AN EXPERIMENTAL STUDY OF THE EFFECTIVENESS OF ATTITUDE CHANGE TECHNIQUES FOR ENHANCING SELF-ESTEEM

by

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CHAPTER I

INTRODUCTION

Statement of the Problem

It has recently been advocated that psychotherapy is not a world unto itself, but rather follows rules, patterns, and relationships inherent in most interpersonal relations. Goldstein (1971) notes that "psychotherapy as generally practiced has long included major, efficiency-reducing trappings; that is, procedures and conceptualizations embedded in clinical lore which are largely irrelevant to patient change" (p. 3). Goldstein and Simonson (1971) further point out that the literature of social psychology is a likely and rewarding area from which to derive models for investigating psychotherapy. An increasing number of studies have already begun looking at this relationship (Beutler, Jobe, and Elkins, 1974; Beutler, Johnson, Neville, Elkins and Jobe, 1975; Goldstein, 1973). An investigation into the area of patient self-esteem would seem to be an appropriate addition to this movement in psychotherapy research.

The self-esteem level of the patient is a variable that is integrally related to the process of psychotherapy since it is a commonly held belief that patients entering therapy have, as one trait in common, a low level of self-esteem (Murray and Jacobson, 1971). In order to expedite therapy, therefore, it is in the therapist's interest to modify this low level of self-esteem. At least two arguments can be made for the importance of this

attempt. First, it would be the value judgment of many, if not most psychotherapists, that an increased respect of, or liking for, oneself is a primary goal of therapy since it is one of the variables whose change signals improvement (Butler, 1966; Truax and Carkhuff, 1967). Second, increased levels of self-esteem would allow other behaviors to take place more readily in the patient's environment. We refer here to the facilitation of such therapist directions as are included in assertiveness training or in vivo desensitization. Usually, attempts to increase self-esteem occur through the normal procedural events of the therapeutic sessions, that is, the sort of accepting, supportive, and permissive stance common to almost all psychotherapy. This indirect method, although widespread, is an excellent example of the "efficiency-reducing trappings" decried by Goldstein (1971).

In order to avoid such inefficient treatment of what may be considered a major component of psychotherapy, self-esteem can be conceived of as an attitude, and thus be treated as a variable common to both psychotherapeutic endeavors and social psychology. However, it is by no means a simple matter to define what is meant by the seemingly simple term "attitude". Allport (1935) reviewed more than one hundred different definitions of the concept of attitude before he concluded that most definitions agreed that an attitude is a learned predisposition to respond to a situation or a class of objects in a consistent way.

The treatment of self-esteem as an attitude is not an entirely

new idea. A tacit belief that self-esteem is an attitude that can be changed is already found in the clinical psychology literature. For example, Murray and Jacobson (1971) state that typically, patients entering therapy have problems involving low levels of self-esteem. Patients have learned to see themselves that way based on their beliefs about themselves: they are not capable of dealing with their problems; they cannot love or be loved; they possess certain personality characteristics that are undesirable and unchangeable. However, the authors' recognition that a therapist "shapes the attitudes and behaviors shown by the client" does not mean that his efforts extend to a direct attack on the self-esteem level itself. Instead, increases in self-esteem level which are considered important by traditional and behavioral therapists alike, come about as the result of the general therapeutic process itself rather than of specific, planned intervention procedures. It is also noted that although self-esteem has been construed as an attitude by those involved in attitude change research in social psychology (Rosenberg, 1967), no body of literature exists in which self-esteem itself is used as a dependent variable to be modified rather than an independent variable in the investigation of some other attitude. The current study was undertaken therefore as an initial attempt at streamlining the esteem-enhancing aspect of psychology through use of attitude-change procedures used in social psychological research.

Self-esteem: Definition and Historical Perspective

Self-esteem has been discussed as a concept for a long time in the field of psychology. James (1890), in speaking of the significance of the self, concluded that our values and aspirations play an important role in determining how we evaluate ourselves. Thus, achievements are measured against aspirations for any given area of behavior. According to this formulation, if achievement meets or closely approaches aspirations in a valued area, high self-esteem results. If there is a wide difference between these two factors, the individual is left with a resulting low self-esteem. James shows the relationship by means of the formula:

$$\text{self-esteem} = \frac{\text{success}}{\text{pretentions}}$$

The areas that are chosen as valued are in part determined by the value system of the individual, but are also directly and indirectly affected by conventional standards of the society in which the person lives.

Mead (1934), elaborates on what James referred to as the "social self." Mead states that the individual internalizes the attitudes expressed by key figures in his life, in a sense modeling them directly until they are a part of his self. This applies not only to attitudes and actions toward external objects but toward himself as well. Thus, the individual gradually responds to himself and develops self-attitudes congruent with those shown to him by those significant others. The individual derives his

self-evaluations directly from social interactions with his social group. Mead also introduced the notion of the "generalized other" which has a representation in the self as the role of a group of others and corresponds to society's representation within the individual. This "generalized other" is an important concept because it permits the development of a "generalized self" in addition to the individual "specific self" which operates in a specific social situation. We can thus account for a more general sense of self across many situations which is a prerequisite for the concept of overall self-esteem.

Freud's conceptualization of the self included components of ego, id, and superego. The ego was described as a mediational concept which, like some descriptions of the self, is directed toward realistic adaptation to the world. Although Freud did not directly deal with self-reflective behavior, the function of "ego instincts" presumed such reflective behaviors (Munroe, 1955). His ideas of superego and ego ideal represented the social strata from which self-judgments are made but do not correspond clearly to what is called social self by James (1890), Mead (1934), and others. Freud did not deal directly with reflected values such as self-esteem but did posit strong emotional evaluations of self-hate and condemnation.

Neo-Freudian theorists have dealt with self-esteem more directly. Instead of seeing libido as an energizing force of all behavior, Adler, Horney, Fromm, and Sullivan, saw the self as a

mediator between basic drives and reality. Except for Sullivan, they all saw innate self-drives as acting to motivate behavior: the concepts of Adler's "striving for superiority," Horney's "self-realization," and Fromm's "self-fulfillment" were central to their respective theories.

Adler emphasized actual biological organ inferiority as a basis for the development of the life goal of the individual (Ansbacher and Ansbacher, 1956). However, it is not the actual physical reality which caused the striving for superiority but the individual's perception of the defect. This reflexive process is very similar to the concept of self-esteem.

For Horney, basic anxiety results from the experiences of the helpless child in a potentially hostile world. This anxiety results in a need for security, for which self-esteem is a fairly important concept. Horney (1950) states as a basic assumption of her theory the desire of the person to value himself and to be valued by others. The "real self" consists of the potential qualities contained in the individual which are differentiated from the individual's actual qualities or "actual self." The self ideal serves as a guide for the normal person's actions. Self-alienation results from a growth in the discrepancy between the real and actual self.

Fromm and Sullivan were more inclined toward sociological aspects in their theoretical presentation. Fromm (1939) emphasized the relation between an individual's self-regard and his ability

to deal with other people. His notion of self-esteem is recognized as his idea of self-love. He believed that self-love was a prerequisite for the ability to love others.

Sullivan (1953) specified self-processes more explicitly; in some respects his approach is similar to that of Mead. He described the self as being defined interpersonally, coming from experience by means of appraisals by others. He posited no self-drives or potential selves but rather saw the self as entirely a learned phenomenon. Development of the self from childhood into "good me," "bad me," and "not me," arises as a result of satisfaction of needs or production of anxiety by the parents when the child acted in a way which pleased or displeased them. According to this process, the self-system develops as "an organization of educative experience called into being by the necessity to avoid or to minimize incidents of anxiety" (Sullivan, 1953, p. 165). It also includes a process of self-evaluation which constitutes self-esteem.

Other theorists have dealt indirectly with the concept of self-esteem. Symonds (1951) defines the self as the way in which the individual responds to himself. The self thus consists of four components: (1) how the individual perceives himself; (2) what he thinks of himself; (3) how he values himself; and (4) how he tries to enhance or defend himself. The self develops as the individual sees himself separate and distinct from others. Eventually, the self comes to represent all the evaluations and

meanings a person has about himself and his relationship with the world around him.

Snygg and Combs (1949) see the self as a phenomenal self selected out of the phenomenal field which "includes all those parts of the phenomenal field which the individual experiences as a part of, or characteristic of, himself" (Snygg and Combs, 1949, p. 58). A relationship to the concept of self-esteem is derived from the authors' definition of the self as an object about which attitudes are held.

Rogers (1951) agrees with the concept of a phenomenal self and its emergence from the phenomenal field. The self, developing out of interaction with the environment, reflects the judgments, preferences, and shortcomings of the particular environment of that individual. Rogers posits that harsh, rejecting judgments of the self prevent the individual from accepting himself and produce underlying doubts of worthiness.

Two recent theoreticians have dealt more directly with the concept of self-esteem and its associated variables. Coopersmith (1967) is concerned with early development of self-esteem with study restricted to pre-high school children. His idea of self-esteem is derived from a conglomeration of analytic views with an attempt to avoid deeper than necessary involvement in assumptions. Self-esteem is seen as a complex concept involving self-evaluation, defensive reactions, and subsequent concomitants of these processes. It is defined as a "personal judgment of worthiness that is ex-

pressed in the attitudes the individual holds toward himself" (1967, p. 5). Coopersmith (1959) conceptualized self-esteem into a component of subjective expression (as represented by self-perception and self-description) and a component of behavioral expression presumably available to observers. Self-esteem thus involves true self-esteem (the extent to which the individual actually feels valuable, etc.) and defensive self-esteem (the degree of actual unworthiness feelings which are not admitted). Coopersmith (1967) posits four groups of variables which determine the level of self-esteem: success, values, aspirations, and defenses. He states: "The process of self-judgment derives from a subjective judgment of success, with that appraisal weighted according to the value placed upon different areas of capacity and performance, measured against a person's personal goals and standards and filtered through his capacity to defend himself against presumed or actual occurrences of failure" (Coopersmith, 1967, p. 242).

Rosenberg (1967), in his conceptualization of the self-esteem concept, shows considerable substantive overlap with the ideas of Coopersmith, but differs in several key points. Rosenberg, unlike Coopersmith, sees self-esteem as a fairly unidimensional phenomenon coordinated within a larger, more comprehensive theory. The concept of attitude is used as a unifying idea to which antecedent, consequent and structural aspects of behavior can be related through the influence of reference groups. Rosenberg (1967)

states that "self-esteem" can be construed as an attitude toward oneself. Self attitudes can be seen to have direction (like or dislike), intensity (strong or mild), salience (the degree of intrusion into a wide variety of situations), importance (the degree to which self-esteem makes a major difference in one's life), clarity, etc., as do other attitudes. In a theoretical position that has structure somewhat similar to that of Fishbein (1967) in the area of attitudes, Rosenberg posits that self-esteem is based on the individual's self-assessment of qualities that count. Therefore, the relationship between global self-esteem and the self-estimate of high likeability is strong for those who value being likeable while for those for whom this attribute has less value, the relationship is much weaker. Given an almost limitless range of possible areas that one could rate well on, it would seem plausible that everyone could enhance his self-esteem by choosing as valuable attributes those at which he excels and devaluing those qualities at which he is poor. Thus, almost everyone could consider himself superior to almost everyone else as long as he chooses his own basis on which to judge. In addition, the individual can be selective in his interpretation of the facts. As Rosenberg states, "There is scarcely any behavior which cannot be interpreted as admirable in some way (the last resort is to say that 'at least' one is not the opposite appalling extreme)." Rosenberg agrees with the simple, yet ingeneous formulation of James (1890) in which self-esteem equals success over pretensions.

