The Thinking/Feeling Content Analysis Scale: additional data on reliability and validity

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The Thinking/Feeling Content Analysis Scale: Additional data on reliability and validity

by

Robert A. Seegmiller

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Introduction

A basic premise of counseling is that an understanding of the client and his or her concerns is only possible if the counselor is willing to carefully attend to what the client has to say. Indeed, the verbal messages communicated by a client may provide the most valuable and readily accessible information available regarding the client's personality and worldview. According to Nunnally (1978, p. 585), "it may prove to be the case that 'words are the mark of the person,' moreso than clothes are." Patton and Meara (1982) likewise maintained that the words or strings of words used in communication serve as "informative displays of meaning." By carefully attending to, and empathically interpreting verbal communications, it may be possible to gain insight into another person's thoughts, feelings, and the way in which he or she views the world.

The present research project was based on the proposition that certain personality characteristics are reflected in the language people use to express themselves. In an earlier study, Seegmiller and Epperson (1987) found a significant relationship between individual preferences for thinking versus feeling information processing styles and the use of certain words in natural conversation. In that study, a Thinking/Feeling Content Analysis Scale was developed and used to assess thinking/feeling preferences through the analysis of
speech samples. A significant positive relationship was found between subjects' content analysis scores and their scores on the Thinking/Feeling Scale of the Myers-Briggs Type Indicator. The original study also reported a split-half reliability coefficient of .82 for Thinking/Feeling Content Analysis scores.

The primary purpose of this study was to further develop and evaluate the reliability and validity of the Thinking/Feeling Content Analysis Scale. This included efforts to refine the dictionary of thinking and feeling words used in the evaluation and scoring of verbal samples. Additionally, the methods used in the original study to evaluate verbal samples and to assess the validity of content analysis scores were replicated. The present study also included research into the stability of Thinking/Feeling Content Analysis scores over a 5-week period.

Two additional procedures were used in this study to evaluate the validity of Thinking/Feeling Content Analysis scores. The first involved correlating subjects' content analysis scores with their scores on the Thinking and Feeling scales of the Singer-Loomis Inventory of Personality (SLIP). The SLIP is a recently developed instrument designed to measure Jungian personality types by asking individuals how they tend to respond to various life circumstances.
The second procedure used to assess the validity of the Thinking/Feeling Content Analysis Scale involved examining the relationship between subjects' verbal content analysis scores and their preferences for different counseling styles. The deductive reasoning behind this investigation was as follows: 1) different styles of counseling or psychotherapy vary with regard to the emphasis they place on clients' thoughts and feelings; 2) in counseling, as in many other types of interpersonal relationships, similarity breeds attraction; and 3) on the basis of these two postulates, it was predicted that thinking personality types would prefer cognitively oriented therapies, while feeling personality types would prefer therapies that focus on clients' emotions and feelings.

In summary, the purpose of the present study was to refine, and further evaluate the reliability and validity of a previously developed method of assessing individual thinking/feeling preferences by analyzing the content of verbal samples.
Literature Review

The Content Analysis of Natural Language

The Method of Content Analysis

In a general sense, content analysis consists of any technique used to systematically and objectively identify specified characteristics of verbal messages. Berelson (1952) defined content analysis as "a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (p. 18). Content analysis has also been described as "a multipurpose research method developed specifically for investigating a broad spectrum of problems in which the content of communication serves as the basis for inference" (Holsti, Loomba, & North, 1968, p. 597). In fact, a primary assumption underlying the method of content analysis is that valid inferences can be made about individuals' psychological characteristics through the objective, systematic, and quantitative analysis of specified aspects of their verbal communications (Berelson, 1952; Viney, 1983; Weber, 1983).

The first step of content analysis involves obtaining a verbal sample from the person whose language is to be analyzed. Such a sample may be obtained from written sources such as letters or diaries, or from speech samples which have been recorded and transcribed. Specific scoring rules are then used to identify instances of particular verbal behaviors.
which are of interest. For example, if the psychological condition of depression was of interest, clearly defined rules would be used to identify depressive statements in the verbal sample. An individual's level of depression would then be determined by the relative frequency with which depressive statements occurred within his or her speech.

While it is possible to make inferences about a speaker on the basis of such things as his or her tone of voice, rate of speech, vocal inflections, and nonverbal behaviors, it is commonly believed that "information concerning the speaker's personality structure and dynamics is carried primarily in the content channel" (Russell & Stiles, 1979, p. 415). The significance of manifest verbal content was expressed by Gottschalk (1971), who stated, "The major part of the variance in an immediate psychological state of an individual can be accounted for by variations in the content of the verbal communications" (p. 132), and by Hill (1982), who claimed that "content category systems are used most often to investigate internal psychological processes, motives, drives, and characterological traits" (p. 13). In other words, what a person says may, in fact, reveal a great deal about his or her personality.

The method of content analysis is characterized by a number of fundamental principles. These include: 1) a commitment to the quantitative analysis of verbal samples,
which is perhaps the most distinctive feature of content analysis; 2) a strong emphasis on objectivity with regard to the scoring and interpretation of verbal samples; 3) an interest in the manifest content as opposed to the latent semantics of verbal communications; 4) what Berelson (1952) referred to as the "system requirement" of content analysis, meaning that verbal samples must be considered in their entirety; selectively attending only to "confirmatory evidence" in verbal samples is impermissible; and 5) what Holsti et al. (1968) called the "generality" principle, meaning that the quantitative analyses of verbal samples should serve as a basis for inference. In general, the theory behind content analysis studies is that through language analysis, inferences may be drawn about the personality or psychological characteristics of the communicator.

It should be noted that content analysis most often provides information about one or two specific dimensions of personality, and is not used as a comprehensive personality assessment technique. In other words, verbal samples are usually analyzed with specific questions about the speaker's personality in mind. According to Berelson (1952), the hit-or-miss method of analyzing "everything" in a body of content in the hope that "something will turn up" is seldom productive, and is certainly uneconomical. If the problem is not clarified to the point where several
worthwhile hypotheses or questions can be formulated, then the projected analysis should be abandoned. (p. 162)

**Advantages of Content Analysis in Personality Assessment**

A number of distinct advantages are associated with the method of content analysis as a personality assessment technique. Viney (1983) suggested that content analysis bridges the gap between "rigor and vigor," meaning that it is scientific, quantitative, and precise, yet at the same time allows for humanistic data collection and the analysis of naturally occurring speech samples. According to Woodrum (1984), content analysis "facilitates the use of quantitative techniques for making theoretical inference from symbolic information" (p. 6). In many respects, content analysis combines many of the most desirable characteristics of both objective and projective personality assessment techniques.

One way in which content analysis resembles a projective assessment technique is that relatively unstructured, ambiguous stimuli are used to elicit verbalizations. Verbal samples are usually obtained during unstructured interviews in which persons are asked to speak for about five minutes on any topic that interests them (Gottschalk, Winget, & Gleser, 1969). Such an approach to data collection offers a number of potential advantages. First, asking a person to speak for a few minutes about a topic of his or her own choosing tends to
be nonintrusive and relatively nonthreatening. Each individual is free to decide how much personal information will be disclosed. The task is also less threatening than some other approaches to personality assessment in that it does not involve probing for psychological maladjustment. The assessment procedure tends to be intrinsically interesting, and may in fact facilitate the development of rapport between assessor and subject.

Another advantage of this assessment procedure has to do with the issue of reactivity. According to Patterson and Sechrest (1983),

Attempts to assess outcomes of psychotherapy have relied too heavily on measures likely to be highly reactive, by which is meant that the processes of measurement affect what is being measured . . . . There are advantages in developing and using measures that, even though imperfect in other ways, are minimally reactive . . . . With respect to nonreactivity, the most promising of . . . assessment techniques . . . are speech samples from client interviews. (pp. 391, 395)

Persons whose language is to be content analyzed are unlikely to distort their speech because they are generally unaware of the assessor's particular interests or intentions. In other words, assessment errors are less likely to be introduced because of subjects' awareness that they are being
"observed" (Viney, 1983). Thus, content analysis techniques tend to be less susceptible to faking and socially desirable responding than most self-report inventories (Viney & Westbrook, 1979) or therapist rating scales (Patterson & Sechrest, 1983). Furthermore, because the instructions used to elicit verbal samples are generally ambiguous, subjects' verbalizations are more likely to reflect their phenomenological viewpoints rather than cued responses to standardized questions (Westbrook & Viney, 1980). Finally, content analysis resembles other projective assessment techniques in that it provides the potential for tapping into unconscious or repressed material, and may help the individual clarify personal insights that had previously not been verbalized (Viney, 1983).

At the same time, however, content analysis avoids many of the psychometric pitfalls traditionally associated with projective techniques. Once content categories and scoring rules have been defined, the process of scoring verbal samples is usually quite objective, thus minimizing the probability of biased scoring. Objective, quantitative analysis also enhances rater reliability and facilitates standardization of the assessment technique.

Thus, it may be argued that content analysis cannot be clearly classified as either a projective or an objective technique. Projective techniques generally provide a wide
range of information, but lower levels of dependability, whereas objective instruments characteristically yield a narrow band of information at a high level of dependability (Cronbach & Gleser, 1957; Anastasi, 1976). Content analysis bridges this gap by providing a means to tap the rich content of projective responses, while at the same time objectively controlling much of the "noise" that traditionally makes the interpretation of projective responses difficult. As summarized by Woodrum (1984, p. 2), "The special potential of content analysis is its explicit linkage of qualitative symbol usage with quantitative data."

A number of other advantages of content analysis as a personality assessment technique are also worth noting. First, content analysis is particularly well suited to the gathering of test-retest data (Lebovits & Holland, 1983). Practice effects are less of a problem than with most other assessment techniques because verbal samples are not elicited by distinctive questions or stimuli (Gottschalk, Eckardt, Paulter, Wolf, & Terman, 1983; Viney, 1983). It is unlikely that subjects will specifically remember, or seek to reproduce their verbal behavior from an earlier "testing." For this reason, content analysis may prove to be a useful means of assessing changes which take place over a course of counseling or psychotherapy. For example, a client's level of anxiety or hostility may be unobtrusively monitored on a weekly basis by
attending to specific aspects of his or her speech. Additional data can easily be collected at any time.

Another advantage of content analysis is that it may be used to assess a wide range of personality characteristics or mood states (Lebovits & Holland, 1983). In fact, many different personality characteristics may be assessed by analyzing a single verbal sample. Furthermore, content analysis is not tied to any single theoretical orientation (Viney, 1983). For example, an individual's speech may be conceptualized in terms of learned verbal responses, or as a reflection of unconscious processes. For this reason, Gottschalk (1974b) described the method of content analysis as being theoretically eclectic.

A final significant advantage of content analysis is that data is collected under natural conditions. Rather than having to respond to artificial prompts, information is gathered as the individual engages in a rather natural task, i.e., speaking for a few minutes about something of personal interest. It may be that an individual's true personality has greater opportunity for expression under these conditions. As suggested by Mischel (1977),

In the conditions of real life, the psychological "stimuli" that people encounter are neither questionnaire items, nor experimental instructions, nor inanimate events, but involve people and reciprocal relationships
The future of personality measurement will be brighter if we can move beyond our favorite paper-and-pencil and laboratory measures to include direct observations as well as unobtrusive nonreactive measures. (p. 248)

A call for the use of assessment techniques which allow for personal expression was also recently issued by Dana (1984), who stated,

Instruments of idiographic origin have a unique role in illuminating not only experience but the contextualization of the individual within a variety of life situations and treatment milieus. These instruments will continue to humanize and enrich relationships between care-providers and consumers. (p. 568)

With so many potential advantages, one may wonder why "content analysis remains an underutilized research method" (Woodrum, 1984, p. 1). One reason is that the scoring procedures associated with many of the previously developed content analysis scales (e.g., Gottschalk & Gleser, 1969) require carefully trained judges to make semantic interpretations of verbal samples. Such analyses tend to be labor intensive, complex, and costly (Lebovits & Holland, 1983). Another reason may be that content analysis is neither a purely projective or a purely objective technique. Although, as previously suggested, the hybrid status of
content analysis may have certain theoretical advantages, at the same time it may be partly responsible for the current underdevelopment and underutilization of this personality assessment technique. As pointed out by Woodrum (1984), quantitatively and qualitatively oriented social scientists often drift into polarized camps, from which mediating or synthesizing efforts are often viewed with suspicion or hostility.

Previous Applications of Content Analysis

The history of content analysis as a research technique dates back to the beginning of the twentieth century. Since that time, the number of content analysis studies has grown exponentially, from approximately 2.5 studies per year in 1900 to nearly 100 published studies per year during the 1960s (Holsti et al., 1968).

The earliest applications of content analysis were not directly concerned with personality assessment. Prior to 1930, content analysis studies were primarily journalistic, political, or literary in nature. Typical research involved analyzing the content of newspapers, or studying the stylistic features of popular and classical literature. During the late 1930s, developments in mass communication technology prompted investigations into the content and impact of political propaganda.
During World War II, attention focused on the content analysis of major newspapers from around the world in an attempt to understand the political philosophies and predict the behaviors and of various world leaders. During the late 1940s, fewer applied studies were conducted, as interest shifted more toward the theory of content analysis, and the refinement of research methodologies (Berelson, 1952).

Since the 1940s, content analysis has been used to address a wide range of questions in many different fields. Holsti et al. (1968) outlined some of the major historical applications of content analysis techniques. These have included efforts to: 1) secure political and military intelligence; 2) make inferences about cultures and cultural changes, 3) provide legal assistance, and 4) analyze psychological traits of individuals. It is the use of content analysis in personality assessment which was of primary interest in the present paper.

The relationship between verbal behavior and psychological conditions or states has been recognized for some time. For example, early in this century Bleuler identified abnormal speech patterns as "accessory symptoms" of schizophrenia, and Kraeplin considered loose speech associations to be indicative of "disconnected thoughts" (MacHovec, 1982). Even more recently, the etiology and significance of "schizophrenic language" continue to be
discussed and debated (Kertesz, 1982; Neuringer, 1982; Andreasen, 1982; Schwartz, 1982).

Although the association between verbal behavior and certain psychological states had been recognized for some time, the potential value of content analysis as a personality assessment technique was not seriously considered until the 1940s (Berelson, 1952). The earliest attempts to use content analysis to assess psychological characteristics involved analyzing responses elicited by popular projective techniques. Content analysis was considered to be well-suited to the study of the unconscious. As stated by Berelson (1952, p. 76), "It is clear that many psychoanalytic propositions are based upon data which can be provided by content analysis."

Since the late 1940s, a number of studies have utilized content analysis techniques to interpret Rorschach responses (Aronson & Rezinoff, 1976; Elizur, 1949; Finney, 1955; Lindner, 1950; MacHovec, 1982), and responses to the Thematic Apperception Test (Bellak, 1970; Eron, 1950; Hafner & Kaplan, 1960; Shneidman, 1951).

Viney (1983) reported that one of the earliest applications of content analysis in applied psychology involved the evaluation of client change during the course of psychotherapy. For example, Dollard and Mowrer (1947) used content analysis techniques to assess a client's level of tension throughout the period of his treatment by attending to
the number of "discomfort" and "relief" words that he used in each therapy session.

Despite these earlier applications, the use of content analysis for personality assessment purposes was sporadic, and for the most part methodologically unrefined until the late 1960s. Most of the early studies were never replicated, and rigorously developed content analysis scales with broad applicability were not constructed. Furthermore, most of the original content analysis studies were limited to the analysis of either published transcripts, or projective test responses. In many cases, the social scientists conducting the research were not directly involved with the persons whose verbal samples were analyzed (Holsti et al., 1968). Thus, for a number of years the use of content analysis for personality assessment remained of theoretical and experimental interest, but lacked rigorous validation and practical applications.

**Modern Developments in Content Analysis and Personality Assessment**

Significant advances in the assessment of psychological states through the content analysis of verbal behavior were made in the late 1960s through the efforts of Gottschalk and Gleser (Gottschalk & Gleser, 1969; Gottschalk et al., 1969). The contributions of Gottschalk and Gleser were both theoretical and methodological. In terms of theory, they proposed that aspects of an individual's personality may
be understood by analyzing speech samples obtained by simply asking a person to speak for five minutes about any topic of personal interest. This method of eliciting verbal samples tends to be less intrusive, and probably provides less reactive responses than asking subjects to respond to projective test stimuli.

In terms of methodology, Gottschalk and Gleser carefully developed explicit rules for the scoring of verbal transcripts. The first content analysis scales they developed were the Anxiety Scale, the Hostility Directed Outward Scale, the Hostility Directed Inward Scale, the Ambivalently Directed Hostility Scale, and the Social Alienation-Personal Disorganization Scale (sometimes referred to as the Schizophrenia Scale). The validity of these scales has been substantiated by the results of a number of studies which have investigated the relationship between personality characteristics and verbal behavior. For example, Gleser, Winget, and Seligman (1979) found that emotionally disturbed adolescents in mental health treatment programs obtained significantly higher scores than control adolescents on the Anxiety and Social Alienation-Personal Disorganization Scales. Disturbed females also scored significantly higher than control females on the Hostility Directed Inward Scale, while disturbed male adolescents scored significantly higher than controls on the Hostility Directed Outward Scale. In
another study, Gottschalk (1974b) found a significant correlation between pre-therapy Social Alienation-Personal Disorganization scores and measures of post-treatment psychiatric morbidity. On the basis of these results it was hypothesized that content analysis might be used to predict clients' responsiveness to psychiatric interventions.

More recently, Selin & Gottschalk (1983) reviewed evidence suggesting that the Social Alienation-Personal Disorganization Scale provides reliable and valid measures of schizophrenia as determined by four independent diagnostic criteria. The scale also distinguished schizophrenics from other psychiatric patients, and found a high level of "schizophrenic" language in conduct disordered adolescents.

In another recent study (Gottschalk, Hoigaard, Eckardt, Gilbert, & Wolf, 1983), sober chronic alcoholics obtained significantly higher scores than sober nonalcoholics on the Social Alienation-Personal Disorganization, Anxiety, and Inward Directed Hostility scales.

In addition to the five original Gottschalk and Gleser scales which have been used most frequently in research, Gottschalk and his colleagues have also developed a number of other content analysis scales, including: a Human Relations Scale (Gottschalk & Gleser, 1969; Gottschalk, 1974b), a Cognitive and Intellectual Impairment Scale (Gottschalk, 1979; Gottschalk, Eckardt, Paulter, Wolf, & Terman, 1983; Gottschalk
& Gleser, 1969), an Achievement Striving Scale (Gottschalk &
Gleser, 1969), a Dependency and Dependency Frustration Scale
(Gottschalk & Gleser, 1969), and a Hope Scale (Gottschalk,
1974a; Gottschalk, 1983).

Australian researchers Viney and Westbrook have also been
very active during the last decade in the development,
testing, and application of new content analysis scales. Some
of the scales that they developed include: a Cognitive
Anxiety Scale (Viney & Westbrook, 1976), a Positive Affect
Scale (Westbrook, 1976), a Sociality Scale (Viney & Westbrook,
1979), an Origin and Pawn Scale (Westbrook & Viney, 1980), and
a Quality of Life Scale (Viney and Westbrook, 1981). Although
a comprehensive review of all content analysis scales which
have been developed and their various applications is beyond
the scope of the present paper, a good review of historical,
and potential future developments in content analysis was
provided by Viney (1983).

