lindquist et al., 1979). Furthermore, significant relationships among assertion and personality variables, other than depression, were maintained even when the potentially confounding effect of defensive responding was removed. This finding suggests that significant relationships observed in this study are likely more than just artifacts arising from individual response-biases inherent in filling out self-report questionnaires. Furthermore, that low interpersonal anxiety and high self-esteem were most clearly related to self-report measures of assertion provides support for theories which posit the centrality of these concepts in understanding assertive versus non-assertive behaviour (e.g., Salter, 1949; Wolpe, 1958).

Locus of control. Contrary to prediction, no relationship was found between locus of control and assertion. This finding argues against the hypothesis that individuals who are more assertive in their relationships with other people also feel more in control of their lives. At the same time, however, it should be noted that locus of control items included in the Rotter (1966) I-E scale span a wide range of diverse situations, involving both personal and world affairs, and positive as well as negative events, to name just a few. This diversity of items raises the possibility that use of the Rotter (1966) I-E scale may have confounded different types of locus of control (e.g., personal versus political), resulting in confounded relationships with assertion. Consideration of the potentially multidimensional nature of the locus of control concept (Berndt, 1978;

Nowicki & Duke, 1974; Robinson & Shaver, 1974), could yield stronger support for a relationship between locus of control and assertion since logically-speaking assertion should be more closely related to personal, as opposed to sociopolitical, feelings of control (Replogle, O'Bannon, McCullough & Cashion, 1980).

Depression. Contrary to prediction, the results of this study fail to provide strong support for a relationship between low levels of assertiveness and greater depressive symptomatology. While scores on the BDI were inversely related to assertion, the significance of this association was not maintained once the effect of defensive responding was removed. This finding suggests that inverse relationships previously reported among assertion and depressive symptomatology may be inflated by failure to control for individual response-biases (e.g., Hayman & Cope, 1980; Langone, 1979; Lapointe & Rimm, 1980).

Alternately, relationships observed among the BDI and assertion scores on the RAS and CSES may have been minimized by a restricted range of scores on the BDI. Specifically, 78% and 15% of the present sample fell within the "not depressed" and "mildly depressed" categories, with only 7% describing themselves as "moderately" to "severely depressed." Interestingly, the magnitude of association between BDI and assertion scores was similar to that previously reported in studies of moderately to severely depressed psychiatric out-patients (e.g., Hayman & Cope, 1980; Lapointe & Rimm, 1980). Taken together, these findings suggest that level of assertion and degree of depressive symptomatology are similarly related at both the upper and lower extremes of the depressive spectrum. Further clarification might be obtained, however, by examining individual levels of assertion in persons sampled across a much wider range of depressive

affect. One approach might be to use a research-based (e.g., Lubin, 1965) as opposed to clinically-derived, scale more likely to yield individual variation at both the upper- and lower-most levels of depressive affect. A wider range of scores might also be obtained by combining both out-patient and non-patient samples (e.g., Lea & Paquin, 1981). Greater variation in depression scores could lead to stronger associations with assertion.

Self-Report Levels of Assertion and TSCS Subscales

Empirical subscales. Further support for the interpretation that assertiveness is not a single-trait phenomenon but rather a more complex characteristic related to the general psychological functioning of the individual stems from the observed relationships among assertiveness and empirical subscales of the Tennessee Self Concept Scale. Consistent with prediction, individuals who scored low on assertion (RAS, CSES) were more likely to endorse items previously found to differentiate psychiatric from nonpsychiatric groupings (Fitts, 1965). This pattern was most apparent for the General Maladjustment and Neurosis subscales. A significant inverse relationship between assertion and neuroticism is consistent with studies which have used other self-report inventories to explore this relationship (Bates & Zimmerman, 1971; Hernandez & Mauger, 1980; Orenstein et al., 1975; Shows et al., 1974; Vestewig & Moss, 1976). From a conceptual viewpoint, an inverse relationship between assertion and neuroticism is also consistent with the notion of nonassertion as a fear, anxiety, inhibition, or avoidance-based phenomenon (Salter, 1949; Wolfe, 1958). This finding also lends support to the argument that interventions designed to increase assertive behaviour may be particularly warranted when dealing with certain, neurotic-type psychiatric populations

(e.g., Chambless, Hunter, & Jackson, 1982).

Interestingly, level of assertion was unrelated to level of psychological adjustment, as indexed by the Personality Integration subscale of the TSCS. This finding suggests that, while low levels of assertion may be related to greater psychopathology, high levels of assertion are not necessarily indicative of above-average psychological functioning. Some caution is thus warranted in interpreting greater assertion as evidence of more pronounced, psychological health (Flowers, Whitely, & Cooper, 1978; Goldman & Olczak, 1981; Olczak & Goldman, 1981; Rathus, 1978).

Frame of reference subscales. One novel aspect of this study concerns the observed relationships among self-report levels of assertion and 'frame of reference' subscales on the TSCS. While other studies have examined assertion relative to overall level of self-esteem (i.e., Total Positive) on the TSCS (Fiedler et al., 1979; Materi, 1977; Tolor et al., 1976; Wolff & Desiderato, 1980), the relation of assertion to specific 'frame of reference' subscales has not been previously explored. Examination of these subscales reveals that level of assertiveness is related to all three internal 'frame of reference' indices of self-esteem. Individuals who described themselves as most assertive also felt more self-accepting (Self Satisfaction) and more positively about who they were (Identity) and what they did (Behavior).

Examination of the external 'frame of reference' subscales revealed that, as predicted, assertion related most strongly to feelings of personal worth (Personal Self) and feelings of adequacy in social situations (Social Self). It is difficult to say why feelings of value as a family member (Family Self) did not relate more strongly to level of assertion since feelings about oneself as a person and in relation to others would

be expected to originate within one's family of origin. One possible explanation might be the lack of specificity regarding family of origin versus family of marriage on items dealing with Family Self. Since both married and unmarried individuals participated in this study, it seems likely that individuals from the two groups may have interpreted and responded to these items differently, resulting in a possibly confounded relationship between assertion and Family Self. A clearer assessment of this relationship might be obtained by specifying items solely with reference to family of origin, or by limiting one's sample to unmarried respondents.

That correlations between assertion and Physical Self were similar to those observed for Personal and Social Self is also surprising. It may be, however, that perceptions of one's body, health, and physical appearance are intimately tied to more global feelings of personal worth, resulting in an apparently inflated association between assertion and Physical Self. Some support for this interpretation is provided by the magnitude of observed correlation between the Personal and Physical Self subscales, both in the present study ($r = +.67$) and the original Fitts (1965) data ($r = +.65$). Alternately, it may be that people who feel better about themselves as persons also take better care of their health and grooming.

Role-Play Measures of Assertion and Personality Functioning

Contrary to prediction, personality variables and role-play measures of assertion were unrelated. Role-play data obtained in this study thus fail to support the hypotheses that individuals who behave more assertively with others also feel less anxious in social situations, less fearful of

negative evaluation, more in control of their environment, less depressed, and more positive about themselves.

The issue of construct validity. That personality and role-play measures should be unrelated is particularly surprising in view of the significant relationships observed between personality measures and self-report inventories of assertion. Three possible explanations exist. The first pertains to the issue of construct validity and the degree to which the various techniques designed to assess assertive behaviour adequately fulfill this function. While the degree of congruence between self-report measures was high ($r = +.73$), and similar to that reported in other studies (Burkhart et al., 1979; Galassi & Galassi, 1980; Green et al., 1979; Rock, 1977; Tolor et al., 1976), self-report and role-play indices were unrelated. Discrepancies between the two have been reported elsewhere (Burkhart et al., 1979; Friedman, 1971; Futch & Lisman, 1977; Heimberg et al., 1979; Hersen et al., 1973; McFall & Marston, 1970), raising further question as to the construct validity of these measures. Self-report and role-play data obtained in this study may thus have been tapping two distinct aspects of psychological functioning, only one of which pertains to assertion. This would explain differential relationships to personality variables for the two measures.

One possibility is that personality variables relate most strongly to how assertively a person feels he/she acts with other people, as opposed to how assertively he/she actually behaves in social situations. Underlying this interpretation is the assumption that self-report measures reflect no more than a person's perceptions of him/herself as an assertive or nonassertive individual, perceptions which may or may not be accurate with respect to overt behaviour. Role-play measures are, in

contrast, presumed to convey a more valid impression of assertive behaviour. This interpretation gives minimal weight to the observed relationships among personality functioning and self-report measures of assertion, while emphasizing the nonsignificant relationships among personality functioning and role-play assertion. Alternately, it may be that role-play measures are not a valid index of assertion (see Bellack et al., 1978a, 1978b; Bellack, Hersen, & Lamparski, 1979; Curran, 1978) and that a lack of relationship to personality functioning reflects this inadequacy.

