

Archives
Closed
LD
175
.A40K
TR
760

A FACTOR ANALYSIS OF SUGGESTIBILITY
AND RELIGIOSITY MEASURES

A Thesis
by
RAFAELA DAVILA

Submitted to the Graduate School
Appalachian State University
in partial fulfillment of the requirements for the degree of
MASTER OF ARTS

September 1985

Major Department: Psychology

A FACTOR ANALYSIS OF SUGGESTIBILITY
AND RELIGIOSITY MEASURES

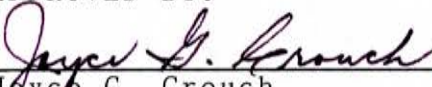
A Thesis

by

Rafaela Davila

September 1985

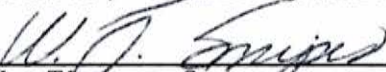
APPROVED BY:



Joyce G. Crouch
Chairperson, Thesis Committee



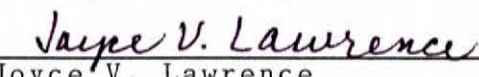
Donald L. Clark
Member, Thesis Committee



W. Thomas Snipes
Member, Thesis Committee



Joyce G. Crouch
Chairperson, Department of Psychology



Joyce V. Lawrence
Dean of Graduate Studies and Research

ABSTRACT

FACTOR ANALYSIS OF SUGGESTIBILITY AND
RELIGIOSITY MEASURES (July 1985)

Rafaela Davila

M. A. Appalachian State University

Thesis Chairperson: Dr. Joyce Crouch

A study was conducted to investigate the relationship between measures of suggestibility and religiosity. Eighty volunteer subjects, 45 males and 35 females undergraduate students with a mean age of 20.2, were tested on measures of religiosity (Allport-Ross Extrinsic and Intrinsic Scales, and Batson's External, Internal, Intrinsic, and Orthodoxy Scales); social desirability (Marlowe-Crowne Social Desirability Scale); and suggestibility (Gudjonsson Interrogatory Suggestibility Scale, Rorschach Adaptation Card Test and Opinion Test). Scores from all measures were factor analyzed. A varimax rotated factor matrix produced four factors. Factor I, Suggestibility, resulted from loadings on suggestibility tests scores. Factor II,

Institutional Religiosity, resulted from scores loadings on the Intrinsic, External, Internal and Orthodoxy Religiosity scale scores. This factor was independent from the first factor. Factor III, Personal Religiosity, resulted from loadings on the Intrinsic and Interactional Religiosity scales scores; Rorschach Adaptation Card Test scores also loaded on this factor. Factor IV, Superficial Religiosity, resulted from loadings on the Extrinsic and External Religiosity Scale scores; Rorschach Adaptation Card Test scores also loaded on this factor. A principal finding in this study was the independence of suggestibility from religiosity. Results were considered as supportive of suggestibility as a general trait contributing to consistent individual differences. Generally, results supported the tridimensional religiosity model proposed by Batson. However, the need for additional research was noted to further test the model as well as to study the psychometric qualities of Gudjonsson Interrogatory Suggestibility Scale in a different context. The Rorschach Adaptation Card Test was questioned as a "clean" measure of nonhypnotic suggestibility. Finally, the Opinion Test was considered as a promising measurement of nonhypnotic suggestibility. However, additional research was noted as necessary to improve its reliability and validity.

ACKNOWLEDGEMENTS

There are many people that in different ways, have supported and helped me with this thesis. I would like to thank all of them even if my memory fails and their names are not spelled out. First, many thanks are due to Dr. Crouch whose involvement, support, encouragement, suggestions and dedication made her an exceptional chairperson and this work a reality. Thanks also to Dr. Clark and Dr. Snipes for their support and encouragement. I am specially grateful to Rich Rawson, Charles Avera, Mark School and Dr. Wilson for their assistance while giving the different questionnaires. Steve Putnam and Ed Cable were a big help during the typing and printing process, thank you so much. Darlyn Hilts deserves my recognition for facilitating her work as a guide. Thanks also to Dr. Gudjonsson for his permission to use his Interrogative Suggestibility Scale. I would also like to express my gratitude and dedicate this work to the memory of Dean Brooks who helped me many times during my stay at ASU and whose diligent and effective work as advisor for foreign students was an example of love that made work.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	vii
INTRODUCTION	1
REVIEW OF THE LITERATURE.....	4
Suggestibility.....	4
Religiosity	23
Social Desirability	35
METHOD	41
Subjects.....	41
Instruments.....	41
Religiosity Questionnaire.....	41
Social Desirability.....	42
Suggestibility.....	43
Procedure.....	46
RESULTS	50
DISCUSSION.....	57
REFERENCES	68
APPENDICES	
A Religiosity Questionnaire	75
B Marlowe And Crowne Social Desirability Scale ..	88
C Gudjonsson Interrogative Suggestibility Scale..	93
D Eysenck and Furneaux Rorschach Card Adaptation Test Directions and Answer Sheet.....	99
E Opinion Test.....	102
F Participants Letter	108
VITA	110

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Means and Standard Deviations of the Religiosity, Social Desirability, and Suggestibility Measures	51
2. Correlation Matrix Of the Religiosity, Social Desirability and Suggestibility Measures	53
3. Varimax Rotated Factor Matrix	56

INTRODUCTION

Individual differences are broadly accepted. Each individual seems to have a characteristic way of dealing with the world and everyday situations. To the same psychological situation or stimulus each individual tends to react differently. On the other hand, individuals also tend to respond consistently over a wide variety of situations or stimuli. Personality theorists have developed different explanations as a response to this theorizing about individual differences and to explain the different behaviors that seem to be relatively stable through the life of each individual.

An aspect on which individuals seem to differ widely is their religion commitment and the importance which they give to religion as a source of meaning, support, realization, direction, and as solutions for superficial as well as deeper concerns.

At the same time, in the majority of religions there is a code, and the individuals who adopt it are implicitly accepting this code or group of norms. Variability among members' commitment and compliance with the norms is usually wide. However, history has provided numerous

examples where extreme adherence to a religious code are the apparent reasons for a total submission and fanaticism to the point that survival mechanisms are inhibited, as in the case of Jim Jones mass suicide in Jonestown, Guyana (Korns, 1979; Levi, 1982)

It is well known that numerous variables and factors are involved in a situation such as the one described. However, extreme suggestibility could be cited as one of the major variables. These observations lead to several questions about the relationship between religiosity and suggestibility. Are religious people more vulnerable to suggestibility than less religious ones? What kind of religiosity, if any, relates to suggestibility? Are religiosity and suggestibility independent constructs? These are questions worth investigating to better understand human behavior, its differences, and the consistencies sometimes seen.

Even though it is important to establish the relationship between religiosity and suggestibility, it does not seem to be a simple task. Both constructs are extremely complicated with many ramifications. Besides, both have been extensively researched independently. Efforts have been aimed mainly toward developing objective measures and relating them to other personality measures and behaviors. Factor analysis has been extensively used in the attempt to understand of the underlying processes

and effects on human behavior. However, the relationship between suggestibility and religiosity has not been systematically researched. This investigation was intended to examine both constructs and their relationship to one another.



REVIEW OF THE LITERATURE

Suggestibility

According to Webster's Third New International Dictionary, suggestibility is the "quality or state of being suggestible: susceptible to suggestion or influence." A suggestible person is described as "easily influenced by suggestion, susceptible mentally to external influences specially to the opinions of others." Certainly individuals differ in how easily they are influenced by suggestion. A careful observation of people reveals that some are easily influenced by a slight observation or suggestion while others are able to maintain their original position even when there is overwhelming evidence against their original position. Such individual differences in suggestibility have aroused the interest of students of human behavior since early times and have stimulated considerable research within clinical and social psychology.

Although there has been considerable research in the field, little is known about suggestibility in everyday life. As Hughes, Reyher and Wilson (1979) stated, the term suggestibility has been invoked by many investigators to

explain baffling phenomena like the placebo effect, acupuncture, faith healing, exorcism, systematic desensitization, and transcendental meditation. However, they added, its invocation to explain some laboratory or therapeutic outcome provides only the illusion of scientific understanding. Virtually nothing is known about the conditions that influence suggestibility in everyday life (Hughes et al., 1979). In addition, the subject is surrounded with controversy and ethical questions.

Historically, the study of suggestibility has been related to hypnosis, and from these studies "precious little light" has been shed (Hughes et al., 1979, p. 175)

Weitzenhofer (1980), who has been studying hypnosis and related phenomena for a long time, suggested that the term suggestibility be used to refer to the capacity to respond to suggestions once a given depth of hypnosis is attained. He emphasized that hypnotic behavior has two distinct parts: first, a special state of hypnosis and second, a degree of suggestibility which is not dependent on the presence of the state of hypnosis but is definitely affected by it. He also suggested that suggestibility can exist without hypnosis. However, an induction of hypnosis procedure is frequently associated with an appreciable increase in suggestibility. Although a relationship between suggestibility and hypnotic susceptibility have been found, the two have not as yet been shown to be

identical (Weitzenhofer & Weitzenhofer, 1958; Weitzenhofer, 1980). Despite this fact, the literature has employed the terms "hypnotic susceptibility" and "hypnotic suggestibility" interchangeably. Usually tests that measure hypnotic susceptibility are based on the subject's ability to follow experimenters' suggestions once a given depth of hypnosis has been achieved or to follow experimenters' suggestions without hypnotic induction. Subsequently, this paper will use the term hypnotic suggestibility to refer to this kind of phenomena.

This suggestibility within the hypnotic phenomena has received considerable attention for a long time. However, there are still many questions about the exact nature of the process and its relationship to susceptibility to suggestion or influence in situations different from hypnosis.

Currently, there are different standardized measures of hypnotic suggestibility which have been extensively used in research. Some of the names frequently seen in the literature review are the Harvard Group Scale of Hypnotic Susceptibility (Shore & Orne, 1962), the Stanford Hypnotic Susceptibility Scale (Weitzenhoffer & Hilgard, 1959), and the Barber Suggestibility Scale and the Wilson-Barber Creative Imagination Scale (Barber & Wilson, 1978). It seems as if researchers have used these measures and the derived scores as equivalent to one another. In addition,

data have pointed to acceptable psychometric qualities, and when factor analyses have been performed, a principal factor, which could be called hypnotic suggestibility, has emerged as a principal component (Eysenck & Furneaux, 1945; Bandura & Benton, 1953; Evans, 1967; Barber & Wilson, 1978).

Many efforts employing hypnosis as a method have been made to relate hypnotic suggestibility and personality variables. Barber (1964), in his critical review of research findings on hypnotizability, suggestibility, and personality, reported that a large number of studies using self report inventories, projective tests, ratings, interviews and other methods of personality assessment failed to find reliable relationships between hypnotizability or suggestibility and traits of personality (Barber, 1964). In general, this trend has been observed as conventional measures of personality do not seem to correlate with the hypnotic suggestibility measures (Barber, 1964). However, clinical studies and reports have shown a different picture. Clinical reports are usually based on case studies of highly hypnotizable individuals and give valuable and interesting information that helps to understand better the suggestibility and hypnosis phenomena. Hilgard (1965), based on her clinical experience, reported characteristics that differentiated subgroups of hypnotizable subjects. She named reading,

dramatic arts, esthetic involvement, religious dedication, and adventure as representative of the kind of interests of highly hypnotizable subjects. With respect to religion, Hilgard cautioned that differentiations had to be made between the mere church goer and the one with a sense of devotion and discipleship; when the involvement is profound, she added, it is a favorable sign for hypnotizability (Hilgard, 1965).

Spiegel (1974), also using clinical experience, discussed the highly hypnotizable person, which he termed the grade 5 syndrome. He described the highly hypnotizable individuals as ones who tended to be trusting people who easily suspended their critical judgement, readily affiliated with new metaphors, emphasized the present without too much concern for past-future perspectives, felt comfortable with incongruities, had an excellent memory, and was capable of intense concentration (Spiegel, 1974).

More recent data, combining clinical and experimental information about the highly hypnotic suggestible individual, have presented impressive information. Wilson and Barber (1983) interviewed in depth 27 women who had been rated as excellent hypnotic subjects and a comparison group of 25 women who had been rated as nonexcellent hypnotic subjects. These interviews focused on childhood and adult memories as well as fantasies and

psychic experiences. They reported that with one exception the excellent hypnotic subjects had a profound fantasy life and that their fantasies were "as real as real" (hallucinatory). Their involvement in fantasy, Wilson and Barber concluded, played an important role in producing their superb hypnotic performance. The authors interpreted the data as showing that there exists a small group of individuals (possibly 4% of the population) who fantasize a large part of their time, and who typically "see," "hear," "smell," "touch," and fully experience what they fantasize.

Although Wilson and Barber's excellent hypnotic subjects differed markedly in personality, 26 of 27 shared a series of interrelated characteristics, a syndrome or personality type that they labeled as the fantasy prone personality. Some of the characteristics shared by the Barber and Wilson's excellent hypnotic subjects were involvement in fantasy, hallucinatory abilities, hypnotizability and psychic abilities. Among the psychic abilities named by Wilson and Barber as more characteristic of their excellent hypnotic subjects than their nonexcellent hypnotic subjects were telepathy, precognition, out of the body experiences, automatic writing, healing, experiences with apparitions and religious visions. Ninety-two percent of the excellent hypnotic subjects, contrasted with 16% of the comparison

group, saw themselves as psychic or sensitive and reported numerous telepathic and precognition experience. Related to the religious visions, six subjects in the excellent hypnotic subjects group and none in the comparison group had had religious visions. The experiences were described by the subjects as very intensive and reported as occurring by three subjects when they were children, by two when they were adolescents, and by one when she was an adult (Wilson & Barber, 1983).

