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STYLISTIC COMPLEXITY AND VERB USAGE IN ASSERTIVE AND PASSIVE
SPEECH

The Ohio State University

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STYLISTIC COMPLEXITY AND VERB USAGE
IN ASSERTIVE AND PASSIVE SPEECH

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in the Graduate
School of The Ohio State University

By

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The Ohio State University

1982

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A handwritten signature in cursive script, reading "Andrew I. Schwebel", is written over a horizontal line.

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This dissertation is dedicated to Anne Kael Wallach, who long ago taught me who the speaker of a poem was, and to the memory of C. L. Barber, who first taught me to catch a text on the wing.

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Medicine, when it fails to cure the sick, busies
itself with changing the sense of verbs and pronouns.

Marcel Proust
Sodom et Gommora, Vol. II, p. 214
Remembrance of Things Past

The subjective impression is for the writer what
experimentation is for the scientist, but with this
difference, that with the scientist the work of the
intelligence precedes, and with the writer it comes
afterwards.

Marcel Proust
Le Temps Retrouvé, p. 1002
Remembrance of Things Past

Introduction

In recent years, behavior therapists have attempted to develop techniques that directly modify people's patterns of communication. Assertiveness training is one such attempt which, in the 1970's, attracted widespread professional interest and enough popular attention to be classified as a fad (Heimberg, Montgomery, Madsen, & Heimberg, 1977). Researchers and writers on assertion suggest that people can achieve behavioral goals more effectively and feel better about themselves if they employ certain kinds of speech patterns (Alberti & Emmons, 1978; Bloom, Coburn, & Pearlman, 1975; Fensterheim & Baer, 1975). They imply that this more effective language includes specific paralinguistic and linguistic components. Although not always stated explicitly, most definitions of assertion contain prescriptions for the style, as well as the content, of language to be used (Lange & Jakubowski, 1976).

To the extent that assertion is placed in a behavioral framework, one would expect assertive behavior, including verbal behavior, to be amenable to observation and expect the effectiveness of assertiveness training procedures to be amenable to empirical tests. Reviews of the literature indicate that hundreds of studies of assertion have been conducted in the last 15 years (Brown & Brown, 1980; Galassi & Galassi, 1978; Heimberg et al., 1977; Hersen, Eisler, & Miller, 1973). While

there have been a large number of studies of the paralinguistic components of assertiveness, such as eye contact, fluency of speech, and tone of voice (cf. Rimm & Masters, 1979), there have been few studies dealing with the subtle linguistic aspects of assertion. Most of the latter focus on broad categories of speech, such as requests, refusals, compliance, and positive or negative content of assertion (Hersen, Eisler, & Miller, 1974; Galassi, DeLo, Galassi, & Bastien, 1974; McFall & Twentyman, 1973). Some trainers incorporate contrasts of assertive and non-assertive texts into their training sessions (MacNeilage & Adams, 1979; Woolfolk, 1976). Cooley and Hollandsworth (1977) give training an even more explicit linguistic focus by teaching clients the labels of the grammatical categories used in assertive speech.

Recent research suggests that the effect of ideal assertive speech on listeners may be less positive than researchers in assertion would wish (Hull & Schroeder, 1979) and may even be considered as aggressive (Woolfolk & Dever, 1979). There is also evidence that assertiveness is a situational response (MacDonald, 1978) and that a "task analysis" of assertion may be necessary to understand the relationship of the many cognitive components involved in making a specific assertive response (Schwartz & Gottman, 1976). Generally, researchers have assumed that the assertive verbal techniques presently taught are sufficient to serve most situations. Difficulties in transfer of training and maintenance of assertive responses have been attributed instead to flawed training methods or to inadequate attention to

clients' anxiety or cognitive styles (Lange & Jakubowski, 1976; McFall & Twentyman, 1973).

Research in assertion often focuses more systematically on methods for reducing anxiety or on cognitive restructuring than on testing the actual effect on others of particular styles of language. Research has not addressed the possibility that the categories of verbal responses used in the literature do not account for subtle differences in the styles of assertive and passive speech, and that the style of assertive speech may differ in actuality from predictions implied in theories of assertion. The degree of difference between assertive speech and ordinary conversation might be directly related to the ease with which particular verbal behaviors are learned and maintained, and to the degree of anxiety experienced in specific situations. For example, adoption of the broken record technique, in which the assertive speaker repeats the same point over and over again (Booraem & Flowers, 1978), may be hindered, not only by the inclusion of negative content, but by the form's probable violation of usual rules for taking turns and for repetition. Research applied at the level of linguistic style may reveal that assertive language contains structural (e.g., semantic, syntactic, and pragmatic) properties that have a profound impact on the effectiveness of certain techniques used in assertiveness training, or on the level of comfort a person feels when employing them.

Researchers interested in improving assertive techniques might benefit from the use of constructs and methods developed in other

disciplines concerned with natural language, such as linguistics or philosophy of language. Cook (1979) has developed measures of both style (called stylistic complexity) and verb usage that can be applied to spoken and written language. These measures are based on concepts of case grammar (Chafe, 1970; Fillmore, 1968), in which the clause is presumed to be the central informational unit of language. Unlike traditional content analyses of language used in psychotherapy, these measures do not rely upon a particular psychological orientation. (See Appendix A for a selective review of the systems of content analysis that employ linguistic categories to study language in therapy.) They are a "meta-language" that can be used to describe verbal communication (Hurndon, Pepinsky, & Meara, 1979; Meara, Shannon, & Pepinsky, 1979). In principle, these measures should be applicable to the study of assertive and non-assertive speech.

Computerized systems have been developed which facilitate calculation of measures of stylistic complexity and verb usage. One such system, the Computer-Assisted Language Analysis System, or "CALAS" (Rush, Pepinsky, Landry, Meara, Strong, Valley, & Young, Note 1), has been used to study several aspects of the therapeutic process. (These studies, described here briefly, are discussed in more detail in Appendix A.) Meara et al. (1979) found that therapists from three different theoretical orientations exhibited different levels of stylistic complexity when interviewing the same client. There was also evidence that the level of stylistic complexity of the client and therapist converged over the course of each interview. In another

study using data from the same interviews, Meara, Pepinsky, Shannon, and Murray (1981) found minimal changes in the verb usage of client and therapist over the course of an interview, indicating that stylistic complexity as a measure of "surface structure speech" is more amenable to change in a brief period of time than the "deeper structure" or semantic content represented by the kind of verbs the client used. In terms of assertion training, these findings suggest that it may be easier to manipulate changes in style than changes in verb usage in brief assertiveness workshops.

Bieber, Patton, and Fuhrman (1977), Patton, Fuhrman, and Bieber (1977), and May (1977) used CALAS to describe changes in the stylistic complexity and verb usage of both clients and therapists over the course of a long term client-centered therapy. In these studies, the language of therapist and client tended to converge, although different patterns were found for different therapists (May, 1977). Similarly, CALAS could be used to study the relationship of modeling to "convergence" in behavior therapies, for which convergence would be re-defined as the client's increasing tendency to speak as the therapist has explicitly modeled or instructed.

Shannon (1980) used CALAS to study the linguistic correlates of conversation labeled as empathetic in client-centered therapy. Recently, CALAS has been used to study the interaction of first grade children and their teacher over the course of a year (Pepinsky & DeStephano, Note 2), as well as the relationship of measures of stylistic complexity to a measure of cognitive complexity involving written text (Hurndon et al.,

1979). These studies provide a framework for relating traditional measures of psychological constructs to the structure of the actual linguistic responses from which these constructs are inferred.

This study attempts to identify, with the aid of CALAS, the differences in the stylistic complexity and verb usage present when professional assertiveness trainers identify the verbal behavior of naive subjects as assertive or passive. In addition, the computer-assisted analysis is used to describe previously published samples of "ideal" assertive and passive responses. To the extent that assertiveness training represents a behavior therapy in which language is modified directly, this research serves as an example of how methods derived from linguistics may be used to study the conversation that takes place in a behavioral role-play.

The remainder of this chapter is divided into four sections:

(a) The first defines assertive behavior and presents a rationale for studying the linguistic components of assertion. (b) The second section presents the concept of case grammar and describes measures of stylistic complexity. (c) The third section describes the probable structure of assertive speech in terms of stylistic complexity and verb usage. (d) The final section presents the hypotheses of this study.

Chapter 2 describes the experimental method, including programs utilized by CALAS. Chapter 3 presents the results. Finally, Chapter 4 discusses the results in light of previous work in both assertiveness training and stylistic complexity, and presents suggestions for further research.

Definitions of Assertion

There are three basic definitions of assertion, which focus on either self-expression, consequences of behavior, or rights. Assertion has been defined as a generalized ability for self-expression (Lieberman, King, DeRisi, & McCann, 1975; Wolpe & Lazarus, 1966) or a series of response classes that pertain to self-expression (Galassi et al., 1974; Lazarus, 1973; Rathus, 1978; Salter, 1977). McFall and Twentyman (1973) define assertive behavior in terms of the reactions of others to the assertive person's behavior, while Rich and Schroeder (1976) define assertiveness in terms of its reinforcement value for an individual engaged in an interpersonal interaction involving the expression of feelings. Cheek (1976) and Rakos (1979) include the content and intention of the verbal behavior in assessing the degree of assertiveness. MacDonald (1978) has focused on the subtleties and varieties of assertive responses. In both the professional and popular literature, assertive behavior is often defined in terms of rights (Alberti & Emmons, 1978; Fensterheim & Baer, 1975; Lange & Jakubowski, 1976; Smith, 1975), although it is unclear to what the rights refer, who has them, and how they become violated (Heimberg et al., 1977; Rakos, 1979).

Rimm and Masters (1979) suggest that most writers on the subject would probably agree with the following definition of assertive behavior:

1. Assertive behavior is interpersonal behavior involving the honest and relatively straightforward expression of thoughts and feelings.
2. Assertive behavior is socially appropriate.
3. When a person is behaving assertively, the feelings and welfare of others is taken into account (p. 63).

Booraem and Flowers (1978) put it most succinctly: "Assertion basically involves asking for what one wants, refusing what one doesn't want, and expressing positive and negative messages to others" (p. 17).

Assertiveness is distinguished from aggressive and passive behavior. Definitions of aggressiveness generally include non-verbal and verbal behavior which violates the rights of others, especially when the intent of the aggressor is to dominate, humiliate, hurt, or blame others (Cheek, 1976; Jakubowski-Spector, 1973). By contrast, passive behavior is attributed to individuals who fail to express their thoughts or feelings and allow themselves to be dominated or humiliated by others (Lange & Jakubowski, 1976).

Most assertiveness trainers include the expression of positive, warm, and friendly feelings in their definitions of assertion, although there seems to be an emphasis on negative feelings (Salter, 1977). Shoemaker and Satterfield (1977) view assertion as a life style that achieves the same ends as the "human potential" movement but which uses different language and methodology. Increased "awareness" is endorsed as a goal of their training, with awareness defined as knowing what one wants. Individuals are encouraged to pursue "benevolent self-interest,"

but it is expected that such pursuit will lead to conventional intrapsychic and existential questions.

The wide range of specific behaviors that are presumed to be related to increased interpersonal effectiveness or personal satisfaction include: (a) non-verbal aspects of assertion, such as eye contact, posture, speech latency, and smiling (Hersen et al., 1973; Hersen, Kazdin, Bellack, & Turner, 1979; Serber, 1972); (b) paralinguistic aspects, such as tone of voice and fluency of speech (Rimm & Masters, 1979); (c) broad categories of verbal responses, such as compliance, requests, and refusals (Booraem & Flowers, 1978); (d) content of responses, which is generally divided into "positive and negative assertion" (Galassi et al., 1974).

Components of assertiveness training. The objective of assertiveness training is usually viewed as either remediation of deficits (Schwartz & Gottman, 1976) or education in cognitive restructuring (Lange & Jakubowski, 1976). Training directed at deficits assumes that individuals lack basic communications skills necessary for attending, listening, or communicating clearly and effectively. Training based on a cognitive restructuring framework assumes that individuals feel uncomfortable using the skills they do possess because they may be considered impolite, selfish, awkward, etc. (Gambrill & Richey, 1975). Accordingly, the three common components of assertiveness training are reduction of anxiety, training in the necessary communications skills, and cognitive restructuring (Booraem & Flowers, 1978; Lange & Jakubowski, 1976; Rimm & Masters, 1979). Much research has focused on the various

methods of effecting change in each of these areas, such as behavioral rehearsal, covert modeling, self-instruction, etc. (Carmody, 1978; Hersen et al., 1973; Kazdin, 1975; McFall & Twentyman, 1973).

Through cognitive restructuring and the teaching of systematic verbal techniques, assertiveness training procedures are generally expected to enable individuals to make requests and refusals, express feelings, and carry on conversations (Rathus, 1978; Rimm & Masters, 1979). The verbal techniques taught in assertiveness workshops contain many prescriptions for constructing responses. Speakers are taught to be direct. Requests should be interrogatives, not indirect statements or hints. Refusals should be given without reasons, excuses, or apologies (Booraem & Flowers, 1978). Speakers are encouraged to express positive and negative feelings by using "I-me" statements, in which the speaker is the subject of the sentence. Speakers are also encouraged to focus on their own feelings, rather than on the actions or attributes of others, by using verbs that express feelings, desires, beliefs, or needs. "Mind reading" or guessing how others feel is discouraged (Alberti & Emmons, 1978; Fensterheim & Baer, 1975; Lange & Jakubowski, 1976; Smith, 1975). Such prescriptions imply that assertive speakers will have mastered a particular style of speaking.

Deciding when a specific assertive act is appropriate requires social judgment. Many assertiveness trainers teach the concept of the "minimal effective response," i.e., behavior that would ordinarily accomplish the speaker's goal with a minimum of effort, the least amount of negative emotion, and very little likelihood of negative consequences (Rimm & Masters, 1979; Rakos, 1979). If a fairly polite response does

not suffice in a particular situation, the speaker is taught to "escalate" the response by changing the form of the request or by making successively more negative or threatening responses.

The literature on assertion offers an arsenal of systematic assertive techniques designed for use in particular situations. Two illustrative techniques are the "broken record" and the "reinforcement sandwich" (Booraem & Flowers, 1978). In the broken record technique, a single point is repeated over and over again until the speaker is satisfied that the message has been properly received or accepted. In the reinforcement sandwich, a negative statement is preceeded by a positive statement and followed by a request for change in another person's behavior. An extensive discussion of such techniques is not directly relevant to the present study but is provided along with a reconceptualization of them as "performative speech acts" in Appendix B. However, the emphasis of assertiveness training on highly specified ways of conveying information and feelings suggests a reasonable justification for predicting that assertive speech should be measurably distinct from non-assertive speech.

In summary, assertiveness is stipulatively defined by researchers and trainers as containing paralinguistic and linguistic components. Assertive speakers are encouraged to make direct requests and refusals, without apologies, hints, or qualifications. Speakers are encouraged to be concise, to use the first person as the subject of their sentences, and to use verbs that indicate wants, desires, needs, and beliefs. Such prescriptions, when considered alongside the number of verbal techniques taught in assertiveness training, suggest that

assertiveness includes a distinct style of speaking. A more formal description of the theoretical style of assertive speech, employing linguistic terms, will be presented in a subsequent section of this chapter.

To the extent that assertiveness is conveyed by the language people use, measures of style may be useful in describing differences between speech labeled as assertive and non-assertive. Methods and theories developed by linguists might help researchers in assertion to pinpoint those aspects of conversation that are more relevant to assertiveness than others, to construct more effective techniques, and to explain more fully why transfer of training might fail to occur.

Case Grammar

Linguists have tried to explain how sentences are produced, as well as how two different sentences may convey the same meaning, and how the same sentence may convey two different meanings in different contexts (Slobin, 1979). The syntactic forms of a language are called its surface structure, and the meanings and their representations are called its deep structure (Cook, 1979; Palermo & Bourne, 1978; Slobin, 1979). Different schools of linguistics have different conceptions of the form of deep structure. In one current approach, called "case grammar," the focus of study is on the inherent relationships between various grammatical categories, particularly the relationship between verb phrases and noun phrases, and the roles they play in conveying the meaning of a sentence (Anderson, 1977). A "case" refers to a category describing a relationship implied by the verb. Illustratively, the same noun may serve as an agent in relation to one type of verb and as

an experiencer with another type, e.g., "Mary hit John," as opposed to "Mary heard music." Cook (1979) writes:

In traditional grammar the term 'case' refers to the case forms in surface structure; in case grammar the term 'case' refers to underlying semantic roles independent of their surface form. Case roles are semantic relations proper to deep structure; terms such as subject and object refer to grammatical relations proper to surface structure (pp. 201-202).

Thus, traditional grammar would focus on the first or second person syntactically, as the subject of the sentence, but case grammar would focus on the first or second person semantically, as potential agents of the verb.

As summarized by Patton et al. (1977) and Pepinsky (1974), the basic form of the structure imputed to linguistic events can be thought of as a set of name-relator relationships, or relations between nouns and verbs. For Chafe (1970) and Cook (1979), the semantic focal point of case grammar is the verb or verb phrase. The verb is considered to be a relator which specifies how noun phrases are to be taken by the listener. It shows the listener that the speaker intends him or her to interpret the nouns mentioned either as an agent or object of the verb. Thus, the verb is considered to be the central element because it tells the listener what is happening as well as how things named are the topics of that action (Pepinsky & Patton, 1971; Patton & Meara, in press).

In psychological terms, "The verb is the name for various states, conditions, experiences, possessions, or actions that assert something about the things named and related to it" (Bieber et al., 1977, p. 265).

Verb usage. Cook (1979), refining and combining the work of Fillmore (1968), Chafe (1970), and Anderson (1971), has presented a "case grammar matrix" in which he defines three basic types of verbs: state, process, and action. A fourth category is called action-process and consists of verbs that fit both action and process categories. In a modification of this matrix, Meara et al. (1981) present examples of these verb types. Stative verbs describe a non-causal relation between persons or things, or a state of property of a person or thing. Process verbs describe a causal relationship without the specification of an agent in which something is happening to a person or thing. Action verbs describe a causal relation with the specification of an agent who makes something happen. This becomes an "action-process" verb when something is also made to happen to a person or thing.

Case designations. Noun phrases can play several "roles" in relation to verb phrases, depending upon the type of verb. Chafe (1970) outlined seven noun-verb relations, and Fillmore (1968) described nine. Cook (1979) refined these to include five cases: agent, experiencer, benefactive, object, and locative. Cook (1979) writes:

The five propositional cases are defined by verb features as follows: Agent... is the case required by an action verb. Although Agent is typically the animate doer of the action,

inanimate nouns may also be Agents. Experiencer... is the case required by an experiential verb. Experiencer is the person experiencing sensation, emotion, cognition, or communication. Benefactive... is the case required by a benefactive verb. Benefactive is the possessor of an object, or the nonagentive party in transfer of property. Object... is an obligatory case found with every verb. Object is a neutral underlying theme of the state, process, or action described by the verb. Locative... is the case restricted to physical location and includes both stative and directional locatives (p. 202).

An individual verb in a clause may not take on more than three cases, including the object case.