It is easily seen that an increase in self-esteem may be as profitably derived by reducing the denominator as by increasing the numerator. It is, therefore, not simply how good a person thinks he is with regard to some quality but how good he desires to be that makes a difference. It would make sense for people to choose goals that are interpreted as falling within reach of their potential success.

There are, however, limits on selectivity which result in individuals having less than favorable self-attitudes. One limitation is the inescapable quality of certain objective facts about the self. Contact with reality forbids distortion of such bits of data as sex, height, wealth, etc. Much more importantly, self-values, although capable of being shaped for psychological comfort (decent level of self-esteem) are not infinitely so. There are still some individuals who are low in some self-estimate for whom that value is extremely high. There are several reasons for this discrepancy between self-values and self-estimates. First, many self-values are acquired long before the opportunity arises in which they can be tested. For example, a child from an intellectually-oriented family may learn early to value academic pursuits and achievement and only gradually become aware of his shortcomings in this area with the passage of time. Second, the trait to be valued may only be a means to some other, highly valued goal. It is difficult to abandon the importance of the particular trait involved without abandoning the goal for which the trait is

required. Thus, the son of a doctor who wants to follow in his father's footsteps will find it hard to lower his value of academic performance which serves as a prerequisite to his larger goal. He would find it most difficult to substitute his prowess at artistic enterprises since they serve little toward advancing to his still-kept goal. A third, and very important reason why self-values do not agree with self-estimates, is that these self-values are determined often from social role definitions and group norms (Mead, 1934). At an early age a child learns from parents and family what is right and wrong, important and unimportant for him, with these values internalized into his own value system (see also Coopersmith, 1967). As the child grows up, he finds himself judged by these criteria. If he wants the approval of a group, he must seek to excel in terms of their values and not his own. Our opinions of ourselves are highly influenced by what other people think of us or by what we assume they think.

To summarize, the definition of "self-esteem" is difficult to derive, largely because of the many closely associated concepts and different interpretations of the same concept by different theorists. Wylie (1974), for example, states that, "for some authors, self acceptance means respecting onself, including one's admitted faults, while self-esteem, or congruence between self and ideal self, means being proud of oneself or evaluating one's attributes highly" (p. 127). Self-acceptance is thus assumed by

some to be a conscious and realistic recognition that one can fall short of the ideal and still be all right. Wylie concludes that the terms are so intertwined and overlapping in the literature that the various constructs must be treated as a group. The term used for convenience in this manuscript will be self-esteem, with the acknowledgement that it represents an indefinite and somewhat inclusive term. The term will be construed as differing from self-concept in that this latter term is seen by the current author as denoting a more specific evaluation of some particular trait on the part of the individual akin to the term "self-estimate" proposed by Rosenberg (1967). Self-esteem is seen to represent a quantitative concept describing an overall value of the person, as a person, which is, in fact, based on an additive evaluation of the individual's self-concepts. The author thus embraces a concept of "overall self-esteem" despite problems of conceptualization and measurement inherent in this model.

Attitudes and Attitude Change: Theoretical Perspective

The area of study dealing with attitude theory is an extremely complex and difficult one. Various attempts have been made to classify the different theories from several points of view (eg. Greenwald, Brock, and Ostrom, 1968; Insko, 1967). In order to present a quick overview of this topic, the formulation of McGuire (1969) will be used because of its relative simplicity and direct applicability to attitude change.

In his review, McGuire (1969) states that theories of

attitude change fall under two domains: miniature theories which try to explain small subareas of research findings within the attitude change literature, and general conceptualizations which attempt to summarize a wide range of psychological findings. Some examples of miniature theories include Kelman's (1961) tri-component analysis of source affects, Janis' (1970) analysis of fear-arousing appeals, and McGuire's (1969) analysis of influenceability and personality or resistance to persuasion (innoculation). Insko (1967) presents a detailed look at such theories in an ordered and economical way.

The second approach to theory which provides heuristic value in developing understanding, prediction, and control of behavioral patterns, can be best summarized by use of four general conceptual models. These approaches include perception theory, functional theory, consistency theory, and learning theory. It must be understood that no one of these approaches is without problems in explaining some of the relationships explored in attitude change research. Neither do they necessarily provide alternative predictions from one to another. They are instead seen by McGuire as supplemental to each other. This is not to say that the unique features of one theoretical position are not valuable. In fact, areas pointed to as important by one approach are often retroactively accounted for by the other theories but would probably not have been investigated had not that particular frame of reference been applied in the first place.

Perceptual Theory Approaches

This approach is succinctly explained by Asch (1948; 1952) who stated that persuasion consists of not so much changing the believer's opinion about a given object as it does changing his perception of which object it is he is giving his opinion about. For example, if we present to someone who initially has a low opinion of politicians the simple message that most of his peers whom he values see politicians as admirable, he tends to report a more favorable opinion about politicians upon requestioning. Thus perceptual theory says that the normative feedback causes the person to reinterpret what "politicians" means rather than changing his opinions of the individuals about whom he originally had doubts. He may now "recode his cognitive field" so that he sees politicians as statesmen rather than as ward bosses -- he has not changed his opinion of statesmen nor of ward bosses, however. As does the learning-theory approach, the perceptual theory approach to attitude change stresses the reception mediator. Both theoretical positions often make similar predictions, albeit for different reasons. Although many experiments have been designed to tease out the relative contribution of the mechanisms of each (as, for example, inhibition versus perceptual distortion in primacy-recency effects) it is equally plausible that both could be operative simultaneously. These two approaches thus can be seen as complementary rather than diametrically opposed (McGuire, 1969). This interrelationship is illustrated by the Sherif and Hovland

assimilation-contrast theorists (Sherif and Hovland, 1961; Sherif and Sherif, 1967; Sherif, Sherif, and Nebergall, 1965). They have applied their respective approaches to determine when source-receiver discrepancies are resolved by changing one's own opinion or by perceiving the source as closer to himself than is actually the case by means of interaction with personality and situational factors. Other interesting results along this line involving personality (particularly sex) differences have been reported by Brock and Buss (1962), Steiner (1960), and Steiner and Johnson (1964).

Functional Theory Approaches

The functional theory approaches differ from the other approaches presented here in that there is a relative lack of stress put on the relationship between attitude toward an object and information about it, perception of it, or to some extent, behavior regarding it. Instead, attitudes are seen to be determined by the individual's needs so that there may be very little relation to the particular object about which the attitude is held. Attitude change is achieved, therefore, not by changing the person's information, perception, or behavior in regard to the object, but by changing his underlying motivational and personality needs. Work in this area includes that of Adorno, Frenkel-Brunswick, Levinson, and Sanford (1950) on the authoritarian personality, Bettelheim and Janowitz (1950) on prejudice, and Smith, Bruner, and White (1956) on nationalistic attitudes.

Explicit development has been made using this theoretical viewpoint by Katz and his associates (Katz, 1960; Katz, Sarnoff, and McClintock, 1956; Katz and Stotland, 1959).

Consistency Theory Approaches

The basic position of the consistency theory approach is that an individual adjusts his attitudes and behavior in order to keep the highest degree possible of internal harmony in his belief system and between those beliefs and his actions. The logical system used is not strictly consistent but may make a more "psychological" sense.

Much of the theoretical work in the area of cognitive consistency followed from Heider's (1946) formulation that the person (p) tries to keep his feelings about another person (o) in line with their mutual liking for an object (x). Derivatives of this line of thought include Newcomb's (1953) A-B-X model, Cartwright and Harary's (1956) use of graph theory generalizing Heider's three-element system to an n-element one, and Abelson and Rosenberg's (1958) use of matrix algebra to extend Heider's formulation. Included in this area is Festinger's dissonance theory (Brehm and Cohen, 1962; Festinger, 1957; Festinger and Aronson, 1960).

Several consistency theory approaches are relatively independent of Heider's work. Congruity theory (Osgood and Tannenbaum, 1955) has recently been applied to the question of immunization against persuasion. McGuire's (1960; 1966) "cognitive consistency" theory derives from an attempt to codify the similarities and

differences between formal logical principles and real human information-processing. This theory states that although the person has a need for logical consistency, there are conflicting needs (such as wishful thinking) that produce an actual belief system which is a compromise between these conflicting forces.

Learning Theory Approaches

This approach to attitude change has received the most widespread use by experimentalists (McGuire, 1969). Major theoreticians in this area include Hovland (1959), Campbell (1963), and Anderson (1959). The unifying concept behind these approaches is the prediction of a relationship between an independent variable and attitude change by means of a presumed known relationship of that independent variable and learning. For example, the effects of fear-arousing appeals on persuasion are predicted from known relationships between anxiety and learning; order of presentation effects (such as primacy-recency controversies) are explained by referring to proactive and retroactive inhibition and facilitation effects investigated in the area of verbal learning; the relationship of a particular personality variable on persuasion is analyzed by means of the effect of that personality variable on learning.

One such learning theory approach has been formulated by Fishbein (1967). In his theory he posits that a person's attitudes (affect) are based on beliefs (cognitions) about an object which may or may not predict behavior (conation). Beliefs about an object can be defined in terms of the probability that a particular

relationship exists between the object and any others. Attitude acquisition is seen as an automatic, nonverbalized process that occurs in conjunction with concept learning. Thus an individual's attitude toward an object is a function of the strength of his beliefs about the object in his own belief hierarchy and an evaluative aspect of those beliefs. While all of an individual's beliefs about an object serve as indicants of his attitude toward the object, it is only the individual's salient beliefs that serve as determinants of his attitude. The most obvious implications of the theory concern the area of attitude change. According to the theory, attitude change will occur when an individual's beliefs about an object change and/or when the evaluative aspects of those beliefs change (become more or less important to the individual). Beliefs may be changed in two ways: new beliefs may be learned or the relative strength of already held beliefs may be altered as reflected by their position in the individual's belief hierarchy. Attitude change is viewed as a function of the total amount of affect associated with an individual's beliefs about the attitude object. Thus, if a very positive attitude toward an object exists and some new beliefs are associated with the object which are slightly less positive, the overall attitude will remain very positive because of the summation of beliefs.

The theory also has implications for understanding the relationship between attitudes and behavior. There have been many problems involved in attempting to make predictions of overt

behavior (not answers on a paper-and-pencil test) from attitudes. The lack of unity between attitude as measured on paper and behavior is theoretically due to the fact that the saliency of beliefs is different for the two situations. If there is, in fact, a relationship between attitudes and behavior, discovery of it will depend on the measurement of attitudes toward appropriate stimulus objects.

Measurement of Self-esteem as an Attitude

The problems inherent in measuring self-esteem are for the most part a subset of the difficulties of measurement of attitudes in general. A complete and systematic treatment of this area is presented in the chapter on measurement by Scott (1968). There are, however, differences in the extent to which different attitudes can be defined in a clearcut, objective way. Self-esteem is certainly not a unitary concept as was stated above. In addition, self-esteem is a more "private" variable, less open to measures involving direct observation. Thus, most attempts at measurement have involved use of paper-and-pencil tests. As such, these measures are affected by all the questions of test construction in general, including establishment of reliability and validity, confounding with acquiescence set, etc.

Wells and Marwell (1976) state that the use of more unstructured procedures such as open-ended interviews is very infrequent and tends to show up mainly as validation mechanisms for already existing standard self-esteem paper-and-pencil measures. While

very few cases of substantive research using unstructured interviewing to measure self-esteem were found by the authors, they state that "as a clinical procedure in the course of psychotherapy and clinical counseling, unstructured (or non-directive) interviewing must be one of the most widely used procedures for indexing self-regard" (p. 179).