Additional research on personality and hypnotic suggestibility shows the complexity of the problem and the importance of considering the different variables that intervene or interact when relating personality variables and hypnotic suggestibility. Strauss and Vachino (1975) reported that high dogmatic subjects, as determined by scores on Rokeach's Dogmatism Scale, were more susceptible to hypnosis than low dogmatic subjects when they were led to believe that the hypnotist was an authority in the field but were not more or less susceptible than low dogmatic subjects when the hypnotist was not perceived as an authority (Strauss & Vachino, 1975).

In the same way, Burger (1981) showed how personality variables can interact with hypnotic suggestibility. Burger measured hypnotic suggestibility with the Harvard Group Scale of Hypnotic Susceptibility following a description of hypnosis as either situationally determined

or personally determined, a control group received no description. Results suggested that individual differences in locus of control interacted with the perceived hypnotic situation to produce increased or decreased levels of hypnotic susceptibility (Burger, 1981).

Besides the personality variables, the situation is also important to the understanding of suggestibility. Hughes et al. (1979) assessed hypnotic suggestibility in a condition characterized by a passive-receptive interpersonal relationship, in which the subject remained silent, and a second condition characterized as an active-receptive relationship, in which speech was maintained throughout. They reported that suggestibility was significantly lower in the active-receptive condition. The authors claimed that this difference survived a replication and interpreted the results as providing evidence that suggestibility is a variable which can be manipulated.

Another question frequently raised in the hypnotic suggestibility literature is the independence of this construct from suggestibility measured in situations different from the hypnotic arousal condition. Eysenck and Furneaux (1945) analyzed several measures of what they called primary and secondary suggestibility. They concluded that there were two independent types of suggestibility which could be called primary

suggestibility and secondary suggestibility. Primary suggestibility was of the ideomotor kind and correlated highly with hypnotizability, while secondary suggestibility was of the indirection kind, which seemed rather to depend on suggestion by indirection, and did not correlate with hypnotizability. They suggested that possibly a better name for this kind of suggestibility could be "gullibility." They reported that primary suggestibility was a much more definite and marked trait than secondary suggestibility and that reliabilities tended to be a good deal higher for tests of primary suggestibility. They also hypothesized, without empirical support, the existence of a tertiary kind of suggestibility based on prestige suggestions.

This Eysenck-Furneaux classification of primary and secondary suggestibility has been used frequently in the literature. However, Bandura and Benton (1953) replicated the study and reanalyzed the data that led Eysenck and Furneaux to the conclusion of primary and secondary suggestibility as different and independent factors. They reported a failure to find a secondary suggestibility factor and considered that the Eysenck and Furneaux study presented no impressive evidence for the existence of a factor of secondary suggestibility.

In the same way, Evans (1967), after reviewing the literature related to the theme, concluded that in spite

of its widespread usefulness over a 20-year period --by now almost 40-- the old classification by Eysenck and Furneaux (1945) of primary and secondary suggestibility could not be justified either from the original data presented to support it or from subsequent research (Evans, 1967). For this reason this study will avoid the terms primary and secondary suggestibility and will refer to hypnotic and nonhypnotic suggestibility.

In general, the nonhypnotic suggestibility has eluded differentiation as a factor independent from hypnotic suggestibility. At the same time, it has not been ruled out as a part of it. When measures of nonhypnotic suggestibility have been related to hypnotic suggestibility measures, there has been, at least from the literature reviewed, different magnitudes of correlations between the two measures. Even in the Eysenck and Furneaux data (1945), which led them to postulate the primary and secondary concepts, there was a small correlation between the two types of measures.

Support for the relationship between hypnotic and nonhypnotic suggestibility comes also from more recent studies. (Moore, 1964; Miller, 1980; Donahue and Smith, 1980; Grahah & Greene, 1981; Shames, 1981).

Moore (1964) tested 80 undergraduate students and reported that correlations between hypnotic susceptibility and measures of social influence "approached

significance." He measured social influence with a persuasibility test, written communications from authoritative sources, and an influencibility test, with false feedback about peer group norms. He found a negative correlation of $-.17$ between hypnotic susceptibility and persuasibility and a $.21$ correlation with influencibility. Moore reported that although they were not statistically significant, they approached significance (Moore, 1964).

Miller (1980) has also presented support for the relation between hypnotic and nonhypnotic suggestibility. He developed a behavioral measure of nonhypnotic suggestibility. The measure required that subjects determine the identity of tachistoscopically presented nonsense syllables when, unknown to the subjects, no syllables were presented. He reported that subjects who had scored low on the Harvard Group Scale of Hypnotic Susceptibility reported perceiving the suggested syllables less frequently than did subjects with either medium or high scores on the hypnotic susceptibility measure. Miller interpreted the results as evidence that a situation traditionally defined as hypnotic predicts to some degree their behavior in another situation that appears to have little in common with typical hypnosis but that does involve the effects of some kind of suggestion or response to socially encouraged expectation (Miller, 1980).

In a similar fashion, Donahue and Smith (1980) have provided evidence for the relationship between hypnotic and nonhypnotic suggestibility. They had 55 student volunteers listen to eight words each played for 3 minutes and instructed them to report any changes illusory heard. Scores on the Barber Suggestibility Scale correlated significantly (.34) with the number of times subjects reported hearing different forms.

Graham and Greene (1981) have furnished additional data about the relationship between hypnotic and nonhypnotic suggestibility. Scores on the Harvard Group Scale of Hypnotic Susceptibility for 235 college graduates were compared to their records for alumni annual giving. Those who had made at least one contribution to the college since graduation were significantly higher in hypnotic susceptibility than those who had made no contribution. The authors interpreted the results as suggesting that willingness to respond to a persuasive appeal may be related to the person's susceptibility to hypnosis. This finding was considered important by the authors because it established a link between hypnotic suggestibility and persuasion in everyday life.

Shames (1981) has presented additional support for the relationship between hypnotic and nonhypnotic suggestibility. Using 8 males and 2 females known to be high on hypnotic suggestibility through previous research

participation, he administered the Spiegel Hypnotic Induction Profile and a measure of conformity, the classical Asch paradigm. He reported significant correlations between hypnotic susceptibility, or hypnotic suggestibility, and conformity (.55) as well as between hypnotic susceptibility and grade of conformity (.66). He concluded that hypnotic susceptibility is a reasonable predictor of conformity and both appear to be tied to the construct of suggestibility (Shames, 1981).

The above data point to a relationship between hypnotic suggestibility and nonhypnotic suggestibility. The different tests used to measure hypnotic suggestibility seem to share a common factor with nonhypnotic suggestibility tests. This common factor could account for the relationship observed when both types of measures were used (Moore, 1964; Miller, 1980; Donahue & Smith, 1980; Graham & Greene, 1981; Shames, 1981). The difficulties in accepting the nonhypnotic suggestibility as a component of the hypnotic suggestibility seem to be primarily a measurement problem. While hypnotic suggestibility tests are a relatively homogeneous group of tests with standardized procedures and acceptable psychometric qualities, the nonhypnotic suggestibility tests are a more heterogeneous group of measures used in a rather random fashion (Moore, 1964; Miller, 1980; Donahue & Smith, 1980; Graham & Greene 1981; Shames, 1981). Authors usually offer

neither standardized procedures nor psychometric data. Therefore, replications are difficult. As a consequence, it is not surprising that hypnotic suggestibility has been isolated as a definite trait in studies employing factor analysis. On the other hand, nonhypnotic suggestibility has generally not been so differentiated. In spite of this measurement difficulty, the interpretation of a general factor that accounts for the observed relationship between the hypnotic and nonhypnotic suggestibility measurements seems possible from the data reviewed. This factor could be called general suggestibility and could explain the relationship observed.

Some data apart from the hypnosis field give support to this interpretation. Abraham (1962) used three measures of nonhypnotic suggestibility, two sensory tests--the Heat and the Odor tests--and an opinion change test. He tested college students on these three nonhypnotic suggestibility tests and the autonomy and deference scales of the Edward Personal Preference Schedule (Edwards, 1959). Correlations were performed between all the obtained measures; Abraham reported that all tests correlated significantly with one another. Subjects that tended toward nonsuggestibility on the heat test were significantly less persuasible on the opinion change test and on the odor test. Abraham reported a correlation of .42 between the heat and persuasibility scores and .33

between persuasibility and the odor test. He also reported correlations of .55; .31; and .58 between the Edwards' Personal Preference Schedule discrepance scores between autonomy and deference needs and heat, odor and persuasibility tests respectively. Abraham interpreted the results as evidence of a syndrome that he called the suggestible personality. Persuasibility, he added, was not an isolated trait peculiar to a particular topic or specific situation but rather appeared to be a general trait contributing to consistent individual differences in susceptibility to suggestion from diverse sensory, and verbal sources of influences. Besides, he concluded, there are measurable personality needs (autonomy and deference) which predispose individuals toward high or low suggestibility.

Additional information about nonhypnotic suggestibility comes from the forensic psychology field. The major interest about suggestibility within this field is in the interrogatory context and refers to the extent to which misleading and suggestive information and directions can influence subjects' recollections when they give testimony or are interrogated or interviewed and the ease with which they can be made to change their answers under pressure (Andrinks, Loftus, & Powers, 1979; Gudjonsson, 1983, 1984b).

Even though the practical implications of suggestibility within this context are evident, standardized measures of suggestibility to use in this context are a recent development. Gudjonsson (1984b) stated that interrogative suggestibility has been investigated in different studies but the procedures usually involve complicated laboratory settings that are not easily replicable (Gudjonsson, 1984b).

Andriks et al. (1979) measured suggestibility by the extent to which misleading information was incorporated into the subjects' recollections of a series of slides depicting a wallet-snatching or a fight. He reported that women were more accurate and more resistant to suggestion about female oriented details, while men were more accurate and resistant to suggestions about male-oriented details.

Gudjonsson (1983, 1984b) has recently developed an interrogative suggestibility scale that he claims is a measure of the impact of both suggestive questions and interpersonal pressure. He reported data that pointed to acceptable psychometric qualities and standardized procedures for administration and scoring. The scale has three parts. The first part consists of a story to which subjects are required to listen and to try to remember as much of the story as they can. The second part consists of 20 specific questions about the content of the story, from

which "yield" suggestibility scores are derived. The third part consists of the same 20 questions given to the subjects after negative feedback, from which "shift" suggestibility scores are derived. Gudjonsson reported that when principal component factor analysis was performed, the two measures of suggestibility were reasonably homogeneous and loaded on two different factors and that both "yield" and "shift" had satisfactory internal consistency reliabilities (.77 and .66 respectively). The reliability, Gudjonsson added, was higher for the yield measure, which suggested that the "shift" measure was somewhat less homogeneous than "yield." Gudjonsson stated that his scale contained a "theoretically valid suggestibility construct relevant to interrogatory context (Gudjonsson, 1984b, p. 304)."

Gudjonsson (1984a, 1984b) cited different studies as evidence of the validity of his scale within the interrogative context. He reported that suggestibility as measured by the Gudjonsson Scale correlated significantly with teachers' behavioral ratings of suggestibility among delinquent boys. It also correlated negatively with frequency of convictions among young offenders. He also compared suggestibility scores of subjects who had retracted their confessions statements with those of subjects who persistently denied any involvement in the crime they were charged with. The "deniers," Gudjonsson

added, were found to be significantly more resistant to suggestive influence and pressure than the "false confessors" (Gudjonsson, 1984b).

The above data point to acceptable psychometric qualities for the Gudjonsson Suggestibility Scale, and it seems to overcome some of the difficulties observed with the other nonhypnotic suggestibility tests reviewed. These characteristics could make Gudjonsson's Suggestibility Scale a valuable instrument for clinical and research use. Even though the usefulness of the instrument in a context different from the interrogative remains to be established, it seems to be suitable for the general investigation about suggestibility because at the end it also measures individuals' susceptibility to influence and suggestion.

Finally, Gudjonsson Suggestibility Scale scores has also been related to personality variables. Gudjonsson (1983) tested 45 subjects from a variety of occupations on his suggestibility scale, a short form of the Wechsler Intelligence Scale for adults (WAIS), and the Eysenck Personality Questionnaire. He reported that subjects who were more suggestible tended to be of lower intelligence and had poorer memory recall. They commonly had, he added, high trait anxiety (neuroticism) and presented themselves in a socially desirable way (lie scores). Gudjonsson explained that as neuroticism and social desirability were

themselves negatively correlated with intelligence and memory, they added only marginally to the variance of the independent variable, suggestibility.

As a summary, individual differences in the extent to which individuals are influenced by suggestion or suggestibility cover an ample range. There is still much to learn about the conditions that influence suggestibility within hypnosis as well as in everyday situations. Clinical studies of highly hypnotic suggestible subjects have reported that some personality characteristics within this group are similar to those related to some kind of religiosity (Hilgard, 1965) and special religious experiences (Wilson & Barber, 1983). Additionally, suggestibility in the hypnotic situation has been related to suggestibility in situations different from the hypnotic ones. The conclusion that subjects who tend to score high on the hypnotic suggestibility tests also tend to score high on nonhypnosis-related suggestibility tests is also a possibility. The difficulties in accepting this nonhypnotic suggestibility as a common factor of hypnotic suggestibility seems to be a measurement problem. This measurement problem appears to have been improved with the Gudjonsson Suggestibility Scale which is based upon acceptable psychometric data. Finally, nonhypnotic suggestibility seemed to relate to a number of personality variables such as the manifest

personality needs of autonomy and deference, as measured by the Edward Personal Preference Schedule, trait anxiety, social desirability, lower intelligence and poorer memory recall.