The multidimensional nature of assertion. A second, possible explanation for the discrepancy between self-report and role-play findings observed in this study pertains to the multidimensional nature of the assertiveness construct (Kendall, Finch, Mikulka, & Coleson, 1980), or the idea that self-report and role-play measures may be tapping equally valid but psychologically distinct aspects of assertive function. To illustrate, self-report inventories generally require that respondents estimate the descriptive accuracy of self-statements across a variety of social situations, providing what may best be viewed as a "probabilistic" or "likelihood" statement of engaging in assertive behaviour. In contrast, role-play measures are typically attuned to both the verbal and nonverbal, qualitative aspects of the individual's response. Viewed in this light, self-report and role-play data obtained in this study indicate that while cognitive-personality functioning may be related to the overall probability of self-assertion, it has little relevance for the actual quality of response once emitted. Qualitative aspects of self-assertion are, of course, generally unavailable from assertion inventories while probabilistic considerations are similarly omitted from role-play

assessments by virtue of the task requirement which specifies that participants respond to each scene. Use of the role-play procedure may, in this sense, enhance assertive behaviour (Gorecki et al., 1981; Higgins et al., 1979), thereby confounding relationships between level of assertiveness and personality variables. With only one or two exceptions, role-play trials in the present study were, in fact, always followed by a verbal response.

The joint contribution of personality and situational variables.

Nonsignificant linear relationships among personality functioning and role-play assertion may also reflect the demonstrated, joint contribution of both personality and situational variables to level of behavioural assertiveness. As predicted, interpersonal anxiety was found to interact with situational factors in determining level of overall, role-play assertion. Thus, high- and low-anxiety individuals responded differently when compared across different types of role-play situations. These findings suggest that relationships among personality variables and assertive behaviour may be obscured by failure to consider situational aspects of the interpersonal context within which the individual is required to assert. This problem could be overcome either through use of the present "interactionist approach" or by examining personality functioning in relation to role-play behaviour assessed one area at a time (e.g., negative assertion with familiar males only). In short, a global examination of role-play assertion in relation to cognitive-personality functioning may be inadequate when assessed across a wide range of diverse, interpersonal situations, with greater elucidation resulting from limitation to certain pre-specified and uniformly-grouped situations.

The Effect of Situational Variables and Interpersonal Anxiety on Role-Play Assertion

The results of this study substantiate the differential effects of three situational variables (type of assertion, sex of the stimulus-person, and familiarity of the stimulus-person) on the assertive, role-play behaviour of high- versus low-anxiety individuals. The results demonstrate that situational influences are not only different but more pronounced for high- versus low-anxiety individuals, suggesting that assertive behaviour may be particularly susceptible to situational influence, and perhaps more prone to situational disruption, in the former group. Effects for high- versus low-anxiety individuals were, in some instances, directly opposite. Thus, while high-anxiety persons were less assertive in negative situations with males, low-anxiety persons were less assertive in negative situations with females.

While similar interactions between situational variables and other aspects of cognitive-personality functioning (e.g., self-esteem, fear of disapproval, and so on) remain to be demonstrated, the results for interpersonal anxiety do highlight the importance of considering both personality and situational factors in attempts to understand individual differences in assertion. A similar view has been put forth by Helmberg and Becker (1981). From a clinical perspective, these findings suggest that clients who present for assertiveness training may benefit most from intervention in different types of social situations, depending upon their initial levels of interpersonal anxiety. Training programs designed to increase assertive behaviour might, therefore, be well advised to assess initial level of anxiety and/or levels of situational assertion as a necessary first step in treatment intervention.

Some Possible Causes of Situational Influences on Assertion

Fear of negative social consequences. That participants in this study behaved more assertively in positive situations, with females, and with unfamiliar others, irrespective of personality-functioning, is consistent with other studies on the situational determinants of assertive versus nonassertive behaviour (e.g., Eisler et al., 1975; Hamilton & Maisto, 1979; Hersen et al., 1978). While the effect of situational variables alone is well-established, little effort has been made towards understanding why individuals should behave less assertively in some situations than in others. One likely hypothesis is that situations of reduced assertion represent greater interpersonal risk vis-a-vis anticipated punishment from others.

While assertion has usually been viewed by professionals as a positively-valued, psychologically healthy, and socially-adaptive behaviour (e.g., Petrie & Rotherham, 1982; Schill, Toves, & Ramanaiah, 1981), research evidence suggests that assertion is not always positively viewed by others. For example, Kelly et al. (1980) note that while assertive individuals are described by others as more competent in social-conflict situations, they are also seen as less likeable, less flexible, less warm, and less friendly than more nonassertive persons. Similarly, Woolfolk and Dever (1979) report that assertion, relative to nonassertion, is viewed as "less polite, more hostile, and less satisfying to the recipient" (p. 404). Similar findings have been reported by others (Epstein, 1980; Hull & Schroeder, 1979; Schimizu & O'Neill, 1982).

Clinicians who practice assertiveness-training also note the initial negative responses elicited from other people when confronted by the

client's new, increased level of assertiveness. Unfavourable reactions to assertion occur most often in situations involving negative assertion since it is these situations which involve the greatest degree of interpersonal conflict or client-opposition to another person's goals. Expressions of anger, disagreement, and disapproval are more likely to be experienced as unpleasant and responded to unfavourably by others than are more positive expressions of praise, appreciation, and so on.

Anticipated negative consequences for self-assertion could, likewise, carry more "inhibitory weight" when interacting with familiar, as opposed to unfamiliar, individuals, since negative reactions to oneself and one's behaviour are presumably more meaningful when elicited from significant others, as compared to strangers. Anticipated negative responses from males may also elicit a stronger desire for avoidance as a way of maintaining a positive self-image, given the generally higher status, power, and importance stereotypically attributed to the opinions of males in our society.

Conflict over the expression of aggression. From a psychodynamic viewpoint, greater inhibition of self-assertion in certain situations could represent internal threat stemming from conflict over the expression versus inhibition of aggressive impulses. While the distinction between assertion and aggression has been emphasized repeatedly in the assertiveness literature (e.g., Alberti, 1977; Degiovanni & Epstein, 1978; Hollandsworth, 1977; Rakos, 1979), this conceptual distinction may well be lacking in the lay-population. Furthermore, there is some logical basis for confusion in that while assertion is not intended to injure, it is nonetheless aggressive in that it provides a means of psychologically defending against "territorial invasion" or violation of one's personal

space (e.g., defense of rights, dignity, and so on) while at the same time allowing the individual to function offensively in an "active-intrusive" mode (Erikson, 1950, 1964). Given these conceptual links, it seems likely that fear of expressing aggressive impulses could underlie reduced assertion in situations involving negative assertion, male recipients, or more familiar others.

From a social-learning point of view, Dollard et al. (1939) have argued that aggression is most likely to be expressed when fear of punishment is less, depending upon such factors as sex, power and importance of the other person vis-a-vis his/her relationship with the individual. Psychodynamically-speaking, inhibition of negative assertion could reflect impulse anxiety related to the expression and/or loss of control over aggressive impulses. Avoidance of negative assertion may, therefore, constitute an effective, albeit ultimately maladaptive, mode of reducing conflict over the expression of aggression.

Assertion with males, particularly negative assertion, may also conjure up fear of retaliation by the male to whom these feelings are expressed. For young adult males, such as the university students sampled in this study, fear of retaliation could take the form of "castration anxiety" (Brenner, 1955) or some other physical threat, while positive assertion by males with males may elicit homophobic fear. Females, on the other hand, might be expected to experience "superego anxiety" or feelings of guilt (Brenner, 1955) related to taking the initiative and acting in the "active-intrusive," as opposed to stereotypically-feminine "passive-receptive," mode (Erikson, 1950, 1964).