The three basic types of verbs can be crossed with the experiencer and benefactive cases to form subtypes of verbs. Experiential verbs describe feeling, sensing, and knowing. For the purposes of psychological research, stative-experiencer verbs have sometimes been subdivided into affective-experiencer verbs, which describe states of feeling, and cognitive-experiencer verbs, which describe states of knowing (May, 1977). Benefactive verbs describe states, actions, or processes in which someone or something is a beneficiary. Examples of all verb types can be found in Table 1. This table is adapted from May (1977), rather than Cook (1979), because both CALAS and the present study use a modification of an earlier matrix designed by Cook (1979).

Table 1
Verb Types (Adapted from May, 1977)

Verb Type		Examples
STATIVE		
State	(S)	all verb forms of the verb "to be," including is, are being, would
Stative-Experiencer-Cognitive	(SEC)	think, doubt, evaluate, forget, guess
Stative-Experiencer-Affective	(SEA)	care, feel, fear, love, want, like, need
Stative-Benefactive	(SB)	all verb forms of the verb "to have," own, possess
PROCESS		
Process	(P)	tire, sleep, live
Process-Experiencer	(PE)	look, see, hear, smell
Process-Benefactive	(PB)	lost, found, got, increase
ACTION		
Action	(A)	run, jump, work
Action-Process	(AP)	throw, do, hit
Action-Experiencer	(AE)	write, tell, talk, mention
Action-Benefactive	(AB)	send, sell, protect, satisfy

In psychological terms, persons using a preponderance of particular verb types may show that they experience themselves and the world in a particular manner, as a benefactor, thinker, agent, etc. In some forms of therapy, such as client-centered therapy, one of the goals is to encourage clients to talk about themselves as experiencers of feelings and thoughts, rather than as recipients of action (May, 1977).

Grinder and Bandler (1976) suggest that verb usage is indicative of the preferred cognitive or perceptual style an individual uses to understand the world. They hypothesize that people who use different proportions of verbs describing vision, feeling, and knowing experience the world differently.

Stylistic complexity. The verb, in its role as an informational unit, can be thought of as a "marker" or base for constructing measures that describe the style of a written or spoken discourse.

Meara et al. (1981) have characterized the stylistic measures as being more representative of the surface or syntactical structure of speech, and the verb and case measures as representing the deep or semantic structure of speech. Stylistic measures usually revolve around a clause, which is a unit of information containing one and only one verb phrase (Cook, 1979). A "block of clauses" designates a self-contained cluster of main and subordinate clauses, which are often referred to as "sentences." A sentence is an elusive hypothetical unit at best, because its length is potentially infinite. Two kinds of stylistic complexity are identified by Cook (1979): blocks of clauses containing a main clause and a proportionately larger number of

subordinate clauses, and clauses that are more and more embedded, i.e., clauses that are parenthetical and further and further away from the main clause.

One measure of the first kind of complexity is called Average Block Length (ABL). One of the second kind is called Average Clause Depth (ACD). Discourse with a higher level of ABL or proportionately more ACD is said to be stylistically more complex. A more detailed explanation of how these measures are computed is presented in the Method chapter. A helpful way of conceptualizing the difference between simple and complex styles is to think of the difference between the writing of Hemmingway and Faulkner.

A third frequently used measure of complexity focuses on the number of essential cases versus the number of peripheral cases. In essential cases, noun phrases can be given a case designation depending upon the kind of verb phrase found in a clause. In peripheral cases, noun phrases are nested as objects within prepositional phrases (Hurndon et al., 1979). These phrases are not considered "essential" components of a block of clauses, even though they may be semantically meaningful to the speaker. For example, in the sentence "I am going to the store," the noun phrase "the store" is nested in the prepositional phrase "to the store," indicating location. In the sentence "I am going there," the word "there" plays the role of an adverbial phrase indicating location, even though "there" by itself is usually considered to be a pronoun. In either form, the phrases indicating location are not essential for the statement to be understood. Any

measure or ratio that incorporates peripheral phrases can be thought of as representing "extra information" or information that further specifies the relationship defined by a verb.

In summary, linguists have proposed that the clause, consisting of a phrase with only one verb, can be viewed as a central informational unit of language that tells the listener what action is happening and how things that are named are topics of that action (Pepinsky & Patton, 1971). All verbs seem to fall into three basic categories: stative, action, and process (Cook, 1979). Depending on its category, the use of a verb implies a specific relation to a noun. Measures of the frequency of occurrence and the types of relations implied in the verbs may have psychological significance (Meara et al., 1981). As indicated above, the clause can also be used as a base for constructing measures that describe the style of language of a written or spoken text.

The Formal Structure of Assertion

The fact that assertiveness training manuals prescribe the use of certain verb types and linguistic styles suggest that assertive speech could be conceptualized in terms of the verb types and the stylistic measures described in the previous section.

Although Alberti and Emmons (1978) contend that "style" is more important than linguistic content in teaching people to be assertive, they seem to use the word style to mean rhetorical style. A close look at the example they give to show assertive and aggressive speech in the same "style" reveals that assertive speech has a different

grammatical format or style than aggressive speech, even if both sentences express anger. "I'm damn mad about what you just did" (Alberti & Emmons, 1978, p. 35), the sentence which is labeled as assertive, has a first person subject, with one main clause and one subordinate clause containing a stative verb and an action verb. "You're an S.O.B." (Alberti & Emmons, 1978, p. 35), which is labeled as aggressive, has a second person subject, with one main clause containing a stative verb. Thus, it is possible that actual assertive speech may be different from non-assertive speech in ways that researchers have not addressed.

While assertive speech does not appear to have one invariant structure, it seems to have a characteristic format. Examples from books on assertion seem very similar and often stilted. The basic assertive request appears to take the classic format of first person subject, a verb of desire, and a direct or indirect object: "I want this," or "I want you to do this." The form can be made less offensive by using interrogatives with various "will you" forms or by including optional polite phrases. Generally, the extensive use of qualifiers, tag questions, and peripheral phrases would probably be considered passive, while imperatives with implied subjects would be considered aggressive (e.g., "Do this!"). Given that I-me forms and statements of the speaker's opinions are encouraged, there should be more instances where the speaker in assertiveness training is the subject of the sentence than in usual conversation. As feeling language is also encouraged, stative-experiencer-affective verbs such as "want"

and "like" would theoretically be a verb form commonly found in assertive speech.

Given the maxim, "If a goal cannot be stated in one simple sentence, the asserter is probably confused" (Booraem & Flowers, 1978, p. 27), assertive speech is probably not stylistically complex. Low average block length and low clause embeddedness would be expected in assertive speech. However, the degree of complexity might differ according to type of situation and degree of interpersonal closeness involved. In an "institutionalized" situation, such as returning an item to a store, low degrees of complexity would be expected: "I'd like my money back on this saw." Simple, direct statements in close interpersonal relations are also advocated, although it is possible for a complex statement to be labeled as assertive in such situations. Lange and Jakubowski (1976) give an example of what they call "basic" assertion as well as an elaboration of the basic statement, which is also considered assertive. When trying to be assertive with a parent it is possible to say, "I don't want any more advice" (p. 44), but it is also acceptable to add an "empathic" statement such as "I appreciate the help you've given me in the past, and you can help me now by not giving me advice" (p. 45).

In a speech interaction using escalation (where speakers become increasingly more assertive) the number of qualifiers and peripheral phrases may steadily diminish, while the number of subordinate or conditional clauses increases, making the escalation more stylistically complex. An example from Rimm and Masters (1979) illustrates how this

might occur. In an initial assertive response, the speaker says, "'I wonder if you would please be a little more quiet. I'm having difficulty hearing.'" In the "first order of escalation," the speaker adds an imperative, changes the adverb and the verb, and adds a noun phrase: "'Look, would you please be a bit more quiet? I simply can't hear the movie.'" In the "second order of escalation," the speaker makes a conditional statement that contains several subordinate clauses, even though the number of words in the utterance remains the same as in the previous two: "'Look, if you people don't quiet down, I'm simply going to call the manager'" (Rimm & Masters, 1979, p. 78).

To summarize, the literature on assertiveness implies that assertive speech ought to be stylistically simple. It should contain few embedded clauses and few peripheral phrases. However, examples from several sources suggest that assertive speech could become increasingly complex in close interpersonal situations and when situations appear to require escalating or persistent assertiveness. In terms of verb types, stative-experiencer-affective verbs should appear frequently, because assertive speakers are expected to talk about wants, needs, and feelings.

Hypotheses

As mentioned in a previous section, the purpose of this study is twofold: To describe, in terms of stylistic complexity and verb usage, the differences between speech labeled as passive and as assertive, and to apply linguistic methods to describe an analogue of a behavioral technique, in this case the assertive role-play. I

have presented evidence suggesting that assertive speech can be characterized as stylistically simple and as containing a preponderance of specific types of verbs. However, because it appears that assertive behavior may be situationally determined (MacDonald, 1978; Schwartz & Gottman, 1976), in this research I have elected to state hypotheses about a specific situation in which the phenomenon of assertiveness may be isolated. This study analyzes the language used in a refusal situation that elicits varying amounts of assertiveness. In the situation chosen, a speaker could comply with a request, refuse a request, or offer a compromise. A refusal situation was chosen because refusals are an important part of assertiveness training (Booraem & Flowers, 1978) and are more amenable to transfer of training than other aspects of assertion (McFall & Twentyman, 1973).

The hypotheses presented below are intended to apply only to refusal situations. They are divided into two groups, with Hypotheses A-D pertaining to stylistic complexity and Hypotheses E-H pertaining to verb usage. A brief rationale follows each hypothesis.

Hypothesis A. Speakers labeled as assertive, when compared with those labeled as passive, will talk more, as measured by sheer number of words, phrases, total clauses, and main clauses. Persistence will permit assertive speakers to talk more, while acquiescence will tend to deprive passive speakers of the opportunity to speak. Even when the number of responses to standardized statements is taken into account, assertive speakers might speak more because they might take full advantage of opportunities to express their opinions, while

passive speakers might have difficulty responding to each new argument the other person makes during the conversation.

Hypothesis B. Speakers labeled as assertive, when compared with those labeled as passive, will employ a more concise style of speech, as measured by Average Block Length (ABL). According to Booraem and Flowers (1978), the model of assertive speech should be the simple sentence. Thus, assertive speech would be expected to contain a low ratio of main clauses to subordinate clauses.

Hypothesis C. Speakers labeled as assertive, when compared with those labeled as passive, will employ speech that is easier to process and untangle, as measured by Average Clause Depth (ACD). Assertive speakers are not expected to give reasons when explaining their positions, therefore they would not be expected to exhibit patterns of speech in which clauses are highly embedded or dependent upon each other.

Hypothesis D. Speakers labeled as assertive, when compared with those labeled as passive, will employ less "extra" information, as measured by the ratio of Phrases to Main Clauses (PMC). Assertive speakers, who are presumed to avoid qualifying their speech with apologies and tag phrases, should convey less "extra" information by employing fewer subordinate verb and other phrases in relation to main clauses.

Hypothesis E. Speakers labeled as assertive, when compared with those labeled as passive, will employ proportionately less basic stative verbs. Presumably, assertive speakers are taught to think of themselves as agents, and not as passive recipients or objects of states.

Hypothesis F. Speakers labeled as assertive, when compared with those labeled as passive, will employ proportionately more stative-experiencer-affective verbs, such as want, like, need, etc. A higher proportion of affective verbs should be utilized, because assertiveness training encourages individuals to talk about affective states by using "feeling language."

Hypothesis G. Speakers labeled as assertive, when compared with those labeled as passive, will employ proportionately less stative-experiencer-cognitive verbs, such as know, doubt, guess, etc. Fewer cognitive verbs should be used because assertiveness training discourages "thought statements" and statements expressing doubt.

Hypothesis H. Speakers labeled as assertive, when compared with those labeled as passive, will employ proportionately more action verbs. Assertive speakers should employ proportionately more action verbs because they are expected to talk about themselves and their actions. Action verbs could occur prominently in a refusal situation, if compromise positions involving discussion of action were offered.

Method

Overview

Female university students and a female "confederate" role-played three scenes which were variations of situations eliciting the kinds of verbal responses commonly found in assertiveness training. Role-plays were audio-taped, and tapes were transcribed. Written transcriptions for a "refusal" scene were rated for levels of assertiveness and paced in assertive, passive, or aggressive categories by two psychologists with extensive backgrounds in assertion training. Transcribed texts of ten role-plays labeled as assertive and ten labeled as passive were analyzed using the Computer-Assisted Language Analysis System (CALAS). Frequency counts produced by CALAS were used to compute measures previously developed in research on stylistic complexity and verb usage. These measures served as dependent variables, which were subjected to statistical analysis.

Data

Subjects. Subjects were 77 female undergraduates enrolled in an introductory psychology course. They received course credit for participating in the experiment. The first 19 subjects were treated as pilot subjects. Data were collected and transcribed for the 58 subjects who participated in the actual experiment. From this pool of 58 transcripts, 8 were randomly selected and used in practice trials for raters, and 50 were rated in the actual sessions.

The 58 subjects ranged in age from 18-33 years, with a mean of 19.6 and a mode of 19 years. Five of the 58 subjects indicated that they had been in some form of assertiveness training or training in communications skills, which usually took the form of one-day workshops. Most subjects were unaware of the term "assertiveness training" itself.

Only female subjects were used because much of the assertiveness literature focuses on women. A study of sex differences was deferred at this time in favor of comprehensive analysis by CALAS of the data for females.

Research assistant. The research assistant for this study was a female, upper level psychology major, age 21. She received course credit for participating as a "confederate." (This term is used somewhat loosely. Subjects were aware that she was playing a role, but they were given no information about how she would play it.) The confederate, who played either the subject's mother or landlord, was instructed to speak aggressively in each of the role-plays. She was unaware of the hypotheses of the experiment, although she knew the experiment involved assertive conversation.

Materials

Role-plays. The two paramount considerations in choosing role-plays were length of conversation and verisimilitude (i.e., speech as close to natural conversation as possible). The situations had to elicit fairly long sequences of conversation in order to ensure representative samples of the subjects' speech and to provide sufficient

data for CALAS to analyze. Most of the published batteries for assessing assertive behavior focus on short sequences of conversation.

Adaptations of standard role-playing protocols were required to increase the number of stimulus statements made by the confederate. To satisfy the consideration of verisimilitude, it was important that the subject feel as if the situations were familiar or plausible. The confederate's responses had to be as standardized as possible while remaining appropriate and credible in relationship to a particular subject's responses.

Several scenes suggested by the literature on assertion were piloted with graduate and undergraduate students. Three scenes with standardized responses were chosen for the experiment. These three scenes were labeled "Landlord," "Choosing a Major," and "Weekend Plans." They represented, respectively, a request, an expression of negative opinions, and a refusal--the three speech acts on which assertiveness training focuses (Salter, 1977). The weekend plans scene was chosen for linguistic analysis because it was the one scene which seemed to elicit the most variability in outcome (i.e., whether the subjects held fast to their plans or acquiesced to the confederate). This scene is described in more detail later in this chapter. Descriptions of the other two scenes are included in Appendix C.

Standardized responses. The need for credible responses which were appropriate to the immediate context of a subject's conversation precluded the confederate's use of a strictly memorized script with an invariant order. A general sequence of responses and a series of rules

were constructed for each scene. From approximately 12 responses (or points) designed for each scene, the confederate had standard opening and closing lines and could choose to make any 8 of the remaining points in the course of a role-play, for a total of 10 points. She attempted to exhaust these 10 points with each subject. The extra 2 points included standard responses the confederate could make if the subject challenged her, asked her questions, or wavered in her response. In addition, the confederate was allowed to repeat a point if it appeared that she had not made the point clearly, or if the subject's response was confusing. Cue cards on the wall behind the subject aided the confederate in remembering points.

Weekend plans scene. The description of the scene chosen for linguistic analysis was as follows:

You have just received a note from your parents saying they are planning to visit you this weekend, which is four days away. You have already made plans to go with friends to their home in Pennsylvania. All the plans are made, and you are really looking forward to the weekend. You call your house to tell your parents of your previous plans for the weekend.

The description and instructions were adapted from Galassi (Note 3).

The confederate's standardized responses were an adaptation and combination of the pre- and post-test stimuli used by Galassi (Note 3) in his refusal scene. A variation of this situation also appears on the College Self-Expression Scale (Galassi et al., 1974). Subjects reported that it had great relevance to them. (The exact points made by the confederate appear in Appendix C.)

Inventories. It was hoped that the use of standard inventories for measuring assertion, passivity, and aggression would help locate speakers exhibiting various degrees of these three kinds of verbal behavior. Subjects were asked to complete the College Self-Expression Scale (CSES) (Galassi et al., 1974), which is a paper-and-pencil measure of assertive and passive behavior. They were also asked to complete the Buss-Durkee Inventory (Buss, 1961), which is a measure of aggressive behavior and has been used by Galassi and Galassi (1975) as an adjunct to assertive inventories. Unfortunately, the inventories were not useful because responses were not variable.¹ Copies of these inventories appear in Appendix C.

Experimental Procedure

Subjects participated in the experiment individually. I explained that the purpose of this study was to explore the types of conversation and verbal responses people make in interpersonal situations. Subjects were told that they would be asked to role-play three scenes, which would be tape-recorded, and that they would then fill out paper-and-pencil inventories. They were instructed to "play themselves" in the role-plays. Subjects were then introduced to the confederate and seated with her in another room. Scenes were presented in counter-balanced sequence to avoid order effects. Prior to the enactment of each of the three scenes, audio-taped instructions for the scene to be role-played were given to the subjects, along with identical written versions. The subject and confederate were seated face-to-face for two scenes and side-by-side for the weekend plans scene, because the latter scene was designed as a telephone conversation. After the

instructions were played, the confederate turned on a second tape recorder, and the role-play was enacted. Completion of the role-plays took about 15 minutes.

After they finished the role-plays, I asked subjects whether the scenes seemed realistic to them and whether the subjects "felt like themselves" in the role-plays. If a subject felt that she had not responded as herself or that the scenes were unrealistic, it was duly noted. Generally, subjects reported that they felt as if a "real" conversation had occurred. Subjects were also asked to rate the level of discomfort or anxiety they experienced during each scene on a scale of 0 to 100. They were instructed to base these ratings on the anxiety they felt as a result of the situation presented in the role-play, and not as a result of being a subject in a psychological experiment. Subjects who felt that the scenes were quite anxiety-producing were assured that many people felt uncomfortable when role-playing the scenes because the confederate was meant to sound aggressive and difficult, and that it was probably very hard in "real life" for people to go against their parents' wishes or to argue with a landlord.² Finally, the subjects filled out an information packet that contained questions about age, grade, and prior experience with assertiveness training, as well as the College Self-Expression Scale (Galassi et al., 1974) and the Buss-Durkee Inventory (Buss, 1961).

Rating Procedure

Preparation of transcripts for raters. Audio-tapes were transcribed by a professional typist. Both the typist and I then listened

to the tapes and made any necessary corrections. An exact transcript, including all false starts, "uh's," and repetitions, was typed.

It was decided for several reasons that single-word repetitions would be deleted from the final transcripts. It was often unclear whether a subject was saying "half" a word and then hesitating, or whether she was correcting herself. For example, a subject might hurriedly say, "They, they're going." Counting "they" as a word could misleadingly inflate the number of words, expletives, and phrases. Despite its possible interpretation as hesitation, a phenomenon relevant to assertiveness, this kind of behavior was judged to be more paralinguistic than linguistic. In addition, it seemed likely that raters would find it difficult to read and interpret reliably a text in which such repetitions occurred frequently. Finally, single-word repetitions are difficult for CALAS to identify and label reliably.