Religiosity

At the individual level and as a social institution, religion is a significant reality. The 1981 Gallup's survey on religion in America, as Benson (1981) and Bergin (1983) reported, revealed substantial investment in religion among the general population: 93% stated a religious preference; 69% belonged to a church or synagogue; 40% had attended a religious service within seven days prior to the survey; 55% ranked religion as very important in their lives; 31% consider their religious beliefs to be the most important thing in their lives; and 62%, when asked if religion could solve most of today's problems, responded affirmatively (Benson, 1981; Bergin, 1983). Similarly, given the opportunity to define religion in any way at all, 7 out of 10 students indicated that they regarded themselves as actually or potentially religious (Allport, 1960).

The role of religion at the individual level can be seen clearly from the above data. However, the role of religion as a social institution is more difficult to establish. As Batson (1976) indicated, advocates claim that religion is an agent working for the betterment of

mankind, producing increased love and concern among people. On the other hand, he added, critics claim that in the history of western civilization religious fervor often appears to be a double agent, espousing the highest good, seeking to make all men brothers. Yet religion has produced the crusades, the inquisition, and an unending series of witch hunts (Batson, 1976). In the same way, religious fervor has been named as a hidden and underestimated factor behind much of the today's world violence and conflicts.

Even though the importance of religion at the individual and social level is obvious, historically psychologists have underestimated the importance of religion in people's lives. Actually, however, Bergin (1983) indicated that there is a renaissance of psychological interest in religion.

Gordon Allport, a personality theorist who was an exception, gave a very important role to religion. In his dialogue with Evans (1970), he stated that religion represented a problem of personality --perhaps a specialized part of personality-- and that it was ridiculous for a psychologist to neglect it or overlook its importance in the structure of personality. Allport (1960) suggested that the maturely productive religious sentiment is an independent system within the structure of an individual's personality, like any other well developed

interest system. Like other mature sentiments, he added, it is well differentiated, dynamic, motivational and productive (Allport, 1960). Likewise, Albany (1984) considered that religious loyalties evoke some of the deepest behavioral motivations that people experience. Religion, he said, is almost as basic to clients as are their families' structures and relationships.

In addition to the above theoretical importance, Allport proposed that the roots of religion are so numerous, the weight of their influence in individual's lives so varied, and the forms of rational interpretation so endless that uniformity of product is impossible (Allport, 1960). This complexity of the religious phenomena makes the study of religiosity and its relation to personality very difficult and intricate. However, the significance of the religious phenomena demand attention, Besides, it becomes a challenge to science so that the complexity of human nature and behavior can be understood.

Through the literature review, religiosity has emerged as a many-faceted variable measured in different ways. Mainly authors have measured it with questionnaires (Allport & Ross, 1967; Batson & Darley, 1973; Batson, 1976; Batson, Naijeh, & Pate, 1978; Batson & Gray, 1981; Hunt & King, 1971, 1975); but time spent in religious activities (Loden & McClure, 1982), individual rankings of religious involvement and commitment (Singh, 1979; Kauber,

1984), and frequency of prayer (Morgan, 1983) have also been used to measure religiosity.

Religiosity has also been correlated with numerous criteria ranging from grade point average (Kauber, 1984) to happiness in life (Louden & McClure, 1982). Other variables that have been studied in relationship to religiosity are helping behavior (Morgan, 1983; Batson, 1976; Batson & Gray, 1981), personality characteristics (Francis, Pearson & Kay, 1983), moral development (Seltz, 1984), antisocial behavior (Singh, 1979), sexual behavior (Levrin, Natzer, Mashlach & Soffer, 1984), and mental health (Bergin, 1983).

Mental health and its relation to religiosity is a subject frequently found in the literature. Bergin (1983), in his critical reevaluation of religiosity and mental health, reported an analysis of studies through 1979 that had at least one clinical measure such as the MMPI or a comparable scale. A meta-analysis of the 24 studies revealed no support for the supposition that religiousness is necessarily correlated with psychopathology. Of 30 effects tabulated by Bergin only seven, or 23%, manifested the negative relationship between religiosity and mental health. Forty-seven percent indicated a positive relationship and 30% a zero relationship. Thus, he emphasised, 77% of the obtained results are contrary to the theory of a negative effect of religion. At the same

time, he warned, the results did not provide much more than marginal support for a positive effect of religion. Bergin considered that the small number of usable studies and the minimal differences between the overall means provided little positive information or incentive for further inquiry.

Other authors agreed that the study of the religious dimension has gradually improved. Bergin (1983) considered that the trend in the literature to subdivide the religious phenomena into different factors with different characteristics and consequences has increased the quality of the understanding of the religious variable. Additionally, Gorsouch (1984), in his revision of the investigation about religion, reported that it appeared that the measurement area is a boon to the psychology of religion because it has produced reasonably effective instruments that have good content and predictive validity as well as usable reliabilities. However, he suggested that an unsolved problem is the dimensionality of religiosity. Some investigators implicitly suggested, he said, that it is unidimensional by using a single measure while others have used multidimensional measures, thereby implicitly suggesting multidimensionality (Gorsuch, 1984).

Allport, who pioneered the dimensional study of religiosity, defined two different orientations toward religion. First is an extrinsic religious orientation,

which he described as something that the person uses for his own purposes, a very self-centered orientation use of religion. Second is the intrinsic religious orientation, which Allport defined as a more genuine religiosity, a giving of one's self to his or her religion, a living of one's religious beliefs (Evans, 1970).

From this theoretical base, Allport and Ross (1967) created a religious orientation scale divided into two subscales, Extrinsic and Intrinsic, with each item classified as extrinsic or intrinsic. From Allport's writings, it could be assumed that the two orientations he identified were treated as poles of a continuum. However, Hunt and King (1971) reported that no Intrinsic-Extrinsic continuum was apparent. They stated that the Intrinsic and Extrinsic orientations were clearly not opposites but rather two somewhat related but separate variables. They based their conclusion on the revision and analyses of the definitions given by Allport and on results of factor and item analyses on a large number of items, including Allport and Ross Intrinsic-Extrinsic items and others indicating varied aspects of religious belief and practice (Hunt & King, 1971). It seems reasonable to conclude that the Intrinsic-Extrinsic religious orientations represent two different ways of being religious and two different dimensions of the religious phenomena.

Accepting the multidimensionality of the religious phenomena as valid, Batson (1976) has claimed that the items proposed by Allport and Ross to measure the intrinsic orientation did not differentiate between the religious conformist and the individuals oriented toward religion as an open-ended search in which religion was seen as a process of questioning, doubting, and reexamining ultimate values and beliefs -that is, as a quest. Batson concluded that there were two different religious orientations confounded in Allport's conceptualization of the intrinsic individual. Batson (1976) proposed a three dimensional model of religious orientations. This three dimensional model includes the dimensions of "means," "end," and "quest." Batson's first religious orientation, the "means" orientation, reflects the use of religion as a means to other ends such as social status and security. He compared this orientation to Allport's extrinsic religious orientation, identifying it with external motives for being religious, such as responding to sources of social reinforcement and identification. The second orientation identified by Batson, the "end" orientation, reflects a more sincere, committed approach to religion as intrinsically valued end in itself. He compared this orientation to Allport's intrinsic religious orientation and identified it with internal motives for being religious, responding to

personal needs for strength, security, and direction. Finally, the third orientation proposed by Batson, the "quest" orientation, reflects an open-ended search in which religion is seen as a process of questioning, doubting, and reexamining ultimate values and beliefs. According to Batson, this orientation is a different component of religiosity from the Allport's Intrinsic-Extrinsic dimensions and an additional dimension of religiosity. He identified it with interactional motives for being religious, responding to questions arising from involvement in personal and social crisis.

Batson (1976) operationalized the proposed three dimensional model of religious orientations. He used the Intrinsic-Extrinsic scales of Allport-Ross, the Batson's Religious Life Inventory and the Doctrinal Orthodoxy Scale. The Batson's Religious Life Inventory was designed to measure the three possible motives for being religious: external, internal, and interactional. The Doctrinal Orthodoxy Scale was designed to measure one's agreement with traditional Christian motives (Batson & Gray, 1981).

Batson (1976) reported that the 27 items of his Religious Life Inventory were subjected to a three factor varimax rotated principal component analysis. In general, he said, the pattern of results supported the assumption that the theoretical dimensions underlying the Religious

Life Inventory presented a plausible map of the major cognitive dimensions that subjects were using in responding to the 27 items on the questionnaire. However, he reported that the weakest relationship between a questionnaire scale and the corresponding component was for the external scale. He added that the six scales, Allport-Ross's and his, were subjected to a principal component analysis and a varimax rotated three-factor solution. The three factors that emerged from this analysis were: Factor I (Means), which was identical to the extrinsic scale; Factor II (End), which was composed of the intrinsic, external, internal, and orthodoxy scales; and Factor III (Quest), which consisted of the interactional scale.

Batson (1976) reported that it appeared that a three dimensional measure of religious orientations based on the six scales displayed satisfactory convergent and discriminant validity. Therefore, subjects factor scores on each of the three components could be used to indicate degree of each religious orientation.

The meaningfulness of measuring the different dimensions when studying religion has been extensively demonstrated. Allport and Ross (1967), using their religious orientation scale and a questionnaire of racial prejudice, found that people with an extrinsic religious orientation were significantly more prejudiced than people

with an intrinsic religious orientation and that people who were indiscriminately proreligious were the most prejudiced of all.

Batson, Naijeh, and Pate (1978) argued that to the degree that low prejudice and high intrinsic religion are considered good by society, the reported negative relationship between the two could be an artifact of social desirability. To support this hypothesis, they conducted a study in which the effects of social desirability were controlled psychometrically through the use of partial correlations and behaviorally by measuring prejudice in a context in which one's responses had behavioral consequences. Specifically, the possibility for subjects to be interviewed by a member of a minority group. They created a combined prejudice index by summing questionnaire and prejudice scores while at the same time using partial correlations to remove effects of social desirability. They reported that both the End and Quest components correlated significantly in a negative direction with expression of anti-Negro attitudes, while the Means component correlated positively with anti-Negro attitudes. At the same time, they added, the religion as an End and the Intrinsic scales both correlated positively with the social desirability scale (Crowne & Marlowe,

1960). The Means and Quest components and their related religious orientation scales did not correlate significantly with social desirability scores.

Additionally, when the effects of social desirability were controlled psychometrically, the relationship between intrinsic religion and prejudice decreased below statistical significance. However, when the effects of social desirability were controlled behaviorally, the relationship between intrinsic religion and prejudice changed significantly. There was no longer any indication of a negative correlation; indeed, they added, the correlation was positive. When psychometric and behavior control were combined, there was again no indication that intrinsic religion and social prejudice were negatively related. The authors reported that these results suggest that the previously reported relationship between an intrinsic, end orientation to religion and reduced racial prejudice could be an artifact of social desirability (Batson et al., 1978).

Additional support for the meaningfulness of accounting for the different dimensions of religiosity came from works of Batson (1976) and Batson and Gray (1981). They studied the relationship between helping behavior and religious orientation. They reported that none of Batson's religious orientation (Means, End, and Quest) nor any of the six religiosity scales used

(Allport and Ross's and Batson's) predicted whether or not an individual would stop to offer help to a person in obvious distress. However, they reported there seemed to be a relationship between religious orientation and the kind of assistance offered by those who helped; the Quest orientation was found to relate to more tentative situationally responsive helping. The End orientation related to more persistent helping that was less attuned to the expressed needs of the person seeking aid (Batson, 1976; Batson & Gray, 1981).

Specifically, throughout the literature reviewed, religiosity has emerged as significant at the individual as well as the societal level. It has been studied in relation to a variety of criteria and with a variety of measures. By accounting for religious phenomena as multidimensional, the quality of understanding has been improved. Allport and Batson, by their identification of the Intrinsic-Extrinsic and the End-Mean-Quest religious orientations, have contributed to the better understanding of the effects of those religious orientations. These authors have also produced reasonably effective instruments to measure the different religious orientations. However, there is still much to learn about the dimensions of religiosity. Specifically, its independence of suggestibility and social desirability remains to be clarified.

Social Desirability

In the literature reviewed, social desirability has been found to correlate significantly with both religiosity (Batson et al., 1978) and suggestibility (Gudjonsson, 1983). Crowne and Marlowe (1961) defined social desirability as a need for social approval and acceptance and a belief that these can be attained by means of culturally acceptable and appropriate behaviors. They added that a low need for social approval implies a degree of independence of cultural definitions of acceptable behaviors. They regarded social desirability as a motivational variable and theorized that the set to respond in a socially desirable manner specifically reflected a need for social approval (Crowne & Marlowe, 1961; 1962).

Crowne and Marlowe (1960) developed a social desirability scale designed to account for individual differences in the strength of the tendency to respond in a socially desirable manner in response to situational and cultural demands. Their scale contained 33 items selected from items on personality inventories. To be included, an item had to meet the criterion of cultural approval and yet be untrue of virtually all people, that is, behaviors which are culturally sanctioned but unlikely to occur. The items also had as a requisite minimal pathology or abnormality.

Crowne and Marlowe (1960) cited internal consistency and test-retest reliability coefficients of .88 and .89 respectively. They also referred to construct and discriminant validity (Crowne & Marlowe, 1960). From Crowne and Marlowe works (1967) one could assume that they considered their scale to measure a general factor. However, Crino, Rubenfeld, Svoboda and White (1983) reported that their factor analysis, using principal component analysis on Marlowe-Crowne Social Desirability Scale and another social desirability scale, provided little compelling evidence of a strong general factor for the Marlowe-Crowne Social Desirability Scale scores. They concluded that social desirability scales, including the Marlowe-Crowne Social Desirability scale, might be more complex than their use would indicate (Crino et al., 1983).