Reduced assertion with familiar, as opposed to unfamiliar, others could reflect feelings of separation-anxiety or fear of losing an important

object-relationship (Brenner, 1955) if one maintains an autonomous stance vis-a-vis the other person. The fear of losing a valued object's love, or of psychological abandonment by a significant other, has been discussed extensively by Kohut (1971) who emphasizes the individual's early need for positive regard by others (usually the child's parents) as a way of maintaining self-esteem. The persistence of an infantile need for "oneness" (pathological closeness) and for positive regard in adulthood, as a result of inadequate early "mirroring" and the concomitant failure to internalize positive feelings about the self, has also been discussed (Kohut, 1971). These "psychodynamic explanations" for situational influences on assertion are, of course, merely speculative at present, with further research required to demonstrate their role as true, causative factors in assertive versus nonassertive behaviour. Nonetheless, it is worthwhile noting that this conceptualization of extrapsychic, situational variables within an intrapsychic or psychodynamic framework fits nicely with actual findings observed in this study — namely, that low levels of assertiveness are most clearly related to feelings of interpersonal anxiety and low self-esteem.

Summary

The results of this study support the hypotheses that level of assertiveness is related to the personality functioning of the individual, as well as to the characteristics of the situation in which the individual is required to assert. These findings suggest the importance of both cognitive-personality variables and situational context as important factors in understanding assertive versus nonassertive behaviour.

Situational context was shown to interact with one aspect of personality functioning, as evidenced by more pronounced and differential

effects on overall, role-play assertion for high- versus low-anxiety individuals. Findings suggest that training programs designed to increase assertive behaviour might do well to focus on different types of interpersonal situations for clients varying in initial level of anxiety. The differential likelihood of anticipated, negative consequences for self-assertion -- both vis-a-vis external, social reactions from others and internal, psychic conflict over the expression of aggressive impulses -- are discussed as possible factors underlying situational influences on assertion.

References

- Alberti, R. E. Comments on "Differentiating assertion and aggression: Some behavioral guidelines." Behavior Therapy, 1977, 8, 353-354.
- Alberti, R. E., & Emmons, M. L. Assertion training in marital counseling. Journal of Marriage and Family Counseling, 1976, 2, 49-54.
- Alberti, R. E., & Emmons, M. L. Your perfect right: A guide to assertive behavior. San Luis Obispo, Ca.: Impact, 1970.
- Alden, L., & Cappe, R. Nonassertiveness: Skill deficit or selective self-evaluation? Behavior Therapy, 1981, 12, 107-114.
- Allport, G. A-S Reaction study. Boston: Houghton-Mifflin, 1928.
- Andrasik, F., Heimberg, R. G., Edlund, S. R., & Blankenberg, R. Assessing the readability levels of self-report assertion inventories. Journal of Consulting and Clinical Psychology, 1981, 49, 142-144.
- Appelbaum, A. S. Rathus Assertiveness Schedule: Sex differences and correlation with social desirability. Behavior Therapy, 1976, 7, 699.
- Appelbaum, A. S., Tuma, J. M., & Johnson, J. H. Internal-external control and assertiveness of subjects high and low in social desirability. Psychological Reports, 1975, 37, 319-322.
- Bates, H. D., & Zimmerman, S. F. Toward the development of a screening scale for assertive training. Psychological Reports, 1971, 28, 99-107.
- Beck, A. T. Depression: Causes and treatment. Philadelphia: University of Philadelphia Press, 1967.
- Beck, A. T., & Beck, R. W. Screening depressed patients in family practice: A rapid technique. Postgraduate Medicine, 1972, 52, 81-85.
- Beck, A., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J. An inventory for measuring depression. Archives of General Psychiatry, 1961, 4, 561-571.
- Bellack, A. S., Hersen, M., & Lamparski, D. Role-play tests for assessing social skills: Are they valid? Are they useful? Journal of Consulting and Clinical Psychology, 1979, 47, 335-342.
- Bellack, A. S., Hersen, M., & Turner, S. M. Comments on the utility of suggestive versus definitive data: A reply to Curran. Behavior Therapy, 1978, 9, 469-470. (a)

Bellack, A. S., Hersen, M., & Turner, S. M. Role-play tests for assessing social skills: Are they valid? Behavior Therapy, 1978, 9, 448-461.
(b)

Bellack, A. S., Hersen, M., & Turner, S. M. Relationship of role-playing and knowledge of appropriate behavior to assertion in the natural environment. Journal of Consulting and Clinical Psychology, 1979, 47, 670-678.

Berndt, J. D. Construct validation of the personal and sociopolitical dimensions of Rotter's Internal-External Locus of Control Scale. Psychological Reports, 1978, 42, 1259-1263.

Bloomfield, H. Assertive training in an outpatient group of chronic schizophrenics: A preliminary report. Behavior Therapy, 1973, 4, 277-281.

Bodner, G. E. The role of assessment in assertion training. Counseling Psychologist, 1975, 5, 90-96.

Booraem, C. D., & Flowers, J. V. Reduction of anxiety and personal space as a function of assertive training with severely disturbed neuropsychiatric inpatients. Psychological Reports, 1972, 30, 923-929.

Borges, M. A., & Laning, B. Relationships between assertiveness, achievement motivation, feminist attitudes, and locus of control in the college population. Psychological Reports, 1979, 44, 545-546.

Bourque, P., & Ladouceur, R. Validation de l'échelle d'assertion pour adultes de Gay, Hollandsworth et Galassi. Canadian Journal of Behavioural Science, 1978, 10, 351-355.

Bower, S. A., & Bower, G. H. Asserting yourself: A practical guide for positive change. Reading, Ma.: Addison-Wesley, 1976.

Brenner, C. An elementary textbook of psychoanalysis. Garden City, N. Y.: Doubleday & Company, Inc., 1955.

Brown, S. D., & Brown, L. W. Trends in assertion training research and practice: A content analysis of the published literature. Journal of Clinical Psychology, 1980, 36, 265-269.

Bruch, M. A. A task analysis of assertive behavior revisited: Replication and extension. Behavior Therapy, 1981, 12, 217-230.

Bumberry, W., Oliver, J. M., & McClure, J. V. Validation of the Beck Depression Inventory in a university population using psychiatric estimate as the criterion. Journal of Consulting and Clinical Psychiatry, 1978, 46, 150-155.

- Burkhart, B. R., Green, S. B., & Harrison, W. H. Measurement of assertive behavior: Construct and predictive validity of self-report, role-playing, and in-vivo measures. Journal of Clinical Psychology, 1979, 35, 376-383.
- Butler, P. Assertive training: Teaching women not to discriminate against themselves. Psychotherapy: Theory, Research and Practice, 1976, 13, 56-60.
- Callner, D. A., & Ross, S. M. The reliability and validity of three measures of assertion in a drug addict population. Behavior Therapy, 1976, 7, 659-667.
- Cameron, D. E. The conversion of passivity into normal self-assertion. American Journal of Psychiatry, 1951, 108, 98-102.
- Carlson, N. R., & Johnson, D. A. Sexuality assertiveness training: A workshop for women. Counseling Psychologist, 1975, 5, 53-59.
- Chambless, D. L., Hunter, K., & Jackson, A. Social anxiety and assertiveness: A comparison of the correlation in phobic and college student samples. Behavior Research and Therapy, 1982, 20, 403-404.
- Cotler, S. B. Assertion training: A road leading where? Counseling Psychologist, 1975, 5, 20-29.
- Cotler, S. B., & Guerra, J. J. Assertion training: A humanistic-behavioral guide to self-dignity. Champaign, Illinois: Research Press, 1976.
- Craighead, L. N. Self-instructional training for assertive-refusal behavior. Behavior Therapy, 1979, 10, 529-542.
- Curran, J. P. Comments on Bellack, Hersen, and Turner's paper on the validity of role-play tests. Behavior Therapy, 1978, 9, 462-468.
- Deffenbacher, J. L., & Payne, D. M. Relationship of apprehension about communication to fear of negative evaluation and assertiveness. Psychological Reports, 1978, 42, 370.
- DeGiovanni, I. S., & Epstein, N. Unbinding assertion and aggression in research and clinical practice. Behavior Modification, 1978, 2, 173-192.
- Deluty, H. Children's Action Tendency Scale: A self-report measure of aggressiveness, assertiveness, and submissiveness in children. Journal of Consulting and Clinical Psychology, 1979, 49, 1061-1071.
- Doherty, W. J., & Ryder, R. G. Locus of control, interpersonal trust, and assertive behavior among newlyweds. Journal of Personality and Social Psychology, 1979, 37, 2212-2220.

Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., & Sears, R. R. (in collaboration with Ford, C. S., Hovland, C. I., & Sollenberger, R. T.). Frustration and aggression. New Haven: Yale University Press, 1939.