The decision to delete did not apply to phrases in which both a noun and a verb were repeated, or in which a noun phrase and verb phrase without a predicate was followed by one with a predicate (e.g., "I don't, I won't come"). Such phrases seemed linguistically more clear and textually less disruptive, and CALAS can reliably process the "extra phrase" as an expletive, with a minimum of editing.

Punctuation, which is arbitrary when applied to a text of spoken language (Meara et al., 1979), was left to my discretion. I conferred with a senior colleague about punctuation rules. The edited transcript was typed and then proofread orally by the typist and me against the

original transcript. A final transcript was produced, and photo-copies were made for raters and for use with CALAS.

Raters. Two professional assertiveness trainers agreed to rate the transcripts of the weekend plans scene according to degrees of assertiveness, passivity, and aggressiveness.³ Both raters were female and had received Ph.D.'s in psychology. They had conducted workshops in assertiveness training as part of their professional duties. One rater had published research studies on assertion.

Rating scales. Raters were asked to rate subjects' responses in each role-play using three 7-point Likert-type scales--one scale each for levels of assertiveness, passivity, and aggressiveness. The raters were instructed to use their expertise as assertiveness trainers, as well as to be guided by descriptions of assertiveness, passiveness, and aggressiveness based on a "rights" definition of these three behaviors. These definitions were adapted from Lange and Jakubowski (1976). No mention of specific linguistic behavior per se was made in these definitions. To the extent that it was theoretically possible to be aggressive and not acquiesce, or to compromise and not be passive, raters were asked not to base ratings merely on outcome.

Raters were also asked to place each role-play in one of three categories: assertive, passive, or aggressive.⁴ After practice trials of rating eight role-plays, raters discussed their criteria for rating. Both raters seemed to agree that persistence, "feeling language," and respect or empathy for the other person's feelings were important in deciding whether verbal responses were assertive. They

then rated the remaining 50 role-plays during two sessions held a week apart, with "retraining" before the second session to ensure consistency. The retraining period consisted of a review of their practice ratings and their own discussion of assertion. At the end of the second session, raters completed a 30-item form, which I constructed, listing those aspects of the role-plays that raters believed to be relevant in making their ratings. The descriptions of assertive, passive, and aggressive behavior, instructions for the rating scales, and the Item List appear in Appendix C.

Results of ratings. The two raters agreed on the general category assignment for 41 out of 50 role-plays, making an exact rate of agreement of 82%. Raters indicated that it was easier to place role-plays in the general categories than to assign ratings. Of the category assignments agreed upon by both raters, 21 role-plays were labeled as assertive, 18 as passive, and 2 as aggressive. Pearson correlations, computed for each of the three rating scales, were $r = .57$ for aggressiveness, $r = .68$ for assertiveness, and $r = .76$ for passiveness ($p \leq .001$ for all three correlations).

To determine if placement in each category was related to the overall pattern of ratings, despite only moderate correlations between raters for each separate scale, a discriminant analysis was performed. It derived the posterior probability of placing each of the 41 role-plays into one of the three general categories. The analysis classified every role-play into the category in which the raters had placed it, indicating consistency between raters when the three ratings were taken

into account. Thirty-nine role-plays were placed into their proper groups with a posterior probability of .9997 or greater.

Choosing role-plays for analysis by CALAS. Ten role-plays from the assertive group and ten from the passive group were chosen for analysis by CALAS based on the following decision rules: (a) Both raters must have given each role-play a score of 5 or higher on the rating scale that corresponded to the category in which the role-play was placed. (b) Scores of 3 or lower were required on the other two scales, with a 2 or 1 preferred. (c) Scores from both raters had to be matched as closely as possible. This procedure yielded 10 role-plays from the passive group and 11 from the assertive group. One role-play from the latter group was discarded because the confederate had strayed from the protocol in reaction to questions by the subject.

Linguistic Analysis

CALAS. The stylistic complexity of spoken texts used in this study was assessed by means of the Computer-Assisted Language Analysis System (CALAS) (Pepinsky, Baker, Matalon, May, & Staubus, Note 4; Rush et al., Note 1). CALAS is derived from a semantically based conception of grammar. It is a modification of two computer languages, SPITBALL and PL/I, and is designed for use with any computer system that is IBM compatible. There are three subsets of programs, which are performed sequentially. Human editing is done after each phase to provide more accurate input for the next phase. The amount of editing required decreases with each phase. In the first subset of programs, identified as EYEBALL, each word of written text is assigned a

grammatical category, such as noun, verb, adjective, etc. In the second subset, or PHRASER, these categories are aggregated into noun, verb, adverbial, and prepositional phrases. In the third subset, called CLAUSE/CASE, the phrases are grouped into main and subordinate clauses, and noun phrases in the clause are given case grammar labels such as "agent" or "experiencer." Verbs are classified into the categories discussed in the Introduction. CALAS provides totals for the number of words, phrases, clauses, and blocks of clauses or "sentences" for each speaker and for the entire text.⁵ It also provides a running total, so that those variables can be compared for each speaker at any point in the text.

Preparation of texts for CALAS. To make them more directly amenable to unedited analysis by computer, role-plays were prepared for CALAS with slight modifications in the transcripts presented to the raters.⁶ For CALAS, all questions were put in declarative inverted form, and noun phrases occurring in embedded positions were shifted, in order to compensate for CALAS's present inability to analyze embedded nouns directly. For example, the question "How are you doing?" would have been changed to "How you are doing," and the sentence "You should have let me know earlier" would have been changed to "You should have let know me earlier." Some changes in punctuation were also made. Coordinating conjunctions such as "and" were treated as the first word of a new main clause if two different ideas were expressed. Such conjunctions appear frequently in spoken language; to treat every utterance joined by "and" as if it were one

sentence would artificially inflate the computer-identified level of clause embeddedness. Thus, a sentence like "I am going to go up there, so I can relax" would be left as is, but the latter clause in "I am going to go and relax up there, and you should have told me you were coming, anyway" would be treated as a new sentence, i.e., "And you should have told me you were coming, anyway." Apart from these modifications, the transcripts given to raters and the ones used for CALAS were identical.

As explained earlier, the first phase of CALAS requires more hand-editing than the two subsequent phases. To ensure that I was following established rules for editing, a graduate student, who was familiar with CALAS and was co-author of several studies using CALAS, agreed to edit ten of the role-plays. He re-edited five of these after I made my corrections, and we edited a second set of five independently. Relatively few changes of the labels applied by CALAS were required. Computation of statistical reliability for the second set of five texts was precluded because CALAS uses a large number of categories, and there are often several ways to edit the first levels to achieve the same final result. Of the corrections made by both of us in the first phase of editing, 67% were concordant. The concordance increased to 85% when adjusted for my consistent procedural preference for editing several recurring phrases at an earlier phase of CALAS than the second editor. Our corrections of these phrases would have been identical at the end level.

At the second and third phases of CALAS, a senior colleague and I conferred and decided on editing rules. The number of instances where editing was still required was substantially reduced at these phases.

Dependent Measures

The output produced by CALAS was used to compute four frequency variables and three ratio variables used in the measurement of stylistic complexity, as well as the frequency of use for each of five types of verbs.

Stylistic complexity. The first four variables of stylistic complexity were the total number of words, phrases, clauses, and main clauses used by each subject and the confederate. These measures give a rough idea of the sheer quantity of language used in a text (Meara et al., 1979). Two ratio measures, which were first proposed by Cook (1979), were used: Average Block Length (ABL) and Average Clause Depth (ACD). Use of these measures presumes that the clause is the basic structural unit of discourse. It is assumed that a main clause and its dependent clauses constitute an informational block, or a unit of communication. Each clause is treated as if it were an essential component of text. ABL is computed by dividing the speaker's total number of clauses by the number of main clauses. The simplest style would be represented by the number 1, which would indicate that the speaker used blocks of clauses containing one and only one clause each (Meara et al., 1979). ABL may be interpreted as representing the amount of information that is communicated per block of clause.

ACD is computed by assigning numerical weights to each embedded clause and dividing the sum of the weights by the total number of clauses. For example, if each main clause is given a value of 1, the next least embedded clause is given a value of 2, the next least embedded clause a value of 3, and so on. A ratio of 1 indicates no embeddedness. ACD may be interpreted as representing the level of difficulty involved in processing or untangling the informational unit.

A third measure of stylistic complexity used in the present study was phrases-per-main clause (PMC) (Pepinsky, Note 5). PMC is calculated by dividing the number of phrases by the number of main clauses. To the extent that, in CALAS, phrases include adverbial, prepositional, noun, and subordinate verb phrases, PMC can be thought of as representing the amount of "extra information" that is given along with the main clause, which is presumed to carry the essential information. Speakers who use a greater number of qualifiers, adverbs, "you know's," etc., should have a higher PMC than those who speak more concisely, although they could simultaneously have the same ABL.

Verb usage. Output produced by CALAS was used to count the number and proportions of stative, action, and process verbs, as well as the number and proportions of two subtypes of stative verbs, stative-experiencer-affective and stative-experiencer-cognitive verbs.

Results

The procedures outlined in the last chapter yielded ten assertive and ten passive role-plays for analysis by CALAS. Results of this analysis will be presented in the order of the hypotheses stated in the Introduction. For convenient reference, the hypotheses are repeated in Table 2.

Stylistic Measures

Four frequency measures were tabulated and used as variables to test Hypothesis A: number of words, phrases, clauses, and main clauses. Three ratio measures were computed and used as variables to test hypotheses pertaining to stylistic complexity. Average block length (ABL), or the ratio of clauses to main clauses, was used to test Hypothesis B. Average Clause Depth (ACD), or the sum total of the weights assigned to embedded clauses divided by the total number of clauses, was used to test Hypothesis C. The ratio of Phrases to Main Clauses (PMC) was used to test Hypothesis D.

Normality of data. The distribution of the data was plotted and judged to be normal by use of a BMD-P program (University of California, 1977) indicating skewness and kurtosis. Variances of all variables for subjects and the confederate were judged to be homogenous according to Hays' (1973) rule of thumb, which presumes that two variances are homogenous if they do not exceed a ratio of 2:1.

Table 2
Hypotheses

In a refusal situation, speakers labeled as assertive, when compared with those labeled as passive, will:

Stylistic Complexity

- A. Talk more, as measured by sheer number of words, phrases, total clauses, and main clauses.
- B. Employ a more concise style of speech, as measured by Average Block Length (ABL).
- C. Employ speech that is easier to process and untangle, as measured by Average Clause Depth (ACD).
- D. Employ less "extra" information, as measured by the ratio of Phrases to Main Clauses (PMC).

Verb Usage

- E. Employ proportionately less basic stative verbs.
- F. Employ proportionately more stative-experiencer-affective verbs, such as want, like, need, etc.
- G. Employ proportionately less stative-experiencer-cognitive verbs, such as know, doubt, guess, etc.
- H. Employ proportionately more action verbs.

Confederate's language. Table 3 exhibits the means of the stylistic variables for the confederate. It was clear during the running of the experiment that many subjects (who were later labeled as passive by raters) often acquiesced to the confederate before she could exhaust the standardized points. (The points actually made will be designated as "hits" to avoid confusion with the total points possible had subjects not acquiesced.) A point by point analysis of the weekend plans scene indicated that the confederate hit an average of 10 of the required points for assertive subjects and 7.8 for the passive subjects. A T-test was significant for differences in the number of hits made in each group, $t(18) = 3.7148$, $p \leq .01$.⁷ The number of hits was used as a covariate in multivariate analyses of variance to account for differences between the length of the role-plays in each group (cf. SAS User's Guide, 1979). Using the number of hits as a covariate allowed for a better method of comparing the quantity of speech produced by the subjects. Inspection of the role-plays suggested that the confederate used roughly the same number of turns for each group, but appeared to use some turns with the passive group to make neutral or prompting statements (e.g., "Yeah") because of this group's reluctance to speak. With assertive subjects, these same turns were used to make more hits.

Subjects' language. Table 4 presents descriptive statistics for subjects and for published samples to be discussed in detail later. It is evident that there was a wide variation of speech both within and between groups. The mean numbers of words, phrases, total

Table 3
Means for Stylistic Measures for Confederate

Variable	Group			
	Assertive		Passive	
	$\bar{X}$	sd	$\bar{X}$	sd
Hits	10.100	.737	7.800	1.813
Words	146.500	16.887	103.600	26.941
Phrases	87.200	12.709	61.100	16.292
Clauses	21.200	2.741	14.400	3.717
Main Clauses	11.300	1.888	8.200	2.440
Average Block Length	1.897	.215	1.788	.250
Average Clause Depth	1.718	.102	1.495	.397
Phrases per Main Clause	7.792	.834	7.571	1.110

Table 4
Means for Stylistic Measures for Subjects and Published Samples

Variable	Group			
	Assertive		Passive	
	$\bar{X}$	sd	$\bar{X}$	sd
Words subjects ^a	336.200	98.939	168.900	69.233
DT ^b	[403.000]	--	[322.000]	--
Phrases subjects	225.300	67.075	113.700	46.255
DT	[282.000]	--	[232.000]	--
Clauses subjects	57.500	17.212	29.800	11.858
DT	[85.000]	--	[67.000]	--
Main Clauses subjects	29.300	8.577	16.200	6.232
DT	[30.000]	--	[31.000]	--
Words per Turn subjects	27.764	7.944	18.190	6.932
DT	[26.860]	--	[21.460]	--
Average Block Length (ABL) subjects	1.964	.336	1.850	.295
DT	[2.741]	--	[2.266]	--
Average Clause Depth (ACD) subjects	1.740	.209	1.765	.363
DT	[2.270]	--	[1.701]	--
Phrases per Main Clause (PMC) subjects	7.709	1.106	7.074	1.242
DT	[9.096]	--	[7.733]	--

Note. An ABL of 2 indicates that there is an average of one subordinate clause for each main clause. An increase of .5 for ACD indicates an additional embedded clause for each main clause. A PMC of 7 indicates that there are 7 phrases for each main clause.

^a There were 10 subjects in each group.

^b Scores in brackets are raw frequencies for each variable for the Discrimination Test (Lange & Jakubowski, 1976). These scores represent an entire population, therefore no means or standard deviations are available.

clauses, and main clauses employed by the assertive speakers were almost double that for passive speakers.

To test Hypothesis A, a multivariate analysis was performed, with assertive/passive group as the independent variable, hits as a covariate, and number of words, phrases, clauses, and main clauses as dependent variables. An alpha level of $p \leq .05$ was considered to be significant for the MANOVAS. A more conservative alpha level of $p \leq .01$ was considered to be significant for univariate tests, due to the large number of these tests performed. A MANOVA analysis using Wilk's (SAS User's Guide, 1979) criterion showed that $F(4,14) = 3.81$, $p \leq .026$, which was considered significant. Univariate tests accounting for hits showed significant main effects for assertive/passive group for number of words, phrases, and clauses. Assertive speakers exhibited a greater frequency of each of these variables. Results of the MANOVA and univariate tests are presented in Table 5.

To determine if assertive speakers actually spoke more per turn, the number of words per turn for each subject was calculated. A T-test for the differences between the two groups was significant, $t(18) = 2.8716$, $p \leq .005$ for a one-tailed test.

Table 4 reveals that there was little difference in ABL, ACD, and PMC for the two groups of speakers. Scores for ABL and ACD are in the ranges described by Cook (1979) as "medium-to-complex." Speakers used an average of one subordinate clause for every main clause.

To test Hypotheses B-D, a second multivariate analysis was performed, with assertive/passive group as the independent variable,

Table 5
Multivariate Analysis of Variance for Frequency Variables

Variable	Source ^a	<u>df</u>	<u>MS</u> ^b	<u>F</u> ^{c,d}
Words	Group	1	77,669.584	10.06*
	Hits	1	17.540	
	Error	17	7,718.997	
Phrases	Group	1	32,237.494	9.20*
	Hits	1	154.887	
	Error	17	3,505.488	
Clauses	Group	1	2,016.606	8.73*
	Hits	1	6.609	
	Error	17	230.911	
Main Clauses	Group	1	292.147	5.20
	Hits	1	56.371	
	Error	17	56.195	

^a "Hits" is the covariate based on the number of standardized points made by the confederate.

^b All mean squares are corrected for hits.

^c Wilk's criterion for main effect for a multivariate analysis, $F(4,14) = 3.81$, $p \leq .05$.

^d F ratios in this column are univariate statistics.

* $p \leq .01$

hits as covariate, and the three stylistic ratio measures as the dependent variables. This second MANOVA was performed separately from the MANOVA for frequency variables for both conceptual and statistical reasons. Conceptually, the frequency variables and ratio variables were designed to give different types of information. Statistically, it is confounding to include both original variables and new variables constructed from linear combinations of the original variables in the same MANOVA (Ball, Note 6).

A MANOVA for main effect for assertive/passive group using Wilk's criterion was not significant, although it approached significance, $F(3,15) = 3.01$, $p \leq .06$. Hays (1973) suggests that when results gained from small samples are very close to being significant, judgments about the truth of hypotheses can be "suspended." Univariate tests were performed because results approached significance. These tests revealed a significant main effect at the $p \leq .01$ level for PMC, $F(1,17) = 9.70$, $p \leq .0063$, indicating that there was a tendency for assertive speakers to utter about one more phrase per each main clause than passive speakers. Results of this MANOVA and univariate analyses are presented in Table 6.

In summary, it appears that there are significant differences between assertive and passive speech on variables that reflect sheer quantity of speech, and perhaps on the amount of extra information conveyed, but not on the other stylistic measures such as block length and clause depth.

Table 6
Multivariate Analysis of Variance for Ratio Variables

Variable	Source ^a	<u>df</u>	<u>MS</u> ^b	<u>F</u> ^{c,d}
Average Block Length	Group	1	.4728	6.50
	Hits	1	.5699	
	Error	17	.0727	
Average Clause Depth	Group	1	.1236	1.71
	Hits	1	.3597	
	Error	17	.0721	
Phrases per Main Clause	Group	1	9.1672	9.70*
	Hits	1	8.8506	
	Error	17	.9446	

^a "Hits" is the covariate based on the number of standardized points made by the confederate.

^b All mean squares are corrected for hits.

^c Wilk's criterion for main effect for a multivariate analysis, $F(3,15) = 3.01$, $p \leq .06$.

^d F ratios in this column are univariate statistics.

* $p \leq .01$

Verb Usage

The frequencies with which five verb types of interest occurred for both subjects and confederate were tabulated and used as dependent variables to test Hypotheses E-H. The verb types were the basic categories of stative, action, and process verbs, as well as the subtypes of stative-experiencer-affective (SEA) and stative-experiencer-cognitive (SEC) verbs.

Confederate's language. The confederate showed a difference in the proportion of action verbs used for the two groups. This appeared to be due to the fact that the longer protocols of assertive speakers elicited standardized hits that contained more statements of actions, particularly statements using action-experiencer verbs, such as "call," "talk," or "write."⁸

Subjects' language. Table 7 displays the exact number of verbs in each category for the assertive and passive groups. Stative verbs predominated over action and process verbs for both groups. Both groups also employed more SEC verbs than SEA verbs. For the assertive group, SEA verbs accounted for 19.5% and SEC verbs accounted for 28.4% of all stative verbs. For the passive group, SEA verbs accounted for 7.3% and SEC accounted for 34.7% of all stative verbs.