Crowne and Marlowe have conducted several studies, reported in The Approval Motive (1967), to test their hypothesis about the motivational characteristics of the "approval need" as measured with their Social Desirability Scale. In their summary of several studies, they reported that a single consistent conclusion could be drawn: People with a high need for approval were more responsive to perceived situational demands and were more likely to respond affirmatively to social influence than those with low need for approval. This was true whether the influence

attempts were obvious or relatively subtle and whether they emanated from an individual or from a group (Crowne & Marlowe, 1967).

Some of the studies and conclusions reported by Crowne and Marlowe (1967) are worth examining briefly because of their possible relationship to suggestibility, one of the main variables studied. They reported a set of three studies on verbal conditioning on college students. In three different studies of verbal conditioning of plural nouns, self reference statements, and vicarious reinforcement of the pronouns "I" and "we," the authors reported that results consistently showed that subjects with high need for approval (scores above the overall mean on the Marlowe-Crowne Social Desirability Scale) showed a significantly higher verbal conditioning effect under the positive reinforcement conditions than those with low scores on need for approval (scores under the overall mean). They interpreted the results as reflecting greater sensitivity and responsiveness to social reinforcers of the subjects with high scores on need for approval than that shown by individuals less strongly motivated to seek approval (Crowne & Marlowe, 1967).

A second group of studies related conformity and social desirability as measured by the Marlowe-Crowne Social Desirability Scale. In one of the studies Crowne and Marlowe (1967) reported that subjects were

individually exposed to auditory stimuli which could be readily and accurately perceived. After each presentation inaccurate judgements were presented. The authors reported that "high need for approval" subjects behaved in a significantly more conforming manner than the "low need for approval" subjects. In a second study in which the classical Asch perceptual discrimination procedure was used to measure conformity, the authors reported that conformity was higher in the "high approval need group" than in the "low approval need group." The authors concluded that results were overall highly confirmatory of the hypothesized relationship between the strength of approval motivation and conformity to group pressure.

Specifically related to suggestibility, Crowne and Marlowe (1967) reported that undergraduate males with high approval motivation, as measured with their scale, did not differ on suggestibility as measured by the Postural-Sway Test, a test commonly used to measure hypnotic suggestibility, from those with low approval motivation. However, a strong relationship was found between the need for approval and suggestibility as measured by the heat illusion test, a test commonly used as measure of nonhypnotic suggestibility and which consisted of asking subjects whether they detected heat in an object that was never actually warmed. "High approval need subjects"

reported heat significantly more often than "low approval need subjects."

As a summary, Crowne and Marlowe have developed a measure to account for individual differences in the strength of the tendency to respond in a socially desirable manner. The authors reported acceptable psychometric qualities (Crowne & Marlowe, 1960; 1967). However, the factorial complexity of the scale remains a question to be examined further (Crino et al., 1983). "High approval need people" seem to be more responsive than "lows" to perceived situational demands and are more likely to respond affirmatively to social influences. This greater amenability to social influence can be seen in their greater verbal conditionability, both directly and vicariously, their greater social conformity, and their greater susceptibility to suggestion as measured by the heat test (Crowne & Marlowe, 1967).

From the foregoing discussion religiosity and suggestibility emerged as significant dimensions in personality studies. Even though studied separately, both have been developed by similar methodologies. Authors have extensively used factorial analysis in their efforts to produce acceptable measures of those personality dimensions. Additionally, social desirability was found to relate significantly to suggestibility and to religiosity, the main variables studied.

This study was primarily intended to determine if the religiosity and suggestibility factors previously found in Batson's studies of religiosity and Gudjonsson's studies of interrogative suggestibility would emerge as independent factors when factor analyzed. Additionally, Marlowe and Crowne Social Desirability Scale was included to determine if the relationship between religiosity and social desirability and between suggestibility and social desirability found previously and separately would emerge as a common factor between the religiosity and suggestibility scores. Finally, this study was also intended to test a suggestibility scale developed by the writer as a first step in establishing it as a valid measure.

METHOD

Subjects

Eighty subjects, 45 males and 35 females with a mean age of 20.2, were selected from the population at Appalachian State University. To obtain them, the experimenter advertised the study in the conventional places for such purposes in Smith Wright Hall and by announcement in several general psychology classes. Subjects were asked to participate in a study about religiosity and personality. Extra credit slips and eligibility for a \$30 prize were offered for participation.

Instruments

Religiosity Questionnaire

The religiosity questionnaire consisted of Allport and Ross's Religious orientation scales (Hunt & King, 1976) and Batson's Religious Life Inventory and Doctrinal Orthodoxy Scale (Batson, 1976). It contained a total of 62 items. Examples of the kind of items these scales contained are as follows: "I try very hard to carry my religion over into all my other dealings in life" (Allport

and Ross's Intrinsic); "One reason for my being a church member is that such membership helps to establish a person in the community" (Allport and Ross's Extrinsic); "On religious issues, I find the opinion of others irrelevant" (Batson's External); "I find it impossible to conceive of myself not being religious" (Batson's Internal); "It might be said that I value my religious doubts and uncertainties" (Batson's Interactional); "I believe one must accept Jesus Christ as Lord and Savior to be saved from sin" (Batson's Doctrinal Orthodoxy).

Items were presented in the original order Batson presented his Religious Life Inventory. One item of the Allport and Ross scale was included after each three items of Batson's Religious Life Inventory. The 12 Doctrinal Orthodoxy items were included at the end of the questionnaire. Subjects were to rank their agreement or disagreement with the statements on a 9 point scale where 1 represented strongly disagree and 9 strongly agree. Each subject had six religiosity scores; one for each of the scales presented --Allport and Ross's Intrinsic and Extrinsic; Batson's External, Internal, Interactional and Orthodoxy (See Appendix A).

Social Desirability

Social desirability was measured with Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960).(See Appendix B).

Suggestibility

Suggestibility was measured with three different instruments: Gudjonsson's Interrogative Suggestibility Scale (GISS) (Gudjonsson, 1984); an adaptation of the Rorschach Card Test (RCAT) used by Eysenck and Furneaux (1945) and Bandura and Benton (1953) as a measure of what they called secondary suggestibility; an Opinion Test (OT) developed by the writer (Davila, 1983) based on opinions about general subjects in two different contexts.

The Gudjonsson Interrogative Suggestibility Scale was given as instructed by the author (Gudjonsson, 1984), but some modifications were necessary to adjust the directions to this study's setting. First, subjects were asked to listen to a short story and were instructed to listen carefully because they would be required to tell everything they could remember. Then the story was read aloud and subjects were asked to write everything they remembered. This part formed the "free recall." However, this was not scored because the primary interest was suggestibility. After the "free recall" was collected, the first part of the GISS was handed out, and subjects were asked to answer the questions as accurately as they could. This first part of the GISS consisted of 20 questions related to the story and gave the "Yield" score. The scale was designed so that of the 20 questions, 15 were loaded with suggestions whereas 5 were not. The 15 suggestive

questions were designed to measure how much subjects gave in or "yielded" to suggestive questions. Examples of the kind of suggestive questions this scale contains are: "Did the woman have one or two children?" "Were the assailants tall or short?" "Were the assailants armed with knives or guns?" (See appendix C).

When subjects had finished this first part of the GISS, subjects worked on the other instruments used in this study which took about 35 minutes to complete. During this time, the experimenter pretended she was checking the answers on the first part of the GISS; this was done to make credible the negative feedback required in the second part. This second part of the GISS consisted of the same 20 questions of the first part and was given after subjects were given the critical feedback, which consisted in saying to them that they had made a number of errors and that it was therefore necessary to go through the questions once more and that this time they should try to be more accurate. This second part of the GISS provided the "Shift" score.

Eysenck and Furneaux's Rorschach Card Adaptation Test (RCAT) consisted of the presentation of cards I and III of the Rorschach test; subjects were given six answers for each card and were told that those were things people commonly saw. Their task was to check if the cards contained those things that people frequently saw.

The material used were cards I and III taken from the "Rorschach Miniature Ink Blots in color: A Location and record Form" by Morse P. Manson and an answer sheet with the six answers for each card to check their responses. The original I and III cards were also presented by the experimenter in the front of the room. The six answers presented to the subjects consisted of two "good form quality" and four "poor form quality" randomly chosen. These answers were taken from the "globals" presented for cards I and III in the Rorschach workbook for the Comprehensive System (Exner, Schuyler, & Weiner, 1978). The suggestibility score in this test was derived from the addition of poor form quality answers. The maximum score a subject could obtain was 8 (See appendix D).

The Opinion Test (OT) had two parts. The first part consisted of six simple opinions about current topics. Subjects were asked to rate their agreement or disagreement with those opinions on a 9 point scale where 1 represented "strongly disagree" and 9 "strongly agree." The second part consisted of the same six topics, but this time "expert" opinions in a prestigious frame and in a persuasive way suggested a direction contrary to the first opinion. Subjects were asked again to rank their agreement or disagreement on a 9 point scale. Suggestibility scores were derived from the difference between the expected rank (the one that represented no change in the opinion) and

the obtained rank in the second section of the OT. The direction of the change was not considered because the primary interest was in the change of the subjects' answers (See Appendix E).

The first part of the Opinion Test was given before the Religiosity Questionnaire and the Marlowe and Crowne Social Desirability Scale, and the second part was given after these test. This separation was made to avoid the reference to the first part while ranking the second section and to give subjects a time span so the scale could measure a change in an opinion given to a suggestive appeal.

Procedure

Measurements of religiosity, social desirability, and suggestibility were collected in groups of about 12 subjects. The questionnaires were given in a classroom setting with both the experimenter and an assistant present. Subjects had previously signed for participation at a fixed time and place. Once they arrived in the classroom, they were asked to be seated and wait for the whole group to start the experiment. Five minutes after the hour fixed, the door was closed and the recollection of data started. No one was admitted after the door was closed. The assistant read the directions aloud and helped the experimenter hand out and collect the questionnaires.

Each instrument was handed out separately with a coded number. When the whole group had finished, that part was collected and the next one handed out. Distribution of each instrument was always in the same order to maintain the sequence. Besides, subjects were asked to make sure they always had the same number. All the process took about 60 minutes to complete. At the end subjects were asked not to comment about the experiment to avoid contamination.

Religiosity was measured with The Religiosity Questionnaire, which contained six subscales. Each subject had six religiosity scores, one for each subscale.

Suggestibility was measured with three different instruments. First, The Gudjonsson Interrogative Suggestibility Scale, which gave two suggestibility scores "yield" and "shift." Second, an adaptation of The Rorschach Card Test used by Eysenck and Furneaux (1945) in his classical study of primary and secondary Suggestibility. Third, the Opinion Test developed by the writer. Each subject had four suggestibility scores.

Social Desirability was measured with the Marlowe-Crowne Social desirability scale. Each subject had a score on Social desirability.

The Gudjonsson's Interrogative Suggestibility scale and the Opinion Test had two parts; they were always the first two tests given but the ordering between them was

balanced. The second parts of these scales were always given as the last tests, but the ordering between them was again balanced. After the first part of the Gudjonsson's Interrogative Suggestibility scale and Opinion Test were given, the Rorschach Card adaptation test was given. Religiosity measures and Marlowe-Crowne Social Desirability Scales were also balanced in the order of presentation, but they were always given after the Eysenck secondary suggestibility adaptation test and before the second part of Gudjonsson's Interrogative Suggestibility scale and the Opinion Test. The purpose of this order of presentation was to give the subjects a time interval between the first and second parts of Gudjonsson's and the Opinion Test and to partially balance the ordering effects.

In summary, each volunteer subject received a written explanation of the nature of the experiment, information about the anonymity of the information, a reminder about their volunteer participation and their right to terminate their participation, and a statement that the results would be available (See Appendix F); the first part of Gudjonsson's Interrogative Suggestibility scale; the first part of the Opinion Test; the Religiosity Questionnaire; the Marlowe-Crowne Social Desirability Scale; the Rorschach Cards I and III; the Rorschach Card Adaptation Test answer sheet; the second part of Gudjonsson's

Interrogative Suggestibility Scale; and the second part of
Opinion Test.



RESULTS

Data are presented in descriptive terms, correlation patterns, and resulting factors from a varimax rotated factor matrix.

Means and standard deviations for all the variables studied are presented in Table 1 (p. 51). Descriptive data for the general population on the religious orientation measures were not found on the Batson's works reviewed. However, Batson (1976) presented mean scores on religious orientation measures for 16 theological seminary students who stopped to offer aid to an individual in apparent distress. This seems such a specific group that comparison with general population groups, as the one used in this study, does not seem suitable.

The 12.26 mean and the 4.92 standard deviation for the Marlowe-Crowne Social Desirability Scale scores in this study are similar to the 13.88 average mean and 4.56 average standard deviation presented by Crowne and Marlowe (1962) for similar students groups.

Data on Gudjonsson Interrogative Suggestibility reveal "Yield" and "Shift" mean scores of 5.93 and 4.78

Table 1

Means and Standard Deviations of the Religiosity, Social
Desirability, and Suggestibility Measures

Variable	Mean	Standard Deviation
Allport Intrinsic	46.35	14.07
Allport Extrinsic	61.55	12.77
Batson External	51.57	12.09
Batson Internal	57.38	14.92
Batson Interactional	44.11	9.35
Batson Orthodoxy	88.84	20.10
Marlowe and Crowne SDS	12.26	4.92
Gudjonsson Yield	5.93	10.90
Gudjonsson Shift	4.78	11.11
Opinion Test	13.55	11.20
Rorschach Adaptation	2.44	1.65

N = 80

respectively. The 10.90 and 11.11 standard deviations are considerably larger than the means. These results differ from those given by Gudjonsson (1984), who reported a "Yield" mean of 4.2 and "Yield" standard deviation of 2.6; "Shift" mean of 2.8 and "Shift" standard deviation of 2.7.