Duehn, W. D., & Mayadas, N. S. The use of stimulus/modeling videotapes in assertive training for homosexuals. Journal of Homosexuality, 1976, 1, 373-381.

Edwards, N. B. Case conference: Assertive training in a case of homosexual pedophilia. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 55-63.

Eisler, R. M., Frederiksen, L. W., & Peterson, G. L. The relationship of cognitive variables to the expression of assertiveness. Behavior Therapy, 1978, 9, 419-427.

Eisler, R. M., Hersen, M., Miller, P. M., & Blanchard, E. B. Situational determinants of assertive behaviors. Journal of Consulting and Clinical Psychology, 1975, 43, 330-340.

Eisler, R. M., Miller, P. M., & Hersen, M. Components of assertive behavior. Journal of Clinical Psychology, 1973, 29, 295-299.

Endler, N. S., Hunt, J. McV., & Rosenstein, A. J. An S-R inventory of anxiousness. Psychological Monographs, 1962, 76, (17, Whole No. 536).

Endler, N. W., & Okada, M. An S-R inventory of general trait anxiousness (Report No. 1). Toronto, Canada: York University, Department of Psychology Reports, 1974.

Epstein, N. Social consequences of assertion, aggression, passive aggression, and submission: Situational and dispositional determinants. Behavior Therapy, 1980, 11, 662-669.

Erikson, E. Childhood and society. New York: W. W. Norton, 1950.

Erikson, E. Insight and responsibility. New York: W. W. Norton, 1964.

Fensterheim, H., & Baier, J. Don't say yes when you want to say no. New York: Dell Publishing Co., 1975.

Ferguson, G. A. Statistical analysis in psychology and education. (3rd ed.). New York: McGraw-Hill Book Company, 1971.

Fiedler, D., & Beach, L. R. On the decision to be assertive. Journal of Consulting and Clinical Psychology, 1978, 46, 537-546.

Fiedler, P. E., Orenstein, H., Chiles, J., Fritz, G., & Breitt, S. Effects of assertive training on hospitalized adolescents and young adults. Adolescence, 1979, 14, 523-528.

- Firth, P. M., & Snyder, C. W. Three-mode factor analysis of self-reported difficulty in assertiveness. Australian Journal of Psychology, 1979, 31, 125-135.
- Fitts, W. H. Manual for the Tennessee Self Concept Scale. Nashville, Tennessee: Counselor Recordings and Tests, 1965.
- Flowers, J. V., Whitely, J. M., & Cooper, C. G. Assertion training: A general overview. In J. M. Whitely & J. V. Flowers (eds.), Approaches to assertion training. Monterey, Ca.: Brooks-Cole, 1978.
- Friedman, P. H. The effects of modeling and role playing on assertive behavior. In R. D. Rubin, H. Fensterheim, A. A. Lazarus, & C. M. Franks (eds.), Advances in behavior therapy. New York: Academic Press, 1971.
- Fray, W. F. Generalization between areas of assertiveness: Assertion training and depression. (Doctoral dissertation, University of Vermont, 1976). Dissertation Abstracts International, 1976, 36, 5789B-5790B (University Microfilms No. 76-11, 239).
- Futch, E. J., & Lisman, S. A. Behavioral validation of an assertiveness scale: The incongruence of self-report and behavior. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, Atlanta, December, 1977.
- Galassi, J. P., DeLo, J. S., Galassi, M. D., & Bastien, S. The College Self-Expression Scale: A measure of assertiveness. Behavior Therapy, 1974, 5, 165-171.
- Galassi, J. P., & Galassi, M. D. A comparison of the factor structure of an assertion scale across sex and population. Behavior Therapy, 1979, 10, 117-128.
- Galassi, J. P., & Galassi, M. D. Relationship between assertiveness and aggressiveness. Psychological Reports, 1975, 36, 352-354.
- Galassi, J. P., & Galassi, M. D. Validity of a measure of assertiveness. Journal of Counseling Psychology, 1974, 21, 248-250.
- Galassi, J. P., Hollandsworth, J. G. Jr., Radecki, J. C., Gay, M. L., Howe, M. R., & Evans, C. L. Behavioral performance in the validation of an assertiveness scale. Behavior Therapy, 1976, 7, 447-452.
- Galassi, M. D., & Galassi, J. P. Assertion: A critical review. Psychotherapy: Theory, Research and Practice, 1978, 15, 16-29.
- Galassi, M. D., & Galassi, J. P. Similarities and differences between two assertion measures: The College Self-Expression Scale and the Rathus Assertiveness Schedule. Behavioral Assessment, 1980, 2, 43-58.

- Galassi, M. D., & Galassi, J. P. The effects of role playing variations on the assessment of assertive behavior. Behavior Therapy, 1976, 7, 343-347.
- Gambrill, E. D., & Richey, C. A. An assertion inventory for use in assessment and research. Behavior Therapy, 1975, 6, 550-561.
- Gay, M. L., Hollandsworth, J. G. Jr., & Galassi, J. P. An assertiveness inventory for adults. Journal of Counseling Psychology, 1975, 22, 340-344.
- Geer, J. H. The development of a scale to measure fear. Behavior Research and Therapy, 1965, 3, 45-53.
- Gelber, H. The use of psychological learning theory in the development of assertion. Canadian Psychiatric Association Journal, 1967, 12, 207-208.
- Glasgow, R. E., & Arkowitz, H. The behavioral assessment of male and female social competence in dyadic heterosexual interactions. Behavior Therapy, 1975, 6, 488-498.
- Golden, M. A measure of cognition within the context of assertion. Journal of Clinical Psychology, 1981, 37, 253-262.
- Goldman, J. A., & Olczak, P. V. The relationship between psychosocial maturity and assertiveness in males and females. Journal of Youth and Adolescence, 1981, 10, 33-44.
- Gorecki, P. R., Dickson, A. L., Anderson, H. N., & Jones, G. E. Relationship between contrived, in vivo and role-play assertive behavior. Journal of Clinical Psychology, 1981, 37, 104-107.
- Gough, H. G. Manual for the California Psychological Inventory. Palo Alto, California: Consulting Psychologists Press, 1957.
- Gough, H. G., & Heilbrun, A. B. Jr. The Adjective Check List Manual. Palo Alto, California: Consulting Psychologists Press, 1965.
- Green, S. B., Burkhart, B. R., & Harrison, W. H. Personality correlates of self-report, role-playing, and in-vivo measures of assertiveness. Journal of Consulting and Clinical Psychology, 1979, 47, 16-24.
- Guilford, J. P., & Zimmerman, W. S. The Guilford-Zimmerman temperament survey. Beverly Hills, California: Sheridan Psychological Services, 1956.
- Gulanick, N. A., Howard, G. S., & Moreland, J. Evaluation of a group program designed to increase androgyny in feminine women. Sex Roles, 1979, 5, 811-827.

- Hamilton, F., & Maisto, S. A. Assertive behavior and perceived discomfort of alcoholics in assertion-required situations. Journal of Consulting and Clinical Psychology, 1979, 47, 196-197.
- Hammen, C. L. Depression in college students: Beyond the Beck Depression Inventory. Journal of Consulting and Clinical Psychology, 1980, 48, 126-128.
- Hammen, C. L., Jacobs, M., Mayol, A., & Cochran, S. D. Dysfunctional cognitions and the effectiveness of skills and cognitive behavioral assertion training. Journal of Consulting and Clinical Psychology, 1980, 48, 685-695.
- Harris, R. J. Hand computation of Bonferroni critical values. Perceptual and Motor Skills, 1976, 42, 515-521.
- Harris, T. L., & Brown, N. W. Congruent validity of the Rathus Assertiveness Schedule. Educational and Psychological Measurement, 1979, 39, 181-186.
- Hartwig, W. H., Dickson, A. L., & Anderson, H. N. Locus of control and assertion. Psychological Reports, 1980, 46, 1345-1346.
- Hathaway, S. R., & McKinley, J. C. Revised manual. Minnesota Multiphasic Personality Inventory. New York: The Psychological Corporation, 1951.
- Hayman, M., & Cope, C. C. Effects of assertion training on depression. Journal of Clinical Psychology, 1980, 36, 534-543.
- Heimberg, R. G., & Becker, R. E. Cognitive and behavioral models of assertive behavior: Review, analysis and integration. Clinical Psychology Review, 1981, 1, 353-373.
- Heimberg, R. G., & Harrison, D. F. Use of the Rathus Assertiveness Schedule with offenders: A question of questions. Behavior Therapy, 1980, 11, 278-281.
- Heimberg, R. G., Harrison, D. F., Goldberg, L. S., Desmarais, S., & Blue, S. The relationship of self-report and behavioral assertion in an offender population? Journal of Behavior Therapy and Experimental Psychiatry, 1979, 10, 283-286.
- Heimberg, R. G., Montgomery, D., Madsen, C. H., & Heimberg, J. Assertion training: A review of the literature. Behavior Therapy, 1977, 8, 953-971.
- Hernandez, S. K., & Mauger, P. A. Assertiveness, aggressiveness and Eysenck's personality variables. Personality and Individual Differences, 1980, 1, 143-149.
- Hersche, P. D., & Scheibe, K. E. On the reliability and validity of internal-external control as a personality dimension. Journal of Consulting and Clinical Psychology, 1967, 3, 609-614.