With regard to paper-and-pencil tests, Wylie (1974) points out that the explicit or implicit concern on the part of most researchers with the hypothetical construct global self-esteem (also espoused by the current author) has led to the widespread practice of creating measuring instruments which consist of a compiled list of items with heterogeneous, somewhat specific, content referents. Responses to these items are then summed to obtain a total score. Mention is usually made of the criteria used for item selection or creation. However, if we subscribe to the theoretical positions taken by Rosenberg (1967), and Fishbein (1967), it becomes noteworthy that it is not known what the "value importance" or "salience" of any one item from a self-esteem paper-and-pencil measure is to the subject nor, therefore, its contribution to his global self-esteem. Persuasive messages which succeed only in changing old or adding specific new self-concepts or beliefs may show no effects as far as global self-esteem is concerned if the paper-and-pencil measure used to reflect such changes does not contain the particular self-concept statements used in the attitude-change message or some generalization to other self-concepts does not take place.

Rosenberg (1965) attempted to create a unidimensional measure of global self-esteem through the method of Guttman scaling. A Guttman scale is comprised of items drawn from the domain of one hypothetically unified construct in which successive items represent differing degrees of strength of that construct (Wylie, 1974). The increasing degrees are defined by an increasing proportion of subjects who endorse each successive item. Wylie (1974) states that, given its advantage of brevity, high reliability, construct validity, and freedom from the salience-of-items problem cited above, the Rosenberg scale deserves more research, development and application.

Introduction to Literature Review

Research on attitude change can be broken down into five major areas: source, message, channel, receiver, and destination (McGuire, 1969). The literature concerned with these variables is extensive as witnessed by the regular review on this topic in the Annual Review of Psychology and the fact that attitude was the most frequently indexed social psychological term in Psychological Abstracts from 1961 to 1965 (McGuire, 1969). The current study focused on the application of results of research having to do with the source of a communication since the findings in this area are well established and are particularly applicable to self-esteem change techniques.

According to Kelman (1961) a source may have attitude-changing possibilities of different strengths by means of three

types of characteristics: credibility, attractiveness, or power. Kelman calls the corresponding modes by which attitude changes takes place: internalization, identification, and compliance. In the first of these processes, the receiver wants to have an objectively verifiable "correct" stand on an issue. To the extent that the communicator has high credibility, the receiver learns and recalls his arguments and his conclusions are integrated into the belief and value system of the receiver. Empirical data tends to show, however, that when source credibility does affect attitude change, generally there is no learning of the arguments presented (Bauer, 1965; Hovland, Janis and Kelley, 1953; Watts and McGuire, 1967).

In the identification mode, it is assumed that the receiver is motivated to establish a good role relationship with the source. In this case, attractiveness as determined by similarity to, familiarity with, or liking for the source is the determining factor. No evidence for the validity of the source's position is presumed necessary. However, Kelly (1955) states that the change produced is not internalized and depends for maintenance on the source's continued advocacy of the new belief and a continued role relationship valued by the receiver.

The third mode of change, compliance, consists of the receiver's public adoption of the new attitude without private commitment to it. In this mode, the source must have power over the receiver's means to attain desirable goals.

Berlo and Lemert (1961) had subjects do semantic differential

ratings of communication sources and factor-analyzed these ratings. They derived a three-factor solution which consists of the descriptions: expert versus ignorant, admirable versus contemptible, and aggressive versus meek. These factors are very similar to that of Kelman (1961) presented above.

Schweitzer and Ginsberg (1966) in their investigation of Hovland, Janis, and Kelley's (1953) construct of source credibility asked subjects to list the relevant characteristics of several highly credible people with whom they had had personal contact. A set of bipolar rating scales was constructed from the lists so generated. In the second phase of their study, the author had an independent sample of college undergraduates rate a high and low credibility source using the scales derived from the first part of the study. The judgmental responses were factor-analyzed to assess the dimensions used in the judgments.

The factors that emerged from the highly credible source were more specific than those for the low credibility communicator. An "expert" factor did not emerge for the high credibility source. Many factors in addition to "expertness" and "trustworthiness" were required to describe either of the communicators. The authors conjecture that in a population of students who are confronted daily by experts, the possession of this quality may not be crucial for judgments of high source credibility whereas the absence of this characteristic may be sufficient to judge a source as low in credibility. There is a strong suggestion that communicators

having high credibility are perceived as warm and honest.

Bauer (1965) analyzed the distinction between credibility and attractiveness by stating that the person in an attitude-change situation plays either a problem-solving game of coping with real-world problems, which is responsive to source competence, or a psychosocial game of ingratiation and ego defense, which is responsive to source attractiveness.

From the above formulations, it can be seen that the two factors pertaining to communicator persuasibility that would be most relevant to a therapy analogue designed to enhance self-esteem are communicator credibility and attractiveness. A more detailed review of these two factors follows.

Source Credibility

Most of the major and minor theories of attitude change predict that high credibility sources are more persuasive than low credibility sources (Insko, 1967). While the ultimate proof of this assertion is dependent on empirical validation, most authors assume that this relationship has indeed already been established. Some representative statements to this effect include:

> That high credibility sources elicit more attitude change than do low credibility sources is one of the most consistent findings in the attitude-change literature. (Johnson and Scileppi, 1969, p. 31)
>
> In view of the high degree of consistency in this source credibility literature we can safely generalize

that a high credibility source will be more influential than a low credibility source. (Insko, 1967, p. 48)

That sources of low credibility are not as persuasive as highly credible communicators is a firmly established generalization. (Greenberg and Miller, 1966, p. 127)

In any case, research has consistently indicated that the greater the perceived credibility of the source, the more likely the receiver is to accept the source's influence attempts. (Siegel, Miller, and Wotring, 1969, p. 118)

The most pervasive general finding is that highly credible communicators produce more attitude change than communicators having low credibility. (Sigall and Aronson, 1967, p. 179)

Credibility as used in the studies referred to by these authors can be analyzed into components of expertise and objectivity or trustworthiness (Hovland, Janis, and Kelley, 1953). These aspects of the term credibility construe the recipient of a persuasive communication as a rational, problem solving individual who is trying to adjust his belief system to reality based on the ability of the communicator to know the "correct" stand to take in regard to the attitude object and his motivation to present this knowledge in an unbiased fasnion.

Studies that have varied credibility have, in fact, often manipulated expertise or trustworthiness alone or both factors simultaneously, often without a clear distinction as to which variable was really being manipulated. Most of the pioneer work in this area comes from Hovland and his associates. For example, the following two studies found opinion-change differences with expertise and trustworthiness confounded.

Hovland and Weiss (1951) presented four communications each presented to two different groups. Each communication was represented as coming from a high or low credibility source. Opinion questionnaires were given before, immediately after, and one month after receiving the communications. The first questionnaire showed that the four high credibility sources were thought to be trustworthy by 81 to 95 percent of the subjects while the four low credibility sources were seen as trustworthy by only 1 to 21 percent. Differences in before and after opinion scores indicated that significantly more (16.4 percent) of the subjects were influenced by the high than by the low credibility sources. On the one month followup, however, this difference vanished with the number of subjects influenced by the high credibility source decreasing and the number influenced by the low credibility source increasing. The increase in the low credibility group scores was referred to as the "sleeper effect." It was also noted that there was no difference in recall of the content of the communications or of the sources between the high and low credibility source groups either

immediately or one month after presentation of the messages.

Kelman and Hovland (1953) presented subjects with communications advocating a more lenient treatment of juvenile delinquents coming from sources high, low, and neutral in credibility. An opinion measure taken immediately after the presentation of the message showed differences in the expected direction. After three weeks the opinion questionnaire was readministered with half of the subjects re-exposed to that part of the taped communication which introduced the source of the message and half filling out the questionnaire without "reinstatement" of the source manipulation. Results showed that the sleeper effect was present only for the group without reinstatement. As compared to this non-reinstatement condition, reinstatement of the high credibility source increased agreement while reintroduction of the low credibility source decreased agreement with the communication. In addition, those subjects in the non-reinstatement groups who remembered more details about the sources did not continue to be influenced by that source any more than did the subjects who remembered less about the source.

Hovland and Mandell (1952) failed to find evidence for the hypothesis that a high credibility source is significantly more influential than a low credibility source. In this case, however, the communicator's difference in credibility represented differences in trustworthiness rather than expertise. A message in which the conclusion was explicitly drawn caused more people to

change than one that failed to explicitly draw a conclusion. However, the trustworthiness of the communicators, while producing changes in the predicted direction, did not produce a significant effect. It is unlikely that failure to obtain the expected effect was due to inadequate manipulation of the independent variable since the number of subjects who felt that the "trustworthy" source did a good, fair, and honest job of presenting the facts was significantly greater than those who thought the untrustworthy source did so.

On the other hand, some effects of trustworthiness on persuasion have been found. Choo (1964) presented subjects with a written communication downgrading any causal relationship between smoking and cancer. Sources differed in credibility on the dimension of trustworthiness since ratings acquired prior to the presentation of the message showed that both sources were considered approximately equal in knowledge of the facts involved. Choo found that the high credibility sources produced more change than the low credibility source. In addition, subjects who saw the communication as more discrepant from their own position were influenced more than low-discrepant subjects. Analysis of variance showed no interaction between credibility and subjects' perceived discrepancy of positions.

Further evidence on the relative effects of expertise and trustworthiness is presented by Aronson and Golden (1962) who looked at relevant and irrelevant aspects of communicator

credibility on attitude change. Four different groups of sixth-grade children were exposed to attitude change messages from sources differing in race (irrelevant) and vocational expertise (relevant) in a 2 X 2 factorial design. Post measures revealed that the relevant variable was significantly effective but the irrelevant variable was not. Ratings of the communicators indicated a credibility difference due to expertise rather than trustworthiness. A breakdown of the subjects into prejudiced and unprejudiced groups by means of a questionnaire showed that although both groups rated the communicators equally in intelligence and sincerity, the prejudiced subjects were less influenced by the Black communicator. This latter finding was taken as showing that the prejudiced and unprejudiced subjects were responding on the basis of objectively irrelevant cues.

A conclusion can be drawn that, even though there is some contradictory evidence present in this area, the literature on source credibility generally shows that the expertise, status, and intelligence of a perceived communicator has a stronger effect than his objectivity, trustworthiness, or lack of persuasive intent on the attitude-change potential of his message. There are, however, some questions as to the application of research findings to other settings. Thus, despite the overwhelming evidence supporting a positive relationship between source credibility and persuasion, it has been suggested that this effect is in reality an artifact of the laboratory

setting of most of the prior research.

Johnson and Scileppi (1969) hypothesize that because most attitude research is run under low-ego-involvement conditions, source credibility does not affect attention to or comprehension of the communication. Instead, these source characteristics operate as an "evaluative set" which operates under high credibility conditions to make the subject generally accept the content of the communication without critical evaluation. In low credibility conditions the subject tends to reject the content, feeling that the arguments are biased or incomplete. In a high-ego-involving treatment, all subjects should evaluate the communication in a critical manner, resulting in no difference in attitude change to high and low credibility sources. Additionally, if the high-ego-involvement subjects are both evaluating arguments critically as is the low-ego-involvement, low source credibility group, there should be no difference in attitude change between these three groups with only the low-ego-involved, high source credibility group showing higher degree of attitude change.

Subjects in this experiment were exposed to communications of high and low plausibility coming from high and low credibility sources under high- and low-ego-involving conditions. Credibility was varied along dimensions of expertise and general trustworthiness. Ego-involvement was manipulated mainly on the basis of the importance of the study and whether or not the

opinions, judgments, and efforts of the subjects were valid and significant.