The Thinking/Feeling Content Analysis Scale

Rationale for the Thinking/Feeling Content Analysis Scale

Recent work by Seegmiller and Epperson (1987) focused on
the development of a new content analysis scale. This scale
was designed to identify individuals' preferences for thinking
versus feeling modes of information processing. The contrast
between thinking and feeling personality types was first
described by Jung (1923/1971), who viewed these two functions
as opposite ways of making rational judgments. According to Helson (1982, p. 409), "Jung's typologies may be regarded as a theory of individual differences in information processing and exchange."

Jung (1923/1971) maintained that thinking involves analytical processing of factual information. In his own words, "thinking is oriented by the object and objective data . . . . A thinking that is directed neither to objective facts nor to general ideas . . . scarcely deserves the name 'thinking' at all" (pp. 194-195). From Jung's definitions, it is clear that analytical reasoning characterizes the thinking personality type. Myers (1962), the developer of the Myers-Briggs Type Indicator, an inventory based on Jungian personality types, described thinking as "a logical process, aimed at an impersonal finding" (p. 52). Other distinctive qualities of "thinkers" include a reliance upon cognitive organization and logical structure, and a propensity for weighing facts and making impersonal judgments (Carlyn, 1977).

In contrast, Jung (1923/1971) maintained that judgments based on feelings are influenced by traditional or personal values. In other words, valuing serves as the standard by which feeling decisions are made, in contrast to thinking decisions which are based on inferred judgements of truth or correctness. Myers (1962) defined the feeling function as "a process of appreciation . . . bestowing on things a personal,
subjective value" (p. 52). In addition to relying upon subjective impressions and personal values, Carlyn (1977) suggested that feeling personality types tend to be aware of emotions and sensitive to the feelings of others. A dictionary definition (Gove, 1967) accurately describes the Jungian concept of feeling as "an affective state of consciousness, such as that resulting from emotions, sentiments and desires."

The contrast between the thinking and feeling functions was clearly summarized by Loomis (1982), who stated,

Feeling, as Jung defined it, is a one-step matching process where decisions are reached quickly by comparison to a standard of values. Acceptance or rejection is connected to the value judgment. Thinking, in contrast, involves a series of steps in logical progression. Thinking discussions are deliberated, weighing the pros and cons before the final judgment is reached. (p. 66)

As previously mentioned, Jung considered thinking and feeling to be opposites. In other words, the more strongly a person favors thinking, the less likely he or she will be to respond to feelings, and vice versa. Jung also maintained that each person has a preference for one function or the other. This concept was reiterated by Myers (1962) who claimed
Everyone undoubtedly makes some decisions with thinking and some with feeling. But each person is almost certain to like and trust one way of judging more than the other. Whichever judging process a (person) prefers . . . he will use it more often, trust it more implicitly, and be much more ready to obey its dictates. The other kind of judgment will be sort of a minority opinion, half-heard and often wholly disregarded. (pp. 52-53)

The importance of thinking and feeling has been highlighted by renewed interest in cognitive theories of personality. These theories maintain that behavior is significantly influenced by an individual’s cognitive and affective experiences. As stated by Helson (1982, p. 409), "A great deal of the variety in personality and interpersonal behavior (is) attributable to differences in cognitive-affective style." If, as suggested, cognitive-affective style is an integral factor in personality structure and dynamics, then techniques or instruments capable of identifying thinking/feeling preferences would certainly be of value. It was on the basis of this reasoning that the Thinking/Feeling Content Analysis Scale was developed.
Development and Initial Validation of the Thinking/Feeling Content Analysis Scale

The idea that thinking and feeling personality types might differ in the ways they verbally express themselves is not completely new. According to Helson (1982, p. 417), "Dictionaries could be developed containing words theoretically preferred by different [personality] types." In other words, it may be possible to develop a list of cognitive words used most frequently by thinking types, and a list of affective words used most often by feeling types.

A dictionary categorizing cognitive and affective words was, in fact, developed for use with the Computer Assisted Language Analysis System (CALAS; Pepinsky, Baker, Matalon, May, & Staubus, 1977). In addition to other functions, this language analysis system classifies various types of verbs, including what are known as stative-experiencer verbs. These verbs define relations in which states of feeling, sensing, or knowing are attributed, or acts of consciousness or awareness are imputed (Patton & Meara, 1982). In the CALAS dictionary, this class of verbs is subdivided into stative-experiencer-cognitive (SEC) and stative-experiencer-affective (SEA) categories. Examples of cognitive verbs include such words as assume, compare, consider, define, and judge; while examples of affective verbs include admire, care, desire, enjoy, and hate.
The 64 stative-experiencer verbs from the CALAS dictionary were selected to form the core of the Thinking/Feeling Content Analysis dictionary. An additional 296 synonyms and antonyms of the core words, listed in Roget's Thesaurus were also selected for inclusion in the original content analysis dictionary. In selecting words for this dictionary, an intuitive attempt was made to choose words that people commonly use to describe their cognitive and emotional experiences. It should be noted that nouns and adjectives, as well as verbs, were included in the original content analysis dictionary, based on the hypothesis that the use of nouns and adjectives may reflect cognitive or affective states as accurately as the use of verbs.

The 360 words in the content analysis dictionary were classified as either thinking or feeling words by having 160 subjects rate each of the words on a 9-step Likert scale (ranging from -4 to +4), with negative values representing thinking words, and positive values representing feeling words. Words with mean ratings significantly less than the median value of 0 were classified as thinking words, while words with mean ratings significantly greater than 0 were classified as feeling words.

To test the hypothesis that thinking and feeling personality types differ in terms of the language they use, Seegmiller and Epperson (1987) obtained 5-minute verbal
samples from 42 subjects. These verbal samples were analyzed by identifying words from the content analysis dictionary that appeared in each transcript. Thinking/feeling preferences were determined by summing the negative weights assigned to thinking words and the positive weights associated with feeling words. This sum was then divided by the total number of words in the transcript to control for verbosity, and the result was multiplied by 1000 to avoid working with small decimal values. A negative total score for any transcript indicated that thinking words were used more often than feeling words, and was interpreted as indicating a preference for a cognitive information processing style. Conversely, a positive total score reflected a tendency to use more feeling than thinking words, and was interpreted as indicating a preference for an affective information processing style.

Subject's content analysis scores were then correlated with their scores on the Thinking/Feeling Scale of the Myers-Briggs Type Indicator, and a significant Pearson product-moment correlation ($r = .55, p < .001$) was obtained, suggesting that thinking/feeling preferences may be reflected in verbal behavior.

The validity of the Thinking/Feeling Content Analysis Scale was also evaluated by correlating subjects' content analysis scores with their self-evaluations on a thinking/feeling continuum, and by investigating the hypothesis that
females tend to be feeling types, while males are more likely to be thinking types (Loomis, 1982; Stricker & Ross, 1964b; Woehlke & Piper, 1980). In both cases, trends in the expected directions were obtained.

Seegmiller and Epperson (1987) also investigated the internal consistency reliability of the Thinking/Feeling Content Analysis Scale using a modified split-half technique, in which content analysis scores from the combined first and third quarters of subjects' verbal samples were correlated with content analysis scores from the combined second and fourth quarters. An internal consistency reliability coefficient of .82 was obtained.

Two other important findings from the initial study should also be noted. First, it was determined that in the scoring of verbal transcripts, the use of unit weights (assigning values of -1 to all thinking words, and +1 to all feeling words) yielded comparable results to those obtained when exact mean ratings of dictionary words were used as weights. Second, it was found that attending to nouns and adjectives in verbal samples did not contribute significantly to the assessment of thinking/feeling preferences. Verb usage alone was determined to be an accurate predictor of subjects' preferred information processing styles.
The Present Study

Overview

Initial research into the validity of the Thinking/Feeling Content Analysis Scale was generally supportive. Nevertheless, additional research was needed to further assess the reliability and validity of this scale.

In the present study, verbal samples were obtained from subjects on two separate occasions to investigate the stability of Thinking/Feeling Content Analysis scores over time. Two different methods were also used to evaluate the validity of the Thinking/Feeling Content Analysis Scale.

First, the relationship between subjects' verbal behaviors and their self-reported behaviors in a number of typical life circumstances was investigated. Such research was considered important because the value of the Thinking/Feeling Content Analysis Scale ultimately depends on its ability to predict and explain nonverbal behaviors. Second, the relationship between content analysis scores and subjects' expressed preferences for different counseling styles was investigated. It was hypothesized that thinking personality types would tend to prefer logical, cognitive approaches to counseling, while feeling personality types would be more attracted to empathic counseling styles that focused more on clients' feelings and emotions. The rationale underlying each of the validity investigations is presented below.
The Hypothesized Relationship Between Thinking/Feeling Preferences and Behavior

The utility of any personality assessment technique invariably depends upon its ability to account for non-test behaviors. In other words, it is essential that the methods used to assess theoretical personality constructs correlate with real-life behaviors. As expressed by Liebert and Spiegler (1978),

All strategies for the study of personality begin with an examination of overt behavior . . . . Personality is a hypothetical idea rather than a real thing. The only direct observations we can make are of other people's behavior, including both what they say (verbal behavior) and the full range of things they do (nonverbal behavior). Thus, personality is an abstraction and is not observed directly; instead it is inferred from behavior. (pp. 419, 11)

Of interest in the present study were criterion behaviors that differentiate between thinking and feeling personality types. Previous research has revealed a number of ways in which the behavior of thinkers and feelers differ. For example, Carlyn (1977) found that thinkers exhibit a high need for order, autonomy, dominance, and achievement. They tend to have positive work attitudes, and excel in tasks requiring mechanical and theoretical reasoning. By comparison, feelers
more often have strong needs for nurturing and affiliation. They value interpersonal relationships, like to become involved in group projects, and are attracted to helping professions.

Brooks and Johnson (1979) found that thinking and feeling personality types responded differently to a self-descriptive adjective checklist. Thinkers described themselves as alert, logical, assertive, suspicious, and defensive; whereas feelers characterized themselves as kind, generous, sentimental, emotional, soft-hearted, and forgiving. Henderson and Nutt (1980), Kerin and Slocum (1981), and Blaylock and Reels (1984) all found that thinkers and feelers used different types of information to make hypothetical business decisions. Thinkers relied more heavily on objective data and practical decisions, while feelers were more strongly influenced by subjective impressions, personal preferences, and human interest issues.

Significant differences between these two personality types have also been found with respect to their descriptions of the ideal organization (Steckroth, Slocum, & Sims, 1980), level of participation in, and evaluation of various learning games (Pratt, Uhl, & Little, 1980), and self-reported conflict handling behaviors (Chanin & Schneer, 1984). In general, previous research has indicated that people can be meaningfully classified on the basis of their thinking/feeling
preferences, and that such preferences may be related to real behavioral differences.

As previously stated, one of the purposes of this study was to investigate the relationship between verbal behavior and behavior in other life circumstances. This was done by correlating subjects' Thinking/Feeling Content Analysis scores with their self-reported behaviors as assessed by the Singer-Loomis Inventory of Personality (SLIP). The SLIP assesses Jungian personality types, including thinking/feeling preferences, by asking people how they tend to behave in different circumstances. A more comprehensive description of the SLIP, including its development and psychometric properties, is provided in the Methods section of this paper.

The Hypothesized Relationship Between Thinking/Feeling Preferences and Counseling Style Preferences

The validity of Thinking/Feeling Content Analysis scores was also evaluated by investigating the hypothesis that thinkers and feelers prefer different counseling styles. It was expected that thinkers would be more attracted to counseling styles that concentrate on decision making and the exploration, analysis, and modification of cognitive processes; whereas feelers would prefer counseling styles that focus on clients' emotions and subjective experiences. This hypothesis was based on two key assumptions, namely, that counseling styles differ in terms of the emphasis they place
on clients' thoughts and feelings, and that similarity (in this case, similarity in terms of thinking/feeling orientation) breeds attraction or liking. Each of these assumptions is explored in greater detail below.

Classifying counseling styles. The notion that different styles of counseling or psychotherapy may be categorized according to the emphasis they place on thoughts and feelings was suggested by Witzig (1978), who proposed that "C. G. Jung's psychotypology offers a viable means by which the psychotherapies may be classified and given the perspective needed for their more effective application" (p. 315). In fact, many of the major psychotherapies may be classified along the dimensions of Jung's thinking/feeling typology.

Examples of thinking, or what Witzig (1978) referred to as "informational/cognitive" styles of psychotherapy include psychoanalytic, rational-emotive, educational, and transactional approaches. Examples of feeling, or "confrontation/conative" approaches to psychotherapy include "encounter and T-group modalities, classical supportive-ventilative procedures, and the client-centered approaches of Carl Rogers" (Witzig, 1978, pp. 321-322).

Descriptions provided by developers of different forms of therapy tend to support Witzig's classification of the psychotherapies. For example, Rogers' interest in feelings was reflected in his description of the conditions necessary
for psychotherapeutic change, including accurate empathy, deep sensitivity, acceptance, and unconditional positive regard (Rogers, 1959). The central importance of feelings in Client-centered Therapy was also evident in a scale developed by Rogers and Raban to describe the various levels of client progress in psychotherapy:

First stage: Communication is about externals. There is an unwillingness to communicate self. Feelings and personal meanings are neither recognized as such, nor owned.

Second stage: Feelings are sometimes described, but as unowned past objects external to self.

Third stage: There is much description of feelings and personal meanings which are not now present.

Fourth stage: Feelings and personal meanings are freely described as present objects owned by the self.

Fifth stage: Many feelings are freely expressed in the moment of their occurrence and are thus experienced in the immediate present. These feelings are owned and accepted.

Sixth stage: Feelings previously denied are now experienced both with immediacy and acceptance. Such feelings are not something to be denied, feared or struggled against.

Seventh stage: The individual lives comfortably in the
flowing process of his experiencing. New feelings are experienced with richness and immediacy.

(Meador & Rogers, 1979, pp. 165-166)

To facilitate clients' awareness of their "inner experiencing," Rogerian counselors carefully attend not only to the content of their clients' speech, but also to the accompanying affect. Feelings are reflected by the counselor to help the emotionally restricted individual become more aware of his or her organismic needs. From a client-centered perspective, success in therapy is directly related to the degree to which a client becomes aware of, and lives in accordance with his or her feelings. As summarized by Meador and Rogers (1979),

Change in the way a client relates to his feelings and personal meanings has to do with the degree to which he is aware of his feelings, the degree to which he owns his feelings as his, and the degree to which he can express his feelings in the moment of their occurrence . . . .

His personality change will occur in the direction of his being more and more aware of his inner experiencing to flow and change, and toward his behaving in consequence with his inner experiencing. (pp. 166, 133)

Whereas Rogers' Client-centered Therapy is a prime example of a form of psychotherapy that focuses on feelings, Albert Ellis' Rational-Emotive Therapy (RET) perhaps best
exemplifies Witzig's (1978) class of informational/cognitive therapies that deal primarily with clients' thoughts. The paramount importance of cognitions in RET was clearly demonstrated in Ellis' (1979) description of the mechanisms of psychotherapy:

No matter what *feelings* the client brings out, the therapist tries to get back to her main irrational *ideas* that most probably lie behind these feelings . . . . Instead of merely *telling* her that her ideas are irrational, he keeps trying to get her to see this for herself. He does, however, *explain* some relevant psychological processes, such as that her *feelings* come from her *thinking*. (p. 212)

Thus, one of the first goals of RET is to teach clients that feelings are the by-products of thoughts, and that irrational thoughts are generally at the root of personal problems. In contrast to Client-centered Therapy, in which positive change is associated with helping people become more aware of their feelings, the goal of RET is to explore cognitions, challenge irrational thoughts, and teach clients to think rationally. According to Ellis (1979), the cognitive-persuasive aspects of RET are the most distinguishing characteristics of this approach to therapy:
RET holds that virtually all serious emotional problems directly stem from magical, empirically unvalidatable thinking; and that if disturbance creating ideas are vigorously disputed by logico-empirical thinking . . . they can almost invariably be eliminated or minimized and will ultimately cease to reoccur . . . . Cognitive therapy attempts to show clients . . . how to separate rational (nonabsolutistic) from irrational (absolutistic) beliefs; how to use the logico-empirical method of science in relation to themselves and their problems; and how to accept reality, even when it is pretty grim. It assumes that clients can think, can think about their thinking, and can even think about thinking about their thinking; and it consequently helps them to hone and sharpen their cognitive processes. (pp. 187, 203)

A dramatic demonstration of the contrast between the feeling/affective orientation of Client-centered Therapy and the thinking/cognitive orientation of RET was provided in the film series, *Three Approaches to Psychotherapy* (Shostrom, 1965), in which a single client ("Gloria") met individually with Carl Rogers, Frederick Perls, and Albert Ellis. Following her three counseling experiences, Gloria was interviewed and related the following impressions:

Gloria: I felt my more lovable, soft, caring self with
Dr. Rogers. And, uh, I even felt more free and open even about sex. And, uh, Dr. Ellis, I just, uh, I will say I felt more cold toward Dr. Ellis. I didn't have enough feeling. I was so busy trying to think with him that I didn't have enough time there. Shostrom: Would you say that you felt your feeling-self with Dr. Rogers, your fighting-self with Dr. Perls, Gloria: and my thinking-side with Dr. . . ., yes, exactly. That's perfect, 'cause that is what it was. My thinking-side with Dr. Ellis.

It should be noted that in the classification of therapies, as with individuals, there is no such thing as a pure psychological type. One may always expect to find a blend of the functions described by Jung (Witzig, 1978). In other words, all people and approaches to psychotherapy rely, at least to some degree, on both thinking and feeling. Nevertheless, one of the functions is almost always dominant (Myers, 1962), and in the present case, feeling appears to be the cornerstone of Client-centered Therapy, while thinking is at the core of Rational-Emotive Therapy.

Similarity and attraction. The hypothesis that thinkers would favor a cognitive approach to therapy, and that feelers would prefer therapy which focuses more on feelings and emotions was based on evidence from the body of social psychology literature suggesting that similarity breeds
attraction. A number of theories have been proposed to account for similarity-attraction phenomena, including Festinger's Social Comparison Theory, Balance Theory, and Byrne's "law of attraction."

The primary premise of Festinger's (1954) social comparison theory is that people are motivated to evaluate their opinions and abilities. According to this theory, persons who do not have an accurate appraisal of their abilities, or who are uncertain about the validity of their opinions are "at a serious disadvantage in attempting to behave adaptively" (Goethals & Darley, 1977, p. 260). In general, when objective, empirical information is available, it serves as the basis for evaluating one's abilities or opinions. However, when such evidence is not available, confirmation is sought by appealing to "social reality." In Festinger's (1950) words,

Where the dependence upon physical reality is low, the dependence upon social reality is correspondingly high. An opinion, a belief, an attitude is "correct," "valid," and "proper" to the extent that it is anchored in a group of people with similar beliefs, opinions, and attitudes. (p. 272)

In other words, the value of one's abilities and opinions is largely determined by the degree to which they are shared by similar others. The importance of relying on similar
others for social comparison purposes was explicated in Corollary IIIA of Festinger's (1954) theory of social comparison processes: "Given a range of possible persons for comparison, someone who is close to one's ability or opinion will be chosen for comparison" (p. 121). Similar others are preferred over dissimilar others for comparison purposes because they provide more trusted feedback regarding the level of one's abilities and the correctness of one's opinions. To the extent that others help a person reduce his or her self-evaluative drive they are valued, while those who introduce uncertainty are not (deCarufel & Insko, 1979). Thus, Social Comparison Theory predicts that persons who are similar to each other in important ways will tend to prefer association with one another.