- Hersen, M., & Bellack, A. Assessment of social skills. In A. Ciminero, K. Calhoun, & H. Adams (eds.), Handbook of behavioral assessment. New York: John Wiley, 1976.
- Hersen, M., Bellack, A. S., & Turner, S. M. Assessment of assertiveness in female psychiatric patients: Motor and autonomic measures. Journal of Behavior Therapy and Experimental Psychiatry, 1978, 9, 11-16.
- Hersen, M., Eisler, R. M., & Miller, P. M. Development of assertive responses: Clinical, measurement, and research considerations. Behavior Research and Therapy, 1973, 11, 505-521.
- Higgins, R. L., Alonso, R. R., & Pendleton, M. G. The validity of role play assessments of assertiveness. Behavior Therapy, 1979, 10, 655-662.
- Hollandsworth, J. G. Differentiating assertion and aggression: Some behavioral guidelines. Behavior Therapy, 1977, 8, 347-352.
- Hollandsworth, J. G. Further investigation of the relationship between expressed social fear and assertiveness. Behavior Research and Therapy, 1976, 14, 85-87.
- Hollandsworth, J. G. Self-report assessment of social fear, discomfort, and assertive behavior. Psychological Reports, 1979, 44, 1230.
- Hollandsworth, J. G., Galassi, J. P., & Gay, M. L. The Adult Self-Expression Scale: Validation by the multitrait multimethod procedure. Journal of Clinical Psychology, 1977, 33, 407-415.
- Hull, D. B., & Hull, J. H. Rathus Assertiveness Schedule: Normative and factor-analytic data. Behavior Therapy, 1978, 9, 673.
- Hull, D. B., & Schroeder, H. E. Some interpersonal effects of assertion, nonassertion, and aggression. Behavior Therapy, 1977, 10, 20-28.
- Jackson, D. N. Personality Research Form manual. New York: Research Psychologists Press, 1974.
- Jakubowski, P. A. Assertive behavior and clinical problems of women. In D. K. Carter & E. I. Rawlings (eds.), Psychotherapy for women. Springfield, Illinois: Charles C. Thomas, 1977.
- Jakubowski-Spector, P. Facilitating the growth of women through assertive training. Counseling Psychologist, 1973, 4, 75-86.
- Jakubowski, P. A., & Lacks, P. B. Assessment procedures in assertion training. Counseling Psychologist, 1975, 5, 84-90.
- Joe, V. C. Review of the internal-external control construct as a personality variable. Psychological Reports, 1971, 28, 619-640. (Monograph Supplement 1-V28).

Kahn, S. E. Adding affect to assertion training. The Personnel and Guidance Journal, 1979, 57, 424.

Kazdin, A. E. Covert modeling, imagery assessment, and assertive behavior. Journal of Consulting and Clinical Psychology, 1975, 43, 716-724.

Kelly, J. A., Frederiksen, L. W., Fitts, H., & Phillips, J. Training and generalization of commendatory assertiveness: A controlled single subject experiment. Journal of Behavior Therapy and Experimental Psychiatry, 1978, 9, 17-21.

Kelly, J. A., Kern, J. M., Kirkley, B. G., Patterson, J. M., & Keane, T. M. Reactions to assertive versus nonassertive behavior: Differential effects for males and females and implications for assertive training. Behavior Therapy, 1980, 11, 670-682.

Kendall, P. C., Finch, A. T., Mikulka, P. J., & Coleson, W. Multi-dimensional assertive behavior: Conceptualization and empirical support. Catalog of Selected Documents in Psychology, 1980, 10, 15-16.

Kern, J. M., & MacDonald, M. L. Assessing assertion: An investigation of construct validity and reliability. Journal of Consulting and Clinical Psychology, 1980, 48, 532-534.

Kipper, D. A., & Jaffe, Y. Dimensions of assertiveness: Factors underlying the College Self-Expression Scale. Perceptual and Motor Skills, 1978, 46, 47-52.

Kipper, D. A., & Jaffe, Y. The College Self-Expression Scale: Israeli data. Psychological Reports, 1976, 39, 1301-1302.

Kirchner, E. P., Kennedy, R. E., & Draguns, J. G. Assertion and aggression in adult offenders. Behavior Therapy, 1979, 10, 452-471.

Kohut, H. The analysis of the self. New York: International Universities Press, 1971.

Lange, A. J., & Jakubowski, P. Responsible assertive behavior: Cognitive/behavioral procedures for trainers. Champaign, Illinois: Research Press, 1976.

Lange, A. J., Rimm, D. C., & Loxley, J. L. Cognitive-behavioral assertion-training procedures. Counseling Psychologist, 1975, 5, 37-42.

Langone, M. Assertiveness and Lewinsohn's theory of depression: An empirical test. Behavior Therapist, 1979, 2, 21.

Lapointe, K. A., & Rimm, D. C. Cognitive, assertive, and insight-oriented group therapies in the treatment of reactive depression in women. Psychotherapy: Theory, Research and Practice, 1980, 17, 312-321.

- Lapointe, K. A. Cognitive therapy versus assertive training in the treatment of depression. (Doctoral dissertation, Southern Illinois University, 1976). Dissertation Abstracts International, 1977, 37, 4689B. (University Microfilms, No. 77-62, 32).
- Larzelere, R. E., & Mulaik, S. A. Single-sample tests for many correlations. Psychological Bulletin, 1977, 84, 557-569.
- Latimer, P. A case of homosexuality treated by in vivo desensitization and assertive training. Canadian Psychiatric Association Journal, 1977, 22, 185-189.
- Law, H. G., Wilson, E., & Crassini, B. A principal components analysis of the Rathus Assertiveness Schedule. Journal of Consulting and Clinical Psychology, 1979, 47, 631-633.
- Lawrence, P. S. The assessment and modification of assertive behavior (Doctoral dissertation, Arizona State University, 1970). Dissertation Abstracts International, 1970, 31, 971B. (University Microfilms No. 70-11, 888).
- Lazarus, A. A. Behavior therapy and beyond. New York: McGraw-Hill, 1971.
- Lazarus, A. A. On assertive behavior: A brief note. Behavior Therapy, 1973, 4, 697-699.
- Lea, G. Y., & Paquin, M. Assertiveness and clinical depression. Behavior Therapist, 1981, 4, 9-10.
- Leah, J. A., Law, H. G., & Snyder, C. W. Jr. The structure of self-reported difficulty in assertiveness: An application of three-mode common factor analysis. Multivariate Behavioral Research, 1979, 14, 443-462.
- Lefcourt, H. M. Internal versus external control of reinforcement: A review. Psychological Bulletin, 1966, 65, 206-220.
- Lewinsohn, P. M. A behavioral approach to depression. In R. M. Friedman & M. M. Katz (eds.), The psychology of depression: Contemporary theory and research. New York: Wiley, 1974. (a)
- Lewinsohn, P. M. Clinical and theoretical aspects of depression. In K. S. Calhoun, H. E. Adams, & K. M. Mitchell (eds.), Innovative treatment methods of psychopathology. New York: Wiley, 1974. (b)
- Lewinsohn, P. M. The behavioral study and treatment of depression. In M. Hersen, R. M. Eisler, & P. M. Miller (eds.), Progress in Behavior Modification. New York: Academic Press, 1975.
- Libet, J., & Lewinsohn, P. M. The concept of social skill with special reference to the behavior of depressed persons. Journal of Consulting and Clinical Psychology, 1973, 40, 304-312.