The persuasive communication dealt with the recommendation that chest X-rays not be taken as a routine medical procedure to diagnose tuberculosis. After reading the persuasive communication, subjects responded to a four-item questionnaire designed to assess their attitudes in regard to the issue presented. Results showed that mean attitude change was significantly greater under low-ego-involvement, high source credibility conditions than under the other three conditions which did not differ significantly from each other. These results were interpreted as supporting the hypothesis presented above.

A further attempt at establishing support for this thesis was made by Rhine and Severance (1970) who presented persuasive messages to subjects in a three-factor design having three levels of attitude discrepancy, two levels of source credibility, and two levels of ego-involvement. Ego-involvement levels were determined in this experiment by the relevance of the topic of different persuasive messages for the student-subjects and was not manipulated by the experimenters as in the Johnson and Scileppi (1969) study. Source credibility was established by attribution and was measured by control subjects' ratings of a large pool of potential sources' expertise on the issue to be presented in the persuasive message.

Results showed that significantly more attitude change

occurred for low-ego-involvement groups than for high-ego-involvement groups. The authors could not discount the possibility, however, that widely different degrees of persuasiveness were inherent in the two different ego-involvement messages and served as a contaminating factor. Analysis of the low-ego-involvement results showed a difference between the high credibility and low credibility sources which showed more attitude change for the high credibility source at a statistically nonsignificant level (probability between .05 and .10). The high-ego-involvement condition showed no differences between the high credibility and low credibility source groups in attitude change.

Source Attractiveness

Attraction is another "source variable" which has been studied in relation to effects on persuasion. It has been investigated through at least three aspects: familiarity with the source, perceived similarity to him, and liking of him. The first of these is not easily manipulated as an independent variable since it depends on ongoing relationship variables. Although the second aspect has been investigated with some thoroughness (McGuire, 1969), it is the third variable which is of interest in the current research.

It is a common-sense notion that the more an individual likes the source of a persuasive communication, the more likely he would be persuaded toward the position the attractive source

is presenting. This relationship is predicted by most of the consistency theories as well. This is illustrated by the p-o-x formulation of Heider (1946) in which if person p likes another person o, and o likes object x, then p will like x also. Similar predictions are presented by Newcomb (1953) in his ABX symmetry theory, Osgood and Tannenbaum's (1955) congruity theory, Cartwright and Harary's (1956) graph theory, and Abelson and Rosenberg's (1958) psycho-logic theory extended to cover interpersonal relations.

Empirical investigation of this third relationship (liking) has yielded fairly consistent findings according to McGuire (1969). He lists several studies which lend empirical support to the relationship posited above (French and Snider, 1959; Griffin and Ehrlich, 1963; Horowitz, Lyons, and Perlmutter, 1951; Sampson and Insko, 1964; Sherwood, 1965; Thrasher, 1954) and two studies which are not supportive of this thesis (Harper and Tuddenham, 1964; Malof and Lott, 1962). In addition, Goldstein (1971) states that robust evidence is found for a major effect of interpersonal attraction on interpersonal influence. Some of his citations include: Rasmussen and Zander (1954) who found in a study of teacher self-evaluation that subjects chose levels of aspiration for themselves which were similar to reference group standards as they saw them and were more likely to do so if the particular group was attractive to them; Gerard (1954) who showed that subjects in high attraction

groups attempted more influence on others and changed more often toward others in the group than did those in low attraction groups; and Sapolsky (1950) who determined that subjects structured for high attraction to an experimenter responded significantly better to a verbal conditioning task than did subjects structured for low attraction. Additional references illustrating this relationship include Moran (1966), Gordon (1952), and Burdick and Burnes (1958). None of these studies, however, treat liking in a way comparable to the way source credibility has been investigated in the attitude-change studies surveyed above.* Attitude changes due to attraction (likability) have been most frequently seen to be a result of natural relationships, that is, changes in attitude as a function of the receiver's natural liking of the sources. Alternatively, a conscious effort can be made to structure liking to a source who is a stranger at the time that he presents his persuasive communication to the subject.

An example of this latter formulation is provided by Back (1951). He randomly assigned subjects into pairs which prior to meeting were structured for high or low attraction based on the experimenter's description of their personal liking, future task outcome, or group prestige. Before partners met, each subject was given a set of pictures about which a story was to be written. Subjects were told that all sets of pictures were identical but there were in fact slight differences between sets. After

stories were written, the pairs of subjects were brought together for a discussion serving ostensibly as an opportunity to improve their own stories. After this discussion each subject then rewrote his story on his own as he desired. Interpersonal influence was measured in terms of changes from the first to the second modified story and showed a move in the direction of the partner's stories. Significantly more influence attempts and successful influence was demonstrated for the high attraction groups.

A more direct mode of structuring attraction is the manipulation of the attractiveness of the person himself. Asch (1946) presented lists of personality traits identical except for the inclusion of the trait "warm" on one list and "cold" on the other to two groups of subjects. Subjects were then asked to write a brief sketch which furnished evidence of the impressions formed about the hypothetical person. The characteristic "warm-cold" produced, in general, far more positive impressions for the "warm" than for the "cold" person. Rather than differing solely on a warm-cold dimension, the resultant descriptions reflected a widespread change in the entire impression. While the "warm" person was seen as more generous, wise, happy, good-natured, humorous, sociable, popular, and humane, there were no differences rated in reliability, importance, seriousness, strength, or honesty.

Kelley (1950) elaborated on Asch's results by adding

dependent variables that were of a behavioral nature. He arranged an ongoing university class so that it would be conducted by an instructor who had been described to half of the students by a trait list that included "warm" and to the rest of students by a similar list which substituted the trait "cold." The students who had been structured to perceive the instructor as warm rated him as more sociable, considerate, informal and humorous than did the "cold"-structured students. The "warm" students also participated in the class discussion more than the "cold" students.

The findings of the above two studies have been applied along with findings previously described for credibility to an attempt to structure perception of psychotherapists by subjects in an analogue experiment. Greenberg (1969) varied the warm-cold dimension along with one of experienced-inexperienced in a study designed to measure the potentials of attraction enhancement. Subjects (112 undergraduates) were randomly assigned to four experimental groups in which a taped therapist was described as warm-cold and experienced-inexperienced in a 2 X 2 factorial design.

All subjects listened to a tape of the therapist conducting a therapy session. This tape was, in reality, simulated, and was the same for all groups. After listening to the tape, subjects rated the therapist on questionnaires designed to measure attraction, receptivity to influence, and persuasibility. The

attraction measure was a modification of the CPRQ (Ashby, Ford, Guerney, and Guerney, 1957). The persuasibility measure was derived from the extent to which the subject's responses to a questionnaire describing the taped "patient" agreed with the ratings of the "therapist" as presented to the subject prior to his filling out his own ratings. Results showed that subjects structured "warm," rather than "cold," were more attracted to the therapist, more receptive to his influence, and more persuaded by his communications. Subjects structured "experienced" were more attracted and receptive to the therapist than subjects structured "inexperienced," but were not more easily persuaded by the therapist's ratings. Individual group comparisons showed that the warm-experienced group was more attracted, receptive, and persuaded by the taped therapist than the cold-inexperienced group. Subjects were more attracted and receptive to the "warm" therapist regardless of his structured experience. More attraction was shown to the warm-inexperienced therapist than to the cold-experienced one.

These results have been independently replicated and extended by Simonson (1968) using college student subjects. In addition, Goldstein and Simonson (1971) report that an exact replication of Greenberg's study with the addition of a neutral control group was completed using an inpatient psychiatric sample. Patients receiving "warm" structuring were found to be significantly more receptive to the taped therapist's influ-

ence attempts than were the "cold"-structured subjects. Patients structured warm were also more attracted and receptive to the therapist's influence attempts than were nonstructured (neutral control) patients.

Further insight into the operation of these two variables is provided by Mills and Harvey (1972) who presented a message favoring broader education for college students to subjects which was attributed to either an expert or attractive source. Results showed that there was less agreement with the expert source when attribution of expertise occurred after presentation of his communication than when structuring came before his message. Agreement with an attractive source was not affected by when structuring occurred. The authors interpret their results as suggesting that agreement with a source whose relevant dimension is expertise comes primarily from acceptance of his supporting arguments which are not evaluated positively unless the source's expertise is established prior to presentation of these arguments. The influence of an attractive source remains relatively independent of response to the particular arguments used in his communication; attractive sources derive influence power simply through their association with a position, without having to even present arguments which mediate attitude change.

Norman (1976) elaborated on the findings of Mills and Harvey (1972), stating that since an expert source's effectiveness depends on how convincing the arguments for his position are,

varying the number of arguments presented in support of his position should influence his effectiveness more than that of an attractive source. It was additionally postulated that the degree of agreement with arguments presented and agreement with the overall position presented would be greater when the source is expert than when the source is attractive.

Subjects read a statement advocating reduced sleep written by a supposedly expert or attractive source. The expertness of the source was communicated by a written description while attractiveness was determined by presenting a photograph of the source which clearly showed two levels of physical attractiveness. Within each of the two groups (expert and attractive) half of the subjects received the opinion without supporting arguments and the other subjects received the opinion accompanied by six separate supportive arguments. Questionnaires were then filled out by the subjects to measure their recall of stimulus materials, perception of the source, and agreement with his message. Results showed that the manipulations were successful in creating an attractive and an expert source. The number of arguments presented did not significantly influence ratings of expertise or attractiveness. No significant main effects were found for source indicating that across the number of arguments both sources were equally effective in getting subjects to agree with them. Providing arguments had a significant effect on agreement across sources. It was also found that the message containing arguments

was significantly more effective than the no argument message for the expert source but the presence of arguments had no effect on agreement for the attractive source. The results are presented as providing strong support for Kelman's (1961) postulate that the dynamics underlying the persuasive impact of an expert source are more dependent on analysis of arguments than for an attractive source.

Given that communicators who are high in expertise and attractiveness are more likely to persuade people to their point of view, it remains to be seen if these results can be applied specifically to the attitude of self-esteem. The experimental literature shows only fair success in attempts to modify self-esteem levels by other means.

For example, Flannery and Baer (1975) report an application of hypnosis, suggestion, and behavior modification procedures to enhance academic self-esteem. Although statistical analyses showed no change on any of the psychological tests, many spontaneous reports by subjects of academic self-improvement were noted. The authors hypothesize that results of such an experiment depend on the method of observation and that no one method is sufficient by itself for understanding the process adequately.

Moser (1974) investigated the effectiveness of an intervention strategy called the "Human Seminar" on the self-esteem of normal college students. This treatment is highly structured and focuses on the positive aspects, strengths, values, and achieve-

ments of each individual. A control group in the study received no treatment. Changes in self-esteem were measured by the Tennessee Self Concept Scale and showed directional trends in favor of the experimental group. Although differences were not significant at the .05 level, use of a larger sample size might have given sufficient power for differences to be found at greater than the .10 level obtained.

Summary, Conclusions, and Hypotheses

Self-esteem as a concept has been described in the psychological literature for over 50 years. Although there is still much disagreement about its exact meaning, conceptualization of this variable in terms of its being one's attitude about oneself seems to be a rewarding area of investigation. As an attitude, self-esteem would seem to be amenable to a variety of attitude-change procedures presently found in the social psychological literature. Since alteration of esteem level would appear to be a major component of treatment, it behooves psychotherapists to investigate the possibilities of applying such techniques. Such strategies are conceived of as being adjuncts to psychotherapy which are both simpler and more efficient in enhancing self-esteem than current indirect methods.