In counseling relationships, many clients are uncertain about their abilities or the correctness of their opinions. In the process of self-evaluation, which is an integral part of most approaches to psychotherapy, it is reasonable to assume that most clients would prefer to work with someone who they expect will understand them. If similarity fosters attraction, it might be predicted that clients who make judgments on the basis of their feelings would, if given the chance, prefer to work with a counselor who attends to those feelings. At the same time, clients who are inclined to evaluate themselves and their problems in a logical, cognitive
manner would be expected to prefer to participate in counseling with a cognitive, analytically minded therapist.

Balance Theory, as developed by Heider (1958) and Newcomb (1961), has played an important role in many areas of social psychology (Worchel & Cooper, 1983). In its basic form, Heider's theoretical system is used to describe the interrelationship between two persons (p and o) and a third "object" (x).

The primary assumption of Balance Theory is that people prefer relationships that are balanced rather than unbalanced. The simplest way to determine whether a balanced state exists in a p-o-x relationship is to multiply the signs (either + [like] or - [dislike]) of the three dyadic relationships in the triad (p-x, o-x, and p-o). If the product is positive, the relationship is considered balanced. Conversely, if the product is negative, the relationship is assumed to be unbalanced.

Insko and Adewole (1979) also described two other conditions associated with the p-o-x triad that are usually considered pleasant. First, a positive relationship between p and o is more pleasant than a negative relationship. Second, a situation in which p and o have similar feelings about x is generally more pleasant than a case in which p and o have contrasting feelings about x. In other words, when p and o
agree about x, Balance Theory predicts that p and o will naturally be attracted to each other.

In terms of psychotherapeutic relationships, it might be predicted from Balance Theory that a positive relationship between a client and counselor is more likely to develop if, all other things being equal, they share thinking/feeling preferences. Conversely, incongruity between a client's expectations and his or her counselor's goals for therapy (e.g., exploring feelings vs. making rational decisions) may interfere with the development of a working relationship.

Another important theory of attraction was developed by Byrne and his colleagues. The fundamental postulate of this theory, known as the "law of attraction," states: "Attraction toward X is a positive linear function of the proportion of positive reinforcements received from X" (Byrne & Nelson, 1965, p. 662). Put simply, individuals are attracted to persons whom they receive reinforcements from. The more reinforcements received, the greater the attraction will be.

Byrne and Blaylock (1963) pointed out that associating with similar others provides reinforcements in the form of consensual validation. As explained by Byrne, Clore, and Worcher (1966, p. 223), "Attitude similarity and dissimilarity are assumed to constitute consensual validation and invalidation: such information acts as positive and negative reinforcement with respect to the need to be logical and
accurate in interpreting the stimulus world." In other words, association with others who are similar to one's self, "whether involving attitudes or values or abilities or emotional responses or tastes or adjustment responses or worries or need hierarchies or whatever, provides evidence that one is functioning in a logical and meaningful manner" (Byrne, Griffitt & Stefaniak, 1967, p. 83).

The implication of Byrne's law of attraction for the client-counselor relationship is that clients are most likely to receive consensual validation from, and thus be attracted to, counselors who are similar to themselves with regard to the importance they place on thoughts and feelings. For example, an emotionally sensitive client whose feelings are treated as though they are unimportant, or a cognitively oriented client who is repeatedly instructed to focus on his or her feelings, might both be expected to report some initial discomfort or dissatisfaction in counseling. On the other hand, similarity between a client and counselor in terms of cognitive/affective orientation may, at least in the early stages of the counseling relationship, foster the development of a therapeutic alliance.

Similarity and attraction in the counseling relationship. Although the impact of client and counselor similarity on the thinking/feeling dimension has not been extensively researched, there is evidence to suggest that
similarity on a number of other dimensions does influence the
degree to which clients are attracted to their counselors.
Carkhuff and Pierce (1967) conducted an analog study in which
subjects were assigned to counselors who were either similar
or dissimilar in terms of race and social class. The
dependent variable consisted of independent ratings of the
clients' depth of self-exploration. Results of this study
suggested that "in general, the patients most similar to the
race and social class of the counselor involved tended to
explore themselves most, while patients most dissimilar tended
to explore themselves least" (pp. 633-634).

In a review of two dozen studies conducted during the
late 1960s and 1970s investigating the influence of racial
factors on counseling relationships, Sattler (1977) concluded
that "other things being equal, many Black subjects prefer
Black therapists to White therapists" (p. 267). More
recently, Atkinson (1983) reviewed the research looking at
counselor preferences and counselor effectiveness when ethnic
similarity/dissimilarity was manipulated as the independent
variable. Atkinson also concluded that the bulk of the
research indicated that Black clients prefer working with
Black counselors. However, these findings were not replicated
for American Indians, Asian Americans, or Hispanics.
Carkhuff and Pierce (1967) also found that clients who were similar to their counselors in terms of socioeconomic status were initially more willing to engage in self-disclosure and self-exploration. Kerckhoff and Davis (1962) similarly concluded that social status similarity may be important in the initial attraction between clients and their counselors. Finally, in one of the most comprehensive reviews of client-counselor matching studies to date, Berzins (1977) concluded that "probably the most pervasive assumption regarding demographic variables and dyadic compatibility is that therapist-patient similarity in socioeconomic status is desirable" (p. 232).

Although there is little evidence to suggest that gender similarity between clients and counselors significantly influences therapy outcome (Berzins, 1977), it has been suggested that "with the advent of the women's movement, gay rights and other groups, it is increasingly likely that matching on these crucial dimensions may be important" (Ivey & Simek-Downing, 1980, p. 400). Evidence based primarily on clinical observations suggests that homosexual clients may feel more comfortable working with homosexual counselors. As stated by Beane (1983),

My experience is that most gay clients prefer working with gay therapists because either they have been treated by a nongay therapist who tried to cure them of their
homosexuality, or because they simply feel more comfortable and trusting with a gay therapist. (p. 226)

In addition to such factors as race, socioeconomic status, and sexual orientation, there is also evidence that similarity in terms of attitudes also contributes to the level of attraction clients feel toward their counselors. Good (1975) had subjects complete a ten item Survey of Attitudes Scale, and later presented each subject with the description of a counselor whose attitudes matched his or her own attitudes on either 10% or 90% of the issues. When subjects later completed a therapist rating scale, it was found that counselors with similar attitudes were considered to be more open-minded, capable of promoting feelings of ease, understanding, effective as psychotherapists, and socially attractive. A similar study was also conducted by Porche and Banikiotes (1982), who determined that attitude similarity had an even greater influence than racial similarity on Black adolescents' ratings of hypothetical counselors. Counselors with similar attitudes were rated by subjects as more trustworthy, expert, and socially attractive.

As with attitudes, similarity in terms of certain personality characteristics also appears to be related to client-counselor attraction. Mendelsohn and Geller (1963) administered the Myers-Briggs Type Indicator to clients and counselors, and found that similarity, as determined by the
absolute difference between their MBTI scale scores, correlated significantly with duration in counseling. Mendelsohn (1966) later replicated these findings, and further concluded that dissimilarity between client and counselor was highly predictive of an early termination of the counseling relationship.

Landfield (1971) used Kelly's Role Construct Repertory Test to assess the similarity of the participants in counseling dyads, and likewise determined that continuance in therapy was directly related to the degree of similarity between clients' and counselors' construct systems.

In summary, the results of a number of studies suggest that clients will, at least initially, be most attracted to, and feel most comfortable working with counselors whom they perceive as being similar to themselves in some important ways. As concluded by Luborsky, Chandler, Auerbach, Cohen, and Bachrach (1971),

The variety of forms of positive similarity include social class, interests, values, and compatibility of orientation to interpersonal relations. A feeling of similarity seems to provide a more significant relationship between therapist and patient and, therefore, a better outcome to treatment. (p. 153)
Summary of Predicted Relationships

The method most often used to establish the validity of a new scale involves correlating it with a "nomological network" of established measures of the same construct (Holsti et al., 1968). According to Wiggins (1980), instruments "that are developed in the absence of information regarding external correlates have no intrinsic guarantee of predictive success" (p. 385). With respect to content analysis, Weber (1983) stated that "external validity means that content variables are related to other phenomena in accordance with a theory or model" (p. 135).

Thus, the present study was designed to investigate the relationships between Thinking/Feeling Content Analysis scores and various other indices of thinking/feeling preferences. First, it was predicted that the results of the original Thinking/Feeling Content Analysis study conducted by Seegmiller and Epperson (1987) would be replicated, showing a significant correlation between content analysis scores and scores from the Thinking/Feeling Scale of the Myers-Briggs Type Indicator.

Second, it was predicted that there would be a significant relationship between subjects' verbal content analysis scores and their self-reported thinking and feeling behaviors as measured by the Singer-Loomis Inventory of Personality. Finally, it was predicted that individuals
identified as thinkers on the basis of their content analysis scores would express a preference for a cognitive, problem-solving orientation to counseling, whereas those identified as feelers would tend to prefer a counseling style that focused more on clients' feelings and emotions.
Method

Subjects

The subjects in this study were 79 undergraduate student volunteers enrolled in psychology courses at Iowa State University. The participants included 42 males and 37 females. Although extensive demographic information was not collected, subjects were asked on the Myers-Briggs Type Indicator about their favorite academic subjects. The following wide range of preferences were expressed: science (19%), English (19%), practical skills (15%), math (14%), art (5%), history (4%), and music (4%). Twenty percent of the subjects did not specify a preferred field of academic interest.

Although a total of 79 subjects participated in the initial phase of the study by completing the Myers-Briggs Type Indicator and the Singer-Loomis Inventory of Personality, subsequent statistical analyses were based on fewer subjects because of missing data. Initial verbal samples were obtained from 76 subjects, whereas retest verbal samples were obtained from 69 subjects. Complete data sets were collected from 65 subjects.

Instruments

The Thinking/Feeling Content Analysis Scale

The Thinking/Feeling Content Analysis Scale provides a method for identifying individual preferences for thinking
versus feeling information processing styles by analyzing the language people use in natural conversation. Of central importance to the present content analysis scale is a dictionary of 224 verbs which describe either cognitive (thinking) or affective (feeling) experiences. The original Thinking/Feeling dictionary consisted of 360 verbs, nouns and adjectives. The selection of the dictionary items and their classification as either thinking or feeling words for the original dictionary (Seegmiller & Epperson, 1987) was described earlier in this paper. Refinements to this dictionary for the present study are summarized below.

Previous research found that the use of verbs most effectively distinguished between thinking and feeling personality types (Seegmiller, 1984). The original dictionary contained 170 thinking and feeling verbs. An additional 99 verbs were later identified and classified as either thinking or feeling words in the same manner used to construct the original content analysis dictionary. Finally, a total of 224 verbs, including an equal number of the most commonly used cognitive and affective verbs, were selected for inclusion in the revised content analysis dictionary. This dictionary of thinking and feeling verbs is presented in Appendix A.

The content analysis dictionary was used to evaluate verbal samples collected from experimental subjects. Verbal samples were obtained by meeting individually with subjects
and asking them to speak for five minutes on a topic of their own choosing. The instructions used to elicit verbal samples were intended to be unstructured and relatively ambiguous in order to simulate a projective testing situation. In theory, such instructions minimize faking or covering up, and encourage subjects to discuss issues and feelings which are important at the moment (Gottschalk et al., 1969; Gottschalk, 1974a). The instructions that were used to obtain verbal samples are presented in Appendix B.

While subjects spoke, the experimenter generally remained silent or only responded with minimal encouragers. The verbal samples were tape recorded, and subsequently transcribed and scored. Scoring was accomplished by identifying the verbs in each transcript which were contained in the Thinking/Feeling dictionary. This "word-count" method of scoring verbal samples was described by Weber (1983, p. 127):

Operationally, word-count content analysis entails the mapping of many words in documents or other texts into much fewer content categories. Scores representing the relative frequencies of these categories in each document are usually the basic variables in subsequent analyses. The coding rules for mapping words are frequently contained in a thesaurus-like dictionary.

The word-count method of content analysis involves "manifest" as opposed to "latent" content coding (Woodrum,
1984). In other words, scoring of verbal samples involves the identification of key words or phrases, and does not involve subjective interpretations of the meaning of texts. According to Holsti et al. (1968, p. 599), "The case for content analysis based on exact counts of frequency is a powerful one. Foremost among the arguments is the degree of precision with which one's conclusions may be stated." Although this scoring method is generally simple, fast and reliable, it has been argued that it may not be the best measurement strategy for drawing inferences (Woodrum, 1984).

Thinking/Feeling Content Analysis scores can be determined by counting the cognitive and affective verbs that are contained in a verbal transcript. In a previous study (Seegmiller & Epperson, 1987), thinking words were assigned a weight of -1, whereas feeling words were assigned a weight of +1. Content analysis scores were then derived by summing all items weights, dividing by the total number of words in the transcript to control for talkativeness, and finally, multiplying by a constant (1000) to avoid working with small decimal values.

The manner in which verbal samples were scored in the present study was modified only slightly. Rather than computing only a single Thinking/Feeling score, a weight of +1 was assigned to all cognitive and affective verbs in each transcript. Independent Thinking and Feeling scores were
computed as the sum of words in the appropriate class divided by the total number of words spoken and multiplied by 1000. Thinking/Feeling "Preference" scores were then determined by subtracting each subject's Thinking score from his or her Feeling score. Positive Preference scores were obtained by subjects who used feeling verbs with greater frequency than they used thinking verbs. Such persons were identified as "feelers." Conversely, "thinkers" were identified by negative content analysis Preference scores, which were obtained when subjects used more thinking than feeling verbs. The scoring of verbal samples was modified in the present study to yield independent Thinking and Feeling scores, as well as an overall Preference score, in order to facilitate the comparison of subjects' content analysis scores with their scores from the Singer-Loomis Inventory of Personality, which also independently evaluates the thinking and feeling functions. An example of a scored verbal transcript is contained in Appendix C.

The Myers-Briggs Type Indicator

In a previous study (Seegmiller & Epperson, 1987) the Thinking/Feeling Scale of the Myers-Briggs Type Indicator (Form G) was used to evaluate the validity of the Thinking/Feeling Content Analysis Scale. A significant correlation ($\chi^2(42) = .55, p < .001$) between continuous content analysis and MBTI scores was obtained, suggesting that individual
thinking/feeling preferences may be determined through the analysis of natural language samples.

The MBTI was again selected for use in the present study to see whether the earlier significant results could be replicated. MBTI scores were also compared with content analysis scores to determine which measure correlated most highly with thinking/feeling preferences as assessed by the Singer-Loomis Inventory of Personality (SLIP). Finally, MBTI scores were also used in conjunction with SLIP and content analysis scores to investigate the relationship between counseling style preferences and thinking/feeling preferences.

The results of recent studies suggest that the MBTI is an adequately reliable and valid instrument for assessing personality types (Carlson, 1980; Cohen, Cohen & Cross, 1981; Kerin & Slocum, 1981; Tzeng, 1984). Carlyn (1977) and Carlson (1985) have provided the most comprehensive reviews to date of published studies examining the reliability and validity of the MBTI in clinical, counseling, and research settings. The Myers-Briggs Type Indicator Manual (Myers, 1962) reported split-half reliability coefficients commonly exceeding .80. Subsequent studies have reported comparable reliabilities for the MBTI scales, ranging from .66 to .92. Similar correlation coefficients have been reported in test-retest reliability studies, with values generally ranging between .70 and .90. However, test-retest reliability coefficients as low as .48
have been reported, with the greatest instability generally associated with the Thinking/Feeling Scale.

Most of the studies investigating the construct validity of the MBTI have focused on the Extraversion/Introversion Scale. By comparison, relatively few attempts have been made to correlate the three other scales of the MBTI with other personality tests. Nevertheless, significant relationships have been found between other MBTI scale scores and Kelly's Role Construct Repertory Test (Carlson, 1980), and the Bem Sex Role Inventory (Padgett, Cook, Nunly, & Carskadon, 1982).

The criterion-related validity of the MBTI has also been studied by investigating the relationship between scale scores and a variety of behaviors in treatment and research settings. Carlson (1985) summarized research that demonstrated significant relationships between psychological types as determined by the MBTI, and success in interpersonal relationships, measures of memory and social perception, social presentation, conformity, and spouses' descriptions of their partners. As concluded by Carlyn (1977, p. 471), "The Indicator appears to be a reasonably valid instrument which is potentially useful for a variety of purposes." This is not to suggest that the MBTI is without critics (Comrey, 1983; Harrison, 1976; Loomis, 1982; Stricker & Ross, 1964a, 1964b). Nevertheless, at present it is the most widely validated and
frequently used instrument providing information about individuals' thinking/feeling preferences.

In order to work with MBTI scale scores as continuous scores, Myers (1962) recommended subtracting Thinking scores from 100, and adding Feeling scores to 100. For the present study, Thinking scores were subtracted from 0, and Feeling scores were retained as calculated (as positive values). This transformation was consistent with the computation of content analysis Preference scores, in which thinkers were identified by negative scores, and feelers were identified by positive scores.

The Singer-Loomis Inventory of Personality

The Singer-Loomis Inventory of Personality is a recently developed instrument designed to assess individual cognitive styles. Like the MBTI, the cognitive styles evaluated by the SLIP are based on Jung's theory of psychological types. The SLIP contains a total of 16 scales: 8 cognitive modes, corresponding to the 8 major psychological types defined by Jung; 4 function scales (Thinking, Feeling, Sensation, and Intuition); and 4 additional typological scales (Introversion, Extraversion, Judging, and Perceiving). The Thinking and Feeling Scales of the SLIP were of primary interest in the present study.

The most recent edition of the SLIP was published as an experimental edition. In fact, statistical data contained in
the Singer-Loomis Inventory of Personality Manual (Singer & Loomis, 1984) is based on research using an earlier version of the inventory. Nevertheless, previous research, based on the responses of nearly 1200 subjects, indicates that the reliability and validity of the SLIP have been adequately established to warrant the use of this inventory in the present research. In terms of reliability, alpha coefficients of .73 for the Thinking Scale and .80 for the Feeling Scale have been reported.

The face validity of the SLIP was investigated by having Jungian analysts critique the items included in the inventory. Initial factor analytic studies involving the SLIP (Loomis, 1982; Singer & Loomis, 1984) yielded factors consistent with Jung's personality types, thus supporting the construct validity of the inventory. The criterion-related validity of the SLIP has also been evaluated by investigating the relationship between artists' cognitive and artistic styles (Loomis & Saltz, 1984). In general, previous studies have supported the validity of the inventory. However, the need for continuing research is recognized. Additional information regarding both the development and psychometric properties of the SLIP is contained in the Singer-Loomis Inventory of Personality Manual (Singer & Loomis, 1984).