To test for overall differences in use of verb types, Friedman Tests for two or more observations per experimental unit were performed. As described by Marascuilo and McSweeney (1977), the Friedman Test is a non-parametric test which can be used for repeated measures or randomized blocks when normality, common variances, or common

Table 7
Verb Usage Matrix for Assertive and Passive Subjects

	Stative	Action	Process	Total
Total Occurrences ^a				
assertive	261	264	50	575
passive	150	127	21	298
Basic ^b				
assertive	117	214	7	338
passive	80	98	2	180
Benefactive				
assertive	19	6	14	39
passive	7	2	1	10
Experiencer				
Total				
assertive	125	44	29	198
passive	63	27	18	108
Cognitive				
assertive	74	--	--	--
passive	52	--	--	--
Affective ^c				
assertive	51	--	--	--
passive	11	--	--	--

^a Total occurrences = sum of the raw frequencies for Basic, Experiencer, and Benefactive verbs for each main category, across all subjects.

^b T-tests for proportions for Basic Stative verbs, $t(18) = -1.8317$, $p \leq .05$.

^c T-tests for proportions for Stative-Experiencer-Affective verbs, $t(18) = 1.8754$, $p \leq .05$.

correlation coefficients between treatments or conditions cannot be assumed. The Friedman Test follows the chi-square distribution. When using a blocking variable (in this case, the assertive or passive group), the score for each dependent variable is ranked within a block. The premise of the test is that if there are no differences between scores for each variable in the blocked groups, the average ranks for each treatment will be the same.

A Friedman Test, corrected for ties, was significant for differences between overall use of the three main verb types of interest (stative, action, and process), $\chi^2(2) = 33.809$, $p \leq .001$, indicating that there were differences in the overall use of the verb types for both groups. Planned contrasts indicated that there were significant differences at the .05 level between process verbs and the two other types, but no difference between stative and action verbs.

The stative verbs were divided into state basic plus state benefactive (S + SB), stative-experiencer-cognitive (SEC), and stative-experiencer-affective (SEA) categories. A Friedman Test, corrected for ties, was significant, $\chi^2(2) = 18.3537$, $p \leq .005$. Planned contrasts indicated that there was a significant difference between the use of S + SB verbs and the other two subsets, but no difference between SEC and SEA verbs.

Hypotheses E-H made predictions about the relative proportions of verb types between groups. The Friedman Test does not provide tests for the interaction between blocks and a particular condition. Therefore, for each subject, four proportions were calculated. Frequencies

of stative, action, SEC, and SEA verbs were divided by the total number of verbs used by each subject. These proportions then served as dependent variables in four T-tests for differences between groups. All T-tests were one-tailed, because specific predictions had been made. The proportions did not add to 1.00; thus, the tests can be considered independent. Two T-tests were significant. Assertive speakers used proportionately more SEA verbs, $t(18) = 1.8754$, $p \leq .05$, and proportionately fewer stative verbs, $t(18) = -1.8315$, $p \leq .05$, than passive speakers. There were no differences in proportions for action or SEC verbs.

In summary, there were no differences in overall usage between stative and action verbs, but there were differences between groups in the proportions of SEA and basic stative verbs used.

Naive Versus Ideal Assertion

No linguistic analysis of texts either labeled as or designed to be assertive appears in the literature. In order to compare results obtained from "naive" subjects in this study with a sample of "ideal assertive speech," CALAS was applied to the Discrimination Test on Assertive, Aggressive, and Nonassertive Behavior developed by Lange and Jakubowski (1976). This test contains 60 "statements" intended for classification by professionals as assertive, passive, or aggressive. Although the statements are not matched for content, when taken as a whole they suggest what two prominent researchers in assertion consider to be assertive and passive speech. Fifteen of the first 16 assertive statements were matched with the 15 passive statements presented in the

text.⁹ The results for stylistic measures, offered for comparison with subjects in the present study, are presented in Table 4. Stylistic measures for the present study and the DT cannot be compared statistically because the scores for the DT represent an entire population, and no standard deviations are available, but they can be used for gross comparisons.

As is the case for the present subjects, the quantity of assertive speech in the DT is greater, with about 1.33 times more words and clauses used in assertive statements than passive ones. Assertive speech, not passive speech, appears to be stylistically more complex. It is probably more difficult to process assertive speech, which averages approximately two embedded clauses per main clause. Assertive speech also produces more extra information, with about nine phrases per main clause. The ACD and PMC measures for passive speech were almost exactly the same as the means in the naive sample described in the present study. However, the samples of assertive speech in the study were less stylistically complex than those in the DT. Speech that is designed to be assertive in the DT does not appear to be either brief or concise. The content of the passive speech may be passive, but the style is closer to the ideal of "one simple sentence" advocated in assertion literature.

The data for verb usage in the DT are presented in Table 8. Table 9 compares percentages of verbs used by the present subjects with verb usage in the DT. As in the present study, stative verbs predominated over action verbs, but the proportion of process verbs in the DT was

Table 8
Verb Usage Matrix for Discrimination Test

	Stative	Action	Process	Total
Total Occurrences ^a				
assertive	45	36	4	85
passive	39	18	10	67
Basic				
assertive	17	16	3	36
passive	15	11	4	30
Benefactive				
assertive	5	0	0	5
passive	5	3	1	9
Experiencer				
Total				
assertive	23	20	1	44
passive	19	4	5	28
Cognitive				
assertive	11	--	--	--
passive	16	--	--	--
Affective				
assertive	12	--	--	--
passive	3	--	--	--

Note. The Discrimination Test was developed by Lange and Jakubowski (1976).

^a Total Occurrences = sum of the raw frequencies for Basic, Experiencer, and Benefactive verbs for each main category, across all 15 representative statements.

Table 9
Comparison of Verb Usage for Subjects and Published Samples

Variable ^a	Group	
	Assertive	Passive
	Percentages	Percentages
Stative ^b		
Total		
subjects	45.39	50.34
DT	52.94	58.21
Cognitive (SEC) ^c		
subjects	12.87	17.44
DT	12.94	23.88
Affective (SEA) ^d		
subjects	8.87	3.69
DT	14.12	4.48
Action		
subjects	45.91	42.62
DT	42.35	26.87
Process		
subjects	8.70	7.04
DT	4.71	14.92

Note. The Discrimination Test was developed by Lange and Jakubowski (1976).

^a Percentages = raw frequencies of each verb type ÷ total number of verbs for each group.

^b Percentages = Stative verbs, including SEC and SEA verbs, ÷ total number of verbs for each group.

^c Percentages = SEC verbs ÷ total number of verbs for each group.

^d Percentages = SEA verbs ÷ total number of verbs for each group.

double that for naive subjects. Chi-square tests for association between assertive/passive category on the DT and five verb types were significant, $\chi^2(4) = 13.055$, $p \leq .05$.¹⁰ Assertive speech used proportionately more action verbs than passive speech, while the latter used more stative verbs. When stative verbs were partitioned, assertive speech was characterized by a higher proportion of SEA verbs ("feeling language"), while passive speech used a higher proportion of SEC verbs ("thinking language"), $\chi^2(2) = 6.112$, $p \leq .05$. In fact, the language of the passive statements in the DT could be characterized as predominantly stative and cognitive. Passive statements used almost as many action verbs as SEC verbs.

To summarize, a linguistic analysis of the Discrimination Test on Assertive, Aggressive, and Nonassertive Behavior (Lange & Jakubowski, 1976) suggests that assertive speech is more wordy and stylistically complex than passive speech, and uses proportionately more verbs describing affect.

Discussion

Conclusions

Differences in assertive and passive speech. The major purpose of this study was to identify differences in the components of assertive and passive speech. Support was found for the hypothesis predicting differences in the sheer quantity of language. The assertive speakers in a refusal situation used significantly more words, phrases, and clauses than passive speakers, even when the length of their role-plays was taken into account by using the number of hits as a covariate. Assertive speakers also spoke more per turn than passive speakers. Although, in theory, assertive speech is expected to be brief, the finding that assertive speakers talked more than passive speakers is not inconsistent with the objectives of a number of assertive techniques; the broken record is an example of one such technique in which persistence and repetition of utterances are encouraged, perhaps at the cost of brevity.

Hypotheses predicting differences in stylistic variables for assertive and passive speech approached significance. Contrary to expectations, the stylistic complexity of both assertive and passive speakers was at the high end of a "medium-to-complex" scale when compared to Cook's (1979) samples of written text--definitely not the "one simple sentence" advocated by Booraem and Flowers (1978). The

ideal assertive responses taken from Lange and Jakubowski's (1976) Discrimination Test on Assertive, Aggressive, and Nonassertive Behavior (DT) were even more stylistically complex than the sample obtained from subjects used in this study. Stylistically, the DT sample was comparable to the high level of complexity Cook (1979) assigned to Thoreau's Walden.

These findings suggest that "duration of the assertive response," which is equated in many studies with concision of style and brevity (Hersen et al., 1973), may not actually be related to a simple style. The analysis of the DT suggests that assertion trainers should redefine their expectations concerning the stylistic complexity of assertive speech. "Basic assertion," consisting of one simple sentence, is not the norm even in ideal assertion. "Elaborate assertion" (Lange & Jakubowski, 1976), which includes empathic and persuasive statements, is most likely more representative of assertive speech, perhaps because such forms contain more embedded clauses. A brief inspection of the content of the role-plays rated as assertive in this study suggests that assertive speakers made empathic statements and provided reasons for their refusals. Results suggest that when teaching responses to refusal situations, assertiveness trainers should emphasize the amount of talk, rather than brevity or simplicity of style.

Results concerning differences in verb usage were mixed. In the samples used in this study, speakers used about the same proportion of stative and action verbs, and few process verbs, overall. Cook (1979)

found a similar pattern when studying literary texts. In the present study, basic stative verbs predominated over stative-experiencer-cognitive verbs (SEC), but the latter verbs were used more than stative-experiencer-affective verbs (SEA). When proportions of SEC and SEA verbs to total verbs were calculated for each speaker, it was found that assertive speakers used significantly more SEA verbs, but not fewer SEC verbs. This finding indicates that there was some reason to assume that assertive speakers used "feeling language" more than passive speakers, even though affective verbs constituted a small portion of all speakers' semantic communication. Assertive speakers also talked about basic states significantly less than passive speakers. The use of action and SEC verbs in the DT was closer to the predictions made in the hypotheses.

Further research is needed to clarify the extent of differences in verb usage between assertive and non-assertive speech. Results of the present study imply that it is not necessary for assertion trainers to discourage use of SEC verbs as long as an individual uses a fair percentage of SEA verbs.

Applicability of CALAS. The second purpose of this study was to apply CALAS to both an analogue of a behavioral role-play and to previously published examples of ideal assertive speech. CALAS seems to lend itself to these tasks with the same success it has had in studies describing the language used in more traditional psychotherapy. A linguistic analysis revealed that assertion trainers may be imprecise and misleading when using linguistic terms such as "conciseness," "one

simple sentence," and "feeling language" to describe assertive techniques or assertive speakers.

The findings that the quantity of speech is an important factor in rating subjects as assertive is compatible with other studies of stylistic complexity that have employed CALAS. Hurndon et al. (1979) found that "cognitive complexity," as measured by a written test, could be explained best by the sheer quantity of language. Meara et al. (1981) found that both quantity and stylistic measures described differences between the interaction of a client and three counselors better than measures of verb usage.

This study did not attempt to demonstrate that speech alone accounted for the labels of assertive or passive, or that role-plays matched for quantity of language or stylistic complexity would be differentially rated regardless of outcome. However, results for both this study and the samples of published assertive responses lend credence to the contention that, in terms of quantity of speech and "feeling language," one kind of speech would be consistently labeled as assertive, and another kind as passive.

Limitations

Training and instructions. It is possible that had this study employed subjects trained in assertion and compared them with naïve passive subjects, there would have been greater stylistic differences between the two groups. However, comparison with the DT suggests that trained assertive subjects would have been more stylistically complex than passive speakers. Also, had subjects been instructed to be

assertive rather than "be themselves" in the role-plays, greater difference might have been obtained. Nietzel and Bernstein (1976) found that when role-players were asked to pretend to be assertive, they responded more assertively than when they were merely asked to play themselves in a situation that might call for assertiveness.

Outcome. This study did not control for behavioral outcome. Although raters were instructed not to base ratings merely on outcome, it was evident that outcome was important in labeling a role-play as assertive or passive; all the assertive speakers exhausted the points until the confederate gave in, and all the passive speakers acquiesced. However, if quantity of speech were not related to outcome, then there should have been no differences between the two groups of speakers when the lengths of the role-plays were taken into account. Yet, assertive speakers employed a greater number of words per turn. Given that the 20 role-plays analyzed represented the most assertive and most passive role-plays, the conclusion that highly assertive speakers employ more words is justified, especially when these results are compared with those for the DT.

Further study would present raters with samples of assertive and passive speech crossed with different outcomes to eliminate the effect of outcome upon judgments of assertiveness and passiveness. A clear outcome is most important in a "reinforcement" definition of assertive behavior (Rich & Schroeder, 1976); however, research using situations with ambiguous outcome seems warranted as long as assertiveness trainers include the mere expression of feelings and

opinions in definitions of assertiveness. Two difficulties in constructing role-plays with ambiguous outcome were encountered during pilot work for this study. It was difficult to find situations in which outcome was ambiguous, and raters could achieve no reliability when a scene with ambiguous outcome was presented.

Content of responses. This research did not study the content of the responses in terms of broad categories of "speech acts," i.e., categories of language having some purpose (Searle, 1969), discussed in Appendix B. Raters appeared to respond to the content of the role-plays. In their discussion after the practice trials, raters agreed that non-compliance, persistence, feeling language, and "empathy for the other person" were important aspects of assertiveness, while compliance and apologizing were aspects of passivity. After rating the role-plays, raters chose, from a 30-item list, what they believed to be the five most relevant factors in making assertive, passive, and aggressive ratings, and in placing a role-play in one category or another.

For the assertive ratings, both raters chose two of the same items: verbs of feeling and empathic statements. The other six items chosen by one rater but not the other included I-me language, requests for change, standing up for rights, concision, verbs of desire, and a statement that the subject's mind was made up. For labeling, rating, and categorizing a role-play as passive, both raters chose four of the same items: apologizing, valuing the family's needs over one's own, long responses, and compliance. The remaining items chosen

by only one rater were hesitating and inducing guilt. (See Appendix C for the complete responses to the Item List.)

For assertive speakers, both the content and quantity of speech may have served to underscore the raters' perceptions that speakers were trying to be persistent, to stand up for their rights, and to express their feelings. Passive speech, which was perceived by raters as having "long responses," may have appeared to be less concise if it included indirect hints, apologies, or excuses which might give the reader the feeling that the passive speaker was rambling.

Suggestions for Further Research

Further research is needed to discover whether the differences between assertive and passive speech found in this study would be obtained using other assertive role-plays or could be extended to aggressive speech. Sex differences, changes in role-status, age, etc., could be manipulated to measure their effects upon language use. In addition, CALAS's capacity to provide case designations would be of definite help in studying the use of I-me language; the number of times "I" versus "you" appeared as an agent or object of verbs could help determine if assertive speakers use I-me language more often than non-assertive speakers, including aggressive speakers.

CALAS could also be used to describe the stylistic and semantic components of particular assertive techniques, such as the broken record. This kind of information could then be used to aid in training assertiveness trainers. CALAS printouts could help therapists-in-

training study their own language. CALAS could also be used in outcome studies of assertion by comparing samples of speech taken before and after training. Results of the present study suggest that phrases-per-main clause, stative-experiencer-affective verbs, and quantity of speech would be variables of interest in outcome research. Demonstration of few differences before and after training would imply that assertiveness training does not effectively change linguistic communication.

The study of how assertive role-plays employ the speech acts discussed in Appendix B is clearly an area open for research. Enumeration of the types of requests and refusals taught in assertion training might necessitate content analyses requiring more inference than is necessary when studying linguistic structure. Such research could begin to relate the linguistic structure of speech to interpersonal and socialization processes (cf. Pepinsky & DeStephano, Note 2). Schur (1976) suggests that the assertive philosophy is a narcissistic one, and Gervasio (Note 9) has discussed how assertive language reinforces the value of the individual as the prime social unit, through its emphasis on I-me language, verbs of desire, and rejection of justification and accounting.

Recently, theorists have called for research in the process of behavior therapy (Ford, 1976; Mahoney & Arnkoff, 1978; Wachtel, 1977). CALAS could be used as an adjunct in such research because it provides a meta-language in which traditional psychotherapy and behavior therapy could be compared. A procedure like language analysis could aid

behavior therapists in studying the subtleties and ambiguities inherent in language that impede the process of changing communication patterns, and so enable therapists to refine theory and hone technique.

Footnotes

1. On the College Self-Expression Scale, the mean assertiveness score of 134.84 with a standard deviation of 20.29 in this study's sample was approximately one standard deviation above the mean of 117 reported by Galassi et al. (1974). There were few scores falling in the passive range. There were also no subjects who scored in the aggressive range of the Buss-Durkee Inventory (Buss, 1961).
2. The average level of discomfort for the weekend plans scene was 36.94, with a standard deviation of 25.19. The discomfort levels for the other two scenes were equally skewed, indicating that subjects either reported a great deal of discomfort, or very little. For the major scene, the mean was 33.34, with a standard deviation of 24.82, and for the landlord scene the mean was 43.96, with a standard deviation of 24.47.
3. Originally, the major scene was rated by two other assertion trainers. They each categorized 30 out of 50 role-plays as assertive, but could agree on category placement for only 26 role-plays. Only one role-play was designated as aggressive by both raters. Correlation coefficients were $r = -.1334$ for assertives, $r = .1388$ for passives, and $r = .542$ for aggressives, $p \leq .001$ for the latter correlation only. It appeared that the raters had difficulty rating the major scene because it involved an expression of negative opinions and had no clear outcome. Even subjects who were able to counter the confederate's arguments to a small degree were likely to be labeled as assertive. Also, as discussed in the Introduction (p. 7), assertiveness has been defined in a variety of ways; it is possible that the two raters had differing orientations towards assertiveness. These raters were not able to offer more of their time to rate another scene. Therefore, it was decided to have new raters rate the weekend plans scene.
4. Raters were also told that they could place a role-play in a fourth category, designated as "very assertive," if they felt the responses of the subject came close to "ideal" assertion as practiced in their own workshops, but that for the purposes of establishing inter-rater agreement, the very assertive and assertive categories would be collapsed.

5. The variable "sentence" is, in effect, an arbitrary one when processing spoken language, since speakers may punctuate their own speech differently than the listener, and since spoken discourse often contains coordinating conjunctions such as "and," which can inflate the length of a block of clauses (Meara et al., 1979).
6. The number of changes made per role-play included roughly two questions, three embedded nouns, and approximately three commas before coordinating conjunctions. It should be noted that had the first two changes been made in the role-plays presented to raters, the text would not have sounded like written or spoken English: "You me let know" would have been disruptive to readers. It is highly unlikely that changes in the use of commas would have changed ratings.
7. T-tests could not be performed for differences in the confederate's words, phrases, clauses, etc., for each group because the assumptions for T-tests require independent observations. T-tests could be performed for hits because the number of hits to which each subject responded could be independently assessed and treated as an independent trial.
8. T-tests could not be performed for differences in verb types for the confederate for the same reasons given in footnote 7.
9. The number of statements representative of each category were unequal, with 24 assertive, 15 passive, and 21 aggressive statements. Also, 1 out of the first 15 assertive statements was a 2 word utterance without a noun or verb; the 16th assertive statement was therefore substituted for it.
10. For the calculation of chi-squares, each clause in the Discrimination Test (Lange & Jakubowski, 1976) was treated as an independent observation. This procedure seemed justifiable because each clause in the DT contributed to an entire population of responses. Observations were not a series of responses produced by different subjects, as in the present study.