One area in which research on attitude-change has been well-established is that of communicator effects on persuasion. This area is particularly relevant to therapy since any communicator variables which are found effective can be enhanced to a level

beyond that possessed by the individual therapist in order to effect attitude change. Two aspects of source characteristics seem to provide much of the power behind his ability to persuade--credibility and attractiveness. Within the characteristic "credibility," the component of expertise would appear to be more important.

The current study will systematically look at the effects communicator expertise and attractiveness have on changing the way a person sees himself. In addition, an attempt will be made to replicate the results of Johnson and Scileppi's (1969) investigation regarding the effects that subject ego-involvement have on response to communicator characteristics. Finally, in order to satisfy the questions of whether self-esteem is a unitary or global concept, both kinds of measurement will be compared with each other, and with other, more behavioral measures.

Following the discussion above, the following hypotheses are offered:

1. Subjects who listen to an attitude-change message presented by a communicator who is represented as high in expertise will see him more expert, attractive, and trustworthy and will agree more with his message that they should raise their level of self-esteem than will subjects exposed to a low expertise communicator.

2. Subjects who listen to an attitude-change message presented by a communicator who is represented as high in

attractiveness will see him as more expert, attractive, and trustworthy and will agree more with his message than will subjects exposed to a low-attractive communicator.

3. Level of ego-involvement will have no effect on ratings of communicator expertise, attractiveness, or trustworthiness or agreement with his message.

4. Subjects who are led to believe that the communicator is both expert and attractive will rate him higher on the communicator dimensions than will the subjects who are told the communicator lacks these traits. The groups which are given communicator descriptions which mix high levels of one communicator variable with low levels of the other will fall within the extreme ratings of the purely structured groups.

5. Subjects given high expertise structuring of the source of an attitude-change message will show greater mean self-esteem as measured by pencil-and-paper tests and ratings of their interview behavior than subjects presented with a self-esteem-enhancing message from a low-expertise source.

6. Subjects given high attraction structuring of the source of an attitude change message will show greater mean self-esteem as measured by paper-and-pencil tests and ratings of their interview behavior than subjects presented with a self-esteem-enhancing message from a low attraction source.

7. No effects of level of ego-involvement on self-esteem will be found.

8. Subjects who are led to believe that the communicator is both expert and attractive will show greater mean self-esteem than will the subjects who are told the communicator lacks these traits. The groups which are given communicator descriptions which mix high levels of one communicator variable with low-levels of the other will fall within the extreme ratings of the purely structured groups.

9. Groups presented with a self-esteem-enhancing persuasive message will show greater levels of self-esteem than a control group which is not presented such a message.

As a test of the hypotheses presented above, college students were presented with a message designed to increase their level of self-esteem. One week later the students' level of self-esteem was measured using standardized paper-and-pencil tests and an interview in which they were encouraged to talk candidly about themselves.

CHAPTER II

METHOD

Subjects

The subjects for this study were male and female college students enrolled in introductory psychology courses at Texas Tech University. Of an original group of 149 subjects, five were excluded due to an invalid score on the Tennessee Scale, failure to complete the second part of the experiment, and being obviously above the age range of the rest of the group subjects.

Design

The remaining 144 subjects were randomly assigned to eight experimental groups in a 2 X 2 X 2 factorial design combining high and low levels of communicator expertise and attractiveness and subject ego-involvement. In addition to these groups of 16 subjects, an attention-control group of 16 subjects was formed. The experimental groups thus constituted were structured for communicator characteristics of high expertise and high attractiveness (HH); high expertise and low attractiveness (HL); low expertise and high attractiveness (LH); and low expertise and low attractiveness (LL). Each of these groups was split into a high- and low-ego-involvement condition.

Interviewer

The interviewer was a distinguished-looking, 30 year old male with a masters degree in rehabilitation counseling. He was naive as to the aims and procedures of the study.

Measures

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) consists of ten items answered on a four point scale from "strongly agree" to "strongly disagree," although as a Guttman scale they are scored only as agreement or disagreement. The scale can also be scored for items with each item scored from 1 (low self-esteem) to 4 (high self-esteem) giving a total score range from 10 to 40. All of the items are concerned with liking and/or approving of the self. The scale therefore probably measures self-acceptance aspects of self-esteem. As a Guttman scale, the items in this instrument were derived by selecting items and groups of items from a larger pool of items. The items selected differed substantially in the numbers of people who answered each way (agree-disagree). A Guttman scale reproducibility coefficient of .92 was obtained (Rosenberg, 1965). Silber and Tippett (1965) found a test-retest correlation over two weeks of .85 (N=28). They also found that the scale correlated from .56 to .83 with several similar measures and clinical assessment (N=44). Rosenberg (1965) presents data establishing predictive validity in terms of social and interpersonal consequences such as shyness, depression, assertiveness, and participation in extra-curricular activities. Administration time for the test is approximately five minutes.

The Tennessee Self Concept Scale is one of the more frequently used measures of self-esteem (Wylie, 1974). It consists of 100 items phrased half positively and half negatively to con-

trol acquiescence response set. The subject marks each item on a five point scale from "completely true" to "completely false." A self-criticism score is composed of ten of the 100 items which are taken from the L-Scale of the Minnesota Multiphasic Personality Inventory. These are mildly derogatory statements that most people admit as being true for them. A fairly high score generally indicates a normal, healthy openness and capacity for self-criticism. Extremely low scores indicate that the subject is being defensive and making a deliberate effort to present a favorable picture of himself and suggests that the positive scores are probably artificially elevated by this defensiveness. While scores above the 99th percentile are considered pathological, no similar cut off point is indicated for low scores (Fitts, 1965).

Each of the 90 self-esteem items was included in the Scale only when seven clinical psychologists agreed perfectly on its location in one of three rows (identity, what I am; self-satisfaction, how I accept myself; and behavior, how I act) and also in one of five Self columns (physical, moral-ethical, personal, family, and social). A total self-esteem score is derived from the 90 items; separate self-esteem scores can be computed and interpreted for each row and column. Wylie (1974), however, advises that discriminant uses of these separate scores are inadvisable since row and column items overlap and intercorrelations between rows, columns, and between rows, columns,

and total score was high. For this reason, only the total positive score was used in this study.

Test-retest reliability coefficients over a two week period are reported as .92 for total self-esteem, .88 to .91 for rows, and .85 to .90 for columns using college students as subjects. Convergent, discriminant, and predictive validity are fairly well established (Crandall, 1973). Administration time for this test is approximately 20 minutes.

Interviewer Rating Form

Interviewer Self-Esteem Rating Forms were created which asked the interviewer to rate subjects' overall level of self-esteem based on a just-completed interview. Ratings ranged from "very high" (10) to "very low" (1) with intervals of one scaled point in between these extremes. Interviewers were instructed to use clinical judgment in making these ratings.

Tape Evaluation Forms

Tape Evaluation Forms were devised, consisting of a request to the subject to briefly write in a few sentences what the speaker on the taped message said, followed by a number of 100mm long bipolar scales adapted from Norman (1976). These scales were designed to measure general attractiveness, perceived expertise, and trustworthiness of the communicator, and agreement with his presented message. These scales served as a check on the effectiveness of the source-characteristic manipulation (see appendix C).

Interview Tape Ratings

Interview Tape Ratings were made using guidelines for judging self-referring statements adapted from Davidoff (1969) and modified by Friedenberg (1971) (see apendix E). Identified self-referring statements were classified as positive, negative, or neutral in content. Positive self-statements were defined as those in which the subject gives a positive evaluation of himself or states that he is pleased with his behavior, personality, physical appearance, etc. Negative statements consisted of negative evaluations or discriptions. Neutral statements were defined as those statements which cannot be judged as either clearly positive or negative or are not self-evaluative although self-referring, e.g., "I have been a resident of Lubbock for all my life." Intrajudge reliability for positive statements (.94) and negative statements (.92) had been established in a pilot study. Interjudge reliability on these measures has also been demonstrated to be at a substantial level (.92 and .88 respectively). Based on the reliability of these measures, a single, previously trained, experienced judge was employed in this study.

Self-Esteem Enhancement Tape

An approximately eight minute long tape was used as an attitude-change message (see appendix A). This tape is based on Ellis' (1962) "Irrational ideas which cause and sustain emotional disturbances" (chap.3) as a supporting argument for the message that one should feel better about oneself as a person. The message

is compiled from "Ideas" 1, 2, 4, 8, and 9 and includes a closing paragraph that urges the listener to stop trying to be perfect or to feel incompetent or inferior because unreachable goals are not met. A final statement suggests that the listener should see himself as a much better person than he used to think he was. The general tone of the message appeals toward decreasing the denominator of the James (1890) equation (pretentions) to a more reasonable level. The speaker on this tape was a Ph.D. psychologist who spoke in an informative, unemotional style.

Procedure

Subjects participated in two experimental sessions spaced one week apart. In the first session, experimental groups listened to an attitude-change tape presented with different sets of instructions. The control group listened to a non-relevant tape describing changes in ideas about mental retardation under neutral instructions (see appendix B).

For subjects in the high-ego-involvement condition, the purpose of the experiment was stated as follows to replicate the conditions of Johnson and Scileppi (1969):

> This study is part of some very important research being done for the Institute for Rational Living. We are primarily concerned with the ability of college students to make sound and intelligent judgments about a procedure designed to help people feel better about themselves. The tape you will hear is especially aimed toward people of your age and background and may provide you with some new insights about yourself.
>
> Some people have suggested that college students do not take tasks like this seriously enough to make

> judgments that are worthwhile. We, on the other hand, are confident that since these materials are particularly relevant for college students, you will make sound, intelligent judgments.

For subjects in the low-ego-involvement condition, the purpose of the experiment was stated as:

> This study is mostly of an experimental nature. We are mainly interested in whether the tape you will hear is reliable enough to be used in studies that we are planning for the future.

This introduction was then followed by a description of the communicator on the tape.

Subjects in the high expertise groups were told:

> This talk will be presented by Dr. Andrew Martin, a distinguished psychologist in the area of human potential and interpersonal growth. Dr. Martin received his doctorate from Yale University in 1962. Since that time he has received many awards and personal recognition for his work helping people to improve themselves as individuals. He has led more than 50 personal growth workshops and seminars in 23 states in the past year alone.

For the low expertise groups, the introductory message was simply:

> This talk will be presented by Andy Martin.

In the communicator trait introduction, the descriptions "understanding" and "unemotional" were added to the attraction-determining adjectives suggested by Greenberg (1969) due to their high and low respective ratings for likableness to college student populations (Anderson, 1968). Thus, for the "high attraction" groups, a statement followed the "expertise" structuring which said:

> (Dr.) (Mr.) Martin has been chosen as the speaker on this tape due to his warm and understanding manner which has resulted in extremely favorable reactions on the part of previous listeners to this message. I'm sure you'll enjoy listening to him.

The "low attraction" group was presented with an added statement which said:

> (Dr.) (Mr.) Martin sometimes tends to be somewhat cold and unemotional as a person--however, I hope you'll enjoy listening to him.

After hearing the tape, all experimental subjects filled out the Tape Evaluation Form.

The experimenter then told all the subjects:

> You are in a control group of this experiment and therefore will not need to come back for the second session you signed up for. So that you will not lose credit for the second session, I've arranged for you to take part in another study at the same time. The experimenter's name is and the experiment letter is_____. He will give you your bonus points for both experiments next week.

A different room and experimenter were assigned for running the second session of the experiment. Participants were then released from the session.

In the second session, now represented as a separate experiment, all subjects filled out the Rosenberg Self-Esteem Scale and the Tennessee Self Concept Scale in that order and participated in a 15-minute interview. Order of presentation of the paper-and-pencil tests as a unit and the interview were counter-balanced with an equal number of subjects in each group receiving either the written or interview measures first.