The SLIP was used in the present study to determine whether thinking/feeling preferences, as determined by content
analysis scores, correlate with thinking/feeling preferences as they are reflected in subjects' self-reported behaviors. A basic assumption of the SLIP is that "a relationship exists between the manner in which individuals perceive and understand their environments and the way they behave" (Singer & Loomis, 1984, p. 1). The assumed relationship between personality and behavior is reflected in the format of the SLIP, which measures cognitive styles by asking individuals about their behavior patterns, or usual ways of responding in various situations. The inventory consists of fifteen theoretical situations. Each situation is followed by eight possible responses, with each response theoretically corresponding to one of eight basic personality types described by Jung. For example, one item from the SLIP reads:

I am involved in an argument with an older member of my family over something I want to do, but that person disapproves. I would

1. consider the other person's argument and weigh the evidence before I act. (introverted thinking)

2. do what seems best to me despite what the other person says. (introverted feeling)

3. present reasons why my position is justified. (extroverted thinking)

4. modify my position to keep peace in the family. (extroverted feeling)

5. gather together all the facts and then point them out. (introverted sensation)
6. explain in detail what the results will be if I do what I have proposed. (extroverted sensation)

7. worry about what might happen if I don't get my way, and try to think up some alternatives. (introverted intuition)

8. point out, using many examples, that my friends and other people are doing this. (extroverted intuition)

The person completing the inventory is asked to indicate on a 5-point scale (from 1 = "I would never do this," to 5 = "I always do this") how likely he or she would be to engage in each of the response behaviors. Individuals' cognitive styles, including their thinking/feeling preferences, are then determined on the basis of their self-reported behaviors in the fifteen situations presented in the inventory.

A major difference between the SLIP and earlier inventories designed to assess Jungian typologies (e.g., the Jungian Type Survey and the MBTI) is that the SLIP does not assume that the thinking and feeling functions are necessarily bipolar opposites. As pointed out by Singer and Loomis (1984, p. 8), "Jung based his theory of psychological types on the assumption that thinking and feeling were bipolar opposites . . . . He believed that the more highly developed one of the function pairs became, the more underdeveloped would be the opposite."

On the basis of this assumption, previous inventories placed thinking and feeling items opposite each other in a forced choice format, and thinking and feeling tendencies were
assessed ipsatively. Consequently, a high thinking score on an instrument such as the MBTI necessarily precluded an individual from also obtaining a high feeling score, and vice versa.

Because of the complications associated with the interpretation of forced-choice responses, and because some recent research (Loomis, 1982; Loomis & Singer, 1980; Metzner, Burney, & Mahlberg, 1981) has challenged Jung's assumption of bipolarity, the SLIP was designed so that the various psychological functions are assessed independently. Rather than yielding a single Thinking/Feeling score as the MBTI does, the SLIP provides separate Thinking and Feeling Scale scores. Thus, it is theoretically possible for a person's thinking and feeling functions to both be either highly developed or underdeveloped.

In addition to the Thinking and Feeling Scale scores, a Thinking/Feeling "Preference" score, based on SLIP scale scores, was also developed for use in the present study. Singer and Loomis (1984) suggested that the strength of thinking/feeling preferences may be evaluated by considering the difference between the Feeling and Thinking Scale scores. In general, a difference of 9 or more points is considered significant. Thus, a continuum based on the value of \((F-T)\) may be used to evaluate thinking/feeling preferences. If \(F-T = 0\), there is clearly no preference. Difference scores \(\leq -9\)
reflect a marked thinking preference, whereas difference scores ±9 indicate a significant feeling preference.

Prior to interpreting T and F scores, Singer and Loomis (1984) recommended controlling for response bias (i.e., acquiescence) by dividing scale scores by total raw scores. Though not specifically recommended by the developers of the SLIP, it may be argued that the same control should be used when interpreting (F-T) scores, as a 9 point (F-T) difference is of greater significance for a person with a total raw score of 250 than for a person with a total raw score of 450. Thus, the SLIP Preference scores used in the present study were derived by subtracting subjects' Thinking Scale scores from their Feeling Scale scores, dividing the difference by the total raw score, and then multiplying the result by a constant (1000) to avoid working with small decimal values:

\[
\text{SLIP Preference} = \frac{(F-T)}{\text{SLIP Total}} \times 1000
\]

It might be noted that the manner in which SLIP Preference scores were calculated was essentially the same as that used to derive content analysis Thinking/Feeling Preference scores.

**Counseling Style Videotapes**

One of the questions investigated in this study was whether thinking/feeling preferences, as determined through linguistic content analysis, were associated with preferences
for different styles of counseling or psychotherapy. It was hypothesized that thinkers would tend to prefer a rational, cognitive approach to therapy, while feelers would be more attracted to counseling that focuses on feelings and emotions.

To investigate this question, two videotapes depicting different counseling styles were developed. Videotapes were used rather than live counseling experiences for a number of reasons. First, the use of videotapes allowed for greater control over extraneous variables, i.e., all subjects were assured of being exposed to the same stimuli. Such equity could not be maintained if subjects met individually with counselors. In addition to the problem of experimental control, it was also concluded that providing each of nearly 70 subjects with two private counseling experiences would be both time and labor prohibitive, and could raise ethical dilemmas.

In producing the counseling style videotapes, an attempt was made to control for extraneous variables by using the same counselor, the same client, and the same presenting problem in both role plays. The counselor's role was portrayed by an experienced, licensed counseling psychologist, while the role of the client was acted out by an advanced graduate student in counseling psychology.
In both role plays, an initial therapy session was portrayed in which the client sought help in dealing with a marital problem. The variable that was manipulated was the counseling style adopted by the therapist in working with the client. In the affective videotape, the therapist used primarily Rogerian techniques, and focused on the client's feelings and emotions. In the cognitive videotape, the therapist also demonstrated empathy for the client, but used a cognitive, problem-solving counseling style which encouraged a rational evaluation of the client's options. Transcripts of the two counseling role plays are presented in Appendix D. With other salient variable held constant across the two videotapes, it was hoped that the therapist's counseling style would be the major factor influencing subjects' preferences for one videotape or the other.

Prior to using the counseling style videotapes in the final research project, a pilot study was conducted to determine if the videotapes were perceived by subjects as intended, i.e., as differing significantly in terms of the emphasis placed on thoughts versus feelings, and as not differing significantly on other important dimensions. Films 1 and 3 of the film series Three Approaches to Psychotherapy (Shostrom, 1965), which were also considered for use in the final research project, were likewise evaluated. Film 1 shows Dr. Carl Rogers demonstrating affectively oriented, Client-
centered Therapy. Film 3, in contrast, shows Dr. Albert Ellis demonstrating cognitively oriented Rational-Emotive Therapy. A total of 47 subjects evaluated the counseling style videotapes, while 43 different subjects evaluated the *Three Approaches to Psychotherapy* films.

Approximately half of the subjects in each group viewed the cognitive counseling style first, whereas the order of presentation was reversed for the remaining subjects, who observed the affective counseling style first. A series of questions with 9-point Likert scales were used to evaluate each film or videotape immediately after subjects viewed it.

The counselors were rated in terms of the emphasis they placed on feelings and emotions, the emphasis they placed on cognitive thought processes, and the extent to which they were perceived as being professional, supportive, friendly, accepting, sincere, realistic, confusing, threatening, insightful, active, and concerned. Subjects also indicated the degree to which they would like to work with each counselor if they had a personal problem. The questionnaire used to evaluate subjects' perceptions of the counseling style videotapes and films is presented in Appendix E.

Subjects' perceptions of the counseling style videotapes and the *Three Approaches to Psychotherapy* films were evaluated independently. A series of split-plot factorial analyses were used to compare subjects' perceptions of the cognitive and
affective counseling styles. The two counseling styles, observed by all subjects, served as the within-subjects variable, whereas the order of presentation—cognitive style first or affective style first—served as the between subjects variable.

Analysis of subjects' ratings suggested that the counseling style videotapes performed much as had been hoped for. The cognitive counselor was rated as having placed greater emphasis on rational thought processes, while the affective counselor was seen as having placed more emphasis on feelings and emotions. At the same time, the counselors did not differ significantly in terms of the degree to which subjects considered them to be professional, supportive, friendly, accepting, sincere, confusing, threatening, insightful, concerned, or desirable as a counselor. The cognitive counselor was rated as being more realistic and active. One unexpected finding was a strong recency effect that was observed. On 12 of 14 dimensions, subjects rated the second videotape they watched more favorably. A summary of subjects' evaluations of the counseling style videotapes is presented in Appendix F.

For the purposes of the present study, the Three Approaches to Psychotherapy films did not perform as well as the counseling style videotapes. As anticipated, subjects felt that Albert Ellis placed greater emphasis on cognitive
thought processes than Carl Rogers. However, the two therapists were not seen as being different in terms of the emphasis they placed on the client's feelings and emotions.

Ellis and Rogers were also perceived as differing significantly on a number of other important dimensions. Ellis was considered to be more professional, active, and threatening, while Rogers was rated as being more friendly and accepting. The strong order effect observed with the counseling style videotapes was not found in connection with subjects' ratings of the *Three Approaches to Psychotherapy* films. A recency effect was noted on only one dimension, wherein subjects rated the second counselor they observed as less confusing. A summary of subjects' evaluations of Dr. Rogers and Dr. Ellis is presented in Appendix G.

Because of the results obtained in this pilot study, it was decided to use the counseling style videotapes to investigate the relationship between subjects' counseling style preferences and their thinking/feeling preferences. **Videotape Evaluation Forms**

Two different questionnaires were used to evaluate subjects' counseling style preferences. The first questionnaire was similar to the one used in the pilot study to evaluate the counseling videotapes and the *Three Approaches to Psychotherapy* films. The questionnaire consisted of nine 9-point Likert scale questions. The first items asked subjects
to rate the amount of emphasis that the counselor placed on feelings and emotions, whereas the second item asked about the emphasis the counselor placed on cognitive thought processes. These items were included to determine whether subjects recognized the thinking/feeling differences between the two counseling styles.

Subjects' preferences were then assessed by having them indicate how professional, sincere, supportive, insightful and helpful they considered the counselor to be. Finally, subjects were asked to indicate whether they would like to work with the counselor if they had a personal problem, and the extent to which they believed that the counselor would be able to help them. A copy of this questionnaire is presented in Appendix H.

Each subject completed one questionnaire for each counseling style videotape. Each videotape was evaluated in turn, i.e., immediately after the counseling role play was viewed. In other words, subjects watched one videotape and evaluated it, and then watched the second videotape and evaluated it.

Subjects' counseling style preferences were assessed by calculating the difference between their ratings of the affective and cognitive counseling styles. To calculate difference scores, subjects' ratings of the cognitive videotape were subtracted from their ratings of the affective
videotape. Thus, difference scores could range from -8 (maximum preference for the cognitive counseling style) to +8 (maximum preference for the affective counseling style). A difference score of 0 occurred when a subject rated the two counseling styles equally.

The second evaluation form used in this study was a simple 5 item questionnaire. Each item consisted of an 8-point Likert scale on which "Style A" and "Style B," respectively corresponding to the cognitive and affective counseling styles portrayed on the two videotapes, were placed at opposite ends of a continuous scale. Scales with an even number of points were selected so that subjects would be required to indicate some preference, even if slight, for one of the two counseling styles. By placing a mark in one of the spaces along the continuum between Style A and Style B subjects indicated which counseling style they most preferred, as well as the strength of their preference. After the first item, on which subjects were asked to specify their overall preference, they were also asked to explain the reasons for their preference.

Other items on this questionnaire asked subjects which counseling style they considered to be most professional, and most effective in helping the client deal with her problems. Finally, individual preferences were also evaluated by asking subjects to indicate which counseling style they would most
enjoy working with, and which one they believed would be most able to help them if they had a personal problem. The questionnaire used to directly compare the two counseling styles is presented in Appendix I.

Subjects completed this "direct comparison" questionnaire after viewing both counseling style videotapes and completing the independent counseling style evaluation forms. This form of evaluation was used to see whether the strong recency effect observed in the pilot study, when the videotapes were evaluated in turn, would also be found if subjects watched both counseling styles and then compared them directly to one another.

It should be noted that all of the items on both questionnaires were analyzed independently. The purpose of the questionnaires was purely exploratory in the sense that they were comprised of a diverse set of questions intended to investigate the relationship between thinking/feeling preferences and counseling style preferences. The 9 items on the first questionnaire and the 5 items of the direct comparison questionnaire were not intended to form internally consistent scales.

**Procedure**

Four group testing sessions were scheduled during which subjects viewed and evaluated the counseling style videotapes, and completed the Myers-Briggs Type Indicator and the Singer-
Loomis Inventory of Personality. The order in which the videotapes were presented was controlled so that approximately half of the subjects viewed the cognitive videotape first, while the remaining subjects viewed the affective videotape first. The order in which subjects completed the two personality inventories was similarly controlled.

In each of the group testing sessions, subjects viewed the counseling videotapes after being instructed to pay particular attention to the counseling style and the techniques employed by the counselor in each film. After viewing the first videotape, subjects completed the 9 question evaluation form. Subjects then viewed and evaluated the second videotape. After rating each videotape independently, subjects then completed the 5-item questionnaire which asked them to directly compare the two counseling styles.

Later in the same group testing sessions, subjects completed the MBTI and the SLIP. Following the completion of both inventories, subjects were asked to sign up for a private 15 minute meeting with the experimenter, to be arranged as soon as possible after the group testing session. These meetings were used to obtain the first 5-minute verbal samples from which content analysis scores were derived. As recommended by Gottschalk et al. (1969), all verbal samples were collected by the same experimenter to reduce the likelihood of introducing confounding interviewer effects. At
the end of the first interview, each subject was asked to schedule a return appointment to meet with the experimenter five to six weeks later. Subjects were informed that a second verbal sample would be obtained at that time.

After completion of all data collection, the following set of scores were available for 65 subjects: a score on the Thinking/Feeling Scale of the MBTI; Thinking, Feeling, and Preference scores from the SLIP; evaluations of the two counseling style videotapes; and two sets of content analysis scores, including Thinking, Feeling, and Preference scores. Incomplete sets of data were obtained from an additional 14 subjects.
Results

Reliability

Interrater Reliability

To assess the interrater reliability of the method of content analysis under investigation in the present study, two research assistants were each provided with scoring instructions and copies of 20 different transcripts randomly selected from the first set of verbal samples. Pearson product-moment correlations between the research assistants' scores and the scores determined by the primary researcher were then computed. The correlation between content analysis scores computed by the first research assistant and the primary researcher was statistically significant: \( r(19) = .73, p < .001 \). A similar relationship was also found between the scores computed by the second research assistant and the primary researcher: \( r(19) = .74, p < .001 \).

Test-retest Reliability

To investigate the stability of Thinking/Feeling Content Analysis scores over time, five-minute verbal samples were collected from 66 subjects on two separate occasions, approximately five weeks apart. The primary investigator transcribed and analyzed all verbal samples, and a Pearson product-moment correlation was calculated to determine the relationship between the two sets of content analysis scores.
The resulting correlation coefficient was moderately low, yet statistically significant: $\chi(66) = .23, \ p < .05$.

Validity

Content Analysis Scores and the Myers-Briggs Type Indicator

After converting MBTI scores into continuous scores, Pearson product-moment correlations between subjects' MBTI Thinking/Feeling and content analysis scores were computed. The relationship between MBTI scores and the scores from the first set of verbal samples was statistically significant: $\chi(75) = .27, \ p < .05$.

For investigative purposes, MBTI scores were also correlated with content analysis scores derived from the second set of verbal samples, which were collected approximately six weeks after subjects completed the MBTI. A statistically significant relationship was again obtained: $\chi(69) = .23, \ p < .05$. A third content analysis score was also calculated by combining the verbal samples of subjects from whom two speech samples had been obtained. This, in essence, provided content analysis scores based on 10-minute verbal samples, which theoretically may be more reliable than scores based on 5-minute samples due to the fact that essentially twice as much data were available for analysis for each subject. The correlation between 10-minute verbal sample content analysis scores and MBTI Thinking/Feeling scores was also statistically significant: $\chi(66) = .34, \ p < .01$. 
The relationship between the use of cognitive and affective verbs and thinking/feeling preferences was further evaluated by independently correlating content analysis Thinking scores and Feeling scores with subjects' MBTI scores. Utilizing content analysis scores derived from the first set of verbal samples, it was determined that Feeling scores correlated significantly with MBTI scores ($r(75) = .25, p < .05$), while Thinking scores did not ($r(75) = .08, p = .26$).

Opposite relationships were found between subjects' MBTI Thinking/Feeling scores and their content analysis scores based on the second set of verbal samples. Thinking content analysis scores correlated significantly with MBTI scores ($r(69) = .23, p < .05$), whereas Feeling scores did not ($r(69) = .07, p = .28$).

Finally, correlations between MBTI Thinking/Feeling scores and combined verbal content analysis scores were similar to the correlations based on the first set of verbal samples in that Feeling scores correlated significantly with MBTI scores ($r(66) = .25, p < .05$), whereas Thinking scores did not ($r(66) = .14, p = .12$).
Content Analysis Scores and the Singer-Loomis Inventory of Personality

The relationship between content analysis scores and subjects' thinking/feeling preferences as assessed by the Singer-Loomis Inventory of Personality was first investigated by calculating Pearson product-moment correlations between content analysis scores and SLIP Preference scores. The correlation between SLIP Preference scores and content analysis scores based on the first set of verbal samples was nonsignificant: \( r(76) = .11, p = .16 \). The correlation between SLIP Preference scores and content analysis scores derived from the second set of verbal samples was also nonsignificant: \( r(69) = .06, p = .31 \). Finally, content analysis scores based on subjects' combined 10-minute verbal samples yielded a slightly higher, yet still nonsignificant correlation with SLIP Preference scores: \( r(66) = .15, p = .11 \).

These initial results suggested that there was not a meaningful relationship between subjects' use of thinking and feeling verbs and their tendency to engage in behaviors that involve thinking or feeling. However, further analyses revealed significant relationships between the use of certain verbs and thinking/feeling tendencies as evaluated by the SLIP. In addition to overall Thinking/Feeling Preference scores, separate Thinking and Feeling scale scores were obtained from the SLIP as well as through content analysis.
Table 1 summarizes the correlations between SLIP and content analysis Feeling, Thinking, and overall Preference scores.

As shown in Table 1, both Feeling and overall Preference scores from the SLIP were significantly correlated with content analysis Feeling scores. These results suggest that the frequency with which people use feeling verbs may be related to the probability that they will behave in certain ways on the basis of their feelings or emotions. A comparable relationship between the use of thinking verbs and cognitively directed behaviors was not found.

In addition to comparing content analysis scores with SLIP and MBTI scores, the relationship between the SLIP and the MBTI was investigated. The resulting Pearson product-moment correlation between SLIP Preference scores and MBTI scores was statistically significant: $r(78) = .23$, $p < .05$.

**Content Analysis Scores and Counseling Style Preferences**

Prior to comparing content analysis scores with counseling style preferences, subjects' evaluations of the two counseling style videotapes were analyzed to investigate the ways in which the counseling styles were perceived as being similar or dissimilar. In producing the videotapes, it was hoped that subjects would view the two counseling styles as differing in terms of the degree to which the counselor attended to the client's thoughts or feelings. At the same time, it was hoped that the cognitively and affectively
Table 1

Correlations between content analysis and Singer-Loomis Inventory of Personality Thinking, Feeling, and Preference Scale scores

<table>
<thead>
<tr>
<th>Content Analysis Scores</th>
<th>Thinking</th>
<th>Feeling</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>0.03</td>
<td>-0.09</td>
<td>-0.04</td>
</tr>
<tr>
<td>Feeling</td>
<td>0.02</td>
<td>0.27**</td>
<td>0.22*</td>
</tr>
<tr>
<td>Preference</td>
<td>0.04</td>
<td>0.11</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Note. n = 76 for all correlations.