Scores derived from the religiosity questionnaire, Marlowe and Crowne Social Desirability Scale, Gudjonsson Interrogative Suggestibility Scale, Rorschach Card Adaptation Test, and Opinion Test were intercorrelated. The correlation matrix, presented in Table 2 (p. 53), reveals a variety of magnitudes of correlations between measures of religiosity, moderate to high correlations between the suggestibility measures, low correlations between the social desirability measure and one religiosity measure and two suggestibility measures, and no significant correlation between religiosity and suggestibility measures.

A more specific focus upon the intercorrelations reveals that scores on the Allport and Ross Intrinsic Scale correlated significantly with scores on the Batson's External Scale ($.64, p < .001$); Batson's Internal Scale ($.81, p < .001$); Batson's Interactional Scale ($.30, p < .01$); Batson's Orthodoxy Scale ($.57, p < .001$). In addition, Table 2 shows that scores on Batson's External Scale correlated significantly with scores on Batson's Internal Scale ($.67, p < .001$) and Batson's Orthodoxy

Table 2

Correlation Matrix of the Politeness, Social Desirability and Suggestibility Measures

Variable	Allport Intrinsic	Allport Extrinsic	Between External	Between Internal	Between Interactional	Between Orthodoxy	Marlowe and Croane SDS	Gudjonsson Field	Gudjonsson Shift	Opinion Test	Borchach Adaptation
Allport Intrinsic	-										
Allport Extrinsic	-.01	-									
Between External	.64000	.12	-								
Between Internal	.81000	-.02	.67000	-							
Between Interactional	.3100	.02	.11	.19	-						
Between Orthodoxy	.37000	.08	.60000	.74000	-.03	-					
Marlowe and Croane SDS	.270	.07	.11	.20	.01	.16	-				
Gudjonsson Field	.03	.06	.03	.06	.03	.02	-.240	-			
Gudjonsson Shift	-.04	.01	.01	-.03	.02	.06	-.210	.94000	-		
Opinion Test	.01	.02	.02	.02	.02	-.02	-.16	.84000	.86000	-	
Borchach Adaptation	.01	.09	.02	.06	.18	-.14	-.20	.43000	.46000	.34000	-

N = 80
 * P < .05
 ** P < .01
 *** P < .001

Scale (.57, $p < .001$). In addition, Table 2 shows that scores on Batson's External Scale correlated significantly with scores on Batson's Internal Scale (.67, $p < .001$) and Batson's Orthodoxy Scale (.60, $p < .001$). At the same time, Batson's Orthodoxy Scale correlated significantly with Batson's Internal Scale (.74, $p < .001$).

An examination of the correlation between social desirability and the measures of suggestibility and religiosity reveals two major links. First, scores on the Marlowe and Crowne Social Desirability scale correlated negatively and significantly with scores on the "shift" and "yield" scores on the Gudjonsson Interrogative Suggestibility scale (-.24 and -.21 respectively, $p < .05$). Second, the scores on the Marlowe-Crowne correlated significantly with scores on only one measure of religiosity, the Allport Intrinsic Scale (.27, $p < .05$).

Although Table 2 shows that all measures of suggestibility included in the study were significantly intercorrelated, two patterns were revealed. First, scores on the "yield" and "shift" portion of Gudjonsson Interrogative Suggestibility scale correlated significantly with each other (.94, $p < .001$) and with the Opinion Test (.84 and .86 respectively, $p < .001$). Instead of high correlations between the three measures, the Rorschach Card Adaptation Test scores correlated moderately with scores on the Gudjonsson "Yield" (.43, $p <$

.001), Gudjonsson "Shift" (.46, $p < .001$) and the Opinion Test scores (.34, $p < .001$).

A varimax rotated factor matrix produced four factors as presented in Table 3 (p. 56). The first and strongest factor, which could be called Informational Suggestibility, resulted from loads on the Gudjonsson Interrogative Suggestibility Scale, both the "Yield" and "Shift" scales, and the Opinion Test. Rorschach Card Adaptation Test scores also loaded in this factor but to a more moderate degree. This first factor accounts for 44.3% of the total variance. The second factor, that could be called Institutional Religious Orientation, resulted from loads in the Intrinsic, External, Internal and Orthodoxy scale scores. This second factor accounts for an additional 42.2% of the variance. The third factor, which could be called Personal Religious Orientation, emerged from loads on the Intrinsic and Interactional Religiosity Scale scores. It should be noted that Rorschach Adaptation Card test scores also loaded on this factor. This third factor accounted for 8.8% of the total variance. The fourth and weakest factor emerged from loads on the Extrinsic and External Religiosity Scale scores. Again the Rorschach Card Adaptation test scores loaded on this factor. This fourth factor accounted for 4.6% of the total variance and could be called Superficial Religious Orientation.

Table 3

Varimax Rotated Factor Matrix

Variable	Factor I	Factor II	Factor III	Factor IV
Gudjonsson	.97	.02	.06	.07
Yield				
Gudjonsson Shift	.95	-.04	.05	.09
Opinion Test	.89	.01	.00	.02
Rorschach Adaptation	.40	-.13	.42	.40
Marlowee and Crowne SDS	-.21	.24	-.02	-.17
Batson Internal	.02	.90	.14	-.02
Batson Orthodoxy	-.04	.83	.21	.18
Batson External	.01	.72	.10	.22
Allport Internal	-.01	.84	.46	.17
Batson Interactional	.01	.10	.49	.01
Allport External	.01	.05	-.01	.21

N = 80

DISCUSSION

A principal finding in this study was the independence of suggestibility as measured with the Gudjonsson Interrogative Suggestibility Scale and the Opinion Test from religiosity as measured by the Allport-Ross and the Batson religiosity scales.

When scores on the Gudjonsson Interrogative Suggestibility Scale, the Opinion Test and the religiosity questionnaire were subjected to factor analysis, both types of measurements, suggestibility and religiosity, loaded on different and independent factors. These results give support to the interpretation of suggestibility and religiosity, at least as measured by the instruments used, as different constructs, as scores on the religiosity questionnaire were not significantly correlated with scores on the Gudjonsson Interrogative Suggestibility Scale or the Opinion Test.

A varimax rotated factor analysis produced four factors. The first and strongest factor, which accounted for 44.3% of the total variance, was composed of suggestibility measures. This factor resulted from scores

loadings on the Gudjonsson Interrogative Suggestibility Scale ("Yield" loading =.95 and "Shift" loading =.95), Opinion Test (.84) and partially from Rorschach Card Adaptation Test (40). These data support the interpretation that suggestibility of the type measured (nonhypnotic) is not an isolated trait peculiar to a particular topic or specific questions but rather a general style used in a diversity of situations. These results agree with those of Abraham (1962), who referred to the "suggestible personality" and stated that it appeared to be a general trait contributing to consistent individual differences in susceptibility to suggestion from diverse source of influences. Certainly, these results support Abraham's data and indicate that further investigation of suggestibility is needed to confirm the generality of a possible "suggestibility trait" and consequent behavioral implications, especially to determine the relationship, if any, between measures of hypnotic and nonhypnotic suggestibility. New instruments of nonhypnotic suggestibility with acceptable psychometric qualities could be of great value in the study of nonhypnotic suggestibility.

The remaining three factors resulted primarily from scores loadings on the religiosity questionnaires. It must be noticed, however, that the last two factors, III and V, were weak factors and accounted for only 8.8% and 4.6% of

the total variance while factors I and II accounted for 44.3% and 42.2% of the total variance. Factor II, called Institutional Religiosity, resulted from loadings on the Allport-Ross Intrinsic Religiosity Scale scores and Batson's Internal, External, and Orthodoxy Religiosity Scales scores. Factor III, called Personal Religiosity, resulted from score loadings of Allport-Ross Intrinsic Religiosity Scale, Batson's Interactional Religiosity Scale and Rorschach Card Adaptation Test. The fourth factor, called Superficial Religiosity, resulted from scores loadings of Allport-Ross Extrinsic Religiosity scale, Batson's External Religiosity Scale and Rorschach Card Adaptation Test.

Generally, the resulting religiosity factors were similar to those reported by Batson (1976). However, the ordering and saturation were different. This study's strongest religiosity factor was Institutional Religiosity. This religiosity factor resulted from score loadings of exactly the same scales reported by Batson as his second religiosity factor. This religious orientation probably represents the one described by Allport (1960) as the intrinsic religious orientation and by Batson (1976) as the "end" orientation. Theoretical elaborations about this orientation refer to a sincere and genuine commitment to religion. Both seem to stand on institutional guidelines according to traditional religiosity.

In the same way, Batson (1976) reported his first factor, religion as a "means," as resulting from scores loadings on Allport-Ross Extrinsic Religiosity Scale. In this study there was a fourth and weak factor which resulted from scores loadings on Allport-Ross Extrinsic and Batson's External Religiosity Scales. Additionally, scores on the Rorschach Card Adaptation Test also loaded in this factor. This religious orientation probably represents the one described by Allport as the Extrinsic Religious Orientation and by Batson as the "means." It seems to refer to a less genuine commitment toward religion, one based on external and superficial motives for being religious.

Finally, Batson reported as his second factor, religion as a "quest," which resulted from scores loadings mainly on his Interactional Religiosity Scale. In this study a third relatively weak factor, called Personal Religious ientation, emerged from loadings on Batson's Interactional and Allport-Ross Intrinsic Religiosity scales. Scores on the Rorschach Card Adaptation Test also loaded in this factor. This religious orientation seems to represent the one described by Batson as a "quest" and seems to stand on a personal interpretation and approach to religion.

As stated before, the resulting factors are generally similar to those reported by Batson and support the

interpretation of religious orientation as tridimensional. However, it must be noted that factors III and IV are so weak in this study that additional research is necessary to establish if the three dimensional model proposed by Batson could be replicated in a more heterogeneous population. This replication is necessary because the ordering and saturation differences between Batson's study and this one could be due to different population characteristic. The subjects used in this study were students in a small town university, the majority of whom were residents of the southern Appalachian Mountain region. Although it is probably a biased sample, this group may be assumed to be representative of a more conservative and fundamentalist approach to religion which is characterized by adherence to the formal and institutional aspects of religion. This could explain the emergence of such a strong factor representing the Allport Intrinsic, Batson "End," and this study's Institutional Religious Orientation. The other two factors, Batson's "Means" and "Quest" may be underrepresented in this sample. Other factors that could account for the differences are the inclusion of several measures of suggestibility and the different procedures used in this study. Nevertheless, additional research is necessary to establish definitively the tridimensional model proposed by Batson.

A closer examination of the instruments used reveals that Gudjonsson "Yield" and "Shift" scores have a standard deviation considerably larger than the mean (Yield mean = 5.93 and standard deviation = 10.9; Shift mean = 4.98 and standard deviation = 11.11). Additionally, both components scores, "Yield" and "Shift," loaded strongly on factor I (.97 and .95 respectively) and the correlation coefficient between them was high (.94). Consequently, results do not agree with those reported by Gudjonsson (1984b) about the two measures of suggestibility loading on different factors. In this study scores on both measures, "Yield" and "Shift," loaded on only one factor and were highly correlated. So it seems that the two Gudjonsson measures of suggestibility were measuring almost exactly the same thing.

Some of the reasons that could explain these differences refer to methodological differences. First, Gudjonsson included only scores on his suggestibility scale when he performed factor analysis. His two factors resulted from analysis on scores only in his suggestibility scale while in this study several other measures of religiosity and suggestibility were included in the factor analysis. The second methodological reason that could explain the differences is the samples used in both studies. Gudjonsson data were from an English sample. Besides, he combined data from different studies with

subjects from a variety of settings, occupations, and ages. This study is based on data from a more homogeneous group. All the participants were students at the freshman and junior level with a mean age of 20.2. A third methodological reason is the administration procedures. From Gudjonsson's writings individual administration can be assumed, while in this study the administration was in a group setting. Finally, the Gudjonsson Interrogative Suggestibility Scale may give different results when procedures of administration vary, especially when the "Yield" and "Shift" scales are administered with a number of other measures. Further investigation about the scale and its psychometric qualities is necessary to clarify the reasons for the differences. Additionally, further revision of the psychometric qualities of the Gudjonsson Interrogative Suggestibility Scale is necessary to establish its usefulness in a wide range of contexts.

In relation to the Opinion Test, split half correlation between even and odd scores was .38. Additionally, it correlated significantly with Gudjonsson's "Yield" and "Shift" scores and Rorschach Card Adaptation Test scores (.88, .86, and .34 respectively). It should be noted that the Opinion Test also correlated with Rorschach Card Adaptation Test scores in the same range that Gudjonsson Interrogative Suggestibility Scale scores did. These results support the interpretation that

the Opinion Test measures about the same thing as Gudjonsson Interrogative Suggestibility Scale. Another reasonable conclusion is that the Opinion Test's validity is supported by these results. However, the relatively low split half correlation coefficient, given the short number of items, and the limitations of the Gudjonsson Scale itself, make further investigation necessary in order to establish the Opinion Test as a reliable and valid measure of suggestibility. The Opinion Test's psychometric qualities could be improved by the addition of items to improve the reliability and by comparing it with other suggestibility measures to confirm its validity. The efforts may prove worthy because of the need for better nonhypnotic suggestibility measures and because of practical advantages of the Opinion Test.