Just prior to the interview, subjects were given the following

introduction:

> This study is concerned with the way people behave in an interview. You will be talking to someone for about 15 minutes. I want you to talk about yourself--how you see yourself, your strengths and weaknesses, likes and dislikes, experiences in the past, and plans for the future. You're free to talk about anything about yourself that you want to. The interviewer, who will help you, is an experienced graduate student in the counseling area. A tape recording will be made of your interview but you will not be identified by name and everything you say will be strictly confidential. All tapes will be erased after information from them is coded so that no permanent record will exist of anything you say, so please be as frank and open as you can. Do you have any questions? OK, let's go meet your interviewer.

Subjects were encouraged to talk about themselves with the interviewer helping them along using a set of standardized prompts (see appendix D). After the interview, the interviewer filled out the Interviewer Self-Esteem Rating Form based on information gained from the completed interview. Contents of the interview were judged using Interview Tape Rating procedures outlined above.

CHAPTER III

RESULTS

The data were analyzed to evaluate the effectiveness of structuring expertise and attraction and resultant differences in self-esteem level of the various experimental groups.

Effects of structuring

Table 1 shows the means and standard deviations of rated expertise, attractiveness, and trustworthiness of the taped communicator and the reported degree of agreement with his message for the eight experimental groups.

All of these scores indicate successful results of manipulations of source expertise and attractiveness. The pattern on all measures is generally the same with the "High-High" groups giving the highest ratings of the speaker on the manipulated variables and the "Low-Low" groups giving the lowest ratings. The groups which were given structuring which mixed high and low levels of expertise and attractiveness (HL and LH groups) gave the speaker ratings which were within the extreme ratings of the groups in which expertise and attractiveness were structured consistently high or low. The control group, which rated the same communicator delivering a different, non self-esteem-enhancing message, gave mean ratings on the four variables which were within the range of the scores of the experimental groups and decidedly toward the lower end of the range. All mean ratings of the experimental and control groups for all measures were above the point of neutrality, in-

Table 1

Group Means and Standard Deviations[a] of the Four Rated Communicator Variables

Groups	Expertise	Attractiveness	Trustworthiness	Agreement
High Expertise				
High Attractiveness				
High Ego Involvement	365.88 (26.92)	352.25 (29.53)	352.25 (43.38)	94.25 (16.14)
Low Ego Involvement	372.81 (28.37)	350.69 (51.04)	344.13 (51.24)	88.69 (9.31)
Low Attractiveness				
High Ego Involvement	337.06 (34.41)	269.63 (49.04)	300.81 (60.27)	83.81 (12.97)
Low Ego Involvement	335.56 (38.08)	264.44 (44.74)	293.25 (62.86)	87.94 (12.21)
Low Expertise				
High Attractiveness				
High Ego Involvement	302.25 (48.58)	331.0 (37.09)	303.19 (42.11)	85.69 (13.16)
Low Ego Involvement	292.25 (46.69)	335.56 (36.84)	316.06 (62.95)	83.19 (16.17)
Low Attractiveness				
High Ego Involvement	274.88 (35.31)	226.06 (41.53)	282.63 (62.34)	73.75 (20.57)
Low Ego Involvement	258.25 (60.74)	236.31 (58.47)	263.31 (52.39)	76.25 (16.83)

a. Standard Deviations in Parentheses

Table 2

Summary of Analyses of Variance on the Four Rated Communicator Variables

Source of Variation	Ratings			
	Expertise	Attrac-tiveness	Trust-worthiness	Agreement with Message
Expertise (A)	97.98**	11.85**	10.26*	12.29**
Attractiveness (B)	19.77**	141.29**	20.18**	8.66**
Ego Involvement (C)	<1	<1	<1	<1
A X B	<1	1.27	<1	<1
A X C	1.25	<1	<1	<1
B X C	<1	<1	<1	2.07
A X B X C	<1	<1	<1	<1

* $p < .005$

** $p < .001$

dicating positive evaluation of the speaker and his messages.

Results of analyses of variance of the ratings of expertise, attractiveness, trustworthiness, and agreement with the communicator's message, are presented in Table 2.

These analyses are consistent in showing main effects of expertise and attractiveness structuring but not effects of ego-involvement on the experimental subjects' perception of the communicator's expertise, attractiveness, and trustworthiness or agreement with his message thus confirming hypothesis 1, 2, and 3.

The fourth hypothesis was also confirmed. Planned t test comparisons were made between the HH and LL groups disregarding level of ego-involvement. The HH group was higher than the LL group in rated expertise of the communicator (t (120) = 7.17, $p < .001$), rated attractiveness (t (120) = 7.67, $p < .001$), rated trustworthiness (t (120) = 3.85, $p < .001$), and agreement with the communicator's message (t (120) = 3.22, p. < .01). Neuman-Keuls tests were performed post hoc to determine if there were any other significant differences between groups. In order of decreasing rated expertise, the HH group was followed by the HL, LH, and LL groups which were all significantly different from each other ($p < .05$). The HH and LH groups were not significantly different from each other in their ratings of communicator attractiveness. Both groups were, however, significantly higher in their ratings than the HL group, which was in turn higher in its ratings than the LL group ($p < .05$). In its rating of the trust-

worthiness of the communicator, a variable not directly manipulated by the experiment, the HH group was significantly higher than both the HL and LL groups ($p < .05$). No other significant differences were found for this variable.

There was a significant difference between the HH and LL groups in their rating of agreement with the communicator's message ($p < .05$). However, no other significant differences between groups were found.

Effects on Self-Esteem

Tables 3 and 4 present the means and standard deviations of the dependent variables for the eight experimental groups and the control group.

The pattern of differences between groups in measured self-esteem approximates that of the ratings of communicator attributes. Thus, on all dependent measures without exception, the HH groups show higher measured self-esteem level than the LL groups. The groups which were presented structuring which mixed levels of expertise and attractiveness were intermediate in their measured level of self-esteem. In two instances, individual mixed-message groups show a lower level of self-esteem than an individual LL group. As was seen in the group mean ratings of communicator variables, the control group self-esteem mean falls within the range of the experimental group means for all dependent variables at a point decidedly toward the lower self-esteem end of the range.

Results of analyses of variance of scores on the Tennessee

Table 3

Group Means and Standard Deviations of Paper and Pencil Measures of Self-Esteem

Groups	Tennessee Scale	Rosenberg Scale	Rosenberg Scale (Items)
High Expertise			
High Attractiveness			
High Ego Involvement	376.63 (23.3)	5.25 (.58)	34.44 (2.9)
Low Ego Involvement	376.25 (22.81)	5.38 (.72)	34.19 (3.08)
Low Attractiveness			
High Ego Involvement	345.13 (41.07)	4.63 (.89)	31.75 (3.71)
Low Ego Involvement	339.69 (33.18)	4.63 (1.31)	31.25 (4.14)
Low Expertise			
High Attractiveness			
High Ego Involvement	343.88 (33.1)	4.5 (1.31)	31.19 (4.0)
Low Ego Involvement	350.0 (38.65)	4.63 (1.31)	31.94 (3.89)
Low Attractiveness			
High Ego Involvement	328.5 (33.04)	4.31 (1.25)	30.19 (3.95)
Low Ego Involvement	328.13 (27.89)	4.31 (1.01)	29.69 (3.63)
Control	332.94 (25.6)	4.31 (1.3)	31.5 (3.18)

Table 4

Group Means and Standard Deviations of Interview Measures of Self-Esteem

Groups	Self-Esteem Measures			
	Interviewer Rating	Pos. Statements	Neg. Statements	Pos./Neg. Statements
High Expertise				
High Attractiveness				
High Ego Involvement	7.88 (1.54)	44.0 (6.8)	13.38 (6.2)	4.69 (4.90)
Low Ego Involvement	7.31 (1.35)	41.56 (7.97)	14.38 (7.36)	4.04 (3.51)
Low Attractiveness				
High Ego Involvement	6.88 (1.75)	33.25 (8.0)	15.88 (9.75)	3.40 (2.91)
Low Ego Involvement	6.25 (2.29)	36.75 (8.4)	17.81 (6.59)	2.48 (1.48)
Low Expertise				
High Attractiveness				
High Ego Involvement	6.6 (2.33)	31.94 (7.39)	18.63 (6.77)	2.07 (1.28)
Low Ego Involvement	6.69 (2.09)	37.0 (8.68)	19.88 (9.56)	2.37 (1.52)
Low Attractiveness				
High Ego Involvement	5.88 (2.25)	31.31 (6.75)	18.13 (8.41)	2.21 (1.45)
Low Ego Involvement	5.94 (1.98)	32.5 (8.14)	23.06 (7.2)	1.56 (.63)
Control	6.38 (1.63)	32.56 (7.47)	20.38 (6.51)	1.78 (.76)

Scale, the Rosenberg Scale scored as a Guttman scale and as individual items, the interviewer ratings of self-esteem, the number of positive and negative self-referring statements made during the interview, and the log transformation of the ratio of positive to negative self-statements are presented in Tables 5 and 6. The scores representing the ratio of positive to negative self-referring statements were given log transformations for this and subsequent analyses to make the variance of the groups homogeneous. Mean square for error was derived from one-way analyses of variance which included all experimental groups and the control group for each variable (Winer, 1961, p. 263-264).

In regard to hypotheses 5, 6 and 7, except for the findings of no effect of manipulated communicator attractiveness on number of negative self-referring statements, the results are wholly consistent in showing main effects of level of structured communicator expertise and attractiveness on measured self-esteem. No effect of the level of ego-involvement in the persuasive message was found for any measure of self-esteem.

A priori t tests between the HH and LL groups collapsed across levels of ego-involvement were performed for all dependent measures. The HH group was found to be significantly greater than the LL group in its self-esteem as measured by the Tennessee Scale (t (120) = 4.31, $p < .001$), the Rosenberg Scale (t (120) = 2.59, $p < .01$), interviewer ratings (t (120) = 2.44, $p < .05$), number of positive self-referring statements (t (120) = 3.97, $p < .001$), number of

Table 5

Summary of Analyses of Variance on the Paper and Pencil Measures of Self-Esteem

Source of Variation	Self-Esteem Measures		
	Tennessee Scale	Rosenberg Scale	Rosenberg Scale (Items)
Expertise (A)	15.26***	7.33**	11.27***
Attractiveness (B)	22.27***	5.71*	11.93***
Ego Involvement (C)	<1	<1	<1
A X B	1.91	1.24	<1
A X C	<1	<1	<1
B X C	<1	<1	<1
A X B X C	<1	<1	<1

* $p < .05$

** $p < .01$

*** $p < .001$

Table 6

Summary of Analyses of Variance on the

Interview Measures of Self-Esteem

	Interview Measures			
Source of Variation	Interviewer Rating	Positive Statements	Negative Statements	Pos./Neg. Statements
Expertise (A)	5.38*	17.29***	11.25**	24.27***
Attractiveness (B)	6.72*	14.22***	2.51	7.81**
Ego Involvement (C)	<1	1.78	2.81	1.68
A X B	<1	3.62	<1	1.21
A X C	<1	<1	<1	<1
B X C	<1	<1	<1	1.28
A X B X C	<1	3.20	<1	<1

* $p < .05$

** $p < .01$

*** $p < .001$

negative self-statements (t (120) = 2.47, $p < .05$), and the log transformation of the ratio of positive to negative self-statements (t (120) = 3.8, $p < .001$). Thus hypothesis 8 was also confirmed.