* p < .05.  ** p < .01.
oriented counselors would not be perceived, overall, as being significantly different on the dimensions of professionalism, sincerity, support, degree of insight, helpfulness (to the client), and perceived ability to help the subject.

A split-plot factorial design was used to evaluate subjects' perceptions of the two counseling style videotapes. Subjects were randomly assigned to one of two treatment groups of approximately equal size (n₁ = 40; n₂ = 39). "Style" served as the within subjects variable, in that all subjects were exposed to both styles of counseling. The two groups differed in terms of the order in which the videotapes were presented, i.e., one group viewed the cognitive-style videotape first, whereas the other group viewed the affective-style videotape first. Thus, "Sequence" served as the between-subjects variable. After all subjects viewed and evaluated both films, a series of ANOVAs were used to evaluate subjects videotape ratings. Results of subjects' various ratings of the videotapes are summarized in Table 2.

As shown in Table 2, the two counselors were in fact viewed as being significantly different with regard to the relative emphasis they placed on the client's thoughts and feelings. At the same time, the counselors were not judged to be significantly different in terms of how professional, sincere, insightful, or supportive they were. The videotapes were also rated similarly with regard to how much subjects
Table 2

Subjects' evaluations of the cognitive and affective counseling style videotapes

<table>
<thead>
<tr>
<th></th>
<th>Mean rating-</th>
<th>Mean rating-</th>
<th>Treatment effect</th>
<th>Interaction effect</th>
<th>( \bar{F} )</th>
<th>( \bar{F} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cognitive</td>
<td>affective</td>
<td>(&quot;Style&quot;)</td>
<td>(&quot;Style x &quot;Sequence&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>videotape</td>
<td>videotape</td>
<td></td>
<td></td>
<td>( \bar{F} )</td>
<td>( \bar{F} )</td>
</tr>
<tr>
<td>Emphasis on feelings</td>
<td>5.38</td>
<td>6.67</td>
<td>15.76***</td>
<td>14.52***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on thoughts</td>
<td>6.87</td>
<td>5.33</td>
<td>28.41***</td>
<td>15.03***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>6.43</td>
<td>6.18</td>
<td>0.93</td>
<td>11.14**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sincere</td>
<td>6.20</td>
<td>6.44</td>
<td>0.62</td>
<td>14.64***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive</td>
<td>6.00</td>
<td>6.00</td>
<td>0.00</td>
<td>26.28***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insightful</td>
<td>6.43</td>
<td>6.27</td>
<td>0.37</td>
<td>8.70**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helpful (to client)</td>
<td>6.11</td>
<td>5.15</td>
<td>9.81**</td>
<td>46.95***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like to work with</td>
<td>5.07</td>
<td>4.38</td>
<td>3.87</td>
<td>51.27***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Able to help (subject)</td>
<td>5.39</td>
<td>4.48</td>
<td>6.64*</td>
<td>39.39***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( a \) Degrees of freedom = 1,77 in all cases.

* \( p < .05 \)  ** \( p < .01 \)  *** \( p < .001 \).
said that they would like to work with each counselor if they had a personal problem.

In addition to the emphasis placed on the client's thoughts and feelings, another dimension on which the counselors were rated differently was in terms of their helpfulness. The cognitive counselor was seen as being more helpful to his client, and as being more capable of helping the experimental subjects if they were to go to a counselor with personal problems. These results may be due to the fact that the counselor in the cognitive videotape explored potential solutions to his client's problems, whereas the counselor in the affective videotape focused more on his client's immediate feelings, and did not actively seek for solutions. The greater emphasis which the cognitive counselor placed on problem solving may account for why he was rated as being more helpful than the affective counselor.

Another significant finding to come out of the split-plot factorial analysis was the powerful interaction effect (Style x Sequence) which influenced subjects' ratings. On every dimension, subjects evaluated the second counseling style they observed more favorably. In other words, those subjects who were shown the cognitive videotape last tended to prefer the cognitive counseling style, while the reverse was true for those who were shown the affective videotape last. The mean ratings of the two counseling styles, by subjects in the two
reversed sequence experimental groups are presented in Table 3. A similar pattern emerged on the analysis of comparative ratings of the videotapes, as documented in Table 4.

Although subjects were randomly assigned to the two film order groups, the results showing that the subjects in the two groups tended to prefer different counseling styles raised some question as to whether by chance there were more thinkers in the group preferring the cognitive film, and more feelers in the group favoring the affective film. This hypothesis was tested by conducting t-tests to determine whether subjects in the two groups differed in terms of their thinking/feeling preferences as measured by their MBTI, SLIP, and content analysis scores. As shown in Table 5, no significant differences between the subjects in the two groups were discovered.

Because previous research suggests that males and females tend to differ with regard to their thinking/feeling preferences, with males generally preferring the thinking function, and females more often preferring the feeling function, an analysis was also conducted to determine whether the two film sequence groups differed in terms of their male:female composition. The group viewing the affective videotape last was composed of 55% males and 45% females. The group viewing the cognitive videotape last included 51% males and 49% females. The difference between the proportions of
Table 3

Mean Ratings of the Cognitive and Affective Counseling Style Videotapes, Reported Separately by Order of Viewing

<table>
<thead>
<tr>
<th>Dimension of Evaluation</th>
<th>Order of Viewing</th>
<th>Cognitive videotape</th>
<th>Affective videotape</th>
<th>Cognitive videotape</th>
<th>Affective videotape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group viewing affective videotape last</td>
<td>Group viewing cognitive videotape last</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on feelings</td>
<td>4.58</td>
<td>7.08</td>
<td>6.21</td>
<td>6.26</td>
<td></td>
</tr>
<tr>
<td>Emphasis on thoughts</td>
<td>6.05</td>
<td>5.63</td>
<td>7.72</td>
<td>5.03</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>5.83</td>
<td>6.48</td>
<td>7.05</td>
<td>5.87</td>
<td></td>
</tr>
<tr>
<td>Sincere</td>
<td>5.48</td>
<td>6.80</td>
<td>6.94</td>
<td>6.08</td>
<td></td>
</tr>
<tr>
<td>Supportive</td>
<td>5.03</td>
<td>6.60</td>
<td>7.00</td>
<td>5.38</td>
<td></td>
</tr>
<tr>
<td>Insightful</td>
<td>5.80</td>
<td>6.48</td>
<td>7.08</td>
<td>6.05</td>
<td></td>
</tr>
<tr>
<td>Helpful (to client)</td>
<td>5.00</td>
<td>6.18</td>
<td>7.26</td>
<td>4.10</td>
<td></td>
</tr>
<tr>
<td>Like to work with</td>
<td>3.33</td>
<td>5.25</td>
<td>6.92</td>
<td>3.69</td>
<td></td>
</tr>
<tr>
<td>Able to help (subject)</td>
<td>3.90</td>
<td>5.25</td>
<td>6.92</td>
<td>3.69</td>
<td></td>
</tr>
</tbody>
</table>

Note. Mean scores were based on 9-point Likert scales, with 1 = low, 9 = high.
Table 4

**Direct Comparisons of the Cognitive and Affective Counseling Styles Videotapes, Reported Separately by Order of Viewing**

<table>
<thead>
<tr>
<th>Dimensions of Evaluation</th>
<th>Group viewing affective videotape last</th>
<th>Group viewing cognitive videotape last</th>
<th>t^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which counseling style did you prefer most overall?</td>
<td>5.88</td>
<td>2.69</td>
<td>6.85^*</td>
</tr>
<tr>
<td>Which counseling style did you consider to be most professional?</td>
<td>5.45</td>
<td>3.05</td>
<td>5.30^*</td>
</tr>
<tr>
<td>Which counseling style do you believe was most able to help this client?</td>
<td>5.75</td>
<td>2.49</td>
<td>7.51^*</td>
</tr>
<tr>
<td>Which of the counseling styles would you most enjoy working with?</td>
<td>5.93</td>
<td>2.62</td>
<td>7.82^*</td>
</tr>
<tr>
<td>Which counseling style do you think would be best for you?</td>
<td>5.70</td>
<td>2.51</td>
<td>7.06^*</td>
</tr>
</tbody>
</table>

*Note.* Based on 8-point Likert scales, with the median value of 4.5 corresponding to "no preference." Higher values reflect preferences for the affective counseling style, while lower values reflect preferences for the cognitive counseling style.

^a Degrees of freedom = 77.

^*p < .001.
Table 5
Comparisons of the Average Myers-Briggs Type Indicator, Singer-Loomis Inventory of Personality, and Thinking/Feeling Content Analysis Scores of Subjects in the Two Videotape-order Groups

<table>
<thead>
<tr>
<th>Instrument</th>
<th>$M_{\text{Cog}}$</th>
<th>$M_{\text{aff}}$</th>
<th>df</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myers-Briggs Type Indicator</td>
<td>-3.20</td>
<td>-5.21</td>
<td>76</td>
<td>0.34</td>
<td>0.73</td>
</tr>
<tr>
<td>Singer-Loomis Inventory of Personality</td>
<td>-6.09</td>
<td>-9.99</td>
<td>77</td>
<td>0.70</td>
<td>0.49</td>
</tr>
<tr>
<td>Content Analysis Scores</td>
<td>-6.86</td>
<td>-6.18</td>
<td>74</td>
<td>-0.33</td>
<td>0.74</td>
</tr>
</tbody>
</table>

$^a$Mean of subjects viewing the cognitive counseling style videotape last. $^b$Mean of subjects viewing the affective counseling style videotape last.
males and females in each group was not significant: \( z(77) = .33, p = .74 \).

Evaluating counseling style preferences with difference scores. Two different types of scores were used to evaluate subjects' counseling style preferences. One scoring method involved the use of difference scores, derived by subtracting each subject's ratings of the cognitive videotape from his or her ratings of the affective videotape. On each of 9 dimensions, subjects rated each counseling style on a 1 to 9 Likert scale, with higher values reflecting more favorable evaluations. Thus, difference scores ranged from -8 to +8. As with content analysis and SLIP Preference scores, the method used to calculate counseling style preference scores yielded positive values when the feeling function was preferred, negative values when the thinking function was preferred, and a "no preference" score of 0.

This first set of scores were utilized in 9 multiple regression analyses to investigate factors contributing to the variance in counseling style preference ratings. Three independent variables were entered into the regression equation. Because the question of primary interest was whether verbal behavior was related to counseling style preferences, the first independent variable consisted of the subjects' content analysis Preference scores derived from the first set of verbal samples collected after the videotapes
were viewed and evaluated. The variable "Sequence" was also entered into the analysis to investigate the extent to which subjects' counseling style preferences were influenced by the order in which the videotapes were presented. Finally, a variable named "First," corresponding to the value of the first rating subjects made on each evaluative dimension, was entered into the regression equation. For example, if a subject viewed the cognitive counseling style first, and then responded to the question, "How professional was the counselor in this film?" the subject's rating could theoretically serve as an anchor, limiting the range of difference scores that could subsequently be obtained. In essence, the variable "First" was entered into the regression analysis as a response bias variable, reflecting individual tendencies to rate the first videotape seen either favorably or unfavorably, or with extreme versus moderate scores. The results of the regression analyses, which looked at the factors influencing subjects' counseling style preferences, are summarized in Table 6.

As can be seen, the relationship between subjects' content analysis Preference scores and their counseling style ratings were generally negative, although none of the correlations achieved statistical significance. The regression analyses also failed to reveal a significant relationship between difference scores and subjects' response tendencies (the variable "First"). However, the powerful
Table 6

Multiple Regression Analyses: Factors Accounting for the Variance in Counseling Style Preference Ratings

<table>
<thead>
<tr>
<th>Regression variables</th>
<th>Beta&lt;sup&gt;b&lt;/sup&gt;</th>
<th>F&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>How professional was the counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.10</td>
<td>0.88*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.35</td>
<td>10.69</td>
</tr>
<tr>
<td>First</td>
<td>.15</td>
<td>1.97</td>
</tr>
<tr>
<td>How sincere was the counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.21</td>
<td>3.83**</td>
</tr>
<tr>
<td>Sequence</td>
<td>.39</td>
<td>13.18</td>
</tr>
<tr>
<td>First</td>
<td>-.03</td>
<td>0.09</td>
</tr>
<tr>
<td>How supportive was the counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.07</td>
<td>0.48**</td>
</tr>
<tr>
<td>Sequence</td>
<td>.49</td>
<td>23.73</td>
</tr>
<tr>
<td>First</td>
<td>-.11</td>
<td>1.08</td>
</tr>
<tr>
<td>How insightful was the counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.13</td>
<td>1.30*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.32</td>
<td>8.06</td>
</tr>
<tr>
<td>First</td>
<td>.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Note. N = 76.

<sup>a</sup>Based on the difference between separate ratings of the cognitive and affective counseling style videotapes. <sup>b</sup>Beta weights are standardized correlation coefficients. <sup>c</sup>Degrees of freedom = 1,74 in all cases.

* P < .01. ** P < .001.
<table>
<thead>
<tr>
<th>Regression variables</th>
<th>Beta</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>How helpful (to the client) was the counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.13</td>
<td>2.15 **</td>
</tr>
<tr>
<td>Sequence</td>
<td>.63</td>
<td>45.03</td>
</tr>
<tr>
<td>First</td>
<td>-.08</td>
<td>0.70</td>
</tr>
<tr>
<td>Would you like to work with this counselor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.09</td>
<td>0.99 **</td>
</tr>
<tr>
<td>Sequence</td>
<td>.63</td>
<td>48.00</td>
</tr>
<tr>
<td>First</td>
<td>.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Do you believe this counselor would be able to help you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.07</td>
<td>0.61 **</td>
</tr>
<tr>
<td>Sequence</td>
<td>.58</td>
<td>36.59</td>
</tr>
<tr>
<td>First</td>
<td>.01</td>
<td>0.01</td>
</tr>
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</table>
order effect was again clearly demonstrated, wherein the second counseling style observed by subjects was consistently rated more favorably.

**Evaluating counseling style preferences with direct comparison scores.** The second set of scores used to investigate counseling style preferences was obtained by asking subjects to complete a second questionnaire immediately after viewing both videotapes. On this questionnaire subjects were asked to make direct comparisons between the two counseling styles. On each of the five evaluative questions, subjects were asked to place a mark in one of eight spaces along a continuum on which Style A (cognitive) had been placed at the low end of the continuum, and Style B (affective) had been placed at the high end. Thus, in direct comparison, scores from 1 to 4 reflected a preference for the cognitive counseling style, while scores from 5 to 8 indicated a preference for the affective counseling style. Subjects used 8-point Likert scales to compare the two counseling styles on five different dimensions.

A series of multiple regression analyses were also used to evaluate counseling style preferences based on direct comparison scores. The independent variables in this case included the subjects' content analysis scores and the order ("Sequence") in which the videotapes were viewed. The results of these regression analyses are presented in Table 7.
Table 7

**Multiple Regression Analyses: Factors Accounting for the Variance in Counseling Style Preference Ratings**

<table>
<thead>
<tr>
<th>Regression variables</th>
<th>Beta</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which counseling style did you prefer most overall?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.11</td>
<td>1.36*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.61</td>
<td>44.58</td>
</tr>
<tr>
<td>Which counseling style did you consider to be most professional?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.04</td>
<td>0.17*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.52</td>
<td>26.46</td>
</tr>
<tr>
<td>Which counseling style do you believe was most able to help the client?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.06</td>
<td>0.40*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.65</td>
<td>53.28</td>
</tr>
<tr>
<td>Which of the counseling styles would you most enjoy working with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.15</td>
<td>2.90*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.66</td>
<td>59.24</td>
</tr>
<tr>
<td>Which counseling style do you think would be best for you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content analysis scores</td>
<td>-.13</td>
<td>1.95*</td>
</tr>
<tr>
<td>Sequence</td>
<td>.62</td>
<td>47.55</td>
</tr>
</tbody>
</table>

*aBased on direct comparison of cognitive and affective counseling style videotapes.  
  *Beta weights are standardized correlation coefficients.  
  *Degrees of freedom = 1,74 in all cases.  
  *p < .001.
Once again, the relationship between content analysis scores and counseling style preferences proved to be nonsignificant, while the order in which the videotapes were presented was found to have significantly influenced subjects' preferences. As can be seen in Tables 6 and 7, similar correlations were found between content analysis scores and the various measures of counseling style preferences. In fact, subjects' responses to the 12 counseling style preference questions (7 questions from the counseling style evaluation form [Appendix H] and the 5 questions from the comparative evaluation form [Appendix I]) tended to be highly correlated. The correlations between these predictor variables are presented in Table 8.

Important questions were raised by the fact that the hypothesized positive correlations between content analysis scores and counseling style preferences were not observed. At issue was whether content analysis scores provided an inadequate measure of thinking/feeling preferences, or whether the hypothesis about the relationship between thinking/feeling preferences and counseling style preferences was incorrect.

To investigate this question, Pearson product-moment correlations between counseling style preferences and thinking/feeling preferences, as measured by the MBTI and the SLIP, were calculated and compared to the correlations between subjects' content analysis Preference scores and their
Table 8

Correlations Between Counseling Style Preference Predictor

Variables$^a$

<table>
<thead>
<tr>
<th></th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
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<table>
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<td>C4</td>
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</table>

Note. All Pearson product-moment correlations, based on responses of 79 subjects. $p < .001$ in all cases.

$^a$Items E3 - E9 refer to questions 3 - 9 of the counseling style evaluation form (Appendix H). Items C1 - C5 refer to questions 1 - 5 of the comparative evaluation form (Appendix I).
counseling style ratings. These correlations are presented in Table 9.

As can be seen, the relationship between MBTI and SLIP scores and counseling style ratings were also generally nonsignificant. The SLIP, however, was most strongly related to general counseling style preferences, producing significant correlations with the most global questions about counseling style preferences: "Which counseling style did you prefer most overall?" and "Which of the counseling styles would you most enjoy working with?" Although these correlations were significant, they were relatively small in magnitude, .28 and .21 respectively. Their emergence, however, allows for the possibility of a meaningful, but modest relationship between thinking/feeling preferences and counseling style preferences.
<table>
<thead>
<tr>
<th>Evaluative Dimension</th>
<th>Scale</th>
<th>Thinking-Feeling Content Analysis&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Myers-Briggs Type Indicator&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Singer-Loomis Inventory Personality&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>How professional was the counselor?</td>
<td>-.11</td>
<td>.10</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>How sincere was the counselor?</td>
<td>-.22&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-.19</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>How supportive was the counselor?</td>
<td>-.09</td>
<td>-.04</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>How insightful was the counselor?</td>
<td>-.14</td>
<td>.02</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>How helpful was the counselor?</td>
<td>-.16</td>
<td>.07</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>Would you like to work with this counselor?</td>
<td>-.12</td>
<td>.06</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>Do you believe this counselor would be able to help you?</td>
<td>-.10</td>
<td>.03</td>
<td>.17</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup><sub>n = 76</sub>,  <sup>b</sup><sub>n = 78</sub>,  <sup>c</sup><sub>n = 79</sub>.