In relation to the Marlowe and Crowne Social Desirability Scale, its scores did not emerge as a factor by themselves and loaded only weakly on the two strongest factors: Factor I, Suggestibility (.21), and Factor II, Institutional Religiosity (.24). Mean scores and standard deviation were about the same as those reported by Crowne and Marlowe (1962) for similar student groups. An examination of the correlation matrix revealed that Marlowe and Crowne Social Desirability Scale scores did not correlate significantly with the religiosity measures used except for the Allport-Ross Intrinsic Religiosity

Scale (.27). These results differ from those of Batson (1978), who reported significant correlations for social desirability scores and Allport-Ross Intrinsic and Batson's Internal and Doctrinal Orthodoxy Scales (.36, .35, and .50 respectively).

In relation to the Rorschach Card Adaptation Test, it should be noted that its scores loaded evenly on factors I, III, and IV (.40, .42, and .40 respectively). These data could be interpreted in different ways. It could be inferred that this test is as good a measure of religiosity as of suggestibility. However, the fact that the religiosity factors on which these test scores loaded were weak, in fact accounting for only 13.4% of the total variance, does not support this interpretation. It is more likely that this test is not a "clean" measure of suggestibility. Rather the scores from the Rorschach Card Adaptation Test share a common variance with suggestibility and religiosity measures. So its use as a measure of nonhypnotic suggestibility is questionable.

To summarize, a principal finding in this study is the independence of suggestibility as measured with the Gudjonsson Interrogative Suggestibility Scale and the Opinion Test from religiosity as measured with the Allport-Ross and Batson's Religiosity Scales. A varimax rotated factor matrix with scores from all the measures used produced four factors: Factor I, Suggestibility;

Factor II, Institutional Religious Orientation; Factor III, Personal Religious Orientation; and Factor IV, Superficial Religious Orientation. Results were considered supportive of Abraham's (1962) interpretation of the "suggestible personality" and of suggestibility as a general trait contributing to consistent individual differences in susceptibility to suggestion from diverse source of influence. The possibilities for further investigation about the suggestible personality were noted as well as the need for better nonhypnotic suggestibility measures. Also discussed were the similarities and differences of religiosity factors in this study and those factors reported by Batson. Although results were similar to those reported by Batson, the need for further research in a different population was suggested to further test the validity of the tridimensional religiosity model proposed by Batson (1976). In relation to the instruments used, some differences between the findings of this study and those of Gudjonsson were noted, and reasons for the differences were discussed. Also the need for further research about the psychometric qualities of Gudjonsson scale in a different context was noted. The Rorschach Card Adaptation Test was questioned, as it appeared not to be a "clean" measure of nonhypnotic suggestibility. At the same time, The Opinion Test was considered as a promising measurement of nonhypnotic suggestibility. However,

additional research is necessary to improve its reliability and confirm its validity.

REFERENCES

- Abraham, H. L. (1962). The suggestible personality: A psychological investigation of susceptibility to persuasion. Acta Psychologica, 20 , 167-184.
- Albany, A. (1984). Clinical implications of religious loyalties: A contextual view. Counseling and values, 28 , 128-133.
- Allport, G. W. (1960). The individual and his religion: A psychological interpretation. New York: Macmillan.
- Allport, G. W., & Ross, M. J. (1967) Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5 , 432-433.
- Andrinks, J. L., Loftus E. F. & Powers P. A. (1979). Eyewitness accounts of female and males. Journal of Applied Psychology, 64 , 339-347.
- Bandura, L., & Benton, A. L. (1953). "Primary" and "Secondary" Suggestibility. The Journal of Abnormal and Social Psychology, 48 , 336-340.
- Barber, T. X. (1964) Hypnotizability, suggestibility, and personality: A critical review of research findings. Psychological Reports, 14 , 299-230.

- Barber, T. X., & Wilson, S. C. (1978). The Barber Suggestibility Scale and the Creative Imagination Scale: Experimental and clinical applications. The American Journal of Clinical Hypnosis, 21 , 84-108.
- Batson, C. D. (1976). Religion as prosocial: Agent or double agent? Journal for the Scientific Study of Religion, 15 , 29-45.
- Batson, C. D., & Darley, J. M. (1973). From Jerusalem to Jericho: A study of situational and dispositional variables in helping behavior. Journal of Personality and Social Psychology, 27 , 101-108.
- Batson, C. D., & Gray, A. R. (1981). Religious orientation and helping behavior: Responding to one's own or to the victim needs? Journal of Personality and Social Psychology, 40 , 511-520.
- Batson, C. D., Naijeh, S. J., & Pate, S. (1978). Social desirability, religious orientation, and racial prejudice. Journal for the Scientific Study of Religion, 17 , 31-44.
- Benson, J. M. (1981). The Polls: A rebirth of Religion. Public Opinion Quarterly, 45 , 576-585.
- Bergin, A. E. (1983). Religiosity and mental health : A critical review and meta-analysis. Professional Psychology: Research and Practice, 14 , 170-174.

- Burger, J. (1981). Locus of control, motivation and expectancy: Predicting hypnotic susceptibility from personality variables. Journal of research in Personality, 15 , 523-537.
- Crino, M., Rubenfeld, S., Svoboda, M. & White, M. (1983). Data on the marlowe-Crowne and Edwards Social Desirability scales. Psychological Reports, 53 , 963-968.
- Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 24 , 349-354.
- Crowne, D. P. & Marlowe, D. (1961). Social desirability and response to perceived situational demands. Journal of consulting Psychology, 25 , 109-115.
- Crowne, D. P. & Marlowe, D. (1967). The approval motive. New York: John Wiley & Sons.
- Davila, R. (1983) The relationship between religiosity and suggestibility. Unpublished Study. Appalachian State University. Boone. N.C.
- Donahue, A., & Smith, H. (1982). Suggestibility and the verbal transformation effect. Perceptual and Motor Skills, 5 , 813-814.
- Edwards, A. L. (1959). Personal Preference Schedule Manual. Revised New York: Psychological Corporation.

- Evans, F. E. (1967). Suggestibility in the normal walking state. Psychological Bulletin, 67 , 114-129.
- Evans, R. I. (1970). Gordon Allport: The man and his ideas. New York: E. P. Dutton & Co.
- Exner, J. E.; Schuyler, W. & Weiner, I. B. (1978). A Rorschach Workbook for the Comprehensive System. New York: Rorschach Workshop Publications.
- Eysenck, H. J., & Furneaux, W. D. (1945). Primary and secondary suggestibility: An experimental and statistical study. Journal of experimental and Social Psychology, 13 , 485-503.
- Francis, L., Pearson, P., & Kay, G. (1983). Are introverts still more religious? Personality and Individual Differences, 4 , 211-212.
- Gorsouch, R. L. (1984). Measurement: The boon and bane of investigating religion. American Psychologist, 3 , 328- 236.
- Gudjonsson, G. H. (1983). Suggestibility, intelligence, memory recall, and personality: An experimental Study. British Journal of Psychiatry, 142 , 35-37.
- Gudjonsson, G. H. (1984a). Interrogative suggestibility and perceptual motor performance. Perceptual and Motor Skills, 58 , 611-612.
- Gudjonsson, G. H. (1984b). A new scale of interrogative suggestibility. Personality and Individual differences, 5 , 303-314.

- Hamley, R. W., & Sturgeon, R. S. (1979). Religiosity and Anxiety. The Journal of Social Psychology, 108 , 137-138.
- Hilgard, E. R. (1965). Hypnotic Susceptibility. New York: Harcourt, Brace & World.
- Hughes, R. P., Reyher, J., & Wilson, J. G. (1979). Suggestibility and type of interpersonal relationship. Journal of Research in Personality, 13 , 175-186.
- Hunt, R. A., & King, M. (1971). The intrinsic-extrinsic concept: A review and evaluation. Journal for the Scientific Study of Religion, 10 , 339-355.
- Hunt, R. A., & King, M. (1975). Measuring the religious variable. Journal for the Scientific Study of Religion, 14 , 13-22.
- Kauber, R. (1984). Correlation between religious commitment and students achievement. Psychological Reports, 54 , 262-263.
- Korns, W. A. (1979). Cults in America and public police. Editorial Research report, 1 , 267-284.
- Levan, D., Natzer, N., Mashiach, S., & Soffer, S. (1984). Effects of religiosity and sex attitudes, experience, and contraception among university students. Journal of Sex and Marital Therapy, 10 , 57-62.
- Levi, K. (1982). Violence and religious commitment. Implications of Jim Jone's People's Temple movement.

- University Park, Pa: The Pennsylvania State University Press.
- Loden, M., & McClure, R. (1982). Religious activity, denomination membership, and life satisfaction. Psychology: A Quarterly of Human Behavior, 19 , 12-17.
- Miller, R. J. (1980). The Harvard Group Scale of Hypnotic Susceptibility as a predictor of nonhypnotic suggestibility. International Journal of Clinical and Experimental Hypnosis, 28 , 46-57.
- Moore, R. (1964). Susceptibility to hypnosis and susceptibility to social influence. Journal of Abnormal and Social Psychology, 68 , 282-294.
- Morgan, S. P. (1983). A research note on religion and morality: Are religious people nice people? Social Forces, 61 , 683-692.
- Seltz, I. (1984). Moral judgment and religion. A review of literature. Counseling and Values, 28 , 94-116.
- Shames, M. L. (1981). Hypnotic susceptibility and conformity: On the mediational mechanism of suggestibility. Psychological Reports, 49 , 563-566.
- Shore, R. E., & Orne E. C. (1962). Harvard Group Scale of Hypnotic Susceptibility: Form A. Palo Alto, CA: Consulting Psychologists Press.

- Singh, A. (1979). Religious involvement and anti-social behavior. Perceptual and motor skills, 48 , 1157-1158.
- Spiegel, H. (1974). The grade 5 syndrome: The highly hypnotizable person. The international Journal of Clinical and Experimental Hypnosis, 22 , 303-319.
- Strauss P. S., & Vachino, R. B. (1975). Dogmatism, authority, and hypnotic susceptibility. The American Journal of Clinical Hypnosis, 17 , 185-187.
- Webster's Third New International Dictionary. (1976) G. & C. Merriam Company. Massachusetts.
- Weitzenhoffer, A. M., & Higard, E. R. (1959). Stanford Hypnotic Susceptibility Scale: Form A. Palo Alt, CA: Consulting Psychologist Oress.
- Weitzenhoffer, A. M., (1980). Hypnotic susceptibility revisited. American Journal of Clinical Hypnosis, 22 , 130-146.
- Weitzenhoffer, A. M., & Weitzenhoffer, G. B. (1958). Sex transference, and susceptibility to hypnosis. American Journal of Clinical Hypnosis, 1 , 15-24.
- Wison, S. C., & Barber, T. X. (1983). The fantasy prone personality: Implications for understanding imagery, hypnosis, and parapsychological phenomena in A. A. Sheikh (ed.), Imagery: Current theory Research and applications. New York: Wiley.

APPENDIX A

Religiosity Questionnaire

This questionnaire includes some commonly heard statements about one's religious life. They are very diverse. Your task is to rate ranging from strongly disagree (1) to strongly agree (9). Try to rate each of the statements, not leaving any blank. If you find a statement particularly difficult to rate or ambiguous, please circle your response and explain the difficulty in the margin. Work fairly rapidly, not brooding over any one statement too long. There is not consensus about right or wrong answers; some people will agree and others will disagree with each of the statements. Please be careful and DO NOT MARK 0 ON THE ANSWER SHEET.

1. The church has been very important for my religious development.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

2. Worldly events cannot affect the eternal truths of my religion.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

3. My religious development is a natural response to the innate need of man for devotion to God.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

4. What religion offers most is comfort when sorrow and misfortune strike.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

5. I try hard to carry my religion into all my other dealings in life.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

6. It might be said that I value my religious doubts and uncertainties.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

7. My minister (or youth director, camp counselor, etc.) has had a profound influence on my personal religious development.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

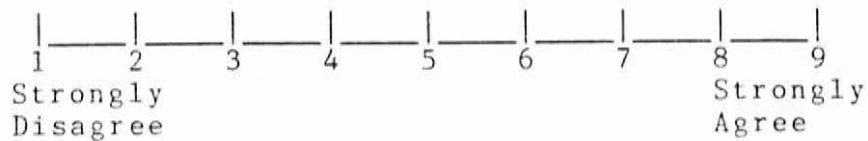
8. God's will should shape my life.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

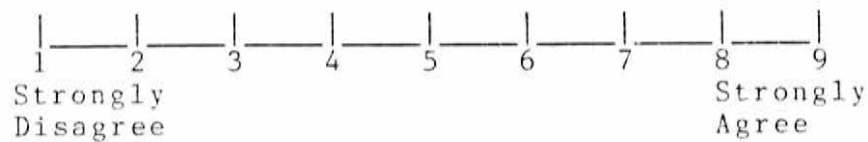
9. Religion helps to keep my life balanced and steady in exactly the same way as my citizenship, friendships, and other memberships do.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

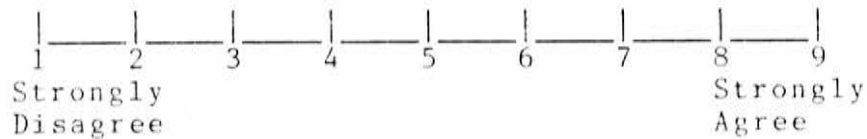
10. One reason for my being a church member is that such memberships helps to establish a person in the community.



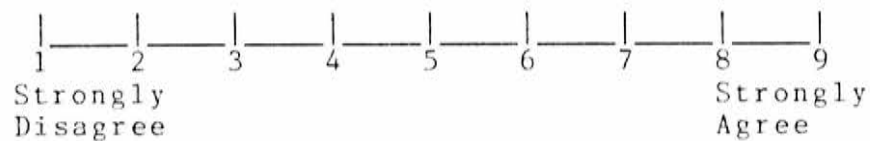
11. On religious issues, I find the opinions of others irrelevant.