Again, Neuman-Keuls tests were performed post hoc to determine if there were any other significant group differences on any of the dependent measures. For the Tennessee Scale scores, the number of positive self-referring statements, and the log transformation of the ratio of positive to negative self-statements, significant differences were found between the HH and the HL, LH, and LL groups ($p < .05$). No other significant differences between groups were found for these or the other dependent measures.

Treatment Effects versus Control

Dunnett's multiple comparison statistic was obtained for all sixteen experimental groups and the control group for each of the dependent measures. The HH groups under both levels of ego-involvement showed significantly greater self-esteem levels than the control group as measured by the Tennessee Scale, the Rosenberg Scale, the number of positive self-statements, and the log ratio of positive to negative statements ($p < .05$). The HH group under the condition of high ego-involvement was also greater in self-esteem as measured by the number of negative self-statements ($p < .05$), while the HH, low-ego-involvement group was not. No significant differences were found between any of the experimental groups and the control group for the interviewer's ratings of self-esteem. All other differences between experimental and control groups were not

Table 7

Correlations Between Ratings of Communicator Variables

	Expertise	Attractiveness	Trustworthiness	Agreement
Expertise	1.00	.54*	.44*	.33*
Attractiveness		1.00	.54*	.32*
Trustworthiness			1.00	.38*
Agreement with Message				1.00

* $p < .0001$

at a level of statistical significance. The last hypothesis was therefore only partially confirmed.

Correlations between ratings of communciator expertise, attractiveness, and trustworthiness, and agreement with his message for all subjects are shown in Table 7. These correlations range from .32 to .54 and are all significant at the $p < .0001$ level. Table 8 shows the correlations between the dependent measures of self-esteem. These coefficients range from -.04 to .74. The majority of the correlations (17 of 21) fall in a range from .35 to .74 and are significant at the $p < .0001$ level. Three of the four remaining correlations are also significant ($p < .001$; $p < .01$). The highest correlation of .74 between the Rosenberg Scale scored for items and as a Guttman Scale is, of course, spuriously high since it is not based on independent data. However, it is interesting to note that scoring the scale for items consistently increases its correlation with the other measures of self-esteem.

Table 8

Correlations Between Dependent Variables for All Subjects

	Rosenberg	Rosenberg (Items)	Tennessee	Inter-viewer Rating	Positive State-ments	Negative State-ments	Ratio Pos./Neg.
Rosenberg	1.00	.74***	.48***	.37***	.35***	-.23*	.28**
Rosenberg (Items)		1.00	.62***	.53***	.39***	-.37***	.39***
Tennessee Scale			1.00	.45***	.37***	-.40***	.43***
Interview Rating				1.00	.36***	-.37***	.38***
Positive Statements					1.00	-.04	.23*
Negative Statements						1.00	-.65***
Ratio Pos./Neg.							1.00

* $p < .01$

** $p < .001$

*** $p < .0001$

CHAPTER IV

DISCUSSION

The results of this study show quite strongly that perception of a communicator can be structured by means of verbal description. Substantial evidence was also found which indicates that self-esteem can be changed through use of attitude-change messages and that these changes are related to the perception of the person presenting the attitude-change message.

Effects of Structuring

The analyses of variance show that manipulation of expertise and attractiveness of the communicator affected not only ratings of the attribute manipulated but all of the other measures of communicator characteristics as well. Thus, for example, the high expertise structured groups rated the communicator as more attractive and trustworthy and agreed with his message more than did the low expertise structured groups. As predicted the communicator described as high in both expertise and attractiveness (warm and understanding) was rated higher on all measures than was the speaker who was presented as low in expertise and attractiveness.

Although the mixed message groups in which speaker descriptions consisted of high degrees of one persuasibility factor and low amounts of the other did come out with ratings of an intermediate value, different rating patterns emerged for these groups. Subjects rated the communicator who was described as highly expert as significantly lower in expertise when he was also described as "cold and unemotional", as

compared to "warm and understanding". When there was no specific mention of expertise level, subjects rated the communicator as more expert if he was warm than if he was cold. On the other hand, a description of low expertise added to high attractiveness did not detract significantly from the attractiveness of a speaker as compared to one who was described as both attractive and expert. The addition of a description of high expertise did not significantly raise the level of rated attractiveness of a speaker described as "cold and unemotional". It was also noted that when the trustworthiness of a speaker is rated, only a combination of high expertise and high attractiveness as part of his description suffice to show him as superior to a speaker who is described as cold and unemotional with an unspecified level of expertise.

The description of the communicator as both expert and attractive makes his message significantly more acceptable than when both variables are low. Increasing either variable alone while leaving the other unchanged does raise the acceptability of the speaker's message but not to a statistically significant level.

Relationship of Communicator Characteristics

The three variables of expertise, attractiveness, and trustworthiness are related to a fairly strong extent as typified by the correlation between ratings of expertise and attractiveness of .54 ($p < .0001$). Trustworthiness is more highly associated with attractiveness (.54) than with expertise (.44), although all correlations are at significant levels. Of all of the communicator variables, it

was the non-manipulated variable of communicator trustworthiness that was most highly correlated with agreement with his message, although, as noted, all relationships were at a statistically significant level.

Expertise and Attraction Effects on Self-Esteem

Hypotheses of main effects of expertise and attractiveness on dependent measures of self-exteem were confirmed. Thus, for all measures of self-esteem, speakers who were described as highly expert were more persuasive in their esteem-enhancing message than were low expertise speakers. A similar effect was observed for highly attractive versus less attractive speakers.

Hypotheses concerning differences between groups structured for both high communicator expertise and attractiveness versus groups listening to speakers low in these qualities were also confirmed for all measures of self-esteem. While the individual patterns of self-esteem magnitude for the other groups (HL and LH) were different for each measure of self-esteem, they generally fell between the extremes of the HH and LL groups as predicted. No clear statements can be made about the relationship of either expertise or attractiveness alone to communicator persuasiveness while presenting a self-esteem-enhancing message beyond that of saying that high levels of both attributes seem to be necessary in order to produce statistically significant differences.

Effects of Ego-Involvement

As predicted, no effects of level of ego-involvement were found on measures of self-esteem thus providing no confirmation of the

findings of Johnson and Scileppi (1969). According to their theory, differences found between attitude change of groups exposed to high and low credibility speakers should not be found when ego-involvement in the message presented was high.

A case can be made for the assertion that the inherent ego-involving aspects of the currently used message, that is, its personally directed ego-relevant theme, overrode the effects of the ego-involvement structuring making both conditions equally ego-involving. However, this event would have dictated that both groups be equal in their high ego-involvement--a condition under which no differences in attitude change due to source credibility should be noted according to Johnson and Scileppi (1969). One is left then with the possibility that a different mechanism may be in effect for attitude change experiments in which less ego-involving messages are used than the one operating in attitude change messages directly designed to change subject characteristics such as self-esteem.

Treatment Effects versus Control

While the comparative effects on attitude change of different levels of communicator credibility and attractiveness are interesting in themselves, the real test of the effectiveness of an attitude change message as an adjunct to therapy is its ability to increase self-esteem as compared to subjects not receiving this treatment. In this regard, results clearly indicate that groups receiving self-esteem-enhancing messages under maximally persuasive conditions (communicators who are expert and attractive) show higher levels of

measured self-esteem than subjects receiving a non-relevant message. These effects are measurable one week after presentation with the message. An understanding of this finding is in keeping with Fishbein's theoretical position if one assumes that the arguments of the message based on Ellis' ideas are universal ones, at least as far as the population of college undergraduates used in this study is concerned. An alternate explanation, in which the attitude change message had its effect by virtue of its general invitation to feel better about oneself is also feasible. In this case the effects are seen as raising the general evaluative set or overall self-esteem of the subjects. This increase in positive evaluation of the self results in greater numbers of heterogeneous items being responded to in a positive way as well as more emphasis on positive self-evaluative verbal behavior. The question of the duration of such esteem-enhancing effects is not answered in this study. The finding of effects one week following presentation of the attitude change message is consistent with the data of Watts and McGuire (1964). These authors found, however, that 60 percent of the experimentally produced change decayed after six weeks. In any case, in a therapeutic application the decay of the highly persuasive attitude change effect could assumably be at least partly offset by the "booster" effects of repeated attitude change messages at regular intervals following the initial exposure. As the current author conceives it, these messages could serve as an adjunct to therapy in that, even if they do not have a lasting effect, they could be quite effective in temporarily

increasing self-esteem to a level where other behavioral therapies such as assertiveness training could be performed more quickly and efficiently.

A final note should be made about the relationship of the various measures of self-esteem used in this study. Questions raised by Wylie (1974) about the validity of the Tennessee Scale are based on the advisability of compiling a global measure of self-esteem from items tapping many separate content areas. No attempt was made in this study to score the Tennessee Scale for the separate subscales offered by Fitts (1965). The overall measure consisting of the magnitude of positive responding correlates well with the other measures although not of as large magnitude as the Tennessee Scale. This fact is probably due to its limited range of values, especially with the population tested in the current study. The effect of increasing the range of Rosenberg scores by rating each item quantitatively is quite evident. In any case, the Rosenberg Scale emerges as a very efficient measuring device when one considers its extremely short administration time of about five minutes.

Conclusions and Suggestions for Future Research

The current study was quite successful in showing the effect that an eight minute taped message can have on increasing self-esteem. The differential effects of expertise and attraction were demonstrated clearly as regards the attitude "self-esteem" as they have been shown for other attitudes investigated in social psychological research.

The findings of Johnson and Scileppi (1969) were not replicated in the current study. However, it is suggested that the variable actually being manipulated by those authors was attention rather than ego-involvement. In any case, any future research in this area should incorporate a measure to verify that a differential effect of the manipulated variable of ego-involvement was obtained.

Many of the attitude-change studies in the literature have relied solely on written report as a measure of attitude. In the current study an attempt was made by means of the interview to introduce behavioral measures in the evaluation of self-esteem. It is hoped that future extensions of this line of research will utilize behavioral measures beyond those verbal ones used in this study.

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APPENDIX

A. Self-esteem enhancement tapescript

B. Control tapescript

C. Tape evaluation form

D. Interview prompting questions

E. Criteria for rating self-referring statements

APPENDIX A: SELF-ESTEEM ENHANCEMENT TAPESCRIPT

Hello, My name is Andrew Martin and today I'd like to talk to you about some of the ideas we have that cause us to feel badly about ourselves. All of us have believed some things that we learned somewhere in our past; we feel very sure of these things and yet they have no rational basis and are very damaging to our emotional well-being. If we can become aware of some of these irrational ideas, we can discard them as inappropriate and be well on our way toward a more fair evaluation of our abilities and personal strengths.

The first irrational idea I would like to tell you about is the belief that it is absolutely necessary for an adult human being to be loved or approved of by every other person in his life. While it might be nice to be loved or approved of by all the people you come into contact with, the demand that they do creates nothing but problems. Nobody is perfect. To demand that everyone approve of you is unreasonable. Even if you could manage to get everyone currently to approve of you, you would have to worry all the time if the next person you meet will love you and how much and whether the love will last. It is impossible for you to be all things for all people and an attempt to do this would take virtually every minute of your time. You will spend so much time being what others want you to be that you will not be able to take care of your own wants and needs. Self-respect comes not from approval of others, but from liking yourself.

Idea number two that causes trouble is the notion that you should be thoroughly competent, adequate, and achieving in all possible respects if you are to consider yourself worthwhile. Nobody can be perfectly competent and masterful in all respects; most people cannot be truly outstanding even in a single major respect. To try to be quite successful is sane enough--there are, of course, advantages that come from being successful. But to demand of yourself that you succeed all of the time usually results in undue stress, high blood pressure, and forcing yourself beyond your physical and emotional limits. Competition with others is all right, but to expect to always be number one is asking for unhappiness--there is always someone who is still better than you are. Being overly concerned with achievement normally results in becoming tremendously afraid to take chances, afraid of making mistakes, or afraid of failing at certain tasks. All of this is self-defeating and leads to an incomplete, unenjoyable life.