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Appendix A
Natural Language in Therapy

This Appendix is designed as a brief and highly selective review of the literature on natural language and psychotherapy. Its purpose is to place the present research in the context of previous and influential work in the area which may use different methods than the present study or may be based on a different framework, but which nevertheless have some bearing on the study of natural language in therapy.

Exhaustive reviews of the more than 500 content analyses of therapy are available elsewhere (Kiesler, 1973; Marsden, 1971). The representative research discussed here employs either linguistic categories to describe speech, methods derived from linguistics, or computerized systems to aid in the classification of language, because these areas are similar in scope to the present study. Attention is focused on general theories of communication in therapy and systems of discourse or content analysis that attempt to cut across theoretical orientations. Noticeably missing are discussions of the many well-known systems of content analysis whose major purpose is to describe personality constructs or patterns of interaction derived from a particular psychotherapeutic orientation.

Traditional Content Analysis

The major method for studying the use of language in psychotherapy has been content analysis, which is a process whereby nominal data are divided into units and categorized. The purpose of such analysis is to make inferences from a text about some characteristic of its speaker that is not directly observable (Kiesler, 1973).

Kiesler (1973) described over 20 systems of content analysis; Marsden (1971) reviewed over 500 studies of therapy that use content analysis systems. Russell and Stiles (1979) formulated a "typology" of systems of content analysis that consists of three major categories of focus: semantic content of speech, the relationship of the speaker and listener, and "extralinguistic" categories, such as tone of voice, pauses, duration of speech, etc. They noted that the major portion of content analyses fall into the first two categories. Although some of these systems code data using grammatical categories (cf. Strupp, 1957; Snyder, 1963), their primary purpose is to make some inference about the client's psychological state and/or the therapist's style of therapy, based on constructs in particular psychotherapeutic orientations. Examples of such systems are those of Gottschalk and Gleser (1969), Laffal (1968), Siegman and Pope (1972), and Strupp (1957).

Unfortunately, despite the use of an abundance of content analysis systems employed in hundreds of studies, there have been no clear conclusions drawn about the relationship between the language used by the therapist or client and the process or outcome of therapy (Parloff, Waskow, & Wolfe, 1978). Few findings could be generalized beyond a

particular study, let alone beyond a particular therapeutic orientation (Kiesler, 1973).

It is very possible that the subtle changes that seem to occur in therapy may not have been adequately measured by traditional content analysis (Bergin & Lambert, 1978). Recent theories of the use of language in therapy and newer methods of content analysis attempt to remedy some deficiencies of the traditional models by studying the natural language used in therapy. Rather than perform content analyses that reflect therapeutic orientations, these approaches ask, "What properties of language differentiate one type of therapy from another, or one communication pattern from another?" In a very broad sense, therapies are viewed as languages to be learned by the participants.

Theories of Communication in Therapy

Ruesch (1961) believed that successful communication is the core of mental health. To communicate well, an individual must be able to manipulate concepts and combine symbols in accepted ways. The task of the therapist is to re-educate the patient in more effective communication, which involves socialization to the norms and rules of the culture's linguistic conventions (Bär, 1975). In this way, the therapist becomes a kind of "language coach" (Shands & Meltzer, 1973).

Pepinsky and Karst (1964) have used the term "convergence" to describe the lessening of the discrepancy between the norms and standards of the therapist and those of the client. Convergence is a general phenomenon that can occur on many different levels. Matarazzo

and Wiens (1977) use the term "synchronicity" to describe the parallelism or convergence that occurs in the duration of speech of client and therapist over the course of an interview. Jaffe and Feldstein (1970) use the term "tracking" to describe the tendency of one member of a dyad to "catch up" with the other. Convergence seems to occur, not only at a stylistic level, but also at a content level, as when self-disclosure on the part of the therapist leads to a self-disclosure on the same theme by the client (Cozby, 1973).

Watzlawick, Beavin, and Jackson (1967) observed that natural language is a vehicle for both communication about content and communication about how a statement is to be taken. "I was only joking" is a metacommunication about a particular content. Silence and non-verbal behavior are also communications; hence the famous axiom, "One cannot not communicate." Watzlawick (1974) and his colleagues (Watzlawick et al., 1967; Watzlawick, Weakland, & Fisch, 1974) delineated two patterns of communication found in many dyadic exchanges: complementarity and symmetry. Complementarity is said to exist when persons "...exchange behavior which together forms the same sort of Gestalt as day and night, inside and outside..." (Watzlawick, 1974, p. 7). Symmetry is said to exist when both partners exchange the same sorts of behavior, e.g., as in "capping" or one-upmanship games where each person attempts to outdo the other. According to these researchers, severe problems can develop when patterns escalate, when the individuals involved think they are reacting to a different pattern than the one actually occurring, or when one member of the dyad refuses to communicate in the established way.

It is very difficult to study the patterns of interaction proposed by Watzlawick et al. (1967) in a systematic manner (Crider, 1979). It is not clear what behavior constitutes evidence of a pattern, or how often the behavior has to occur to be designated a pattern. Only formal aspects of a pattern are specified, making it difficult to present the hypotheses of these authors in a testable and falsifiable form.

Homologies between grammar and human relationships. Several groups of researchers, seemingly independently, have used a similar paradigm for studying natural language in therapy and in other dyadic relationships. In these studies, the categories of grammar provide a framework for studying human relationships (Cummings & Renshaw, 1979; Stiles, 1979). Different theorists vary in the degree of "homology" (i.e., the structural correspondence) they espouse between grammar and human relationships. Some researchers use categories of grammar in their content analyses as a method of identifying content categories, as when self-disclosure is defined as a simple or compound sentence with the subject "I" (Goodman & Dooley, 1976). Others relate linguistic mood or verb tense to personality variables or characteristic interpersonal relationships (Cummings & Renshaw, 1979; Grinder & Bandler, 1976).

Havens (1978; 1979) has suggested that various therapeutic orientations employ different prototypical grammatical forms. He observed, for example, that history taking in psychiatry involves an interrogative mode, whereas psychoanalysis makes use of imperatives (e.g., "Tell me what comes to mind"); and that the interpersonal techniques of Sullivan employ declarative sentences, while the existential therapies may depend

on rhetorical devices. In a similar vein, Glaser (1980) has outlined three rhetorical devices probably common to all therapy: "ethos" or moral appeals, logical appeals, and stylistic devices such as metaphors.

Meltzer (1978) adapted Bernstein's (1964) concept of elaborated and restricted codes of speech to study what he termed the "semiotic" aspects of suitability for psychotherapy. He proposed that psychoanalytic therapists seek out patients who speak elaborated codes and then attribute qualities like "psychological-mindedness" to these speakers. In an empirical study, Meltzer manipulated the level of elaborated code in transcripts of clients' speech. Therapists were asked to rate these transcripts along a dimension of suitability for psychotherapy. Transcripts showing an elaborated code received significantly higher ratings than those showing a restricted code.

Bandler and Grinder (1975) and Grinder and Bandler (1976) assert that there is a strong homology between grammar and human relationships. They argue that individuals have cognitive models of the world that are totally dependent on language, but that may be at odds with their perceptual experience. People who suffer from psychological problems feel themselves unable to make choices, purportedly because their linguistic models of the world are "impoverished," and their choices are limited by the implicit assumptions about the world that are conveyed in their language. This impoverishment is reflected in an individual's communication with others, with whom he or she employs communication styles of generalization, deletion, and distortion.

These styles can be summarized as follows: (a) In generalization, elements become detached from original experience and come to represent entire categories of ideas. (b) Deletion refers to the habit of paying selective attention to certain dimensions of experience and ignoring others. (c) Distortion refers to the linguistic shifts speakers make when describing their experience of sensory data, e.g., when "blue" becomes the property of an object, rather than an experience of light waves.

Bandler and Grinder (1975) contend that theories of transformational grammar seem to deal with the problems of generalization, deletion, and distortion. The process of transformation from deep to surface structure includes the process of deletion of indefinite elements and the process of nominalization, whereby a verb or process word is transformed into an event-word or noun. Bandler and Grinder (1975) propose that the individual's representation of conscious experience corresponds to his surface structure speech, and actual experience corresponds to deep structure. They assume that the absence of surface manifestations of deep structure is indicative of the absence of some "awareness of self" toward that area of life in which the client experiences difficulties.

According to Bandler and Grinder (1975), the task of the therapist is to complete an impoverished surface structure and to challenge "presuppositions" presented by the deep structure. These presuppositions seem to relate to the client's pronominalization (or use of unclear pronoun references), nominalization (or transformation of process words into nouns), and use of structures that imply a false understanding of

cause and effect (e.g., the statement, "My wife makes me angry," instead of the "truer" statement, "I feel angry when my wife...").

As a model of communication and behavior change, Bandler and Grinder's work poses a number of conceptual problems. First of all, they seem to propose an isomorphism of surface and deep structure of language with a surface and deep structure of intrapsychic events. But deep structure, like the unconscious, is inferred, not observed. Theoretically, there are many possible forms of deep structure for a given surface structure; what determines the "right" one?

Secondly, the isomorphism between language and "model of the world" assumes the client sustains a reified object or model. If the surface structure is ill-formed, then the model must be impoverished. This assumption does not account for the fact that participants in conversations often do not speak in complete surface structures. There is a shared body of knowledge, often dealing with pronoun referents, that can be inferred from speech (Coulthard, 1977; Halliday and Hassan, 1976). While clients who are in therapy may make assumptions about this shared knowledge that are not warranted, it is doubtful that these unwarranted assumptions are manifested in every utterance they make. The one-to-one correspondence between speech and model of the world becomes even more apparent in Grinder and Bandler's (1976) second book, in which the authors claim a relationship between a person's use of words describing sensory modalities such as hearing and seeing and his or her characteristic way of operating in the world.

Thirdly, Bandler and Grinder (1975) imply that transformational grammar presents the true picture of how language is organized and that

such a formulation is "neutral," content free, and value free. Yet, even in the field of transformational grammar there is controversy over the relation of surface structure to deep structure. Chafe (1970) argues that certain classes of verbs can only take on particular surface structures because of the logical relations implied in their meanings and because these verbs refer to relations in the world beyond their syntactic relations in a sentence. In terms of Bandler and Grinder's (1975) work, Chafe's (1970) formulation implies that in order to make surface structure statements, one must already be aware of relations with the world; there is no reason to assume that delving into deep structure will provide a "truer" awareness of oneself.

In summary, the work of Bandler and Grinder is useful as an exploration of the grammatical aspects of therapeutic communication. Their contribution falls short, however, of providing a sufficiently explicated system to support a homology between grammatical forms and human problems. Their system should be viewed as analogical, rather than homological.

Discourse analysis. Labov and Fanshel (1977) also used concepts and methods derived from linguistics to explore the relationship between the speech of a client and her or his underlying problems. Their method of "discourse analysis" differed from traditional content analysis' equation of the frequency with which a particular category is used with its intensity or importance to the participants. Rather than assign statements to categories in order to make quantitative claims about them, Labov and Fanshel (1977) attempted to discover the "rules"

of conversation used by one client (an anorexic) and her therapist, and by the client and her family. From these researchers' viewpoint, the task of a psychotherapist is to overturn the commonsense belief that words are one thing and actions another. Their goals were to identify, as completely as possible, those aspects of language that were cues for, or components of, resistance and insight. These components were viewed as part of an interaction that took place within a social framework, in which the rights, duties, and obligations of each partner in the discourse had to be understood before any specific patterns of discourse could be elicited. These rights and obligations were called "propositions" and seemed to define the therapeutic situation in general, but were also applicable to the situation encountered by the client and her family. One proposition, made both in and out of therapy, was that being an adult entailed certain rights and obligations. Another was that "The therapist does not tell the client what to do." Labov and Fanshel contended that participants in a conversation do not usually argue about such propositions directly, but tend to argue instead about whether particular events are actually instances of the general propositions. The task of the therapist is to try to make these propositions explicit and to show the client what the argument is "really about."

Labov and Fanshel (1977) presented a many layered analysis of the text made from a taped, 15 minute excerpt of a therapy session. They included spectographic displays to indicate paralinguistic properties, as well as the text of the therapist's taped comments in response to

hearing a recording of the session. They then presented an "expansion" of the text that filled in all seemingly ambiguous references for the reader, including references to past history that only the client and therapist may have known. From this expansion, they generated recurring propositions, such as those previously mentioned here. They also applied "rules of requests" based on previous discourse analysis to their analysis and generated other rules of requests from the analysis itself. Finally, they somewhat tautologically presented what they called "speech act functions," or the inferred purpose of specific utterances, based upon the general rules they had developed.

Labov and Fanshel (1977) examined the kind of language used by both therapist and client which was later labeled as "insightful" by the therapist. There were three main patterns of interaction that accompanied insight. The first was "concatenation," where the therapist was quite explicit about drawing relationships and parallels in the client's presentation of successive topics. The second, "interpretation," occurred when either the therapist or client made several complex but direct equations relating several of the basic propositions about adulthood to specific events. "Direct suggestion," i.e., a statement by the therapist indicating that a given observation might be accurate, was a third source of insight for the client.

Resistance on the part of the client was characterized by speech using euphemisms, vague referents, specific intonational patterns, and "narrative responses" (i.e., digressions or stories which seemed to be instances of general propositions, but did not argue them directly).

Although it is doubtful whether the same conclusions would be drawn if a different set of researchers were analyzing the text, the value of Labov and Fanshel's (1977) study is that it provides a method for expanding text, delineates rules for interpreting the speech act functions of conversations, and explores psychodynamic therapy as a series of arguments about certain propositions which are allegedly basic to a particular kind of discourse.

Content Analysis Focused on Natural Language

Several content analysis, or "verbal response," systems (Hill, 1978) have been developed which utilize grammatical concepts to derive categories of natural language. These systems, like traditional content analysis, emphasize a quantitative approach; however, they are conceptually different in that they begin with language rather than a particular psychological orientation as their focal point. Some of these systems use computers to aid in the classification of actual speech.

The grammatical aspects of therapists' verbal behavior were studied by Holzman and Formann (1966). They included 15 categories for what they termed "grammatical structure," including questions, demands, agreements, reflections, etc. Their scoring unit was the simple or complex sentence. The categories were used to form a "directiveness scale," which was based on the ratio of statements and questions to the total number of sentences. Carl Rogers was found to ask few questions and make many "contentless" statements (e.g., "Um-hm") in one application of this scale. In another, client-centered therapists were found to make more statements about their own feelings than psychoanalysts.

These studies were precursors to more recent studies comparing the verbal responses of therapists of differing orientations (Goodman & Dooley, 1976; Hill, Thames, & Rardin, 1979; Meara, Shannon, & Pepinsky, 1979; Stiles, 1978).

In their research, Lennard and Bernstein (1969) emphasized the formal linguistic aspects of psychotherapeutic communication. Three major units for scoring speech were employed. The smallest unit was the "proposition," a verbalization containing a subject and predicate, either expressed or implied. The next largest unit was the statement, or an uninterrupted sequence of propositions. The largest unit used was the interaction or exchange, which consisted of a client's statement followed by a therapist's statement, or vice versa. Lennard and Bernstein (1969) included categories for grammatical forms of propositions (declarative, imperative, interrogatory), affective forms of propositions (descriptive, evaluative, prescriptive), and interaction-process and role categories. By referring to the number of times certain categories were used by both therapist and client, Lennard and Bernstein could give a rough estimate of the occurrence of a particular kind of communication. An Index of Similarity was devised, based on the correlations between the percentage of propositions of the client and the percentage of propositions of the therapist that fell into the same category. During the course of therapy, clients increased their frequency of verbalization about feelings and decreased their discussion about therapy itself. While the clients averaged about four times as much verbalization as the therapists, the rate of interaction varied

little from session to session. Over time, there was an increase in the correlation between the categories used by both the client and therapist for all dimensions of communication, indicating an increased similarity or convergence of the verbal behavior of the client and therapist.

Goodman and Dooley (1976) constructed a response mode system for use in analyzing the process of therapy and in training paraprofessionals. It makes use of six linguistic forms, which Goodman and Dooley (1976) term "language acts," that correspond to six basic "helping intentions." The acts include questioning, advisements, silence, interpretation, reflection or paraphrase, and self-disclosure. The question mode characterizes the role of the therapist, who tends to ask more questions than the client. Advisement includes suggestions, demonstrations, and commands. Interpretation is defined as an offering by the therapist of an alternative view of the client's statement. Reflection or paraphrase is a restatement of the client's expressed thoughts and feelings. Disclosures are statements in which a speaker reveals a non-obvious aspect of his condition through use of distinct self references.

The Hill Counselor Verbal Response System (Hill, 1978; Hill et al., 1979) is similar to that of Goodman and Dooley (1976). The Hill system utilizes 14 categories: minimal encourager (e.g., "Hmm"), approval, reassurance, information, direct guidance, closed and open questions, restatement, reflection, non-verbal referents (e.g., the therapist refers to the non-verbal communication of the client),

interpretation, confrontation, self-disclosure, silence, and other. In a study of the film, Three Approaches to Psychotherapy, Hill et al. (1979) demonstrated the system's ability to differentiate among the verbal responses of Ellis, Perls, and Rogers on all 14 categories. Rogers primarily used minimal encouragers, restatements, and confrontation. Perls was more likely than the other therapists to use non-verbal referents and confrontation. Ellis tended to use more direct guidance, information, minimal encouragers, and interpretation than Perls or Rogers. The three therapists' behavior was consistent with what would be expected from their theoretical orientations.

Barnabei, Cormier, and Nye (1974) studied the effect of "non-contingent" or random responses of the therapist upon the responses of clients. They used grammatical terms to define reflection of feeling, confrontation, and "probes" or questions. Reflection of feeling was defined as including a word describing emotions or affect in a sentence. Confrontation was operationalized as a compound sentence where the first part repeated the message of the client and the second presented the therapist's perceptions (e.g., "You said this, but you looked away"). Probes were defined as interrogatives introduced with "what, where, how, why, or when." Barnabei et al. (1974) concluded that the non-contingent use of these forms did not have a reinforcing effect on the clients' use of affective terms, self-referents, or here-and-now responses. Cormier and Nye (1974) have tried to train therapists by using a behavioral framework in which counselor's responses are linguistically defined and reinforced. Ivey and Authier

(1978) also train counselors by emphasizing the linguistic and grammatical components of the language used in therapy.

Stiles (1978) has devised a grammatically based taxonomy for verbal modes of response. He defines a "verbal response mode" as "...a category of language that implies a particular intent or micro-relationship between communicator and recipient" (p. 693). The system is based on three principle classifications: the source of experience, the frame of reference (i.e., the person whose viewpoint is used), and the "focus" (i.e., the implicit presumption by the speaker of what the other's experience should be). These three categories are coded as pertaining to "self" or "other" and are used to generate eight response modes: disclosure, question, edification (e.g., giving information), acknowledgement, advisement, interpretation, confirmation, and reflection. The categories are defined by using grammatical terms.