- Lindquist, C. U., Lindsay, J. S., & White, G. D. Assessment of assertiveness in drug abusers. Journal of Clinical Psychology, 1979, 35, 676-679.
- Linehan, M. M., Goldfried, M. R., & Goldfried, A. P. Assertion therapy: Skill training or cognitive restructuring. Behavior Therapy, 1979, 10, 372-388.
- Lorr, M., & More, W. W. Four dimensions of assertiveness. Multivariate Behavioral Research, 1980, 15, 127-138.
- Lorr, M., More, W. W., & Mansueto, C. S. The structure of assertiveness: A confirmatory study. Behavior Research and Therapy, 1981, 19, 153-156.
- Lubin, B. Adjective checklists for the measurement of depression. Archives of General Psychiatry, 1965, 12, 57-62.
- Ludwig, L. D., & Lazarus, A. A. A cognitive and behavioral approach to the treatment of social inhibition. Psychotherapy: Theory, Research and Practice, 1972, 9, 204-206.
- MacDonald, M. L. Measuring assertion: A model and method. Behavior Therapy, 1978, 9, 889-899.
- MacDonald, M. L. Teaching assertion: A paradigm for therapeutic intervention. Psychotherapy: Theory, Research and Practice, 1975, 12, 60-67.
- Mahl, G. I. Disturbances and silences in the patient's speech in psychotherapy. Journal of Abnormal and Social Psychology, 1956, 53, 1-15.
- Mandler, G., Mandler, J. M., & Uviller, E. T. Autonomic feedback: The perception of autonomic activity. Journal of Abnormal and Social Psychology, 1958, 56, 367-373.
- Manis, L. G. Womanpower: A manual for workshops in personal effectiveness. Cranston, R. I.: The Carroll Press, 1977.
- Mann, R., & Flowers, J. V. An investigation of the validity and reliability of the Rathus Assertiveness Schedule. Psychological Reports, 1978, 42, 632-634.
- Materi, M. Assertiveness training: A catalyst for behavioral change. Alcohol Health and Research World, 1977, 1, 23-26.
- McFall, R. M., & Lillesand, D. B. Behavioral rehearsal with modeling and coaching in Assertion Training. Journal of Abnormal Psychology, 1971, 77, 313-323.
- McFall, R. M., & Marston, A. R. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76, 295-303.

McFall, R. M., & Twentyman, C. T. Four experiments on the relative contributions of rehearsal, modeling, and coaching to Assertion Training. Journal of Abnormal Psychology, 1973, 81, 199-228.

Metcalf, M., & Goldman, E. Validation of an inventory for measuring depression. British Journal of Psychiatry, 1965, 111, 240-242.

Meyers, J. L. Fundamentals of experimental design. (3rd ed.). Boston: Allyn and Bacon, Inc., 1979.

Morgan, B., & Leung, P. Effects of assertion-training on acceptance of disability by physically disabled university students. Journal of Counseling Psychology, 1980, 27, 209-212.

Morgan, W. G. The relationship between expressed social fears and assertiveness and its treatment implications. Behavior Research and Therapy, 1974, 12, 255-257.

Nevid, J. S., & Rathus, S. A. Multivariate and normative data pertaining to the RAS with the college population. Behavior Therapy, 1978, 9, 675.

Nevid, J. S., & Rathus, S. A. Factor analysis of the Rathus Assertiveness Schedule with a college population. Journal of Behavior Therapy and Experimental Psychiatry, 1979, 10, 21-24.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. Statistical package for the social sciences. (2nd ed.). New York: McGraw-Hill Book Company, 1975.

Nietzel, M., & Bernstein, D. A. The effects of instructionally mediated demand upon the behavioral assessment of assertiveness. Journal of Consulting and Clinical Psychology, 1976, 44, 500.

Nietzel, M. T., Martorano, R., & Melnick, J. The effects of covert modeling with and without reply training on the development and generalization of assertive responses. Behavior Therapy, 1977, 8, 183-192.

Norton, R., & Warnick, B. Assertiveness as a communication construct. Human Communication Research, 1976, 3, 62-66.

Nowicki, S. Jr., & Duke, M. P. A locus of control scale for noncollege as well as college adults. Journal of Personality Assessment, 1974, 38, 136-137.

Olczak, P. V., & Goldman, J. A. Relationship between self-actualization and assertiveness in males and females. Psychological Reports, 1981, 48, 931-937.

Orenstein, H., Orenstein, E., & Carr, J. E. Assertiveness and anxiety: A correlational study. Journal of Behavior Therapy and Experimental Psychiatry, 1975, 6, 203-207.

- Pachman, J. S., & Foy, D. W. A correlational investigation of anxiety, self-esteem, and depression: New findings with behavioral measures of assertiveness. Journal of Behavior Therapy and Experimental Psychiatry, 1978, 9, 97-101.
- Paulson, T. Short-term group assertion training with token feedback as an adjunct to ongoing group psychotherapy. Counseling Psychologist, 1975, 5, 60-64.
- Pavlov, I. P. Conditioned Reflexes. London: Oxford University Press, 1927.
- Pavlov, I. P. Letters on Conditioned Reflexes. (Vol. 1). New York: International Publishers, 1928.
- Pearson, J. C. Factor analytic study of the items in the Rathus Assertiveness Schedule and the Personal Report of Communication Apprehension. Psychological Reports, 1979, 45, 491-497.
- Pentz, M. A. W. Assertion training and trainer effects on unassertive and aggressive adolescents. Journal of Counseling Psychology, 1980, 27, 76-83.
- Percell, L. P., Berwick, P. T., & Beigel, A. The effects of assertive training on self-concept. Archives of General Psychiatry, 1974, 31, 502-504.
- Petrie, K., & Rotherham, M. J. Insulators against stress -- self-esteem and assertiveness. Psychological Reports, 1982, 50, 963-966.
- Phares, E. J. Locus of control in personality. Morristown, N. J.: General Learning Press, 1976.
- Phillips, D. R., & Groves, G. A. Assertive training with children. Psychotherapy: Theory, Research and Practice, 1979, 16, 171-177.
- Piercy, F. D., & Ohanesian, D. L. Assertion training in teacher education. Humanist Educator, 1976, 15, 41-47.
- Pitcher, S. W., & Meikle, S. The topography of assertive behavior in positive and negative situations. Behavior Therapy, 1980, 11, 532-547.
- Pitt, A., & Roth, B. A model for assertive training: Integration of feelings and behavior. Clinical Social Work Journal, 1978, 6, 274-292.
- Quillin, J., Besing, S., & Dinning, D. Standardization of the Rathus Assertiveness Schedule. Journal of Clinical Psychology, 1977, 33, 418-422.
- Rakos, R. F. Content consideration in the distinction between assertive and aggressive behavior. Psychological Reports, 1979, 44, 767-773.

- Rathus, S. A. A 30-item schedule for assessing assertive behavior. Behavior Therapy, 1973, 4, 398-406.
- Rathus, S. A. Assertive training: Rationales, procedures, and controversies. In J. M. Whitely & J. V. Flowers (eds.), Approaches to assertion training. Monterey, Ca.: Brooks-Cole, 1978, pp. 48-83.
- Rathus, S. A. Principles and practices of assertive training: An eclectic overview. Counseling Psychologist, 1975, 5, 9-20.
- Rathus, S. A., & Nevid, J. S. Concurrent validity of the 30-item assertiveness schedule with a psychiatric population. Behavior Therapy, 1977, 8, 393-397.
- Rehm, L. P., Fuchs, C. Z., Roth, D. M., Kornblith, S. J., & Romano, J. M. A comparison of self-control and assertion skills treatments of depression. Behavior Therapy, 1979, 10, 429-442.
- Replogle, W. H., O'Bannon, M., McCullough, P. W., & Cashion, L. N. Locus of control and assertive behavior. Psychological Reports, 1980, 47, 769-770.
- Rich, A. R., & Schroeder, H. E. Research issues in assertiveness training. Psychological Bulletin, 1976, 83, 1081-1096.
- Richardson, F. C., & Tasto, D. L. Development and factor analysis of a social anxiety inventory. Behavior Therapy, 1976, 7, 453-462.
- Rimm, D. C., Hill, G. A., Brown, N. N., & Stuart, J. E. Group assertive training in the treatment of expression of inappropriate anger. Psychological Reports, 1974, 34, 791-798.
- Rimm, D. C., & Masters, J. C. Behavior therapy: Techniques and empirical findings. New York: Academic Press, 1974.
- Rimm, D. C., Snyder, J. J., Depue, R. A., & Haanstad, M. J. Assertive training versus rehearsal and the importance of making an assertive response. Behavior Research and Therapy, 1976, 14, 315-321.
- Robinson, J. P., & Shaver, P. R. Measures of social psychological attitudes. Ann Arbor, Michigan: Institute for Social Research, 1974.
- Rock, D. Interscale variance analysis of three assertiveness measures. Perceptual and Motor Skills, 1977, 45, 246.
- Romano, J. M., & Bellack, A. S. Social validation of a component model on assertive behavior. Journal of Consulting and Clinical Psychology, 1980, 48, 478-490.
- Rose, Y. J., & Tryon, W. W. Judgments of assertive behavior as a function of speech, loudness, latency, content, gestures, inflection, and sex. Behavior Modification, 1979, 3, 112-123.

- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80 (1, Whole No. 609).
- Salter, A. Conditioned reflex therapy. New York: Creative Age Press, 1949.
- Sanchez, V., & Lewinsohn, P. M. Assertive behavior and depression. Journal of Consulting and Clinical Psychology, 1980, 48, 119-120.
- Sanchez, V., Lewinsohn, P. M., & Larson, D. W. Assertion training: Effectiveness in the treatment of depression. Journal of Clinical Psychology, 1980, 36, 526-529.
- Sansbury, D. L. Assertive training in groups. Personnel and Guidance Journal, 1974, 53, 117-122.
- Schill, T., Toves, C., & Ramanaiah, N. Responsible assertion and coping with stress. Psychological Reports, 1981, 49, 557-558.
- Schimizu, E., & O'Neill, P. Gender and assertiveness. Paper presented at the meeting of the Canadian Psychological Association, Montreal, June, 1982.
- Schwab, J. J., Bialow, M., & Holzer, C. A comparison of two rating scales for depression. Journal of Clinical Psychology, 1967, 23, 94-96.
- Schwartz, R. M., & Gottman, J. M. A task analysis approach to clinical problems: A study of assertive behavior. Journal of Consulting and Clinical Psychology, 1976, 44, 910-920.
- Schwartz, R. M., & Higgins, R. L. Differential outcome from automated assertion training as a function of locus of control. Journal of Consulting and Clinical Psychology, 1979, 47, 686-694.
- Scott, N. A. Beyond assertiveness training — problem solving approach. Personnel and Guidance Journal, 1979, 57, 450.
- Seitz, F. C. Five psychological measures of neurotic depression: A correlation study. Journal of Clinical Psychology, 1974, 26, 504-505.
- Seligman, M. E. P. Helplessness. San Francisco: W. H. Freeman, 1975.
- Serber, M. Teaching the nonverbal components of assertive training. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 179-183.
- Shelton, J. L. Assertive training: Consumer beware. Personnel and Guidance Journal, 1977, 55, 465-468.

- Shows, W. D., Gentry, W. D., & Wyrick, L. C. Social constriction in psychiatric patients: A normative study. American Journal of Psychiatry, 1974, 131, 1287-1288.
- Skillings, R. E., Hersen, M., Bellack, A. S., & Becker, M. P. Relationship of specific and global measures of assertion in college females. Journal of Clinical Psychology, 1978, 34, 346-353.
- Smaby, M. E., & Tamminen, A. W. Counselors can be assertive. Personnel and Guidance Journal, 1976, 54, 421-424.
- Smith, M. J. When I say no I feel guilty. New York: Bantam Book Co., 1975.
- Smye, M. D., & Wine, J. D. A comparison of female and male adolescents' social behaviors and cognitions: A challenge to the assertiveness literature. Sex Roles, 1980, 6, 213-230.
- Snyder, O. W. Assertive training: A comparison of behavior rehearsal modeling and silent reading and the relationship of training to selected self-report inventories. Dissertation Abstracts International, 1973, 33, 6094B. (University Microfilms No. 73-12, 978).
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. The State-Trait Anxiety Inventory. Preliminary test manual for Form X. Florida State University, Tallahassee, Florida, 1968.
- Stebbins, C. A., Kelly, B. R., Tolor, A., & Power, M. E. Sex differences in assertiveness in college students. Journal of Psychology, 1977, 95, 309-315.
- Stevenson, I., & Wolpe, J. Recovery from sexual deviations through overcoming of non-sexual neurotic responses. American Journal of Psychiatry, 1960, 116, 737-742.
- Strickland, B. R. Internal-external control of reinforcement. In T. Blass (ed.), Personality variables in social behavior. New York: Wiley, 1977.
- Tanck, R. H., & Robbins, P. R. Assertiveness, locus of control, and coping behaviors used to diminish tension. Journal of Personality Assessment, 1979, 43, 396-400.
- Taylor, J. A. A personality scale of manifest anxiety. Journal of Abnormal Social Psychology, 1953, 48, 285-290.
- Tiegerman, S., & Kassinov, H. Effects of assertion training and cognitive components of rational therapy on assertive behaviors and interpersonal anxiety. Psychological Reports, 1977, 40, 535-542.
- Tolor, A., Kelly, B. R., & Stebbins, C. A. Assertiveness, sex-role stereotyping, and self-concept. Journal of Psychology, 1976, 93, 157-164.

- Tryon, W. W. An operant explanation of Mower's neurotic paradox. Behaviorism, 1978, 6, 203-211.
- Vaal, J. J. The Rathus Assertiveness Schedule: Reliability at the junior high school level. Behavior Therapy, 1975, 6, 566-567.
- Valentich, M., & Gripton, J. Sex differences in work assertiveness of social workers. Journal of Sociology and Social Welfare, 1977, 4, 922-926.
- Vestewig, R. E., & Moss, M. K. The relationship of extraversion and neuroticism to two measures of assertive behavior. Journal of Psychology, 1976, 93, 141-146.
- Warren, V. J., & Gilner, F. H. Measurement of positive assertive behaviors: The Behavioral Test of Tenderness Expression. Behavior Therapy, 1978, 9, 178-184.
- Watson, D., & Friend, R. Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology, 1969, 33, 448-457.
- Weiskott, G. N., & Cleland, C. C. Assertiveness, territoriality, and personal space as a function of group assertion training. Journal of Counseling Psychology, 1977, 24, 111-117.
- Westefeld, J. S., Galassi, J. P., & Galassi, D. Effects of role-playing instructions on assertive behavior: A methodological study. Behavior Therapy, 1980, 11, 271-273.
- Wilk, C., & Coplan, V. Assertive training as a confidence-building technique. Personnel and Guidance Journal, 1977, 55, 460-464.
- Willoughby, R. R. Norms for the Clark-Thurstone Inventory. Journal of Social Psychology, 1934, 5, 91-99.
- Wolfe, J. L., & Fodor, I. G. Modifying assertive behavior in women: A comparison of three approaches. Behavior Therapy, 1977, 8, 567-574.
- Wolff, J., & Desiderato, O. Transfer of assertion-training effects to roommates of program participants. Journal of Counseling Psychology, 1980, 27, 484-491.
- Wolpe, J. Psychotherapy by reciprocal inhibition. Stanford, California: Stanford University Press, 1958.
- Wolpe, J. The instigation of assertive behavior: Transcripts from two cases. Journal of Behavior Therapy and Experimental Psychiatry, 1970, 1, 145-151.
- Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.

Wolpe, J., & Lange, P. J. A fear survey schedule for use in behavior therapy. Behavior Research and Therapy, 1964, 2, 27-30.

Wolpe, J., & Lazarus, A. A. Behavior therapy techniques: A guide to the treatment of neuroses. New York: Pergamon Press, 1966.

Woolfolk, R. L., & Dever, S. Perceptions of assertion: An empirical analysis. Behavior Therapy, 1979, 10, 404-411.

Wyrick, L. C., Gentry, W. D., & Shows, W. D. Aggression, assertion, and openness to experience: A comparison of men and women. Journal of Clinical Psychology, 1977, 33, 439-443.

Zeichner, A., Wright, J., & Herman, S. Effects of situation on dating and assertive behavior. Psychological Reports, 1977, 40, 375-381.

Zielinski, J. J. Situational determinants of assertive behavior in depressed alcoholics. Journal of Behavior Therapy and Experimental Psychiatry, 1978, 9, 103-107.

Zielinski, J. J., & Williams, L. J. Situational determinants of stuttering in assertive contexts: A case study. Behavior Therapist, 1979, 2, 13.

Zuckerman, M., & Lubin, B. Manual for the Multiple Affect Adjective Check List. San Diego: Educational and Industrial Testing Service, 1965.