<sup>*</sup><sub>p < .05</sub>,  <sup>**</sup><sub>p < .01</sub>.
Table 9 (continued)

<table>
<thead>
<tr>
<th>Evaluative Dimension</th>
<th>Thinking-Feeling Content Analysis</th>
<th>Myers-Briggs Type Indicator</th>
<th>Singer-Loomis Inventory Personality</th>
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<td>Thinking</td>
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<tr>
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<td>Myers</td>
<td>Briggs</td>
<td>Type</td>
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<td></td>
<td>Indicator</td>
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<td>Inventory</td>
</tr>
<tr>
<td></td>
<td>Personality</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Direct comparisons**

Which counseling style did you prefer most overall?  -.13  .11  .28**

Which counseling style did you consider to be most professional?  -.06  .12  .08

Which counseling style do you believe was most helpful to the client?  -.08  -.04  .16

Which of the counseling styles would you most enjoy working with?  -.17  .06  .21*

Which counseling style do you think would be best for you?  -.15  .10  .14
Discussion

Reliability

Interrater Reliability

The interrater reliability of Thinking/Feeling Content Analysis scores was evaluated by correlating content analysis scores computed by the primary researcher with the scores determined by two independent raters who each scored 20 verbal transcripts. The resulting Pearson product-moment correlations of .73 and .74 were statistically significant, yet lower than expected given the theoretically straightforward word-matching method used to score transcripts.

Subsequent analyses revealed a number of factors contributing to content analysis scoring inconsistencies. Human error, wherein raters simply failed to identify words in the transcripts corresponding to words listed in the Thinking/Feeling dictionary, accounted for a substantial number of scoring errors. Such errors might be prevented by encouraging raters to become more familiar with the Thinking/Feeling dictionary before attempting to score verbal samples, and by requiring raters to carefully read through each transcript twice to insure that all scorable items are identified.

Scoring inconsistencies also appear to have resulted from confusion regarding the scoring of certain verbs with multiple meanings. For example, the verbs say and tell, which were
Included in the Thinking/Feeling dictionary, were meant to be scored only when used to describe cognitive experiences (e.g., "That's what I say [think] to myself when I get mad," and "I can't tell [determine] what will happen next."). However, these same verbs may also be used as action verbs, describing things that people do rather than what they think or feel (e.g., "I didn't say that," and "Tell me what you think."). Confusion associated with the distinction between scorable cognitive/affective verbs and nonscorable action verbs reduced interrater reliability.

Interrater reliability was also reduced because of unclear rules regarding the scoring of gerunds and participles. Gerunds are verb forms, usually ending with the suffix -ing, that are used as nouns (e.g., "All my worrying kept me awake last night."). Participles are words that have the function of an adjective, yet at the same time have features of verbs such as tense, voice, and the capacity to take an object (e.g., "My parents are never satisfied."). Raters were instructed to identify and score key verbs and their variants. However, no guidelines were provided for the treatment of frequently occurring gerunds and participles. The absence of specific instructions resulted in inconsistency between raters in the scoring of words which combine the characteristics of verbs with those of nouns and adjectives.

The results of this study highlight the need for
refinement of the Thinking/Feeling Content Analysis scoring rules. First, the dictionary could be improved by clearly distinguishing between cognitive/affective verbs and action verbs. Specific rules governing the scoring of gerunds and participles should also be developed. Item analyses could be conducted to identify the verbs which most effectively distinguish between thinkers and feelers, and item weights based on each verb's discriminant validity could be established.

Even with refinement of the Thinking/Feeling dictionary and clarification of scoring rules, it is clear that the scoring of verbal transcripts involves more than simple word-matching. Because a number of verbs in the dictionary have multiple meanings (e.g., like, see, concern), trained raters are needed to distinguish between scorable and nonscorable usages. Thus, even though the scoring of verbal samples is fundamentally an objective procedure, it does require scorers to make informed judgments.

One method of potentially increasing Thinking/Feeling Content Analysis scoring reliability would be to develop a program for computerized scoring of verbal transcripts. In addition to insuring the consistent application of scoring rules, computerized scoring would also significantly increase the speed with which verbal samples could be analyzed. Because content analysis involves more than simple word-
matching, a fairly sophisticated program capable not only of identifying key words, but of also discerning their usage or meaning, would be required. Such programs have previously been developed and successfully used with other content analysis scales (Gottschalk, Hausman, & Brown, 1975; Gottschalk & Bechtel, 1982; Deffner, 1986). Although computerized content analysis is still in the experimental stages of development, it does appear feasible, and in the long term probably cost effective (Viney, 1983).

Test-retest Reliability

The relatively low test-retest correlation [r(66) = .23, p < .05] between content analysis scores derived from verbal samples collected approximately 5 weeks apart suggests that Thinking/Feeling Content Analysis scores are not particularly stable, even over fairly short periods of time. A number of potential reasons for this low correlation merit consideration.

One possible reason has to do with the nature of content analysis as a personality assessment technique. In almost all previous applications, content analysis has been used to assess psychological states, as opposed to traits or types. In general, content analysts have sidestepped the issues of stability and generalizability by focusing on their subjects' immediate psychological conditions. According to Gottschalk and Gleser (1969, p. 59), "We should not expect a single five-
minute score to yield an estimate of the individual's typical scores over a period of days."

Although surprisingly little research into the test-retest reliability of content analysis scales has been conducted, published results indicate that content analysis scores do tend to be quite unstable. One of the most comprehensive studies to date was conducted by Schofer, Koch, and Balck (1979), who computed one hour test-retest correlations for 12 of the original Gottschalk-Gleser content analysis scales, based on verbal samples obtained from 340 German subjects. The correlations they obtained ranged from -.03 to .25, with an average correlation of .12.

Content analysis researchers have argued that low test-retest correlations are not due to any fundamental problem with the method of content analysis, but instead reflect the nature of the personality characteristics that have generally been studied, namely affective states. For example, previous content analysis scales have been developed to measure affective experiences such as anxiety, guilt, hope, and depression. Such emotional states would be expected to fluctuate over time and across situations. As stated by Schofer et al. (1979),

As a rule, high stability over time cannot be expected with the Gottschalk-Gleser method of measuring affects because of the nature of affects. This aspect of
reliability obviously raises many problems in relation to the Gottschalk-Gleser method, for the Gottschalk-Gleser method aims at assessing spontaneously occurring affects, rapid change over time being one of their fundamental characteristics. (pp. 123-124)

Thus, one possible explanation for the relatively low test-retest correlation observed in the present study is that the method of content analysis is not particularly well suited for the assessment of stable traits or types, such as individuals' thinking/feeling preferences. Another possibility is that content analysis accurately assesses thinking/feeling preferences, but that these preferences are less stable than originally suggested by Jung (1923/1971). In other words, whether a person relies primarily on thinking or feeling may vary considerably over time and across situations.

A review of the verbal samples collected in the present study suggests that, at least in some cases, subjects' Thinking/Feeling Content Analysis scores were influenced by the topics they discussed. For example, when the first set of verbal samples were collected, one subject talked about her academic progress, and personal decisions she was trying to make at the time. In discussing these topics, she frequently used such verbs as study, think, know, and decide, and subsequently obtained a high Thinking score. When a second verbal sample was obtained from the same subject six weeks
later, she talked about her summer vacation plans and her sister's upcoming wedding. This time she used such verbs as want, feel, and hate, and received a Feeling content analysis score. Although additional research is needed, such results suggest that the context of a given situation might significantly influence a person's tendency to use either thinking or feeling verbs.

Questions regarding the stability of thinking/feeling preferences have also been raised by research involving the Myers-Briggs Type Indicator. Of the four personality dimensions assessed by the MBTI, research has consistently shown the Thinking/Feeling Scale to be the least stable over time (Stricker & Ross, 1964a; McCarley & Carskadon, 1983). In a study utilizing introductory psychology students as subjects, Carskadon (1977) reported seven-week test-retest correlations of .56 for males and .73 for females, and concluded, "The Thinking/Feeling Scale appeared unstable, particularly for males" (p. 1012). Carlyn (1977) reviewed studies of the MBTI conducted between 1962 and 1977, and found only moderate test-retest reliabilities for the Thinking/Feeling Scale, ranging from .48 to .82. Finally, in a recent comprehensive assessment of the MBTI, Carlson (1985) concluded,

In summary, published studies on reliability of the MBTI are relatively few in number. However, the studies that
are available show satisfactory internal consistency of each of the four scales and, with the possible exception of the Thinking/Feeling Scale, satisfactory stability of scores across several months. (p. 359)

Again, it is not clear whether the comparatively low test-retest reliability of Thinking/Feeling scores is due to inadequacies of the scale, or to the transient nature of thinking/feeling preferences. Nevertheless, the test-retest reliabilities reported for the Thinking/Feeling Scale of the MBTI were still significantly higher than those obtained with the Thinking/Feeling Content Analysis Scale. However, it is not clear whether the lower coefficients associated with content analysis scores indicate that content analysis is actually a less reliable, and thus less suitable method of assessing thinking/feeling preferences.

The higher correlations observed for the MBTI may be explained by the fact that the same specific questions were asked of subjects on two separate occasions. The ability to recall previous responses to inventory items, combined with a desire to respond consistently, may artificially inflate test-retest reliability coefficients. While such recall for MBTI questions might be expected, it is much less likely that subjects would recall, and attempt to repeat the same verbs they used when speaking on a previous occasion. Thus, some of the observed difference between MBTI and content analysis
test-retest reliability coefficients may be due to methodological factors.

Even if thinking/feeling preferences are determined to be relatively unstable over time, there may still be some value in being able to accurately assess such preferences. For example, content analysis methods might be used to measure changes in a client's dependence upon thinking or feeling over a course of therapy. Changes in verbal behavior may accompany personality changes as a highly cognitive, intellectualizing client learns to get in touch with his or her feelings, or as an emotionally labile client develops his or her logical problem-solving skills. While such practical applications of the Thinking/Feeling Content Analysis Scale are certainly speculative at the present time, the potential value of such applications would seem to warrant future research consideration.

Validity

Content Analysis and MBTI Scores

The relationship between verbal behavior and thinking/feeling preferences was investigated by correlating subjects' content analysis scores with their MBTI Thinking/Feeling scores. A statistically significant relationship was observed: $r(75) = .27, p < .05$. These results confirm the findings of a previous study (Seegmiller & Epperson, 1987) which reported a significant correlation between verbal
behavior and thinking/feeling preferences. The results of the present study also suggest that the use of affective verbs serves as a better predictor of thinking/feeling preferences than the use of cognitive verbs. In other words, it appears that people who are identified as thinkers and feelers by the MBTI are about equally inclined to use cognitive verbs such as think, know, consider, and decide. However, feelers are significantly more likely to use affective verbs such as like, love, want, and hate.

Although the relationship between content analysis scores and MBTI scores was statistically significant, it was considerably lower than the correlation reported ($r = .55$) by Seegmiller and Epperson (1987). Because the present study involved more subjects ($N = 75$) than the initial study ($N = 42$), it might be assumed that the results of this study provide the most accurate estimate of the relationship between content analysis scores and thinking/feeling preferences as assessed by the MBTI. However, one significant methodological difference between the two studies may have contributed significantly to the discrepancy in the correlations obtained.

In the first study, all verbal samples were collected within a few hours of the time that subjects completed the MBTI. In the present study, all subjects completed the MBTI and the SLIP, and evaluated the counseling style videotapes
before any verbal samples were obtained. Consequently, verbal samples were collected an average of 4.8 days after subjects had completed the MBTI. If content analysis scores are not particularly stable, as test-retest data would seem to indicate, it might be expected that verbal samples collected on the same day that the MBTI is completed would have higher correlations with MBTI scores than content analysis scores derived from verbal samples collected nearly 5 days later.

It is not possible with the data currently available to determine the extent to which time delays between data collection reduced the correlation between content analysis and MBTI scores. A future study could be conducted in which verbal samples would be collected on the same day that subjects completed the MBTI, and again approximately one week later. Data from such a study could be used to evaluate the validity of content analysis scores as a measure of thinking/feeling states, and the extent to which content analysis scores fluctuate over relatively brief periods of time.

**Content Analysis and SLIP Scores**

As part of the present study, content analysis scores were correlated with Thinking/Feeling scores from the Singer-Loomis Inventory of Personality. In general, the correlations between the two measures were nonsignificant, suggesting that there was no meaningful relationship between subjects' verbal
behavior and their tendencies to engage certain behaviors that involve thinking or feeling.

Although content analysis Preference scores did not correlate significantly with SLIP Preference scores, the use of feeling verbs was found to be significantly related to both SLIP Feeling scores and overall SLIP Preference scores. These results are similar to those showing a relationship between the use of feeling verbs and MBTI scores, and they support the hypothesis that it is the use of affective verbs which most accurately distinguishes between thinkers and feelers.

The correlations obtained between content analysis and SLIP scores do not provide strong support for the validity of the Thinking/Feeling Content Analysis Scale. However, these results should be interpreted cautiously. One reason for caution is that the SLIP, like the MBTI, was completed by subjects approximately 5 days before the first set of verbal samples was collected. Given the questionable stability of Thinking/Feeling Content Analysis scores, this delay may have reduced the correlation observed between content analysis scores and SLIP scores. A higher correlation might be obtained if the two measures were completed on the same day, although further research is needed to test this hypothesis.

The correlations between content analysis and SLIP scores should also be interpreted cautiously because of the experimental nature of both instruments. While high
correlations would have lent support to the validity of both measures, the low correlations that were obtained are less easily interpreted. It is presently unclear whether the SLIP and the Thinking/Feeling Content Analysis Scale are measuring different constructs, or whether one, or both measures are inadequate for evaluating thinking/feeling preferences.

Content Analysis Scores and Counseling Style Preferences

Contrary to experimental hypothesis, no significant relationship between subjects' verbal behavior and their counseling style preferences was observed. It does not appear, however, that the absence of a significant relationship was due to the inadequacy of the Thinking/Feeling Content Analysis Scale, because the correlations between MBTI Thinking/Feeling Scale scores and counseling style preferences were also nonsignificant. There were relatively small, yet statistically significant correlations between subjects' SLIP Preference scores and some measures of counseling style preferences. Considered together, the results of this study suggest that there is at most only a slight tendency for thinkers to prefer cognitively oriented counseling, and for feelers to prefer affectively oriented counseling.

It is not entirely clear why the correlations between Thinking/Feeling scores and counseling style preferences were lower than anticipated. One possibility is that the videotapes used to demonstrate the two counseling styles were
inadequate for the purposes of this study. Each counseling role play only lasted for approximately 17 minutes. It is possible that subjects unfamiliar with counseling or psychotherapy may have needed more exposure to the different counseling styles in order to understand, and make an informed judgment about the methods and intentions of the counselor in each film.

Another possibility is that the portrayal of the two different counseling styles may have been confused by using the same counselor in both role plays. Although the decision to use a single counselor allowed for greater control over extraneous variables, it may have made the role plays seem artificial, and may have also minimized real differences between the two counseling styles. Additional research would be necessary to investigate whether the relationship between thinking/feeling preferences and counseling style preferences would be greater if subjects observed two different counselors, each particularly skilled in either cognitively or affectively oriented counseling.

Ratings of the counseling videotapes indicate that subjects did recognize the different thinking/feeling emphasis of the two counseling styles. Nevertheless, this recognition appears to have had a minimal effect upon the preferences expressed by subjects.

One possibility is that even though subjects recognized
the thinking/feeling difference between the two videotapes, this distinction may not have been the most salient, or important difference between the counseling styles. Evidence of this was provided by subjects' evaluations of the counseling style videotapes. In addition to being asked to indicate which counseling style they preferred most, subjects were also asked to explain the reasons for their preferences. Relatively few subjects indicated that they preferred a counseling style because of the counselor's cognitive or affective orientation.

Subjects who expressed a preference for the cognitive counselor offered such explanations as: "He was more involved in the counseling," "He made more suggestions to help her," "(the cognitive counselor) provided the client with some actions she could take," "He encouraged her to do something about her problem," "He really wanted to help, not just listen," and "He gave the counselee options out of her problem that she didn't even know she had. People go to counselors for solutions!" Subjects critical of the cognitive counselor stated: "He was constantly interrupting her," "He seemed so uncaring and cold," "He was too offensive, not supportive," and "He wasn't really treating the cause of the problem."

Those who preferred the affective counseling style explained: "(the affective counselor) was more personal, and did a better job of getting the subject to talk," "I liked the
way he allowed her to talk and bring things out at her own pace," "He let the woman talk more about herself," "He seemed to consider feelings more; much more sincere," and "He seems to be more serious and more sincere. He is kind and cares for the lady. He pays a lot of attention to what the lady says. I feel that he really wants to help the lady." Subjects who did not care for the affective counselor remarked: "He didn't really help her that much because he didn't provide her any advice," "He didn't say anything helpful," "The counselor just sat there and basically repeated what the woman said," "He made her do all the talking," and "He was too passive and therefore didn't help the client enough."

In general, subjects who preferred the cognitive counselor liked him because of his active, inquisitive, problem solving approach, whereas those who preferred the affective counselor were impressed by his patience, sensitivity, and desire to explore the roots of his client's problems.

Thus, even though subjects recognized the cognitive/affective distinction between the two videotapes when specifically questioned, it appears that other factors more strongly influenced their counseling style preference ratings. As pointed out by Manthei, Vitalo, and Ivey (1982), any attempt to match individuals in order to optimize interpersonal attraction "is immediately complicated by the
almost overwhelming complexity and number of factors involved" (p. 220). Although the thinking/feeling difference between the two counseling styles appears to have been one factor recognized by subjects, it does not appear to have significantly influenced their counseling style preferences.

The analysis of subjects' videotape ratings revealed one factor that did significantly influence their counseling style preferences. More than any other factor, subjects preferences appear to have been strongly influenced by the order in which the counseling videotapes were presented. Regardless of which videotape was shown first, subjects expressed an overwhelming preference for the second counseling style they observed. In fact, multiple regression analyses of subjects' counseling style preferences revealed that whereas content analysis scores (reflecting thinking/feeling preferences) accounted for only around 2% of the variance in counseling style preference ratings, the recency effect accounted for over 37% of the variance in preference ratings.

The reasons for the unexpectedly large order effect are not entirely clear. The literature dealing with the influence of order effects on impression management does not provide a definitive explanation for the results that were obtained in the present study. Some researchers have reported that primacy, or "first impression" effects have the greatest influence on impression formation (Anderson & Norman, 1964).
In other cases, however, recency effects were observed, wherein subjects' impressions were most strongly influenced by the final information presented to them. Lana (1984) concluded that no single theory was able to account for the mixed primacy and recency effects which have been reported in the literature.

More recently, McGuire (1985) reviewed mixed reports of primacy and recency effects in the literature, and concluded that whether primacy or recency effects are observed depends not only upon the order in which information is presented, but also upon more subtle variables such as the manner in which information is presented, and the manner in which attitudes are assessed. In other words, different methods of stimulus presentation and data collection tend to increase the probability of observing either primacy or recency effects.