The scoring unit that Stiles (1978) uses is the clause; each clause is scored as a separate utterance. Each utterance is scored twice, once for "form" and once for "intent." Intent does not refer to the psychological motivation of the speaker, but to the function of the response mode. For example, "Would you close the door" is a question but has the intent of the advisement "Close the door." When intent and form coincide, they are called "pure modes" (Stiles, 1978, p. 697).

When previously published transcripts of therapy were scored using this system, Stiles (1979) and Stiles and Sultan (1979) found that 81% of the responses of client-centered therapists fell into the pure modes of reflection and acknowledgement, while 71% of the responses

of gestalt therapists were categorized as interpretation, advisement, question, and disclosure. For the client-centered sample, 82% of all utterances were in the client's frame of reference, while 89% of all responses made by gestalt therapists were in the therapist's frame of reference. Chi-square tests for the difference between these therapists were significant for both form and intent. Using the same verbal response system, Stiles, Putnam, Wolf, and James (1979) found that physicians show significantly greater "presumptuousness" than patients. "Presumptuousness" refers to the extent to which a speaker presumes knowledge of the hearer and consists of a combination of advisement, interpretation, confirmation, and reflection where the focus is on the hearer.

Computerized systems for analyzing language used in therapy. A third approach to studying natural language in therapy utilizes computer programs to categorize language. The General Inquirer (Stone, Bales, Namenwirth, & Olgilvie, 1962; Stone, Dunphy, & Oglivie, 1966) was one of the first computerized systems to be used in the content analysis of therapy. It employed general purpose dictionaries to identify words or phrases that were specified by a researcher in a particular discipline. Each word in the dictionary was given a tag to indicate its meaning, and tags were aggregated to describe more abstract categories. Each word in a text could be compared with the specified category or their aggregates. Harway and Iker (1964) and Starkweather and Decker (1964) developed computerized programs that analyzed the frequency of association of words in psychoanalytic sessions. The drawback to these techniques was

that they required constant updating of the dictionary and, like other content analysis techniques, were based on categories requiring considerable a priori judgment or construction (May, 1977).

There have been several attempts at computer simulations of the language used in pathological communication. The goal of such attempts was to provide an aid for the study of cognitive structures needed to produce such speech. These efforts are relevant to the study of language in therapy in that they contribute to a methodology for computer-assisted analysis of language. Colby's paranoid model (Colby, 1966; Colby & Gilbert, 1964) used a planned algorithm in which the language program had no options, but consisted of static formulas produced when the proper variables are activated. The "speech" produced by this program proved to be indistinguishable from that of several real patients.

Clippinger (1977) argues that indistinguishability tests do not truly validate a particular model of cognitive processes: They merely validate output. He argues that a better strategy would be to model a "normal" belief system and demonstrate how it would become paranoid by altering the relevant parameters to produce the effects predicted by the model. A more sophisticated language program would be necessary to do this; it would have to be based on a problem-solving model, rather than a model of language retrieval. Clippinger (1977) addressed precisely this task by devising a computer simulation of discourse in psychoanalysis. He expanded on the work done by Winograd (1972), who devised a set of computer programs and an algorithm for the analysis of natural

language used during problem solving. Winograd's (1972) system contained a model of its own mentality. The knowledge base was represented by rules of procedures rather than by tables of words.

Other researchers have adapted Winograd's (1972) computer programs for production of text. Abelson (1981) has devised computer simulations of cognitive structures needed to produce both particular kinds of discourse and long sequences of stereotyped behavior patterns involving non-verbal and verbal behavior, such as "eating in a restaurant." He calls these cognitive structures "scripts;" "A script is a hypothesized cognitive structure that when activated organizes comprehension of event-based situations" (Abelson, 1981, p. 717). Language production is viewed as one of the many concrete representations of interacting scripts.

The Syntactic Language Computer Analysis, or SLCA-III (Cummings & Renshaw, 1979) is another system using programs that incorporate Winograd's methods. Cummings and Renshaw (1979) contend that language behavior is interdependent with perception and cognition, but are doubtful that an analysis of language will reveal a one-to-one correspondence with all mental activity. They propose that parts of speech may correspond to the "perceptual propositions of experience." These propositions include knowledge about perception, sensation, and social relationships. The SCLA-III reflects informational units of perception (nouns) and relations between these units (verbs), as well as the quantity-quality of both informational units and relations (adverbs and adjectives). The authors identify eight classes of

variables of perception accounted for in language: social perception, sensation, existence, motion, disposition, time, symmetry, and conditionality. These classes are operationally defined, and measures of their frequency or "density" in a text are computed. Informational unit density is the relative frequency of nouns which function as subjects and objects of verbs. Relational density is the relative frequency of verbs. Qualitative-Quantitative density is the relative frequency of modifiers. Combinations of these measures produce 32 other variables, including measures of negation, self-perception (e.g., the number of times the first person is used), and perception of others. Several studies, mostly unpublished, have demonstrated that particular classes of variables were found to be associated with age, status, sex, lying, college level, dogmatism, Machiavellianism, and field dependence-independence. To my knowledge, the SCLA-III has not yet been used to study therapy.

Examples of Research Using CALAS. CALAS, which is described in the Method chapter of this dissertation, is similar in principle to the SCLA-III. Studies of traditional psychotherapy have been conducted using CALAS and serve as a paradigm for the present research.

Patton et al. (1977), adapted from Pepinsky (1974) and Rush et al. (Note 1), present a model of client-counselor interaction and describe its application for use with CALAS. In their view, verb types indicate what is being discussed in therapy. Clients' speech characterized by the use of experiencer verbs is recognized as disclosure; speech in which the essential cases do not appear frequently may suggest a basis for inferring that the participants are concealing information

or are making assumptions about what should or should not be said. Similarities or changes in the types of verbs used by both clients and counselors suggest that leading, tracking, or modeling may be taking place. In two counseling cases consisting of 25 interviews, Patton et al. (1977) found that over time the participants increased their use of stative verbs and decreased the use of agentive or action verbs. This suggests that the client and counselor learn to talk about the client in terms of the latter's inner state or condition, rather than as an agent or object of some action.

Bieber et al. (1977) further analyzed a counseling case. In the first interview, the client maintained the same frequency of stative and action verbs throughout the interview, while the counselor increased his use of stative verbs. But by the 11th interview, the client and counselor's frequency of verb usage was remarkably parallel throughout the interview. This provides support for the concept of convergence (Pepinsky & Karst, 1964). This pattern of parallelism held for the 25th interview, but by this time both participants had changed their rate of usage for particular verb types. Both used a high percentage of experiencer verbs. This means that the client spoke as if she were a person who felt, perceived, and knew many things about herself. Bieber et al. (1977) conclude that the counselor's speech may have served as a complex series of instructions about the linguistic manner the client was to use in therapy and about the kinds of beliefs and self-concepts she would have when the therapy was terminated.

CALAS lends itself to studying distinctions between different schools of therapy and changes in therapy over time. May (1977) hypothesized that two clients in client-centered therapy would increase their percentage of stative verbs and experiencer-affective verbs used over time, while the proportion of experiencer-cognitive verbs and agentive verbs would decrease. He also predicted that there would be convergence between client and counselor on 11 verb types. Results were mixed. Different patterns were found in the two dyads. Clients did not significantly increase their use of stative and stative-experiencer-affective verbs, but did decrease their use of stative-experiencer-cognitive and agentive verbs. There was evidence of convergence, as predicted.

Meara, Shannon, and Pepinsky (1979) applied CALAS to the transcripts of the film Three Approaches to Psychotherapy. They predicted that four dependent measures of stylistic complexity would demonstrate: (a) differences among therapists, (b) differences in the client's response to the therapists, and (c) evidence of concerted action or convergence. They expected Rogers to make statements that were brief, infrequent, and stylistically simple; Perls to make frequent and brief responses as he played the role of an active confrontive counselor; Ellis to make frequent, detailed, and stylistically complex responses. Based on statements the client made after the interviews, they expected to find the most evidence of convergence with Perls, less with Rogers, and least of all with Ellis.

Two 3-minute sections from each interview were chosen for analysis. The four dependent measures were: (a) the number of

sentences, (b) the average sentence length, (c) the average block length, and (d) the average clause depth. Results confirmed almost all predictions. The three therapists differed significantly in the predicted directions on all four variables, with the exception that Rogers had a higher average sentence length score than expected at various points in the interview. The client's utterances differed significantly on all four dependent measures across interviews. There was evidence for concerted action of the client and Rogers on three measures, for the client and Perls on four, and for the client and Ellis on one. These findings corroborated Hill, Thames, and Rardin (1979) in their study of the same transcripts.

In a second study using these same transcripts, Meara, Pepinsky, Shannon, and Murray (1981) found that measures of verb types did not differentiate among the three therapists, nor between the interaction of client and therapist in as dramatic a manner as did the stylistic measures. They suggest that stylistic complexity, as a measure of surface structure, is more amenable to quick manipulation than types of verbs are, as measures of deep structure. The latter study suggests that brief therapies designed to modify the cognitive content of messages may not be immediately successful. In terms of assertion training, these findings suggest that it may be difficult to quickly manipulate changes in the use of verbs.

Hurndon, Pepinsky, and Meara (1979) found that measures of stylistic complexity from CALAS correlate highly with conceptual level (CL) as measured by the Paragraph Completion Method (PCM) (Hunt, Butler, Noy, & Rosser, Note 7).

A significant portion of the variance of CL was accounted for by sheer quantity of language, although there appeared to be a component of CL that was independent of linguistic structure.

Shannon (1980) used CALAS to study the linguistic correlates of empathy, as measured by the Truax-Carkhoff (cf. Kiesler, 1973) scales. He found that an interaction of the stylistic complexity measures for counselor and client could predict sequences of talk labeled as empathetic. Recently, Pepinsky and DeStephano (Note 2) have used CALAS along with other linguistic measures to study the changes in patterns of interaction between students and their teacher in a first grade classroom, over the course of a school year. Their study demonstrated how linguistic changes are related to processes of socialization.

The many systems for studying natural language in therapy can be related to, and in some cases subsumed by, each other. Goodman and Dooley (1976) present a general system for associating certain linguistic forms with broad classes of communication that are presumed to be vital to the therapeutic process. Stiles (1978) demonstrates how these forms can be strictly grammatically defined and made mutually exclusive by placing them within the framework of "self and other." Self and other seem to be related to the grammatical forms of subject and object. CALAS classifies the surface structure forms of subject and object into the case roles they play in the semantic structure of a block of clauses. The SLCA-III divides the major grammatical categories of noun and verb into qualified or unqualified, symmetrical or unsymmetrical categories. Finally, both Clippinger's (1977)

"autoregulative model" and Abelson's (1981) computer simulations of scripts work in the reverse direction, by beginning with a concept or perceptual experience and ending with a created text.

Summary

Recent content analyses of psychotherapy have focused on the natural language used by both therapist and client rather than on psychological constructs derived from a particular theory. Systems employing categories based on natural language are useful because they can be applied to many theoretical orientations. Principles derived from linguistics and discourse analysis are used in analyzing the data from such applications. Some studies that use grammatical categories as dependent variables use complicated hand-scored systems, while others use computer programs to aid in the parsing of sentences. Findings from studies of natural language provide evidence that counselors from various orientations can be characterized by differences in their use of language, and that the language of clients and therapists tend to converge over time.

Appendix B
Assertiveness Techniques as Speech Acts

In the Introduction, I argued that assertion trainers make prescriptions concerning what they believe to be the proper styles and content of effective communication. The measures employed in this study did not address the varieties of assertive techniques, nor the interpersonal effect of assertiveness on others. The ultimate aim of linguistic analysis should be to explain how the structure of language relates to its effect on the listener, and how in turn these effects are related to interpersonal, social, and cultural phenomena (Doré, 1977).

The purpose of this Appendix is to consider assertive techniques at a broader and more abstract level than the level of grammar. Assertive techniques are viewed as having purposes whose grammatical fulfillment may be similar to ordinary conversation in some instances and dissimilar in others. Both philosophers of language and discourse analysts have attempted to describe the varieties of linguistic options open to speakers for fulfilling some purpose. One such theory, discussed here, is "speech act philosophy" (Searle, 1969). The discourse analysis of Labov and Fanshel (1977) is a quasi-empirical method for studying speech acts. A reconceptualization of assertive techniques as speech acts may demonstrate how assertive speech is related to ordinary conversation, and how it is more limited than ordinary conversation.

Hopefully, such a formulation can yield testable hypotheses concerning the role of language in labeling people as assertive and suggest more effective techniques.

Searle (1969) calls the many linguistic forms that we use when engaging in conversation "speech acts." He dispenses with the common-sense dichotomy between words and deeds by describing how words are deeds; hence the study of speech acts. The notion that words are deeds seems to be quite appropriate for assertion training.

As discussed in Chapter 1, most definitions of assertiveness include non-verbal components, but it appears that for the most part, to be assertive is to speak assertively. As Alberti and Emmons (1978) emphasize, indicating a desire for something by merely pointing, rather than with a verbal request, would not be assertive by definition. For some assertion trainers, the intent or content of an utterance, not merely its non-verbal behavioral consequences, define it as assertive (Cheek, 1976; Rakos, 1979). Jakubowski-Spector (1973) writes:

At any rate, an important goal of assertive-training is to help these individuals understand that usually a better criteria for assertion is whether their assertive behavior communicates their standing up for their rights in a clear, unambiguous fashion, rather than whether their assertion changes another person's behavior (p. 4).

If acting assertively often means speaking assertively, characterizing assertive techniques as speech acts seems justified.

Implied in the practice of assertion training is a theory of language and its relation to action, albeit a seemingly simplistic

theory. Presumably, people who speak assertively will lead healthy lives, be happy, and get what they desire. They will achieve these goals, in part, because they will present themselves in a certain fashion, using proper language, proper tone of voice, proper eye contact, etc. Also implied in assertion training is a system of values, entailing rights and obligations, which govern what can be said to whom, and when and where it can be said (Schur, 1976). Labov and Fanshel (1977) suggest that the different forms of requests and refusals found in ordinary conversation can be discussed in terms of the values, rights, and obligations entailed in each form. An application of Labov and Fanshel's (1977) analysis to assertive techniques may help assertion trainers enlarge what is now a rudimentary understanding of the subtleties and varieties of conversational responses possible in ordinary language.

Speech Acts

Searle (1969) argues that the appropriateness of particular sentences can not be fully understood at the level of grammar because appropriateness most likely involves factors such as the speaker's and hearer's intentions and role relationships. Depending upon differences in these factors, the same sentence may be used to perform a variety of functions, and different sentences may perform the same function. Thus, Searle (1969) contends that a purely formal study of language is not complete in accounting for a theory of communication.

Searle (1969) believes that conversation follows rules. He distinguishes between regulative and constitutive rules. Regulative

rules specify when verbal and non-verbal behavior can be exhibited, as in rules of etiquette. Constitutive rules create or define new forms of behavior, as in games. Such rules take the form "X counts as Y in the context of C." For example, a checkmate is defined as "When the king cannot move out of check." This definition has no existence outside the game of chess. As Searle (1969) explains, a rule which tells me I may not catch fish under three pounds does not constitute the act of fishing, but rules that define strikes, outs, and balls do constitute the game of baseball.

Searle contends that speech acts are constitutive rules in the sense that to ask a question and expect to receive an answer implies that the speaker intends to ask a question, as opposed to making a statement. In one situation, a speaker may use a particular phrase to ask a question, while in another he may use the same phrase to make a statement. Failure to follow conventional ways of asking a question does not mean that persons are speaking ungrammatically, but that they are engaging in speech acts different from the ones intended.

In as much as assertion is not always dependent on its non-verbal consequences (Jakubowski-Spector, 1973), it can be defined as "A string of sentences X counts as Assertive Technique Y." Assertive speech may be thought of as following constitutive rules. To use a combination of sentences other than assertive ones may cause individuals to be labeled by assertion trainers or others as engaging in behavior that is "non-assertive," i.e., passive or aggressive.

Searle (1969) divides speech acts into illocutionary and perlocutionary acts. The term "illocutionary" describes how a speaker intends an utterance to be interpreted. A "perlocutionary" act refers to the effect the illocutionary act has on the hearer. Illocutionary acts seem to have regular perlocutionary effects (e.g., the illocutionary act of requesting may have the perlocutionary effect of getting the hearer to do something). "Performatives" are defined as special illocutionary acts that exist only by virtue of their being linguistically performed (Searle, 1969; Clark & Clark, 1977). For example, to christen someone or something is to verbally name it. In most societies, individuals enter into the responsibilities of some institutions, such as marriage, through the performance of specific linguistic utterances. In the sense that these utterances may have interpersonal, social, and legal implications, performatives imply actions. Assertive techniques can be viewed as a collection of performative acts which come into being through spoken language. This formulation may be conceptually helpful to the researcher or trainer who would like to include verbal behavior such as complimenting or expressing opinions in a definition of assertiveness, even though these behaviors may not elicit non-verbal behavioral responses from the persons to whom they are directed.

Searle (1969) contends that different illocutionary acts can be differentiated on the basis of seven principles of distinction:

- (a) the purpose of the act in terms of what behavior it requires of the participants,
- (b) the relative social positions of speaker and

hearer, (c) the degree of commitment the act involves, (d) the difference in the propositional content or idea that is expressed (e.g., predictions versus reports), (e) the difference in the way the propositional content relates to the interest of the speaker and hearer (e.g., boasts or laments), (f) the difference in the expressed psychological state of the speaker (e.g., a promise is an intention, a statement is an expression of belief), and (g) the different ways that the act relates to other parts of the discourse. Searle (1969) gives an analysis of what it means "to promise" based on these principles and summarily compares requesting, stating, questioning, thanking, advising, warning, greeting, and congratulating. In Searle's (1969) terms, the illocutionary acts most often used in assertive speech are requesting, questioning, and asserting or stating.

Register. The specific illocutionary acts which Searle discusses, such as greeting, requesting, warning, etc., may be used with differing frequency depending on particular social situations. Register is the term Hassan (1973) uses to describe the varieties of language that are distinguished according to use (e.g., informal persuasion and the "hard-sell" can both be used in buying and selling). Register is defined as varying with: (a) the subject matter of the discourse, (b) the type of situation, (c) the roles of the participants, (d) the linguistic model (e.g., rhetorical style), and (e) the communication medium. The first two features are sometimes called "genre," while the second two are often cited as components of "tenor." Tenor is similar to rhetorical style (Hassan, Note 8). Thus, in the

genre "economic transaction," where the subject matter is food, the situation type is "buying and selling," the participant roles might be salesman-customer, the linguistic mode may be one of informal persuasion, and the medium may be spoken with aural and visual communication channels utilized.

A genre is defined as consisting of obligatory elements and may include optional ones (Hassan, Note 8). In the sale example, the obligatory elements are a sale request, a sale, and a purchase. Optional components might include greeting, an inquiry about other goods, and a repetition of requests and purchases.

In assertion research, the concept of register could be applied to recent work that outlines the many types of situations in which one may make similar assertive requests (MacDonald, 1978). Assertiveness can be used in many situation types, from buying and selling to "sexual invitation (Heimberg, Montgomery, Madsen, & Heimberg, 1977). The situations that are listed in assertiveness inventories seem to occur when one person's wants and needs are not obvious, when one person may be wronged or used, or when two people have conflicting desires. There are probably both obligatory and optional aspects of speech that enable it to be labeled as assertive. In terms of participant roles, assertiveness attempts to repair what may appear to the speakers as an unequal status relationship, by changing what may be said to whom. Research in assertion has shown that the degree of assertion exhibited both "naturally" and after training depends on status, closeness, and sex of the participants. (Galassi & Galassi, 1978). Cognitive restructuring in assertion training often addresses the right of the client

to express feelings to those in authority, even when it would not be considered polite (Lange & Jakubowski, 1976). The mode of assertion probably varies also, depending on the situation; a persuasive mode is often used in requests or refusals, as is an empathic mode (Jakubowski-Spector, 1973).