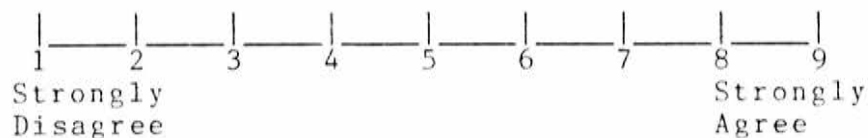
12. It is necessary for me to have a religious belief.



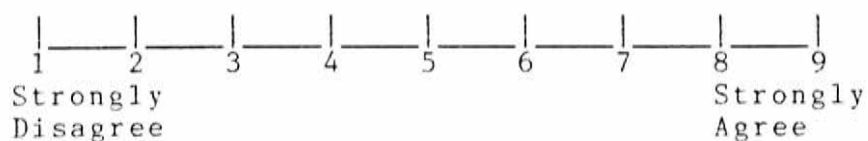
13. When it comes to religion questions, i feel driven to know the truth.



14. The purpose of prayer is to secure a happy and peaceful life.



15. It does not matter so much what I believe as long as I lead a moral life.



16. I find my everyday experiences severely test my religious convictions.

1 ——— 2 ——— 3 ——— 4 ——— 5 ——— 6 ——— 7 ——— 8 ——— 9
Strongly Disagree Strongly Agree

17. A major factor in my religious development has been the importance of religion for my parents.

1 ——— 2 ——— 3 ——— 4 ——— 5 ——— 6 ——— 7 ——— 8 ——— 9
Strongly Disagree Strongly Agree

18. I do not expect my religious convictions to change in the next few years.

1 ——— 2 ——— 3 ——— 4 ——— 5 ——— 6 ——— 7 ——— 8 ——— 9
Strongly Disagree Strongly Agree

19. Quite often I have been keenly aware of the presence of God or of the Divine Being.

1 ——— 2 ——— 3 ——— 4 ——— 5 ——— 6 ——— 7 ——— 8 ——— 9
Strongly Disagree Strongly Agree

20. My religious beliefs are what really lie behind my whole approach to life.

1 ——— 2 ——— 3 ——— 4 ——— 5 ——— 6 ——— 7 ——— 8 ——— 9
Strongly Disagree Strongly Agree

21. Religion is something I have never felt personally compelled to consider.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

22. I have been driven to ask religion questions out of a growing awareness of the tensions in my world and in mi relation to my world.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

23. My religion serves to satisfy needs for fellowship and security.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

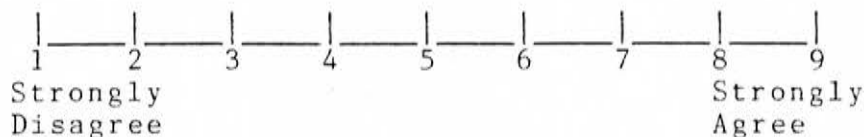
24. The prayers that I say when alone carry as much meaning and personal emotions as those said by me during services.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

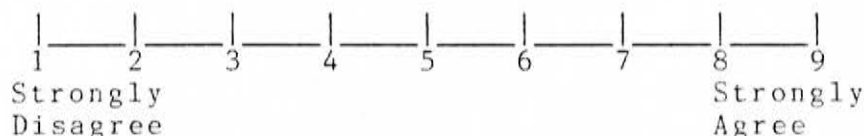
25. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

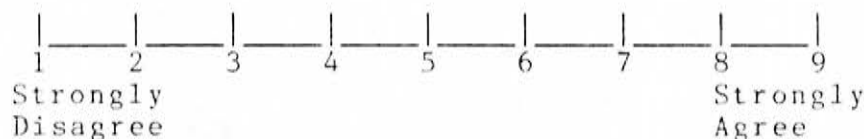
26. My religious development has emerged out of my growing sense of personal identity.



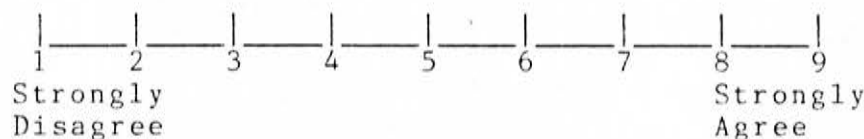
27. My religion is a personal matter, independent of the influence of organized religion.



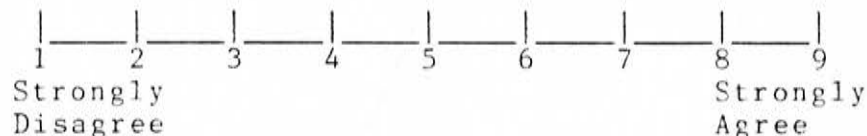
28. Whether I turn out to be religious or not doesn't make much difference to me.



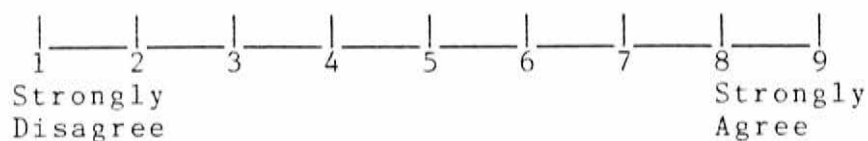
29. The Church is most important as a place to formulate good social relationships.



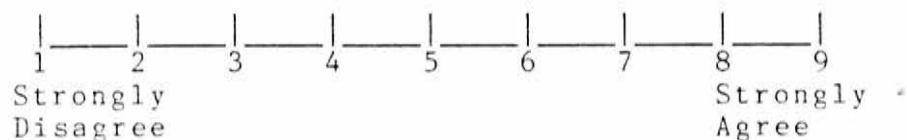
30. Although I believe in my religion, I feel there are many more important things in life.



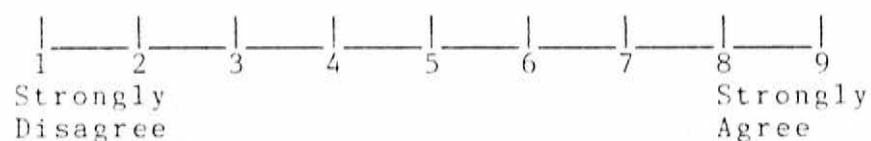
31. Certain people have served as "models" for my religious development.



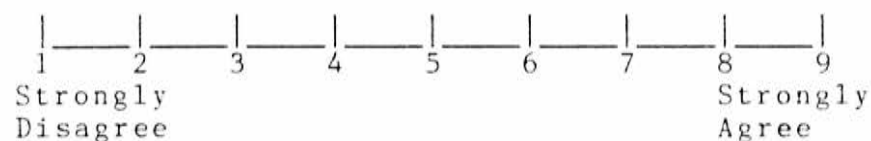
32. I have found it essential to have faith.



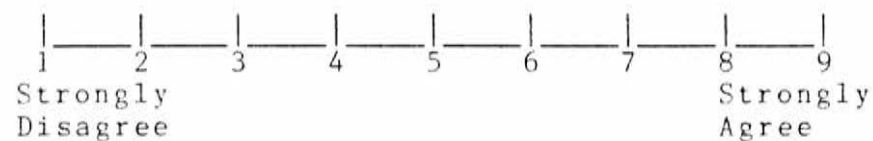
33. It is important for me to learn about religion from those who know more about it than I do.



34. If not prevented by unavoidable circumstances, I attend church at least once a week or oftener.



35. If I were to join a church group I would prefer to join a Bible Study group.



36. If I were to join a church group I would prefer to
Join a social fellowship group.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

37. God wasn't very important for me until I began to ask
questions about the meaning of my life.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

38. I find it impossible to conceive of my self not being
religious.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

39. The "me" of a few years back would be surprised at my
present religious stance.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

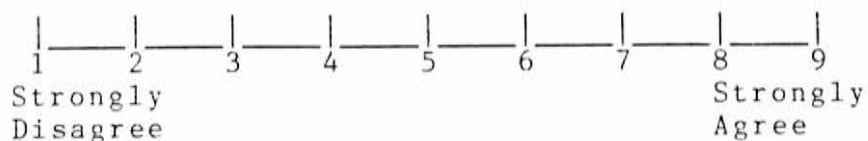
40. I pray chiefly because I have been taught to pray.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

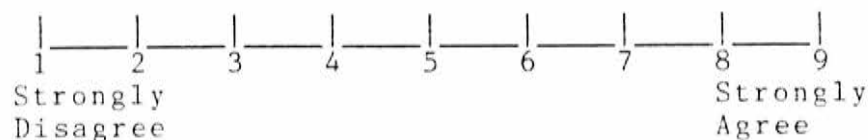
41. Religion is specially important to me because it
answers many questions about the meaning of life.

1	2	3	4	5	6	7	8	9
Strongly Disagree							Strongly Agree	

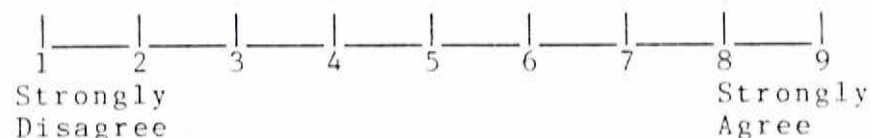
42. Questions are far more central to my religious experience than are answers.



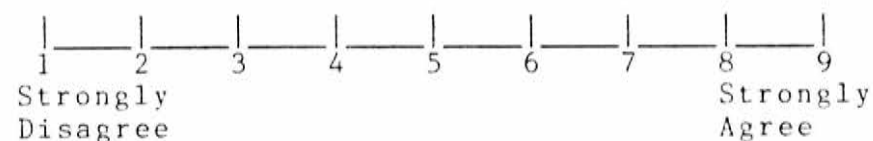
43. Outside forces (other persons, churches, etc.) have been relatively unimportant in my religious development.



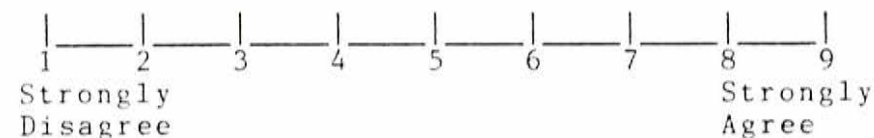
44. For me religion has not been a "must".



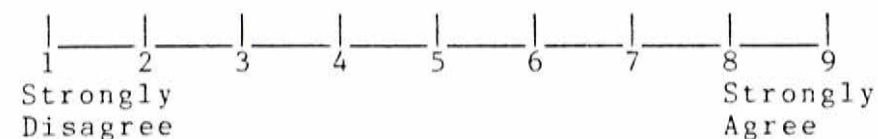
45. A primary reason for my interest in religion is that my church is a congenial social activity.



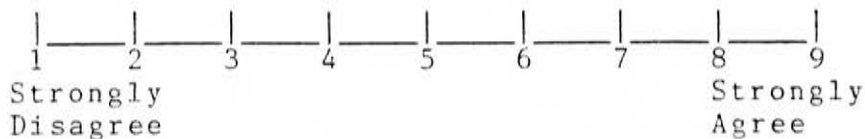
46. I read literature about my faith (or church) frequently.



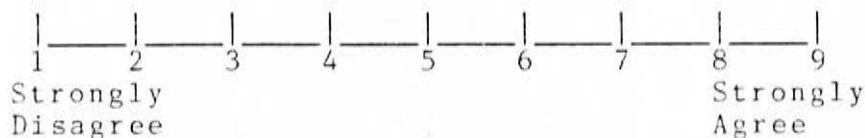
47. I never or rarely read literature about my faith or church.



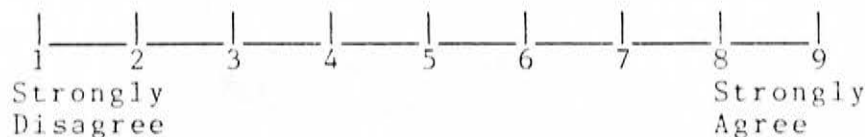
48. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic wellbeing.



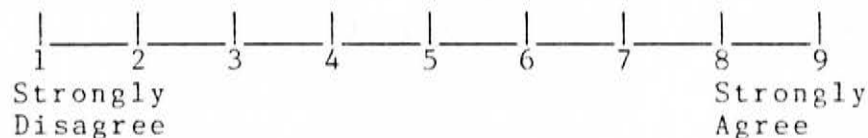
49. It is important to me to spend periods of time in private religious thought and meditation.



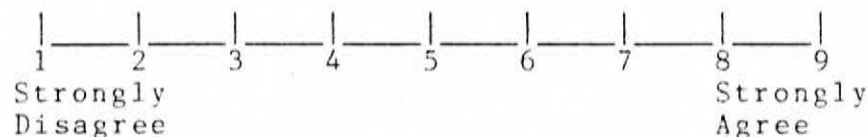
50. The primary purpose of prayer is to gain relief and protection.



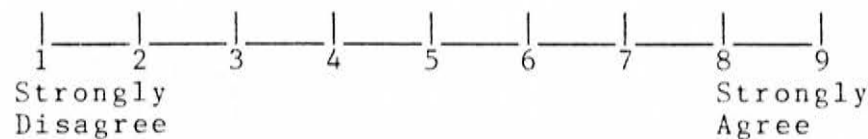
51. I believe in the existence of a just and merciful personal God.



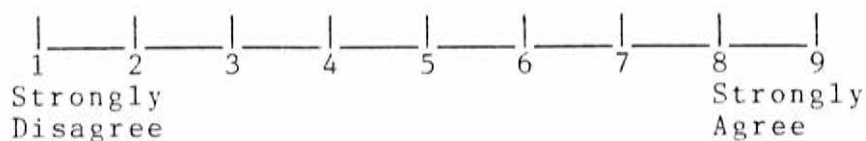
52. I believe God created the universe.