Some of the conditions which reportedly favor the occurrence of recency effects were present in the current research project. Wilson and Miller (1968) predicted that the greatest recency effect should be observed when there is a delay between the presentation of two different sets of information (e.g., the prosecution and defense evidence in a trial), and when subjects' opinions or attitudes are assessed immediately following presentation of the second set of information. Research conducted by Wilson and Miller (1968) did not support the first hypothesis, but did confirm the
second hypothesis. Secord and Backman (1974) explained recency effects on the basis of learning theory, stating, Learning theory predicts a recency effect in the typical experiment on successive persuasive communication. Communications are typically presented in immediate succession, followed by an immediate recall test. Although the successive presentation does not favor either primacy or recency, the immediate recall test favors recency. (p. 107)

Aronson (1976) summarized earlier research on the subject and concluded that, all other things being equal, the last argument or set of information will be most persuasive if there is a delay between presentation of arguments, because a delay between the presentation of two sets of information increases the probability that the second set of information will be attended to and learned. Furthermore, he argued that retention is greatest for the second set of information, and recency prevails, if subjects' impressions are assessed immediately following the final presentation.

In the present study, there was a brief delay between the presentation of the two counseling style videotapes while subjects evaluated the first videotape and while the second videotape was prepared for viewing. The experiment was also conducted so that subjects completed their evaluations of the second videotape, and their comparative evaluations,
immediately after observing the second counseling style. This methodology may have contributed to the recency effect that was observed.

Nevertheless, a recency effect not explained by the learning-based theory of Wilson and Miller (1968) and Aronson (1976) was also observed when subjects evaluated the first videotape prior to viewing and evaluating the second videotape. The reasons for the recency effect in this case are not clearly understood. It is possible that when subjects were told that they would evaluate two different counseling styles, they may have assumed that they would be observing a right approach and a wrong approach to counseling. In general, subjects tended to rate the first counseling style they observed neutrally— as neither good or bad. Being unimpressed with the first counseling videotape, subjects may have anticipated that they would be shown the "right" approach to counseling second. Such expectations may have favorably biased subjects' perceptions of the second counseling style they observed. This explanation is admittedly speculative at present, and in need of research validation.

It is worth noting that the recency effect was observed when the counseling style videotapes were evaluated both in the present study, and in a previous pilot study. By way of contrast, a recency effect was not observed in the pilot study when subjects evaluated the therapy styles of Carl Rogers and
Albert Ellis in the *Three Approaches to Psychotherapy* films. In comparing Rogers' affective counseling style to Ellis' cognitive style, there was not a marked tendency for subjects to rate the second counselor they observed more favorably.

A second difference between the *Three Approaches to Psychotherapy* films and the counseling style videotapes was that in the videotapes, a single counselor demonstrated both the cognitive and affective counseling styles. In evaluating the counseling styles, subjects perceived the counselor as being very similar in the two counseling role plays. In contrast, subjects viewed Drs. Rogers and Ellis as being significantly different on a number of important dimensions.

Rogers was seen as more friendly and accepting, whereas Ellis was considered to be more professional, active, and threatening. These findings suggest that the recency effect, or the tendency for the order of presentation to influence subjects' perceptions, may be greatest when subjects evaluate and compare two similar stimuli. However, when there is a clear distinction between the stimuli which are to be compared, the order in which the stimuli are presented may be less important.

Although the strong recency effect observed in the present study is interesting, and probably worthy of future independent research, it still represents a methodological anomaly that researchers may wish to avoid. One possible
method of eliminating the order effect would be to double the
number of experimental subjects, randomly assign the subjects
to two groups, and have each group of subjects observe and
evaluate only one of the stimuli which are to be used in the
study. For example, the questions addressed in the present
study could be investigated by dividing subjects into two
groups, and exposing each group to only the cognitive or
affective counseling style. The videotape ratings of thinkers
and feelers in both groups could then be analyzed to determine
whether there is a relationship between preferred information
processing styles and counseling style preferences.

Conclusions

The results of this study raise some serious questions
regarding the appropriateness of using content analysis
techniques to evaluate individuals' thinking/feeling
preferences. One of the questions raised by the current
research has to do with the stability of Thinking/Feeling
Content Analysis scores. The five-week test-retest
correlation that was obtained was statistically significant,
but was unacceptably low by most personality assessment
standards. An important consideration meriting additional
research is whether Thinking/Feeling Content Analysis scores
are simply unreliable, or whether they accurately reflect
transient thinking/feeling states. If, as Jung (1923/1971)
maintained, individuals' preferred styles of information
processing are fundamentally stable over time, then it must be concluded that content analysis is an unreliable method for assessing thinking/feeling preferences. However, if individuals' tendencies to rely on thinking versus feeling are more situation specific, content analysis could yet prove to be a valuable tool for assessing information processing styles across situations, or longitudinally over time. These questions, which are characteristic of the broader state/trait controversy, need additional research.

The results of this study also point out the need for further refinement of the rules used to score verbal transcripts. The unacceptably low interrater reliability coefficients that were obtained indicate that verbal transcripts need to be scored with greater precision, and that specific rules for handling homonyms, gerunds, and participles need to be developed. The refinement of transcript scoring rules would help insure that content analysis would serve as an objective method for analyzing projective responses.

The results of this study showing a statistically significant relationship between content analysis scores and subjects' scores on the Thinking/Feeling Scale of the MBTI confirmed the findings of a previous study (Seegmiller & Epperson, 1987) which supported the validity of Thinking/Feeling Content Analysis scores. Nevertheless, the observed correlation between content analysis and MBTI scores
was significantly lower than that obtained in the earlier study. Consequently, questions still remain about the true relationship between verbal behavior and individuals' preferred styles of information processing. Although the larger number of subjects in the present study increases the likelihood that the second, lower correlation most accurately represents the true relationship between content analysis and MBTI Thinking/Feeling scores, the average 5 day delay between completion of the MBTI and collection of the verbal samples may have suppressed the correlation between the two measures in this study. Perhaps the best way to accurately assess the validity of Thinking/Feeling Content Analysis scores would be to conduct additional studies involving both content analysis scores and other measures of thinking/feeling preferences. Additional correlations could be obtained, as well as comparisons between content analysis scores and other measures in predicting thinking/feeling behaviors.

In this study, the relationship between verbal behavior and self-reported thinking/feeling behaviors as assessed by the Singer-Loomis Inventory of Personality was also investigated. The nonsignificant correlations obtained again challenge the validity of Thinking/Feeling Content Analysis scores. However, these results should be interpreted with caution because of the experimental nature of the SLIP, and the fact that verbal samples were collected an average of
nearly 5 days after subjects completed the personality inventory. Nevertheless, it is unlikely that either of these factors is totally responsible for the low correlations that were obtained between content analysis scores and SLIP Thinking, Feeling, and Preference scores. One potentially important finding was that the use of feeling verbs best predicted subjects' thinking/feeling preferences. One possible explanation for this results is that feelers may use cognitions and rational thought processes more often than thinkers rely on emotions and affect. Additional research is needed to investigate this hypothesis.

The portion of this study which involved an evaluation of the relationship between verbal behavior and counseling style preferences failed to provide supporting evidence for the validity of Thinking/Feeling Content Analysis scores. At the same time, however, the nonsignificant correlations that were obtained do not necessarily undermine the validity of the content analysis scores. This conclusion is based on the fact that scores from the other instruments used to assess thinking/feeling preferences (i.e., the MBTI and the SLIP) also had either low, or nonsignificant correlations with subjects' counseling style preference ratings.

These results suggest that the original experimental hypothesis— that thinkers would prefer a rational, cognitive approach to counseling, while feelers would be more attracted
to a counseling style which focused on feelings and emotions—was either incorrect, or was inadequately tested. It is also possible that similarity may foster attraction in the counselor-client relationship, but that the emphasis which a counselor places on thoughts versus feelings is simply not one of the most salient or important factors influencing individuals' counseling style preferences.

Unfortunately, it is impossible to draw firm conclusions about the validity of Thinking/Feeling Content Analysis scores from the results of this study because an unproven hypothesis regarding counseling style preferences was used to evaluate the experimental personality assessment technique. Significant results would have provided validation for both the method of content analysis, and the similarity-attraction hypothesis. The nonsignificant results that were obtained are not as easily interpreted.

Thus, at the conclusion of this experiment, a number of important questions remain unanswered regarding the reliability, validity, and utility of the Thinking/Feeling Content Analysis Scale. One important question meriting additional research has to do with the stability of Thinking/Feeling Content Analysis scores. This issue might best be addressed by obtaining a series of verbal samples from each experimental subject. In this way, the amount of change in subjects' content analysis scores over both brief, and more
extended periods of time could be assessed. It would also be possible to investigate whether test-retest correlations are higher when subjects discuss the same, as opposed to different topics. Furthermore, research might be conducted to determine whether individual thinking/feeling preferences could be more accurately assessed using content analysis scores based on multiple verbal samples.

Future research into the validity of Thinking/Feeling Content Analysis scores could be improved by utilizing a more heterogeneous group of subjects than was used in the present study. It is probable that the verbal behavior of the university students who participated in this study is somewhat different from that of the general population. The effect of this difference upon Thinking/Feeling Content Analysis scores is currently unknown. In addition to studying subjects with a broader range of educational experiences, it would also be desirable to analyze the verbal behavior of subjects of different ages, occupations, and ethnic backgrounds.

Finally, it would be valuable in future studies to investigate the relationship between content analysis scores and actual behavior. This study, as well as the initial research involving Thinking/Feeling Content Analysis scores (Seegmiller & Epperson, 1987), primarily evaluated the validity of content analysis scores by correlating them with scores from self-report personality inventories. Although
such research is relatively easy to conduct, and does provide one measure of criterion-related validity, the value of any personality assessment technique ultimately depends upon its ability to predict real life behaviors.

Thus, in future research it might be desirable to provide subjects with a task, or observe them in a realistic situation where they would be required to make a decision based on either rational thoughts and cognitions, or emotions and feelings, or some combination of the two. Possibilities might include such things as observing the decision-making styles of business executives or jurors.

The concept of studying subjects in realistic situations might also be applied to future studies investigating the relationship between thinking/feeling tendencies and counseling style preferences. The opinions of thinkers and feelers actually engaged in either cognitively or affectively oriented psychotherapies would provide a better indication of the true relationship between content analysis scores and counseling style preferences than was obtained in the present study. The extra effort required to study the behavior of subjects in realistic situations may be necessary in order to adequately assess the validity of Thinking/Feeling Content Analysis scores.

In conclusion, the results of this research seem to have raised more questions than they answered. Convincing evidence
substantiating the validity of Thinking/Feeling Content Analysis scores was not obtained. At the same time, the results of this study did not clearly invalidate content analysis as a technique for assessing thinking/feeling preferences. Additional research is still needed to empirically, and more conclusively establish the reliability, validity, and practical utility of using content analysis to measure thinking/feeling preferences.
References


Byrne, D., Griffitt, W., & Stefaniak, D. (1967). Attraction and similarity of personality characteristics. *Journal of Personality and Social Psychology, 5*, 82-90.


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Finally, I would like to express my sincere appreciation to my wife, Pam Seegmiller, and other members of my family who have patiently encouraged and supported me in this work.
### Appendix A: Dictionary of Thinking and Feeling Verbs

*Used in the Content Analysis of Verbal Samples, with Corresponding Mean Ratings*

**Thinking Verbs**

<table>
<thead>
<tr>
<th>Thinking Verb</th>
<th>Mean Rating</th>
</tr>
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<tbody>
<tr>
<td>account</td>
<td>-1.6</td>
</tr>
<tr>
<td>acknowledge</td>
<td>-1.6</td>
</tr>
<tr>
<td>adopt</td>
<td>-0.8</td>
</tr>
<tr>
<td>affirm</td>
<td>-0.9</td>
</tr>
<tr>
<td>agree</td>
<td>-1.4</td>
</tr>
<tr>
<td>analyze</td>
<td>-3.3</td>
</tr>
<tr>
<td>ask</td>
<td>-1.1</td>
</tr>
<tr>
<td>assess</td>
<td>-2.3</td>
</tr>
<tr>
<td>assume</td>
<td>-1.1</td>
</tr>
<tr>
<td>attend to</td>
<td>-1.4</td>
</tr>
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1^Mean ratings are based on subjects' evaluations of each verb on a 9-point Likert scale, ranging from -4 = totally thinking to +4 = totally feeling. 

2^Verbs with mean ratings significantly lower than the median value of 0 were classified as thinking verbs.
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**Feeling Verbs**

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| ache   | 2.7 | bother | 1.6 |
| admire | 1.8 | care  | 2.9 |
| adore  | 2.6 | cherish | 2.6 |
| agonize | 1.9 | concern | 1.8 |
| amaze  | 1.8 | condemn | 0.6 |
| anger  | 3.7 | confuse | 0.6 |
| anticipate | 1.2 | cope | 1.3 |
| appreciate | 1.3 | covet | 1.2 |
| arouse | 2.9 | crave | 2.3 |
| attract | 1.7 | dare | 1.0 |
| bear  | 0.5 | delight in | 2.4 |

^3Verbs with mean ratings significantly greater than the median value of 0 were classified as feeling verbs.
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Appendix B:

Instructions for Eliciting Verbal Samples

I would like you to talk to me for a few minutes about your life at the moment— the good things and the bad— what it is like for you. I am not only interested in what is happening, but I would also like to know what the experience has been like for you. How have you been responding to the things that are happening in your life? What have some of your thoughts and feeling been?

Once you have started talking, I will be here listening to you, but I would rather not respond to you or answer any questions until a five minute period is over. If you should run out of things to say about one topic, you are free to switch subjects and talk about something else. This is your chance to talk about your experiences, and my chance to listen. Do you have any questions that you would like to ask now before we get started?
Appendix C:

Example of a Scored Verbal Sample

I have a boyfriend I've been going out with for about three years, and I really think that he has an alcohol problem. And it frightens me because we've talked about maybe getting married, and I can see the same thing happening that happened to a friend of mine who has an alcoholic husband. And she feels helpless. She doesn't know what to do, and evidently, Alanon, she said, wasn't exactly telling her to accept it, but more like she should try to be her own person. She wanted to know how to help him and evidently she feels helpless about it. I didn't, I wanted to be able to help her, but I didn't know what to do, and I don't know. I know it's hard cause, um, well anyway the whole thing was that it made me think about my boyfriend who's drinking probably, I don't know, four, five nights a week and getting drunk, which is terrible. The thing is with his alcoholism that really bothers me is he doesn't see it as a problem. He thinks drinking is fun and funny and the things he does when he's drunk are amusing and cool, and that kind of thing. And that upsets me a lot. And I think I'm really sensitive about it cause we have talked about getting married. I don't want to marry an alcoholic. And um, I don't drink a lot. I mean I don't see anything wrong with someone getting drunk cause it's, even though it can be fun once a month or whatever, but
not five times a week. And that, it frightens me a lot that he does that. And I don't want to get into that kind of problem.

I decided to talk to someone at Alanon once, and I told my boyfriend that I talked to him, and he said, "Man, it really surprises me that you did that." But he said, "OK, if I don't stop drinking now for like four days or whatever, I'll go in and talk to him. Trust me." Somehow he managed to do that, cause he didn't want to go in and talk to him. I don't know how he did it. But he really suffered bad withdrawal symptoms. He was seeing, hallucinating and things. Like, he'd be dreaming and he'd wake up and couldn't tell reality from his dreams. And that just frightened the hell out of me. I remember once he woke up and looked at me and thought I was a, like a monster. I felt terrified. And I don't know what to do. I mean I love this guy very much, but he'd have to straighten that out. So I wish he'd try and straighten himself out, but he doesn't want to. It doesn't seem to concern him, and uh, I sure have to worry about those things.

Number of Thinking verbs (underlined) = 19
Number of Feeling verbs (circled) = 24
Total number of words = 480
Appendix D:
Counseling Style Videotape Transcripts
"Cognitive" counseling style videotape

Co: Well, Nan, why don't you tell me what it is that brings you to see me today.

Cl: Well, um, I guess it's, it's that things haven't been going too well lately. Well, maybe not even lately. It's been kind of a long time. Things just aren't going very good.

Co: You've been thinking about things, and your conclusion is that they aren't right.

Cl: Yeah, definitely. They're not right. I just, I don't know, I guess, and it's kind of bothering me a lot.

Co: It sounds kind of heavy, like you're really dealing with something difficult.

Cl: Yeah, it does feel kind of heavy. I don't know.

Co: You don't know what you want to do.

Cl: Yeah. My friends told me that, well, I've been talking to a couple of them, and maybe I should talk to a counselor person. But I've never done this before so it's, I don't know...

Co: It must be hard.

Cl: Yeah, kind of scary. But I guess I don't have much to lose. Nothing's worked out so far, so...

Co: Maybe you think there's some, some help I can offer that might make a breakthrough.

Cl: I guess I'm hoping so. At the same time, you don't really know me. I'm kind of a stranger, and so, I don't know how that all works out either.

Co: Maybe there's some, maybe there's some value in having somebody with a new perspective- someone other than your close friends.

Cl: Yeah, I guess I never thought of that. Yeah, well, like I said, I'm... I decided to come cause I figure I
didn't have much to lose anyway, so if it'll help... I don't know, it just seems like anymore, all my husband and I do is just fight. Lately they've been getting pretty bad again. Boy, I don't know.

Co: The way you look at it is, it's getting more than you want to handle. More than you want to deal with.

Cl: Yeah, I keep thinking it's going to get better, but it never has. Or it never does for very long. Sometimes it gets better for a little while and then, I don't know, we just get right back into it.

Co: I think I know what you mean. Sometimes it gets better and you get to feeling better. And then when you're feeling better, it gets bad. You think, "I can't keep on doing this."

Cl: Boy, I'll say. The last time, I mean, we had that fight, I just, I just felt like I couldn't go through that again. And I know I said that to myself before, but I've always somehow been able to try something else, and hope that that would work, but it just hasn't.

Co: So you just don't know what to do- how to evaluate the situation. Like there is no freedom.

Cl: Yeah, I just sort of feel so stuck. Cause it doesn't get any better, and it just keeps happening over and over again. I don't know. I just don't think I can take much more. I'm just tired of him getting angry, and tired of him yelling, and tired of him... hurting me, I guess.

Co: It's just that there are not, from the way you see it there are just no choices for you. You don't have any, anything that you can do about it.

Cl: It just doesn't seem so, I guess. I just find myself worrying about the kids, and they're pretty young and they really need me. And so I just feel like I have to stay there and take it, for better or for worse, I guess.

Co: So, as far as you've analyzed the situation, you just kind of conclude that there's, there's nothing to do but stay.

Cl: That's what it feels like. I just... my friends say, "You've got to get out of there. You've just got to get out of there. You shouldn't take that. You shouldn't have to take that." Well, I know that is true, but I,
there's no place I can go. I mean, I need him for financial reasons, you know, I just, I just want to figure out... .

Co: So one thing you can think of is to get out.

Cl: I've thought of that so many times. And this last time I just wanted to, right in the middle of it, just grab my kids and run. I just, boy, I really wanted to do that.

Co: It must be a real destructive situation. Really, really demoralizing to be stuck in that.

Cl: Yeah.

Co: You don't see any other things that you can, any other actions that you can take.

Cl: Not, not many, and I just, you know, I just feel like I want to leave, cause he makes me so mad, and I'm so tired of it. And I don't think he's ever going to change anymore. I just, I just don't believe him anymore, anyway.

Co: You've just come to the conclusion that, that change is not possible.