APPENDIX 1

'Behavioral Assertiveness Test -- Revised' Version

Adapted and Modified from Eisler et al., (1975)

Practice Scenes

A. Male Negative Unfamiliar

You have just finished class and are feeling a little hungry. You are getting a candy bar and milk from the machines when a student you have seen but do not know comes over to borrow some change. You have the money but prefer not to lend it. He says:

"I seem to be out of change. Could you lend me some until next class?"

B. Female Positive Familiar

You have just delivered an important presentation in class. After class your professor comes over and says:

"You did a great job on that presentation. You must have worked very hard."

Test Scenes

1. Male Positive Familiar

You have been working on a difficult assignment all week. Your professor comes over with a pleased smile on his face and says:

"That looks like a very good job you've done. I'm sure you'll get a high grade."

Your friend has been in the hospital recovering from a minor illness. You're really quite concerned about him and go to the hospital to see how he is. Your friend says:

"It's great to see you,"

2. Male Negative Familiar

You have been working very hard while your friend has been goofing off in the lab. Your lab instructor comes over to complain to you that the lab will never be done on time. He says:

"Say, will you two stop fooling around and get this lab done?"

You have worked for the same professor, doing the same job for over a year now. A more advanced position will soon be open and you feel that you deserve the promotion and would do a good job. You go to see your professor and ask that he consider you for the position. He says:

"I'm not sure that you have enough experience for this job."

3. Male Positive Unfamiliar

A classmate has just helped you finish your assignment a day ahead of time so that you can work on something else. You think he has done a particularly fine job. He says:

"Well, what do you think of it?"

You are just getting ready to go out for dinner when you notice that the painter is working overtime to get the painting done. You are very pleased with his work. He says:

"I should have this finished by tomorrow instead of the following day."

4. Male Negative Unfamiliar

You are having lunch when a classmate suddenly comes over and asks you if you would lend him \$30 until next week. You have the money on you but were planning to spend it on something for yourself. He says:

"Can you lend me the money? I'll pay you back next week."

You bring your car into a local service station for a grease job and oil change. You tell the attendant that you can only leave your car

for an hour as you have another appointment. He tells you to come back in 45 minutes and that your car will be ready. When you return to the station an hour later you see that the car hasn't been touched. The attendant says:

"I'm sorry but I just haven't had a chance to get to it yet."

5. Female Positive Familiar

Your girlfriend has just bought a new outfit and is trying it on. You really like it and think it suits her very well. She says:

"Well, how do I look?"

You come home from a busy day at school and are feeling very tired. You know that you are supposed to go shopping tonight with your girlfriend. Right before dinner, the phone rings and it is your girlfriend calling to suggest that you postpone the outing. She says:

"I just remembered that today is your busy day at school and thought you might be tired. Why don't we stay home tonight and go shopping tomorrow?"

6. Female Negative Familiar

You have had a very busy day at school and are tired. Your friend comes over to you and asks that you stay late to work on your lab assignment together. You really feel that you would like to go home early this afternoon. Your partner says:

"I've finished all my classes for today. Would you mind staying late this afternoon so that we can work on our assignment together?"

You are in the middle of listening to some records on the stereo. Your room-mate walks in and turns on the TV. She says:

"Let's watch a movie instead. There's supposed to be a good

one on right now."

7. Female Positive Unfamiliar

You have just come home from a weekend trip out of town. You notice that your grass has been cut. As you are getting out of the car, your neighbour comes over to tell you that she cut your grass for you. She says:

"I knew you would be late getting back, so while I was cutting my own grass, I cut yours too."

You are just coming home from school when you notice a neighbour in her yard. She has raised some great-looking tomatoes and offers you some. She says:

"I have plenty of tomatoes. Please help yourself to some of these."

8. Female Negative Unfamiliar

You are in a restaurant with some friends. You order a hamburger very rare. The waitress comes over to your table and serves you a hamburger so well done that it looks burnt. She says:

"Enjoy your meal."

You go to a concert with a reserved-seat ticket. When you arrive at your seat you see that someone else is sitting in it. You ask her to move and she says:

"I have a ticket for this seat."

APPENDIX 2

Request For Student Participation

As my Ph.D. project in psychology, I am now conducting research on personality and social behaviour. The purpose of my visit here today is to ask for your participation in my study.

The study consists of two parts. Part 1 involves having you complete a 30-item questionnaire on social behaviour in class today. The questionnaire is short and takes approximately 10 minutes to complete. Since participation is not a course requirement, you may decide not to participate if you so choose. However, should you decide to help out, your cooperation will certainly be appreciated.

Part 2 involves having you complete some additional questionnaires at the Loyola campus of Concordia University within the next few weeks at a time convenient to us both. During this second phase you will also be asked to respond 'out-loud' to a series of tape-recorded situations involving simulated interactions with other people. Your responses to these situations will be audio-taped for later scoring by a trained research-assistant but, as with all information collected in this study, your responses will be treated as strictly confidential. Under no circumstances will your names or identities be revealed. The total time required to complete Part 2 is approximately 1¹/₂ hours.

Participation in this study is on a purely voluntary basis with no monetary reward. Written feedback on the results of the study will, however, be made available once the research is completed. Please think about whether you would like to take part and let me know as I come around the room with the questionnaires. But first, are there any

questions about the study?

(questions answered)

I will now be handing out the questionnaires. As I come around, please let me know if you would like to participate. Thank you for listening.

APPENDIX 3

Personal Data Sheet

Please indicate below your first name, telephone number, and the times when you can best be reached so that I may contact you for participation in Part 2 of the study. In addition, would you please indicate your sex, age, and mother tongue. This information will allow me to organize my data in a more meaningful way. All information will be kept strictly confidential. Thank you for helping out!

Esther Lefèvre, M.A.
Ph.D. Candidate in Psychology

Malcolm West, Ph.D.
Thesis Supervisor

Name _____

Sex _____

Phone _____

Age _____

Hours _____

Mother Tongue _____

APPENDIX 4

Consent Form

I understand that my participation in this study on personality and social behaviour is on a voluntary basis with no monetary reward and that I am free to withdraw at any time. I grant permission that my verbal responses to ~~tape~~-recorded social situations be audio-taped for later scoring by trained research-assistants, directly involved in the project. I understand that all responses given by me, whether written or verbal, are to be treated as strictly confidential and that under no circumstances will my name or identity be revealed.

Signature

Date

Witness.

-APPENDIX 5

Instructions for Questionnaire and Role-Play Procedures

Questionnaires

You will now be completing a series of six questionnaires. I will hand out the questionnaires one at a time. Please read each item carefully and be sure to answer each one. Do not spend too much time on any one question. Just try to answer each question in the way which best describes you. As soon as you have finished one questionnaire, please let me know and I will hand out the next one.

Role-Play

The purpose of this part of the study is to find out how students react in certain interpersonal situations that might occur throughout the course of their day. To gather this information, I will be asking you to respond out-loud to a series of tape-recorded situations involving simulated real-life encounters with other people. Please try to respond to these situations as you would if they were really happening to you. Your responses will be tape-recorded to be listened to by a trained research-assistant later on. Under no circumstances will your name or identity be revealed.

What you hear on these tapes will go something like this. First, each situation will be described to you by a narrator, in this case myself. As the situation is being described, please try to picture it in your mind and to imagine that you are really there. As soon as the narrator has finished, the other person with whom you are interacting will make a statement. Try to respond to this statement as you would if you were actually in that situation. To familiarize you with the

procedure, we will first do two practice scenes. Listen carefully and try to respond as you would if they were really happening to you.

APPENDIX 6

Product-Moment Correlations Among Role-Play Measures of Assertion

Measure	Latency	Duration	Ratio	Affect	Overall	Praise	Positive Behaviour	Compliance
Duration	-.01							
Ratio	.02	.61***						
Affect	-.12	.09	-.25 ^a					
Overall	-.11	.18	-.21 ^a	.79***				
Praise	-.10	.25 ^a	.10	.23 ^a	.33**			
Positive Behaviour	-.16	.16	-.01	.07	.20 ^a	.09		
Compliance	.09	-.20 ^a	.02	-.32**	-.62***	.00	-.09	
New Behaviour	-.13	.44***	.14	.31*	.38***	.13	-.03	-.35**

^aBorderline significance; $\Delta T_w < .05$.

* $\Delta F_w < .10$; $\Delta T_w = .0030$.

** $\Delta F_w < .05$; $\Delta T_w = .0020$.

*** $\Delta F_w < .01$; $\Delta T_w = .0003$.