The third irrational idea we have is that it is awful and a catastrophy when things are not the way we would very much like them to be. We may be frustrated when things are not as we would

like, but that is no reason for the long, deep depression and anger we see in millions of people today. There is no reason why things should be different from the way they are, no matter how unfair or unfortunate the current situation is. It would be nice if things were different--but reality is often unfair and unexplainable and it is not sensible for us to cry when we don't get everything we want out of life. Getting upset rarely helps us change things for the better. If we try, and cannot change things, we must be resigned to our fate and accept things the way they are. Instead of moaning, "oh my god, how terrible this situation is, I positively can't stand it" you should change your habit of making a catastrophy of things and instead say to yourself, "It's too bad I can't have things the way I want, but it won't kill me, now what can I do to make the best of this situation or change it to make it better?"

Another problem idea is that one should be dependent on others all the time and that you need someone stronger than yourself upon whom to rely. We do need others for some things, but that is no reason to increase our dependency. Let's be socially cooperative, but not act like slaves to others. The more you rely on others, the more you must go along with what they want to do. You lose your individuality and independence. And because others are doing things for you, you don't have a chance to learn by doing yourself. The more dependent you are, the more dependent you become. And if you depend on others for safety, and thereby avoid making any mistakes on your own, you lose the only real security there is in the world--knowing that if you make a mistake, the world does not collapse and you are not worthless--you are merely a normal, fallible human being.

The last irrational idea that I want to discuss is one that holds that your past history is an all-important factor in your present behavior, that because something once strongly affected your life, it should always have the same effect. If you allow yourself to be too much affected by your past, you are committing the logical error of over-generalization. Just because something was true in some situations at one time, it does not mean it will be true for all situations for all time. It may have been true, for example, that you were not able to stand up for your rights against your parents or other adults in the past and thus had to be meek and obedient in order to preserve the peace and get some of the things you wanted. But that does not mean that now, 5, 10, or 15 years later, it is necessary to do those things to get your way. It is an "easy" solution to continue the ways of the past--they are automatic and take little thought on your part. But these ways must not be always so easy as they seem on the surface. Over the short run it is easier to hide behind the excuse "I can't change" or "You can't teach an old

dog new tricks," instead of looking at yourself and working hard to change what you don't like about yourself. But if you don't try, you'll never know what could have been changed to make a happier life for yourself.

As far as we can tell, there is no certainty, perfection, nor absolute truth in the world. We must stop thinking of ourselves as incompetent, inferior, even "bad" people because we do not live up to unreachable goals, instead we must face up to our shortcomings, examine our strengths, and apply ourselves to changes that will provide us with a fuller and happier life. In short, we can see ourselves as being much better as a person than we used to think we were. We can hold up our heads and try.

Thank you for listening. I hope this talk has been meaningful to you and will provide you with some ideas to think about.

APPENDIX B: CONTROL TAPESCRIPT[a]

Mental retardation has always been perceived as a phenomenon that exists within individuals. If we as a discipline or group of disciplines are to make the necessary changes and adaptations to bring about successful existence for people labeled mentally retarded it should be recognized that their behavior and performance is more a function of the context in which they exist than of their innate capabilities.

The societal context in which the retarded presently find themselves differs from anything that has been in the past. For one, the United States is now experiencing an age of awareness and advocacy. In mental retardation the initial impetus in the United States began via the efforts of the executive branch of the Kennedy administration. Following an initial period of funding resulting from the personal involvement of President Kennedy, the legislative branch of the government assumed responsibility in the form of the development of the Bureau for the Education of the Handicapped, the Vocational Rehabilitation Acts, and other legislation such as The Developmental Disabilities Act and more recently the Rehabilitation Act of 1973. In the last few years the judicial branch of government has provided the prime source of movement and direction through court cases designed to alleviate chronic problems in the field. The three principle areas of litigation have been right-to-education, right-to-treatment and peonage. The right-to-education court cases such as the one in Pennsylvania have resulted in legislation requiring that public education systems provide services to all school-aged individuals. Numerous states now have mandatory education for all children as a function of this kind of legislation. Other cases are pending. The second category of litigation is right-to-treatment and will not be covered in this talk.

The third category of litigation is peonage. This litigation, for the most part, concerns individuals in institutions, who have been required to perform services needed to maintain the institution where their pay is not consistent with current wage laws nor commensurate with the productivity stemming from their work. While the specific cases are of no particular concern to this talk, the conceptual issue which is of importance relates to the inherent assumption underlying much of the institutional peonage that has gone on: that the retarded are incapable of a quantity and quality of work which would necessi-

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a. Adapted from Gold, 1975

tate paying them a normal wage. This assumption has been supported by the low level performance of retarded individuals at work, in and out of institutions, under conditions where no attempts were made to provide skills and attitudes which would allow them to produce significantly above current levels of expectancy.

The low expectancy on the part of society is perhaps the single most critical deterent to progress in our field. We have established an expectancy cycle which perpetuates low levels of success and low functional employment capabilities. From the early work of Binet and Itard right on through to the current writings of Goldberg and Kirk, people working with the retarded have decided, on the basis of their own experiences, the performance capabilities of the retarded. They then went out and, as a self-fulfilling prophecy, proved themselves to be right. That is, the retarded did no more than what they were expected to do. This gave early workers the confidence to tell their successors of the capabilities and limitations of the retarded and, in cyclical fashion, their successors went out and again proved that the retarded could be just what they were expected or not expected to be. This cycle continues so that today the retarded still accomplish exactly what is expected of them where the expectancies the people in the field have are basically the ones handed down by their predecessors. Two factors, however, make today different than any other time: (1) Data are now available showing the abilities of moderately, severely, and profoundly retarded individuals to perform tasks or exhibit behaviors totally inconsistent with previous expectancies for such individuals, and (2) There are now emerging a variety of technologies developed in laboratory settings and previously unavailable in service settings, designed to help individuals who find learning difficult. Examples of these technologies include discrimination learning, attention-retention theory, behavior modification, and such specific techniques as match-to-sample, oddity, clustering, fading, and shaping. These two factors give the support, justification and, in fact, the mandate for breaking into the expectancy cycle so that we begin to completely revise what will be accepted as appropriate, successful or even minimum performance from those individuals labeled mentally retarded. The role of expectancy is given considerable weight here because without revised expectancies, all of the technology available will go unnoticed in the absence of individuals having reason to believe that the retarded are capable of significantly more than they presently show.

In an effort to provide a social perspective justification for the philosophy proposed above, the following is hypothesized: The more competence a retarded individual has, the more deviance will be tolerated in him by others. In our field the overwhelming emphasis has been on the elimination of deviance, rather than the

development of competence, as the terms are used here. The goal seems to be to bring individuals up to zero. This results in the all too frequent situation where a retarded individual who is existing successfully in the community, or on the job, commits some minor infraction, such as picking his nose, swearing at someone or showing up late, and is fired or institutionalized. Clearly, this would not be the effect of such infractions if there was competence to maintain a positive balance. But with a mean of zero, the slightest deviance might precipitate exclusion.

The profession must recognize that normalization means competence as well as the elimination of deviance. And vocationally, the retarded at all levels have already demonstrated competence. We must capitalize on current training technologies to give all retarded individuals sufficient competence to maintain a positive balance and a place in society.

APPENDIX C: TAPE EVALUATION FORM[a]

1. Please write, in one or two sentences, what the message you just heard was about.

2. Put a vertical mark through each line below at the point which indicates your rating.

I thought the speaker on this tape was:

Friendly	_____	Distant
Attractive	_____	Unattractive
Awful	_____	Nice
Unpleasant	_____	Pleasant
Qualified	_____	Unqualified
Competent	_____	Incompetent
Inexpert	_____	Expert
Uninformed	_____	Informed
Honest	_____	Dishonest
Virtuous	_____	Sinful
Dependable	_____	Undependable
Trustworthy	_____	Untrustworthy

3. I agreed with the message the speaker presented:

Not at all	_____	Completely

a. Size reduced from actual form.

APPENDIX D: INTERVIEW PROMPTING QUESTIONS

1. How do you see yourself as a person?
2. How would you describe yourself to another person?
3. What are some of your strengths and weaknesses?
4. Is there something about yourself that worries or pleases you?
5. Describe yourself as you think others see you; how would you like them to see you?
6. How pleased are you with the way you are? Why?
7. If someone asked you, "Who are you," how would you answer?
8. How confident do you feel about your relationships with others?
9. What are your feelings about your abilities in school and in your future vocation?
10. How do you think you measure up as compared with most people?
11. How much do you like and respect yourself as a person?
12. What would you like to change about yourself or are you satisfied with the way you are?

APPENDIX E: CRITERIA FOR RATING SELF-REFERRING STATEMENTS[a]

A statement was defined as a clause with subject and verb, recognizable as either:

1. a simple sentence
2. a complex sentence
3. a coordinate clause of a compound sentence[b]
4. a subordinate clause of a complex sentence
5. a clause containing a subject and verb but never completed.

Raters counted self-referring statements according to the following rules:

1. Any statement which contains one or more references to "I", "me", "we", "us", regardless of whether it occurs in a main or subordinate clause, should be treated as one self-referring statement.
2. "My", "mine", "our", "ours", should be counted as self-referring only when they refer to the subject's own mental or physical person, life, group, achievement or

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a. Adapted from Davidoff, L. L. Schizophrenic patients in psychotherapy: The effects of degree of information and compatability expectations on behavior in the interview setting: An operant conditioning analogue. Unpublished doctoral dissertation, Syracuse University, 1969.

b. All compound sentences were analyzed into their component coordinate clauses and treated as two or more simple sentences. Sometimes several clauses joined by "and", or "or" or "but" had the necessary number of verbs for each clause but were missing a stated subject. If they clearly expressed two or more separate thoughts, they were treated as separate coordinate clauses, instead of as a compound verb in a simple or complex sentence.

performance. Do not count "my", "mine", "our", "ours" if they primarily refer to objects outside the person -- relatives, friends, professionals, etc. Example: Count "my family", "my hobby"; do not count "my father, "my car".

3. Count self-referring questions.
4. Count self-referring statements twice if they are repeated for emphasis.
5. Count self-referring quotations, even if the self-reference has been transformed to "you" or "he" for grammatical reasons. However, if "you" refers to a substitute for "people", (they tell you to go home), do not count unless it is clear substitute for "me".
6. Do not count self-referring statements in poetry recited.
7. Certain expressions have become conversational cliches which automatically express certain ideas. The expressions which follow and their like should be counted only when they are followed by or preceded by self-referring words or when they refer to actual thoughts, opinions, or feeling of the individual subject, as opposed to statements of fact. The expressions which follow should also be counted as self-referring if they contain a direct object.

Expressions

I think	I don't know
I'll tell you	I believe it was
Why, I don't know	As far as I know
As I say	I mean
I would say	I suppose
Know what I mean?	I guess
As I understood it	Last I heard
Like I say	I hear
I do believe	As I said before
I don't know of	I remember
I know	I mentioned

8. Do not count as self-referring questions to the interviewer about the task, the experiment, the interviewer, the hospital facilities, etc. And if expressions similar to the following refer to the present situation, do not count them as self-referring:

Expressions

I can't think of the word	Believe me
What else can I tell you?	My foot's asleep
Should I keep on?	How am I doing?
What else do I do?	I'd like a cigarette
Let me think	I'm lost
That's about all I could say	I have to leave