Cl: I don't think so. I just, at least I don't know what else to try. And I want to go, but it's not just me. It's, you know, me and my three kids. And my... .

Co: There's no way that you can figure out. Like, like you, you're just stuck in the situation. I don't, I don't know that you need to feel stuck. There are ways to, to deal with things that seem impossible. It takes a little, a little bit of analysis and some creative thinking. But there are often things that you can do. Let's think about some other alternatives.

Cl: Well, it just seems like if I stay, which I've obviously been doing, it just keeps happening over and over again, and I have to keep taking it. And if I go, I just, I just don't know what, I don't know where I'm going to go. I don't know how I could find a place for not only myself, but the kids.

Co: Well now, just, let's look at, where is there to go? Let's look at that possibility.
Cl: I've thought about, you know, going to my folks, but I don't know. They, I'm just so sure that they're going to, they're going to think I'm crazy for leaving. Because I, because they've told me before, you know, "You better hang onto your man, cause you don't have any way to make a living."

Co: Uh-hum. So, one thing you could do, trying to, to go back to your folks, has a disadvantage of what they might think about you.

Cl: Yeah, I mean, I, I know that, maybe they wouldn't admit it, but I think I know they would, they would feel it was pretty dumb for leaving. I don't, I don't think that they'd turn me away, I mean, if I just suddenly appeared with the kids. Because I know, you know, they care about me and all that, but.

Co: So on the one hand, you wouldn't want them to think you're dumb, but you know they care.

Cl: Yeah, they'd have a pretty hard time understanding my reasons. I don't know if I could ever convince them that I had to go.

Co: You think you have to convince them?

Cl: I guess I do.

Co: Aren't they able to tolerate some uncertainty about what's going on. . . just stand with you? They might be. I wouldn't, wouldn't throw away that possibility. At least I wouldn't throw it away right away. Well, besides uh, besides asking the folks to put you up, do you have any other ideas about what people do in this situation?

Cl: I suppose if it's not family, it's friends.

Co: Uh-huh.

Cl: I've got a couple of real good friends, you know. And they've said, you know, if you need some help, let me know. But.

Co: Tell me why you wouldn't want to accept their help.

Cl: And um, boy, I don't know. My friends would open the door and see us all standing there. They might just close the door and say, "Call me."
Co: Sort of seems like that if, if you just showed up without any advance warning, if you didn't talk it over with them first, they might, they might slam the door, and that would be, that would be the ultimate.

Cl: Yeah. I think they'd be really shocked. And I guess...

Co: You don't believe that you could prepare them in any way?

Cl: I guess I didn't think about that because I never know when these fights are going to occur, so it's kind of like I never know when I might need them.

Co: Uh-huh. It would be hard to, to make clear to your friends. They probably know already, but it would be hard to make it real evident how much trouble you're having.

Cl: Yeah, I think, I think two of my friends kind of know anyway, cause they're the ones who keep saying, "You've got to get out of that situation."

Co: So they might be mentally prepared for a kind of approach for uh, just talking to them about maybe you're going to need their help.

Cl: You mean ahead of time?

Co: Uh-huh.

Cl: Like before I know there is a fight...

Co: You could kind of generate up a little plan.

Cl: Well, that way they wouldn't be surprised. Maybe then they could just tell me if they thought it was going to work or not.

Co: And you'd know whether they'd be open to you or not.

Cl: Yeah.

Co: There might be a lot of, a lot of reassurance in knowing. . . . are there other things that you've heard of, or you think might be workable besides, calling your friends?

Cl: There is one more thing about my friends, I guess, that kind of bothers me. Uh, and that is, you know, so far I think that they see me handling the situation myself.
And um, being able to be strong, and just figure it out. And I guess if I, if I can't do that, then I really don't know, you know, what they're going to think.

Co: You wouldn't want to suffer that loss of confidence or esteem that they have for your capacity to deal with things.

Cl: Yeah, I know they always see me as always being able to handle it, as rough as I think they know it is. And then I'd be saying, "I give up" or something.

Co: Well, I wonder if they wouldn't think you were smarter for finally coming to grips with the situation. Maybe you're a more competent person over taking some steps, than in staying in there and repeatedly getting, getting abused.

Cl: I hadn't thought of that either.

Co: It's something to consider.

Cl: Cause they are the ones that have been telling me, "Nobody can take that, and you shouldn't take it."

Co: So maybe they might think that you are smarter for taking some action.

Cl: Hm, yeah. One of those friends, I know, has a, has a sister with a friend, but this is in another city- cause she was telling me about her, and her husband beating her up all the time. She went to a shelter house, I think it was called, for people. But I really didn't know, I don't know much about that.

Co: That's kind of a friend of a friend, and even another city. I guess you don't know whether that's possible for you.

Cl: I don't. And this other person didn't have any kids, either. So it's probably much easier.

Co: Maybe they only take people without kids.

Cl: Yeah, that would be easier.

Co: That's, that doesn't strike me as a very, as a very smart piece of reasoning, that you've just, you're just working yourself right out of that alternative, right out of that possibility with a bunch of assumptions. How can, how
can you find out if there's something available like that here?

Cl: I don't know. Do they put those things in the phone book?

Co: I don't know. Maybe they do. Have to look it up.

Cl: Yeah. Cause I know my friend's friend said that they keep the places secret, just so her husband wouldn't find it. So I don't even know if it's...

Co: So you could, you could guess that you won't find it in the phone book. There must be someplace where that kind of information is available.

Cl: I don't know... maybe... I had to go to the hospital not too long ago, after one of our fights. Um, I remember the nurses there saying that if I wanted to talk, wanted some help, that uh, that they had some pamphlets, but I don't know what they were about.

Co: Really, somebody knows! So you do know something. You know enough to get started, sounds like, on even another alternative. You've got folks, and you've got friends, and you've got a source for information to find out if there is a shelter.

Cl: Cause that was in the emergency room. I suppose I could call them, and I wouldn't even have to tell them who I was.

Co: I bet you could do that, uh-huh.

Cl: And then just ask them if they know of such a place.

Co: Uh-huh.

Cl: I don't know. I suppose if they don't advertise it I'm not going to see it without checking.

Co: Ultimately, I'm sure you can find out.
"Affective" counseling style videotape

Co: Well, Nan, why don't you tell me what it is that brings you to see me.

Cl: Well, uh, I guess I just haven't been feeling very good about myself lately. I don't know. Feeling kind of down, I guess, for awhile. I guess it's been quite a long while now that I think about it. I've got a, I've got some friends that I've talked with a little bit, about this, but I don't know. They don't seem to, that doesn't seem to make much of a difference. I guess I don't seem to feel any better. My real good friend said to me the other day, you know, maybe you should go see one of those counselor people. And at first I thought, oh, I don't want to do that. But, uh, the more I thought about it, I decided that, things aren't getting any better. Probably nothing to lose, but I don't know.

Co: Kind of frightening though, to try to confront some problem that's going on. Not sure how it will come out.

Cl: Yeah, I'll say. It's kind of scary. I mean I'm not sure what to say.

Co: I can see how scary it is. I can see how you're real tensed up.

Cl: I don't know. I guess I am. I know you're a stranger, and I know you don't know anything about me.

Co: You're not sure you can trust a stranger.

Cl: Yeah. But, I don't know. I've been feeling pretty bad for a pretty long time, I guess. So I guess I've got nothing to lose.

Co: Have to take the plunge. Tell me about what's making you not feel good about yourself.

Cl: Well, um, I don't know, it just seems like things aren't going right. . . with my husband, I guess. We seem to get into an awful lot of arguments. Too many, I think.

Co: Enough that it's upsetting you.

Cl: Yeah, I just. . . and when we're having a really bad one, I think, well, it can't get any worse, you know, that's the worst it will get. And then, somehow, in a couple of weeks, it happens all over again, and it's worse than I
thought.

Co: And you just, you just get surprised each time, that there can be something worse than there was before.

Cl: Yeah. I keep thinking it's going to get better. You know, it feels like, when it's over with, like we got it out of our systems, and then, you know. . . . and I feel, I don't know, I feel really worried before, when I know he's getting in that mood to argue, cause I don't know what's going to happen. And then once it's over with, I feel relieved because I think that that's it, you know, this won't happen again. And then it does.

Co: It must be a real disappointment to you, to realize this is what's happening.

Cl: Yeah. I guess I never thought about that before. It's disappointing because I get my hopes up, that it won't happen again. And I feel close to him, you know, when we make up. And then it comes, I just. . . oh, I just.

Co: It sounds like you almost want to give up.

Cl: Yeah, I just get. . . I just get so frustrated because I don't know how to stop it, and I just feel so angry, that we have to get into it all over again.

Co: You feel like you ought to be able to stop it, and so it's just all the more disappointment, all the more frustration, all the more anger.

Cl: Yeah, and each time it feels worse. You know, I just get really fed up. And then, and then when it's all over with, you know, he says he's sorry, you know, and it'll never happen again, and, you know, I'm usually crying cause, because it hurts. And um, then he goes out and buys me flowers and, I think, "Well, I really, I really think it'll be OK this time."

Co: I hear an emotional roller coaster- up and down, up and down.

Cl: Uh-huh.

Co: You're telling me that's not what you want.

Cl: Yeah, it just feels really crazy, I guess. It just takes so much out of me and I don't know, I don't even know
what I feel for him anymore. Sometimes when he gets mad and we fight, you know, and he hits me, I just think that I can't take this anymore. It feels so bad and I just, I feel so mad at him for doing this. And then when it's all over it feels so good because he's real loving and, uh, you know, most of the time, and I don't want you to get the idea that he, that he, that he's a really bad guy, because most of the time I'm thinking that he really cares about me, and I feel close to him, and, it's just when he gets mad and we get into these arguments that.

Co: It's just not consistent with your picture of him. You love him at one time, and then unexpectedly you, uh, you're angry.

Cl: Yeah, I just, at those times it just feels like he's beating up on me for no good reason. And my friends say, "Why do you take that?" you know, "Just get out of that situation." But that's so scary to think about. I mean, we've been married ten, almost eleven years, and, I can't imagine what it would be like not to be with him. Because I, I love him. He just makes me real angry when he gets mad like that.

Co: There are times when you just want to get out. There are times when you want to leave the situation.

Cl: Yeah.

Co: But, but that's too frightening.

Cl: Yeah, cause I don't know where I'd go.

Co: You're afraid you'd just disappear or something, that you'd just dry up and shrivel away.

Cl: Yeah, it's like my life is so, is so much being with him and our kids that, uh, you know, if I left, I just... I don't know where I'd be. I don't know where I'd go. I don't know. I just feel so, scary.

Co: I hear a real lost feeling. A real lost idea.

Cl: Yeah, I guess I... the idea I had when we got married is that this was just going to be forever, you know. And that's, that's what, that's what marriage is for me. You know, for better or for worse. And right now it feels for worse, I guess.
Co: So, now you have new feelings that you never expected to have.

Cl: Yeah, I feel like I want to run away again.

Co: Don't know how to deal with those . . .

Cl: I feel like I should stay there, cause that was my commitment, you know. And I feel like a traitor. But I don't know. I mean I get so angry each time it happens, and it seems every time it happens it gets worse, that I just don't know how I can take that either.

Co: To protect yourself by getting out, you say it would be like being a traitor.

Cl: It feels like I'd be giving up on him and us and the kids.

Co: You don't want to give up on him.

Cl: Well, not really, cause I, you know, he's really an OK guy. I mean, I, I have a lot of feelings for him. You know, it's like I said, when he's not angry, and we're not fighting, he can be so loving. And I really miss, I guess I'd really miss that, if we weren't together.

Co: That would be hard to give up.

Cl: Yeah, and I mean, there I'd be, you know. If I left I'd try to take the kids with me, and um, I guess I would feel like I was depriving them of their father, and, and the closeness that they have, too.

Co: Uh-huh. And so you'd turn into a bad person relative to your kids, too, if you started taking better care of the situation.

Cl: Yeah, I guess so.

Co: It must be a really terrible dilemma for you. You must feel stopped. No answers, no place to go.

Cl: I feel caught, I guess. I feel trapped. I feel like I'm going to be damned if I do and damned if I don't. Cause my friends are saying, "Get out of that situation. You don't deserve that. It's horrible." And I say, "Yeah, well that's easier said than done." Because, um, I don't know where I'm going to go, and I'm going to be all alone, and I don't know how I'm going to take care of
myself, much less the kids too. I really, I need him around for a lot of things, I mean, I don't need him for, for beating up on me, but all the other times, you know, are pretty good.

Co: You feel like he does give you a lot of, a lot of support to carry out your role as a mother and a wife.

Cl: Yeah, he's pretty good about that, but... I feel like I can be a pretty good mother. You know, he brings home the paycheck.

Co: That just has to complicate what you experience further. He is really good to you in certain ways, and then when he gets abusive, you get impulses which just don't fit.

Cl: Yeah, I just...)

Co: I guess you get a lot of guilty feelings for thinking, "I've got to get out of this."

Cl: Yeah, I keep feeling that urge to just get up and run, and escape, and get away, and then it's like I'm not being fair- to him or the kids. And I don't know what's fair to myself anymore.

Co: Kind of lost your sense of how you ought to be able to treat yourself.

Cl: Yeah, once again, my friends keep saying, you know, "You've got to get out. You owe that to yourself." Yeah, well what about the kids. Maybe being fair to myself is getting out, but is that being fair to them?

Co: I can just sense the confusion, and the, the angry feelings and the sense of helplessness in your voice in the way you describe things. It must be a really, really hard situation for you.

Cl: I just feel like I've lost all of my energy. It's like sometimes when we have those fights, I don't even care. I'm so tired of going through it over and over and over again. And then he makes these promises. And it, sometimes it just seems like such a joke. And I just, I don't know if I have the strength to keep fighting back. Nor do I have the strength to leave, because I just...

Co: You're so tired. You so much want to do something, and you just don't have the energy to do it.
Cl: Uh-huh. I feel so lost, cause there doesn't seem to be an answer to stay. And right now, leaving doesn't seem like and answer either cause that just, that just overwhelms me. And to even just pack up the kids and get out, then it's the question of where to go, the question of money, you know, and,

Co: You just feel like it's impossible.

Cl: I've depended on him for that. And you know, my parents, to go to them would just be devastating. I mean, they would just, they'd probably be mad at me for leaving him. You know, "Are you crazy or something?"

Co: You don't feel like you can get any support from anybody anywhere.

Cl: No, maybe a few friends, but then, I can't, I can't go to them and say, well, "Here I am. You told me to leave, now take care of me." I mean, that just.

Co: That would be really hard.

Cl: Talk about feeling guilty. That would, I don't know if I could do that to them. Cause I really, I really need them because if I don't have them, who will I have?

Co: So even if you felt like your friends are saying the truth, you feel like you might upset your relationship with them if you followed through on what their advice is.

Cl: I, I guess I'd have to rely on them somehow, and that bothers me a lot.

Co: That's not your style.

Cl: Yeah, I feel like I can take care of myself, but boy, thinking about leaving sure makes me wonder.

Co: That would change things completely.

Cl: Cause I don't have a college education, and um, I just don't know what to do.
Appendix E:
Counseling Style Evaluation Form: Pilot Study

For each of the following questions, evaluate the counseling style portrayed on the film you have just watched by placing an "X" in one of the spaces provided along each of the continuums below. (Place the marks between the vertical lines.) Spaces on the left-hand side of each continuum generally indicate low levels of the dimension in question, while spaces on the right-hand side are indicative of high levels of the dimension being assessed. Take a moment to read through each of the items before responding.

1. How much emphasis did the counselor place on dealing with the client's inner feelings and emotions?

   Little emphasis on feelings and emotions

   Great emphasis on feelings and emotions

2. How much emphasis did the counselor place on dealing with the client's cognitive thought processes (logical or rational thinking?)

   Little emphasis on cognitive thought processes

   Great emphasis on cognitive thought processes

3. How professional was the counselor in this film?

   Unprofessional

   Professional

4. How supportive was the counselor in this film?

   Nonsupportive

   Supportive

5. How friendly was the counselor in this film?

   Unfriendly

   Friendly

6. How accepting was the counselor in this film?

   Unaccepting

   Accepting
7. How **sincere** (genuine) was the counselor in this film?
   - Insincere _________ Sincere

8. How **realistic** was the counselor in this film?
   - Unrealistic _________ Realistic

9. How **confusing** was the counselor in this film?
   - Not confusing _________ Confusing

10. How **threatening** was the counselor in this film?
    - Not threatening _________ Threatening

11. How **insightful** (understanding of the client's problem) was the counselor in this film?
    - Lacking insight _________ Insightful

12. How **active** (involved in the counseling process) was the counselor in this film?
    - Inactive _________ Active

13. How much concern did the counselor show for the client in this film?
    - Little concern _________ Much concern

14. If you had a personal problem that you wanted to talk to someone about, would you like to work with this counselor?
    - No _________ Yes
### Summary Statistics

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$^1$Degrees of freedom = 1,45.  
* $P < .05.$  
** $P < .01.$
Appendix G:
Evaluation of Drs. Ellis and Rogers: Pilot Study

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*Degrees of freedom = 1, 41.  \( ^* \text{p} < .05. \text{  } ^{**} \text{p} < .01. \)
Appendix H:
Counseling Style Evaluation Form

For each of the following questions, evaluate the counseling style portrayed in the videotape you have just watched by placing an "X" in one of the spaces provided along each of the continuums below. Spaces on the left-hand side of each continuum generally indicate low levels of the dimension in question, while spaces on the right-hand side are indicative of high levels of the dimensions being assessed. Take a moment to read through each of the items before responding.

1. How much emphasis did the counselor place on dealing with the client's inner feelings and emotions?

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2. How much emphasis did the counselor place on dealing with the client's cognitive thought processes (logical or rational thinking?)

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3. How professional was the counselor in the film?

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4. How sincere (genuine) was the counselor in this film?

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6. How insightful (understanding of the client's problem) was the counselor in this film?

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7. How helpful was the counselor in this film?

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8. If you had a personal problem that you wanted to talk to a counselor about, would you like to work with this counselor?

No ___________ Yes ___________

9. If you had a personal problem that you wanted to talk to a counselor about, do you believe this counselor would be able to help you?

No ___________ Yes ___________
Appendix I:
Comparative Evaluation Form

Indicate your impressions of counseling style "A" and counseling style "B" by placing an "X" in one of the spaces provided on each of the lines below. Spaces on the far left-hand side of each line indicate a strong preference for counseling style "A," whereas spaces on the far right-hand side of each line indicate a strong preference for counseling style "B." More neutral preferences, or nearly equal liking may be expressed by placing a mark closer to the center of each line.

1. Which counseling style did you prefer most overall?
   Style A  I I I I I I I I  Style B

   In a brief paragraph, please explain the reason(s) for your preference. (What things did you particularly like or dislike about either style of counseling?)

2. Which counseling style did you consider to be most professional?
   Style A  I I I I I I I I  Style B

3. Which counseling style do you believe was most helpful to this client?
   Style A  I I I I I I I I  Style B

4. If you had a personal problem that you wanted to talk to a counselor about, which of the counseling styles would you most enjoy working with?
   Style A  I I I I I I I I  Style B

5. If you had a personal problem that you wanted to talk to a counselor about, which of the counseling styles do you believe would be most able to help you? (In other words, which counseling style do you think would be best for you?)
   Style A  I I I I I I I I  Style B