Requests and Refusals

Requests and refusals are two speech acts that are presumed to be commonly exercised in daily life and are particularly prominent in assertion training (Rathus, 1978). Labov and Fanshel (1977) deal extensively with "rules for requests." Labov and Fanshel conceive of the therapeutic interview as a "speech act event," or a routinized form of verbal behavior delineated by well defined boundaries and sets of expected behaviors. In their view, the distinctive character of the traditional therapy interview is that help is given through further talk. In assertion training, it appears that help consists of instruction in how to talk, or in how to feel comfortable talking in a certain way.

Preconditions for requests. Requests, in Labov and Fanshel's (1977) schema, are a generic category that include commands, petitions, orders, and requests for information, confirmation, attention and permission. They posit four preconditions necessary for initiating requests: needs, abilities, obligations or desires, and rights. Labov and Fanshel's (1977) Rule for Direct Requests can be summarized as follows:

Person A is heard as making a valid request for Action X
if A addresses to B an imperative specifying Action X at
Time T_1 and B believes that A believes that:

1. X should be done, for purpose Y, or
B would not do X in the absence of the request.
2. B has the ability to do X.
3. B has the obligation to do X.
4. A has the right to tell B to do X (adapted from Labov & Fanshel, 1977, p. 78).

In assertion training, the most frequent requests probably invoke rules concerning needs and rights, rather than abilities.

In ordinary face-to-face interaction, direct requests may be in the minority. Indirect requests, which may seem more polite, are probably very common. The Rule for Indirect Requests may be summarized as follows:

Person A is heard as making a valid request for Action X at Time T_1 if A makes a request to B for information, or an assertion to B about one of the following:

1. the existential status of Action X to be performed by B.
2. the consequence of performing Action X.
3. the Time T_1 at which Action X might be performed by B.
4. any of the four preconditions listed in the Rule for Direct

Requests (adapted from Labov & Fanshel, 1977, p. 82).

An example of an indirect appeal to existential status would be to say, "It's pretty dusty around here," instead of "Would you mind dusting?" An appeal to time conditions would be found in the statement, "I imagine you will be doing the laundry this evening," as opposed to, "Are you going to do the laundry?" In assertion training, only the direct questions in these examples would be considered assertive.

Another property of requests that has bearing on assertiveness training is that requests can be "mitigated" or "aggravated" (i.e., made more polite or more threatening and offensive). Labov and Fanshel (1977) speculate that references to needs and abilities are probably more mitigating than references to rights and obligations. When a "will-you" form is not used, a request may appear to be aggravated. Empirical work on the effect of assertive speech on listeners suggests that "polite assertion" is viewed more positively than standard assertion by lay listeners (Woolfolk & Dever, 1979).

Responding to requests. Labov and Fanshel (1977) suggest that in most conversation the primary rule of requests is that requests must be acknowledged and responded to. In response to A's request, B can:

- (a) give the response (e.g., perform the action or give the information),
- (b) put off the response, or
- (c) refuse, with or without "accounting"

for the refusal. Depending on B's response, A can do several things. If B complies, A can acknowledge compliance. If B puts off the request, A can reinstate it, redirect it to others, or withdraw. If A decides to reinstate the request, he/she can mitigate it or aggravate it. If B refuses, with an accounting, A can reinstate the request or accept the accounting. If B refuses without an accounting, A may respond with a huff.

Putting off a request is probably conventionally more acceptable than making a direct refusal. There are several ways B can put off a request. If A has made a valid request, and B responds with either an assertion or a request for information about the status, time to do X,

or a negative assertion about one of the four preconditions (i.e., needs, abilities, desires, or rights), B is heard as refusing the request until information is supplied or contradicted. Again, refusals based on needs or abilities are probably heard as mitigated, while those based on obligations or rights are probably heard as aggravated.

When B responds with a request for information, she/he is heard as asserting that she/he needs this information in order to respond to the original request. But if B asks for information which both A and B know B does not need, B is heard as provisionally refusing the request.

Indirect requests presumably offer the opportunity for the speaker to reinstate the request. If, for example, A gives B the requested information, A is heard as making the request again. The response procedure then begins all over again. If a request is refused with an accounting, it is implied that the request could be reinstated if the conditions listed in the accounting changed, or if requests for information were granted. A refusal not accounted for can lead to a break in social relations.

In assertion training, individuals are often encouraged to make refusals without supplying reasons or excuses. Booraem and Flowers (1978) acknowledge that there is a difference between reasons and excuses, but they argue that because clients cannot always tell the difference, it is better to dispense with both habits in the early stages of assertion training. Omission of reasons may not only disrupt interpersonal relations, but it may leave speakers with few linguistic options open if they later change their minds about their refusals.

Indirect responses. Labov and Fanshel (1977) also propose other ways of responding to requests that do not include asking for information, but are still coherent replies. These generally include a statement by B that is heard as B implying an if-then proposition, known to both A and B, that will explain B's response. For example:

A. Are you going to the movies?

B. I haven't been paid this week.

B's response is heard as implying the proposition, "If I don't have money, then I cannot go to the movies." B does not have to say, "No, I am not going to the movies."

Some requests can be made without using interrogative forms. If A makes a statement about events known only to B, then A's statement is heard as a request for confirmation about those events. If A makes a statement about a disputed event, it is heard as a request for B to give an evaluation (agreement, disagreement, or modification) of A's statement. "Socratic Questions" (Labov & Fanshel, 1977), which are "yes-no" questions designed to find out the speaker's position, are often employed in dealing with disputed events. These are heard as a request for evaluative information which will then form the basis for further discussion. If B refuses to answer these questions on the grounds that he does not have the ability, and A asks a Socratic question that is more specific, A is heard as asserting that this second question is really part of the first answer, and B's refusal on this same account will be disallowed. An example illustrating Socratic questions comes from Labov and Fanshel (1977):

T[herapist]: ...why do they keep repeating it?

R: I don't know...

T[herapist]: What are they feeling (p. 103)?

Challenges. The different ways of making requests probably have different implications for interpersonal relations. Labov and Fanshel (1977) believe that requests are often challenges to role competence: "A challenge is a speech act that asserts or implies a state of affairs that, if true, would weaken a person's claim to be competent in filling the role associated with a valued status" (p. 97). They also contend that a challenge to role competence is always present when a request is repeated, but the more the surface structure is varied, the less strongly the challenge is felt. In terms of assertiveness training, this contention implies that those assertive techniques such as the broken record, in which the surface structure is not varied, may be heard as aggressive rather than as assertive. The lack of variation in surface structure may cause assertive speech to be perceived by listeners as stilted, annoying, and cliché-ridden.

Assertion and Rules of Requests

There are many standard "offensive" and "defensive" techniques used in the service of requests and refusals (Booraem & Flowers, 1978; Fensterheim & Baer, 1975; Smith, 1975). Thirteen techniques are described here and analyzed in terms of Labov and Fanshel's (1977) Rules for Requests. Such a reconceptualization is obviously not empirical, but a number of the hypotheses presented here would be amenable to empirical validation. Table 10 presents a summary of this discussion.

Table 10

Representative Assertive Techniques

Technique	Example	Conversational Effect
Minimal Effective Response with Escalation	a) I wonder if you would please be a little more quiet. b) Look, would you please be a bit more quiet? ^a	Mitigation. Very polite. Slightly aggravated, still polite. Use of imperative. Change in surface structure ("little more" to "bit more") prevents from being total "repeated request."
Time out	I need five minutes to think about your idea. I'll call you back later.	Mitigated putting-off response. Not a direct refusal. Heard as refusal if call back is not made.
Broken record	But the point is... (repeated) I really don't want... (repeated)	Very aggravated when repeated over and over. No give and take as in ordinary conversation. Response other than compliance is heard as a refusal. If there is no accounting for refusal, refusee may respond with a huff.
Defensive negative assertion	I was late today. I'm usually a punctual person.	Polite, but no apology, or guilt. Positive statement about self denies complete role incompetence.
Clipping	A: Coffee's not made. B: That's right. ^b	Asserter takes first statement as literal statement about existential status of something. Forces other person to make direct request. Could be taken as a joke. Not considered assertive if used passive-aggressively.
Anger starvation	I know you are really angry. Let's have a cup of coffee and then talk it over.	Similar to Time out. May thwart aims of angry person who wants to let anger out. Promise to talk must be followed through.

Table 10 (Continued)

Technique	Example	Conversational Effect
Fogging	You may be right, I may be crazy.	Agreement with speaker in principle, but no promise to change. No give and take in argument. May help challenger escalate the attacks, since speaker seems passive in accepting criticism. Not usually heard in ordinary conversation.
Negative Inquiry	What about me don't you like? Is it my way of dressing?	Socratic questions. Initial inquiry may have positive effect, since criticism is not usually requested. When used to exhaust argument, may have hair-splitting effect. Promise to change not safe-guarded. Forces other person to make direct statements, which may not be considered polite.
Reversal	Are you telling me that you are not going to give me the job?	Asks for direct refusal, which may not be considered polite. Asserter may be thought of as either more honest than most people, or unable to take a hint.
Repeatback	a) I'm not sure I'm being clear. What do you hear me saying? b) I don't think you understand me. What do you think I mean? ^c	Mitigated. Calls speaker's own competence into question. Allows for give and take, compromise. Slightly aggravated. Calls listener's competence into question.
Flipping	Instead of going to the movies, how about visiting a museum?	Mitigated refusal. Acknowledges underlying message of request (I want to be with you), but negotiates on content. If used too often, may be seen as unwillingness to yield to other person.

Table 10 (Continued)

Technique	Example	Conversational Effect
Offensive negative assertion	I know you may feel I'm out of line, but would you lend me five dollars?	Mitigated request or refusal. Acknowledges possible violation of conversational or interpersonal rules, from listener's point of view. Does not admit to actual rule breakage, or apologize for content of request.
Reinforcement sandwich	I really appreciated you doing the dishes. But you didn't scrub the pots. Could you do that next time?	Combination statement and request. If sincerity conditions are met, and voice tone is genuine, positive statement should mitigate negative statement. Request is direct.

^a This example is taken from Rimm and Masters (1979, p. 78).

^b This example is taken from Booraem and Flowers (1978, p. 36).

^c This example is taken from Booraem and Flowers (1978, p. 30).

DEFENSIVE TECHNIQUES. As summarized by Booraem and Flowers (1978), defensive techniques are used when a person is under attack or would like to refuse something.

Time out. In this procedure, the person asks to terminate action for a brief time, but promises to reinitiate discussion of the problem and answer the request: "I'm not sure about my decision, but I'll call you back in 5 minutes." In terms of Labov and Fanshel (1977), time out appears to be a "putting off" procedure, which is probably heard as a provisional refusal, mitigated by the speaker's offer to reinstate the request at a designated time.

Broken record. In this technique, speakers emphasize the point they want to make over and over again and ignore others' attempts to introduce other material into the conversation: "But the point is..." In terms of speech acts, the broken record is probably the most annoying of all techniques, because it often involves the repetition of the same sentence over and over again. It will probably not be viewed positively if the speaker is wrong about the existential status of the request, or if the ability of the responder to perform the required action is in question. Since the speaker does not respond to a request for more information, almost any response other than compliance is probably heard by the asserter as a refusal. This technique probably violates the give and take often expected in requests (Lange & Jakubowski, 1976). When continually reinstated, or given without an accounting, the hearer may respond with a huff.

Defensive negative assertion is used when speakers are in error, but are being confronted (in their view) unfairly. The speaker admits the error, but adds a positive statement about himself/herself: "I was late today, but I'm usually a punctual person." The asserter's reply is probably heard as an admission of guilt for a particular act, but the positive statement that follows gives the asserter a chance to save face and reduces the impact of a challenge to role competence.

Clipping is used when the content of the other person's message is not clearly confrontive, but the paralinguistic cues suggest that the speaker is under attack. The speaker answers "yes" or "no" with a minimum of disclosive information and forces the other person to make a direct request or withdraw from the field. For example:

Mother: The dishes aren't washed.

Daughter: That's right.

Clipping pretends that an indirect request made by a speaker is not a valid request. Instead, it is taken literally as a statement about the existential status of something. In assertiveness training, clipping is used only to explore the situation; its habitual use as an indirect refusal would not be considered assertive. Clipping may appear to be passive-aggressive, an avoidance of confrontation, or viewed as a joke, because it takes an ambiguous statement literally.

Anger starvation is similar to time out. The speaker acknowledges the other person's anger and asks for a brief time out to allow the other person to cool down. The conversational effects of anger starvation may be similar to those of time out. Given that people often

want others to feel badly when they themselves are angry, this technique may thwart that initial effect. Provided that the speaker follows through with the promise to talk to the other person, anger starvation may be heard as a mitigated refusal.

Fogging is a technique that is advocated by Smith (1975), but denounced by Booraem and Flowers (1978) because its effect can be aggressive, rather than assertive. Fogging entails the acceptance of "manipulative criticism" (Smith, 1975) by calmly acknowledging to the critic the probability that there may be some truth in what he/she says. Speakers are supposed to agree to the truth, in principle, or with "the odds," without offering apologies. For example, a speaker agreeing with the odds in a given situation might say, "You're probably 100% right, I am a slob." Fogging is difficult to categorize as a speech act. It is probably heard as an admission to a challenge, but unlike most apologies, it does not include a promise to change. It also opens the speaker to repeated attacks by the criticizer. The fogging speaker would meet such attacks with continued, unsarcastic agreement until the criticizer drops the argument.

Negative inquiry involves actual prompting of criticism from the other person in order to use the information if it is helpful or to exhaust the criticism if it is manipulative (Smith, 1975). Negative inquiry allegedly forces other people to be more direct. The speech acts involved in this technique appear to be requests for specification or information, following the initial criticism. According to Labov and Fanshel (1977) a request for information is probably heard as a

refusal of a request, or a provisional denial of a challenge. Requesting criticism is probably so unusual in ordinary conversation that negative inquiry may have an initially positive effect. When used as a "hair-splitting" technique, it takes the form of "Socratic questions" designed to find out the speaker's position, with a more specific request or prompt heard as part of the "answer." An example from Smith (1975) follows the Socratic pattern. Paul has just told Beth she "doesn't look too good today:"

B: Is it the way I look or is it the way I'm dressed?

P: Well, that blouse doesn't look too good...

B: Do you think it's too loose?

P: Well, maybe that's it.

B: How about the color of it?... (p.14)

Negative inquiry is liable to cause the criticizer to respond that the assertive person "always has to drag everything out," as Paul does a little later to Beth.

OFFENSIVE TECHNIQUES. These techniques can be used when a request is not heard or acknowledged. Their use is not condoned if a request is directly refused, because the respondent also has the right to be assertive.

Reversal. In this procedure, the asserter asks for a direct refusal after being given many indirect responses: "Are you saying you do not want to go out with me?" By asking for a direct refusal, the asserter is probably heard as not accepting a "putting off" response; thus, he/she may be heard as indirectly reinstating the original request. To the

extent that indirect refusals are more acceptable than direct refusals, the asserter who uses reversal may be thought of as either more honest than most people, or unable to take a hint.

Repeatback. In this procedure, the asserter asks the other person to repeat the asserter's message. This can be done in an unthreatening manner: "I'm not sure I'm communicating clearly. What do you hear me asking for?" (Booraem & Flowers, 1978, p. 30). When this technique is used in the above manner, it appears both to challenge the speaker's own competence as a communicator and to be a request for information. In an "aggravated form" (e.g., "I don't think you understand me"), it may be heard as a challenge to the other person's competence.

Flipping. In flipping, the client makes a counter-proposal to a request, instead of saying "yes" or "no" to the original proposal. In Labov and Fanshel's (1977) terms, this is probably a mitigated form of refusal because it acknowledges the general validity of the request, if not its exact content. If, however, it is used continually, it may cause speakers making the original request to feel as though they never get their way.

Offensive negative assertion is used to anticipate the other person's response to a request or refusal, by disclosing "fear" about how the other person will respond before the actual request or disclosure is made: "I know you might think this is odd, but..." Since this procedure may violate conversational rules, it is probably heard as a "mitigated request." It involves an implied "accounting" for rule violations, although it does not present an apology for the content of the request.

Reinforcement sandwich is used when the asserter wants to present both a positive and negative statement, and may include a request for change in the other person's behavior. It seems to involve the speech acts of statement and request. If the speaker believes both the positive and negative statements, as well as the tone of voice, are genuine, the positive statement should be heard as mitigating the negative statement. However, it may be likely that the hearer will pay more attention to the negative statement and discount the positive statement as flattery.

Minimal effective response is less a "technique" than an instruction about how to use techniques. The minimal effective response is a prescription for employing more and more "aggravating responses" only if a polite response does not suffice. Unlike the broken record, the method of escalation calls for changing the surface structure of a response: "Would you mind turning your radio down, please" might be escalated to, "If you don't turn your radio down, I might have to call the police."

Differences Between Assertive Speech and Conventional Conversation

Grice (1975) suggests that if communication is to be effective, both speaker and hearer must share a number of common assumptions about conversation. Grice (1975) calls these non-linguistic assumptions "conversational postulates." In his view, quantity postulates make speech as informative as possible. Quality postulates indicate that the speakers are expected to have evidence for their statements and to present the truth. Postulates of relation govern the relevancy and

non-redundancy of conversation, and postulates governing manner tell us to be clear, unambiguous, brief, orderly, and polite.

Assertion training is popularly thought to question the conventions of politeness and propriety, especially because it advocates the expression of negative feelings and the making of direct refusals. As is evident in the description of assertive techniques as speech events, assertive speech challenges conversation at both interpersonal and linguistic levels. While assertive speech probably follows Grice's (1975) quantity postulates and his rules for avoiding obscurity, ambiguity, and lengthiness, assertion may violate the politeness postulate, rules governing evidence, and rules governing how given and new information is presented. Assertion training assumes that what others already know is not always clear; no harm is done in restating the obvious or the seemingly trivial. Naturally, this practice may be perceived as annoying, impolite, and as constituting a challenge to the hearer's social competence (as in the "repeatback").

Time out, flipping, and offensive negative assertion probably violate the rules for requests least. Offensive negative assertion even provides for an anticipation of rule breakage. Clipping is probably done commonly in conventional conversation, but when used in a situation in which the asserter has formerly complied, clipping may be heard as a challenge or even as a joke. Reversal and broken record challenge the putting off response and force the responder into making a direct refusal, which may be considered impolite by the non-assertive person. Fogging and negative inquiry, which are two ways of dealing with

criticism, seem to violate the rules most. As mentioned earlier, an admission of a challenge usually implies the need to make reparations, while fogging omits such an implication. When negative inquiry is a genuine request for criticism, it forces the other person to express negative feelings. When it is used to exhaust the argument, it violates rules for repetition and closure. To the extent that it is assumed people do not want to bring criticism upon themselves in most circumstances, there may be a tendency for negative inquiry and fogging to be heard as insincere or sarcastic. Also, in ordinary conversation, when a person is criticized, he is expected to defend himself or change. In assertion training, negative feelings may be expressed without a request for change. It may be difficult, however, for person A to believe that B is merely expressing negative feelings when B says, "I really don't like the fact that you've refused to go to all the movies I want to see, but it's O.K."

In summary, while assertive speech upholds the conventional rules of clarity and brevity, it violates rules of politeness through a number of its techniques. The use of direct requests and refusals violate conventional norms, and techniques that are repetitive, such as the broken record and negative inquiry, may violate rules of repetition and pose a challenge to competence. The reduction in the number of ways requests and refusals can be expressed may cause some assertive responses to sound stilted, and to be difficult to employ in interpersonal situations requiring subtle verbal negotiation.

Appendix C

Materials

Other Role-plays

Instructions for all role-plays: You and another experimenter are going to act out a scene. I would like you to enact it in the same way you would if the scene were occurring in real life. Here is the scene:

Major Scene

You are visiting your mother over the weekend. She asks you if you have decided on a major yet. You are thinking of majoring in the humanities or social sciences. From past experience you know that your mother would like you to major in something she considers practical. She always tries to suggest things for you to major in and offers advice.

Landlord Scene

Your apartment has cockroaches. You have called your landlord twice to complain about the problem, but nothing has been done. You meet your landlord on the street, and decide to remind her about the cockroach problem.

Points

Standardized Confederate Responses to Weekend Scene

1. Opening: Oh, hi. How are you?
2. Prompt: We are really looking forward to seeing you this weekend, and we have made all the arrangements.
3. Pennsylvania: We are not sending you to college to go running off to Pennsylvania every weekend.
4. Social Events: There are plenty of other weekends for parties and social events.
5. Bills: Well, I pay the bills, and I want to see you.
6. Father: Your father is even taking a day off of work for this.
7. Interested: You should be so happy we are so interested to come and see you.
8. Guilt: What shall I say to your father, "Our child is too busy for us, now?"
9. Apology: Well, maybe we should have given you more notice, but can't we still come anyhow?
10. Give in [assertives only]: Well, maybe we can make it another weekend.

Give in [for subjects who have already given in]:
 - a. Don't change your plans on my account.
 - b. I wouldn't want you to be unhappy all weekend just because you couldn't be with your friends.
11. Time [assertives only]: Goodbye, see you then.

Time [for subjects who ask what time parents are coming]: Can we come Friday at four?
12. Closing: Goodbye.

Instructions for Raters

You will be asked to read 50 transcripts of role-plays, in which the subject, designated by "S," is talking to a confederate, designated by "C." The participants are enacting the following role-play.

You have just received a note from your parents saying they are planning to visit you this weekend, which is four days away. You have already made plans to go with friends to their home in Pennsylvania. All the plans are made, and you are really looking forward to the weekend. You call your house to tell your parents of your previous plans for the weekend.

As an assertion trainer, you may have enacted a scene with a client, or observed someone during a role-play, in which you made a relatively quick judgment as to whether the client was acting assertively, passively, or aggressively. Your judgment was probably based on a multitude of variables.

BASED ON YOUR GENERAL FAMILIARITY WITH ASSERTION TRAINING, AND WITH THE AID OF THE DESCRIPTIONS PROVIDED, PLEASE RATE THE SUBJECTS' ROLE-PLAYS ON EACH OF THREE SCALES.

These scales indicate the degree of assertiveness, aggressiveness, and passivity exhibited by the subject. The unit of measure will be explained more fully on a separate sheet.

Descriptions of Assertive, Passive, and Aggressive Behavior

(Condensed from Lange & Jakubowski, 1976)

Assertive

Assertion involves standing up for one's personal rights. It involves respect, not deference. Deference is acting in a subservient manner as though the other person is right, or better. Two types of respect are involved in assertion: respect for oneself, that is, expressing one's needs and defending one's rights, as well as respect for the other person's needs and rights. The basic message of assertion is: this is what I think. The goal of assertion is communication and mutuality.

Passive

Passive behavior involves violating one's own rights, and consequently permitting others to violate oneself. It shows lack of respect for one's own needs and sometimes a lack of respect for the other person's ability to take disappointments. The basic message of passive behavior is: I don't count -- you can take advantage of me. The goal of passive behavior is to appease others and avoid conflict at any cost.

Aggressive

Aggressive behavior involves standing up for personal rights in a way which is often dishonest and always violates the rights of the other person. Winning is ensured by humiliating, degrading, or overpowering other people. The basic message of aggressive behavior is: this is what I think -- you're stupid for believing differently. The goal of aggressive behavior is domination and winning, forcing the other person to lose.

Rating Scales

Because these role-plays are long, and the subjects' individual responses may at times exhibit more than one type of behavior, it is necessary to use all three scales (assertive, passive, aggressive) for each subject. However, the scales should be seen as reflecting the characteristic level of each behavior during the entire role-play. The three scales should be rated independently.

Each scale is numbered from 1 to 7, with 1 representing the lack of the particular behavior mentioned and 7 representing high levels of the behavior. For example:

1	2	3	4	5	6	7
not at all assertive						extremely assertive

After you have rated the subject on all three scales, please indicate which category (very assertive, generally assertive, passive, or aggressive) is most representative of the subject's behavior during the entire role-play. In other words, please make a forced choice.

Note: It is entirely possible that particular numbers in a given scale will never apply to any of the subjects. This is acceptable. Just make sure that all ratings of 7 represent a greater degree of the behavior than ratings of 6, that ratings of 6 represent a greater degree than 5, etc.

Item List

- a. Speech fluency (clarity, not much repetition of phrases)
- b. Hesitation phenomena ("uh's," "um's")
- c. Grammatical correctness (correct verb tenses or pronouns, etc.)
- d. Short responses (a response may be short, but not necessarily concise)
- e. Long responses
- f. Conciseness
- g. Interruptions by the subject
- h. I-me language (statements beginning with "I" rather than "you," to describe subject's own feelings and opinions)
- i. Stock phrases ("I appreciate that," "the point is," etc.)
- j. Verbs of feeling (feel, seems, etc.)
- k. Verbs of cognition (think, doubt, etc.)
- l. Verbs of desire (want, need, etc.)
- m. Opinions stated as facts
- n. Subject's emphasis on rights (including independence)
- o. Compliance ("Well, I'll change my plans")
- p. Empathetic statements acknowledging other's ideas or opinions
- q. Particular assertive techniques (escalation, broken record, etc.)
- r. Request that other person change ("Could you take the pressure off, mom")
- s. Direct statement that subject's mind was made up
- t. Questioning other's definitions or values ("What has money got to do with it")
- u. Inducing guilt

Item List (Continued)

- v. Blaming
- w. Challenging competence ("You don't know what it's like to study day in and day out")
- x. Emphasizing specific facts, rather than principles ("If you had only called yesterday")
- y. Apologizing for choices, feelings, etc.
- z. Anticipating other's displeasure
- aa. Faulty logic
- bb. Valuing the family's needs more than one's own
- cc. Persuasive ability
- dd. OTHER _____

Responses to Item List

Raters were asked to rank order the five most relevant factors in making their ratings. Rank orders appear below.

Assertiveness

Rater 1 (GS)

1. I-me language (h)
2. Verbs of feeling (j)
3. Request that other person change (r)
4. Empathetic statements (p)
5. Emphasis on rights (n)

Rater 2 (MD)

1. Mind was made up (s)
2. Conciseness (f)
3. Verbs of feeling (j)
4. Empathetic statements (p)
5. Verbs of desire (l)

Passivity

Rater 1

1. Apologizing (y)
2. Valuing family's needs over one's own (bb)
3. Hesitation (b)
4. Long responses (e)
5. Compliance (o)

Rater 2

1. Compliance (o)
2. Apologizing (y)
3. Valuing family's needs over one's own (bb)
4. Long responses (e)
5. Inducing guilt (u)

Aggressiveness

Rater 1

1. Lack of I-me language (h)
2. Inducing guilt (u)
3. Blaming (v)
4. Interrupting (g)
5. Short responses (d)

Rater 2

1. Lack of I-me language (h)
2. Blaming (v)
3. Inducing guilt (u)
4. Interrupting (g)
5. Questioning other's values (t)

Responses to Item List (Continued)

Irrelevant Items

Rater 1

1. Persuasiveness (cc)
2. Stock phrases (i)
3. Correct grammar (c)
4. Verbs of cognition (k)
5. Faulty logic (aa)

Rater 2

1. Speech fluency (a)
2. Using assertive techniques (q)
3. Short responses (d)
4. Hesitation (b)
5. Stock phrases (i)

The College Self-Expression Scale

The following inventory is designed to provide information about the way in which you express yourself. Please answer the questions by circling the appropriate number.
(Almost Always or Always = 0, Usually = 1, Sometimes = 2, Seldom = 3, Never or Rarely = 4).

Your answer should reflect how you generally express yourself in the situation.

0 1 2 3 4	1. Do you ignore it when someone pushes in front of you in line?
0 1 2 3 4	2. When you decide that you no longer wish to date someone, do you have marked difficulty telling the person of your decision?
0 1 2 3 4	3. Would you exchange a purchase you discover to be faulty?
0 1 2 3 4	4. If you decided to change your major to a field which your parents would not approve of, would you have difficulty telling them?
0 1 2 3 4	5. Are you inclined to be over-apologetic?
0 1 2 3 4	6. If you were studying and your roommate were making too much noise, would you ask him/her to stop?
0 1 2 3 4	7. Is it difficult for you to compliment and praise others?
0 1 2 3 4	8. If you are angry at your parents, can you tell them?
0 1 2 3 4	9. Do you insist that your roommate does his/her fair share of the cleaning?
0 1 2 3 4	10. If you find yourself becoming fond of someone you are dating, would you have difficulty expressing these feelings to that person?
0 1 2 3 4	11. If a friend who has borrowed \$5.00 from you seems to have forgotten about it, would you remind this person?
0 1 2 3 4	12. Are you overly careful to avoid hurting other people's feelings?
0 1 2 3 4	13. If you have a close friend whom your parents dislike and constantly criticize, would you inform your parents that you disagree with them and tell them of your friend's assets?
0 1 2 3 4	14. Do you find it difficult to ask a friend to do a favor for you?
0 1 2 3 4	15. If food which is not to your satisfaction is served in a restaurant, would you complain about it to the waiter?
0 1 2 3 4	16. If your roommate without your permission eats food that he/she knows you have been saving, can you express your displeasure to him/her?
0 1 2 3 4	17. If a salesman has gone to considerable trouble to show you some merchandise which is not quite suitable, do you have difficulty in saying no?
0 1 2 3 4	18. Do you keep your opinions to yourself?
0 1 2 3 4	19. If friends visit when you want to study, do you ask them to return at a more convenient time?
0 1 2 3 4	20. Are you able to express love and affection to people for whom you care?
0 1 2 3 4	21. If you were in a small seminar and the professor made a statement that you considered untrue, would you question it?
0 1 2 3 4	22. If a person of the opposite sex whom you have been wanting to meet smiles or directs attention to you at a party, would you take the initiative in beginning conversation?
0 1 2 3 4	23. If someone you respect expresses opinions with which you strongly disagree, would you venture to state your own point of view?
0 1 2 3 4	24. Do you go out of your way to avoid trouble with other people?
0 1 2 3 4	25. If a friend is wearing a new outfit which you like, do you tell that person so?

PLEASE GO TO THE NEXT PAGE

The College Self-Expression Scale (Continued)

(Almost Always or Always = 0, Usually = 1, Sometimes = 2, Seldom = 3, Never or Rarely = 4)

0 1 2 3 4	26. If after leaving a store you realize that you have been "short-changed", do you go back and request the correct amount?
0 1 2 3 4	27. If a friend makes what you consider to be an unreasonable request, are you able to refuse?
0 1 2 3 4	28. If a close and respected relative were annoying you, would you hide your feelings rather than express your annoyance?
0 1 2 3 4	29. If your parents want you to come home for a weekend but you have made important plans, would you tell them of your preference?
0 1 2 3 4	30. Do you express anger or annoyance toward the opposite sex when it is justified?
0 1 2 3 4	31. If a friend does an errand for you, do you tell that person how much you appreciate it?
0 1 2 3 4	32. When a person is blatantly unfair, do you fail to say something about it to him?
0 1 2 3 4	33. Do you avoid social contacts for fear of doing or saying the wrong thing?
0 1 2 3 4	34. If a friend betrays your confidence, would you hesitate to express annoyance to the person?
0 1 2 3 4	35. When a clerk in a store waits on someone who has come in after you, do you call his attention to the matter?
0 1 2 3 4	36. If you are particularly happy about someone's good fortune, can you express this to that person?
0 1 2 3 4	37. Would you be hesitant about asking a good friend to lend you a few dollars?
0 1 2 3 4	38. If a person teases you to the point that it is no longer fun, do you have difficulty expressing your displeasure?
0 1 2 3 4	39. If you arrive late for a meeting, would you rather stand than go to a front seat which could only be secured with a fair degree of conspicuousness?
0 1 2 3 4	40. If your date calls on Saturday night 15 minutes before you are supposed to meet and says that he/she has to study for an important exam and cannot make it, would you express your annoyance?
0 1 2 3 4	41. If someone keeps kicking the back of your chair in a movie, would you ask him to stop?
0 1 2 3 4	42. If someone interrupts you in the middle of an important conversation, do you request that the person wait until you have finished?
0 1 2 3 4	43. Do you freely volunteer information or opinions in class discussions?
0 1 2 3 4	44. Are you reluctant to speak to an attractive acquaintance of the opposite sex?
0 1 2 3 4	45. If you lived in an apartment and the landlord failed to make certain necessary repairs after promising to do so, would you insist on it?
0 1 2 3 4	46. If your parents want you home by a certain time which you feel is much too early and unreasonable, do you attempt to discuss or negotiate this with them?
0 1 2 3 4	47. Do you find it difficult to stand up for your rights?
0 1 2 3 4	48. If a friend unjustifiably criticizes you, do you express your resentment there and then?
0 1 2 3 4	49. Do you express your feelings to others?
0 1 2 3 4	50. Do you avoid asking questions in class for fear of feeling self-conscious?

PLEASE MAKE SURE YOU HAVE ANSWERED ALL QUESTIONS. THEN GO ON TO THE BUSS-DURKEE INVENTORY, WHICH IS ON THE NEXT PAGE.

The Buss-Durkee Inventory

Please circle either True or False depending upon the response that reflects how you generally feel or express yourself in most situations.

T	F	1. I seldom strike back, even if someone hits me first.
T	F	2. I sometimes spread gossip about people I don't like.
T	F	3. Unless somebody asks me in a nice way, I won't do what they want.
T	F	4. I lose my temper easily but get over it quickly.
T	F	5. I don't seem to get what's coming to me.
T	F	6. I know that people tend to talk about me behind my back.
T	F	7. When I disapprove of my friends' behavior, I let them know it.
T	F	8. The few times I have cheated, I have suffered unbearable feelings of remorse.
T	F	9. Once in a while I cannot control my urge to harm others.
T	F	10. I never get mad enough to throw things.
T	F	11. Sometimes people bother me just by being around.
T	F	12. When someone makes a rule I don't like, I am tempted to break it.
T	F	13. I often find myself disagreeing with people.
T	F	14. Other people always seem to get the breaks.
T	F	15. I tend to be on my guard with people who are somewhat more friendly than I expected.
T	F	16. I sometimes have bad thoughts which make me feel ashamed of myself.
T	F	17. I can think of no good reason for ever hitting anyone.
T	F	18. When I am angry, I sometimes sulk.
T	F	19. When someone is bossy, I do the opposite of what he/she asks.
T	F	20. I am irritated a great deal more than people are aware of.
T	F	21. I don't know any people that I downright hate.
T	F	22. There are a number of people who seem to dislike me very much.
T	F	23. I can't help getting into arguments when people disagree with me.
T	F	24. People who shirk on the job must feel very guilty.
T	F	25. If somebody hits me first, I let him have it.
T	F	26. When I am mad, I sometimes slam doors.
T	F	27. I am always patient with others.
T	F	28. Occasionally when I am mad at someone I will give him the "silent treatment".
T	F	29. When I look back on what's happened to me, I can't help feeling mildly resentful.
T	F	30. There are a number of people who seem to be jealous of me.
T	F	31. I demand that people respect my rights.
T	F	32. It depresses me that I did not do more for my parents.
T	F	33. Whoever insults me or my family is asking for a fight.
T	F	34. I never play practical jokes.

PLEASE TO TO THE NEXT PAGE

The Buss-Durkee Inventory (Continued)

T	F	35. It makes my blood boil to have somebody make fun of me.
T	F	36. When people are bossy, I take my time just to show them.
T	F	37. Almost every week I see someone I dislike.
T	F	38. I sometimes have the feeling that others are laughing at me.
T	F	39. Even when my anger is aroused, I don't use "strong language".
T	F	40. I am concerned about being forgiven for my sins.
T	F	41. People who continually pester you are asking for a punch in the nose.
T	F	42. I sometimes pout when I don't get my own way.
T	F	43. If somebody annoys me, I am apt to tell him what I think of him.
T	F	44. I often feel like a powder keg ready to explode.
T	F	45. Although I don't show it, I am sometimes eaten up with jealousy.
T	F	46. My motto is "Never trust strangers".
T	F	47. When people yell at me, I yell back.
T	F	48. I do many things that make me feel remorseful afterwards.
T	F	49. When I really lose my temper, I am capable of slapping someone.
T	F	50. Since the age of ten, I have never had a temper tantrum.
T	F	51. When I get mad, I say nasty things.
T	F	52. I sometimes carry a chip on my shoulder.
T	F	53. If I let people see the way I feel, I'd be considered a hard person to get along with.
T	F	54. I commonly wonder what hidden reason another person may have for doing something nice for me.
T	F	55. I could not put someone in their place, even if they needed it.
T	F	56. Failure gives me a feeling of remorse.
T	F	57. I get into fights about as often as the next person.
T	F	58. I can remember being so angry that I picked up the nearest thing and broke it.
T	F	59. I often make threats I don't really mean to carry out.
T	F	60. I can't help being a little rude to people I don't like.
T	F	61. I have no enemies who really wish to harm me.
T	F	62. I used to think that most people told the truth but now I know otherwise.
T	F	63. I generally cover up my poor opinion of others.
T	F	64. When I do wrong my conscience punishes me severely.
T	F	65. If I have to resort to physical violence to defend my rights, I will.
T	F	66. If someone doesn't treat me right, I don't let it annoy me.
T	F	67. At times I feel I get a raw deal out of life.
T	F	68. When arguing, I tend to raise my voice.

PLEASE GO ON TO THE NEXT PAGE

The Buss-Durkee Inventory (Continued)

T	F	69. I often feel that I have not lived the right kind of life.
T	F	70. I have known people who pushed me so far that we came to blows.
T	F	71. I don't let a lot of unimportant things irritate me.
T	F	72. I seldom feel that people are trying to anger or insult me.
T	F	73. Lately, I have been kind of grouchy.
T	F	74. I would rather concede a point than get into an argument about it.
T	F	75. I sometimes show my anger by banging on the table.

PLEASE MAKE SURE YOU HAVE ANSWERED EVERY QUESTION.
THANK YOU FOR YOUR PARTICIPATION. IF YOU WANT ANY MORE INFORMATION
CONCERNING THIS STUDY, FEEL FREE TO ASK THE INVESTIGATORS.