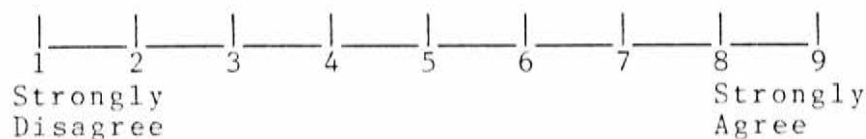
53. I believe God has a plan for the universe.



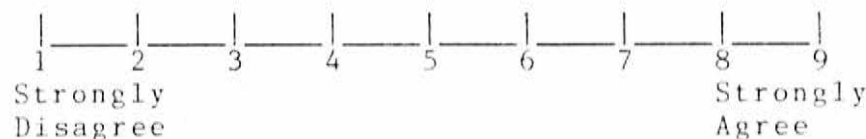
54. I believe Jesus Christ is the Divine Son of God.



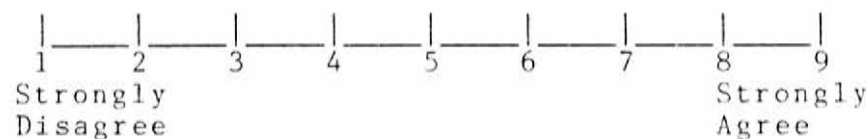
55. I believe Jesus Christ was resurrected (raised from the dath)



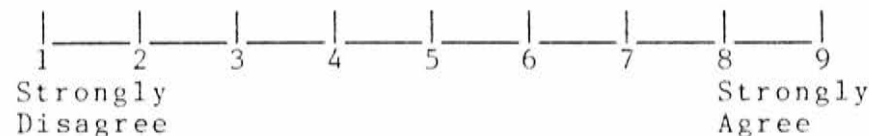
56. I believe Jesus Christ is the Messiah promised in the Old Testament.



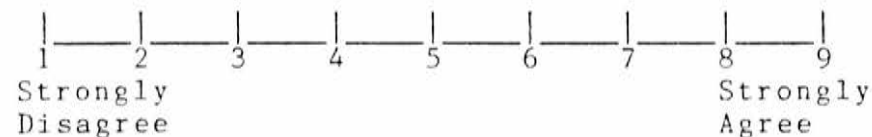
57. I believe One must accept Jesus Christ as LOrd and Savior to be saved from sin.



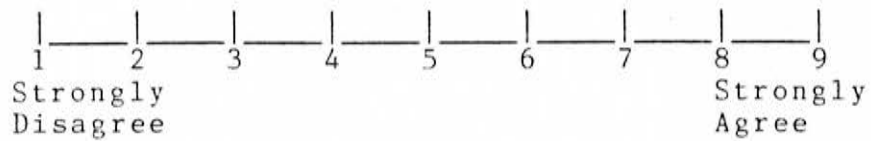
58. I believe in the "second coming" (that Jesus Christ will one day return to judjge and rule the world).



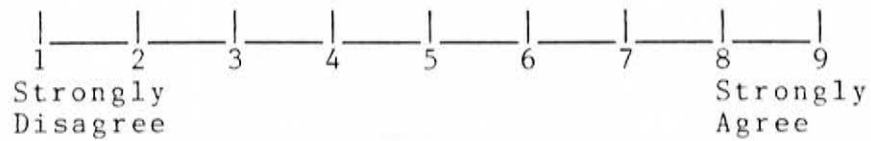
59. I believe in the "original sin" (man is born a sinner).



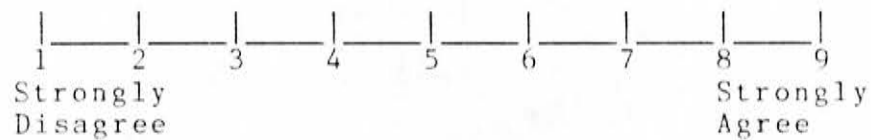
60. I believe in life after death.



61. I believe there is a transcendent realm (an "other" world, not just this world in which we live).



62. I believe the Bible is the unique authority for God's will.



APPENDIX B

Marlowe and Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. Before voting I thoroughly investigate the qualifications of all the candidates.

True _____ False _____

2. I never hesitate to go out of my way to help someone in trouble.

True _____ False _____

3. It is sometimes hard for me to go on with my work if I am not encouraged.

True _____ False _____

4. I have never intensely disliked anyone.

True _____ False _____

5. On occasions I have had doubts about my ability to succeed in life.

True _____ False _____

6. I sometimes feel resentful when I don't get my way.

True _____ False _____

7. I am always careful about my manner of dress.

True _____ False _____

8. My table manners at home are as good as when I eat out in a restaurant.

True _____ False _____

9. If I could get into a movie without paying and be sure I was not seen. I would probably do it.

True _____ False _____

10. On a few occasions, I have given up doing something because I thought too little of my ability.

True _____ False _____

11. I like to gossip at times.

True _____ False _____

12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

True _____ False _____

13. No matter who I am talking to, I am always a good listener.

True _____ False _____

14. I can remember "playing sick" to get out of something.

True _____ False _____

15. There have been occasions when I took advantage of someone.

True _____ False _____

16. I am always willing to admit it when I make a mistake.

True _____ False _____

17. I always try to practice what I preach.

True _____ False _____

18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

True _____ False _____

19. I sometimes try to get even, rather than forgive and forget.

True _____ False _____

20. When I don't know something I don't at all mind admitting it.

True _____ False _____

21. I am always courteous, even to people who are disagreeable.

True _____ False _____

22. At times I have really insisted on having things my own way.

True _____ False _____

23. There have been occasions when I felt like smashing things.

True _____ False _____

24. I would never think of letting someone else be punished for my wrong doings.

True _____ False _____

25. I never resent being asked to return a favor.

True _____ False _____

26. I have never been irked when people expressed ideas very different from my own.

True _____ False _____

27. I never make a long trip without checking the safety of my car.

True _____ False _____

28. There have been times when I was quite jealous of the good fortunes of others.

True _____ False _____

29. I have almost never felt the urge to tell someone off.

True _____ False _____

30. I am sometimes irritated by people who ask favors of me.

True _____ False _____

31. I have never felt that I was punished without cause

True _____ False _____

32. I sometimes think when people have a misfortune they only got what they deserved.

True _____ False _____

33. I have never deliberately said something that hurt someone's feelings.

True _____ False _____

APPENDIX C

Gudjonsson Interrogative Suggestibility Scale

Gudjonsson's Interrogative Suggestibility Scale Directions

"I want you to listen to a short story. Listen carefully because when I am finished I want you to tell me everything you remember."

Gudjonsson Story:

"Anna Thomson/ of South/ Croydon/ was on holiday/ in Spain/ when she was held up/ outside her hotel/ and robbed of her handbag/ which contained \$50 worth/ of travellers cheques/ and her passport./ She screamed for help/ and attempted to put up a fight/ by kicking one of the assailants/ in the shins./ A police car shortly arrived/ and the woman was taken to the nearest police station/ where she was interviewed by Detective/ Sergeant/ Delgado./ The woman reported that she had been attacked by three men/ one of whom she described as oriental looking./ The men were said to be slim/ and in their early twenties. The police officer was touched by the woman,s story/ and advised her to contact the British Embassy./ Six days later/ the police recovered the lady's handbag/ but the contents were never found./ The three men were subsequently charged/ two of whom were convicted/ and given prison sentences./ Only one/ had had previous convictions/ for similar offences./ The lady returned to

Britain/ with her husband/ Simon/ and two friends/ but
remained frightened of being out on her own./

"Now please write everything you remember about the
story."

"Now you are going to be asked questions about the
story. Please answer them as accurately as you can"

"You have made a number of errors. It is therefore
necessary to go through the questions once more, and this
time try to be more accurate."

Gudjonsson Interrogative Suggestibility Scale

1. Did the woman have a husband called Simon?

2. Did the woman have one or two children?

3. Did the woman's glasses break in the struggle?

4. Was the woman's name Anna Wilkinson?

5. Was the woman interviewed by a detective sergeant?

6. Were the assailants black or white?

7. Was the woman taken to the central police station?

8. Did the woman's handbag get damaged in the struggle?

9. Was the woman on holiday in Spain?

10. Were the assailants convicted six weeks after their arrest?

11. Did the woman's husband support her during the police interview?

12. Did the woman hit one of the assailants with her fist or handbag?

13. Was the woman from south Croydon?

14. Did one of the assailants shout at the woman?

15. Were the assailants tall or short?

16. Did the woman's screams frighten the assailants?

17. Was the police officer's name Delgado?

18. Did the police give the woman a lift back to her hotel?

19. Were the assailants armed with knives or guns?

20. Did the woman's clothes get torn in the struggle?

APPENDIX D

Eysenck and Furneaux Rorschach Card Adaptation Test

Directions and Answer sheet

Eysenck and Furneax Rorschach Card Adaptation Test
Directions

Here are two ink blots; people think that they look like many things. I will tell you some of the things people commonly see. Your task will be to check the blot on the page before you and the one shown and check if the ink blot could look to you as those things that people frequently see.

Please mark your answer in the answer sheet provided. Check YES if you think that the ink blot looks like the responses that I am going to give you and that people frequently see. Check NO if you think that the ink blot doesn't look at all like those.

Lets work with the first ink blot:

CARD I

Many people think that this one looks like:

1. Cactus
2. Leaf
3. Frog
4. Buterfly
5. Abdomen
6. Fur

CARD 2

Now lets work on card two

Many people think that this one looks like:

1. Flower
2. Vase
3. Cat
4. Two human figures
5. Spider
6. Skeleton

Eysenck and Furneax Rorschach Card Adaptation Test Answer sheet

CARD 1

- | | | |
|-------------|-----------|-----------|
| 1. Cactus | YES _____ | NOT _____ |
| 2. Leaf | YES _____ | NOT _____ |
| 3. Frog | YES _____ | NOT _____ |
| 4. Buterfly | YES _____ | NOT _____ |
| 5. Abdomen | YES _____ | NOT _____ |
| 6. Fur | YES _____ | NOT _____ |

CARD 2

- | | | |
|----------------------|-----------|-----------|
| 1. Flower | YES _____ | NOT _____ |
| 2. Vase | YES _____ | NOT _____ |
| 3. Cat | YES _____ | NOT _____ |
| 4. Two human figures | YES _____ | NOT _____ |
| 5. Spider | YES _____ | NOT _____ |
| 6. Skeleton | YES _____ | NOT _____ |

APPENDIX E

Opinion Test

Opinion Test First Part

Each of the following statements expresses one opinion. Please rate your agreement or disagreement with each statement on a 9- point scale ranging from strongly disagree (1) to strongly agree (9). There is not wrong or right answer; some people will agree and others disagree with each of the statements.

1. Second marriages have more probability to be succesful than the first marriage.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

2. American school system provides equal oportunity to all the U.S. citizens.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

3. The noise, crowding, and fast pace, which are part of city life, are hazardous to mental health.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

4. U.S. criminal justice system is internationally recognized because of its effectiveness and good organization.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

5. The world is experiencing a change in the trends of the weather. The earth is going through a cooling trend.

-|---|---|---|---|---|---|---|---|---|

1 2 3 4 5 6 7 8 9

Strongly Disagree Strongly Agree

6. Serious diseases and the increment of certain types of cancer are explained by the unhealthy quality of our daily diet and the chemical additives in the food we eat.

-|---|---|---|---|---|---|---|---|---|

1 2 3 4 5 6 7 8 9

Strongly Disagree Strongly Agree

Opinion test Second Part

Each of the following statements expresses an opinion. Please rate your agreement or disagreement with each statement on a 9- point scale ranging from strongly disagree (1) to strongly agree (9). There is not wrong or right answer; some people will agree and others disagree with each of the statements.

1. Dr. David McCarthy, Dr. Joan Brown, Dr, Laura Garland from Johns Hopkiins University have concluded that the divorce rate for remarriages is higher than for first marriages. "The high rate seems contrary to the popular expression that spouses usually learn from their mistakes." The investigators explain that it is easier psychologically for previous divorced people to divorce again and that "remarriages tend to end sooner because many people remarry without having spent enough time assesing their role in the failure of the earlier marriage."

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

2. Dr. Neil Price, From Harvard University, on one of his numerous studies about U.S. education, reports that: "although we think of ourselves as an educated and literate nation, a million school age kids are not enrolled in school. One disabled child in every five is not getting a basic education, up to a third of city high school students are chronic truants, and thirteen percent of our 17 year olds are functionally illiterate.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

3. Dr. Carl Freedman, Ph.D., Chairman of the department of Psychology in a prestigious university, compared country and city people. He belives that mental health is exactly the same in both groups. Extreme mental disturbances, such as schizophrenia, are just as likely to be found among country as city dwellers, and less severe mental conditions are difficulties that people carry with

them wherever they live. Dr. Freedman concludes that there is nothing about urban living that is harmful to people. Those who live in cities are just as healthy physically, mentally, and socially as those who live elsewhere.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

4. The citizens Criminal Justice Commission (Washington, D.C.) issued a report out of its year-long study of the criminal justice system in the United States. The report concluded that "the system is not working with a reasonable degree of efficiency. It is a multifaceted bunch of bodies with no head and without coordinated efforts at all. It absolutely does not meet the needs of today's world. A major court reform is necessary."

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

5. Climatologists, Scientists who study the change in the weather, believe that the earth is going through a warming trend. They believe that the warming trend is being caused by the increase of carbon dioxide in the atmosphere due to pollution from factories, cars, and so forth. This large amount of carbon dioxide in the earth's atmosphere prevents some of the heat radiated by the surface of the earth from escaping out into space, and it is inadvertently changing the world's weather dynamics.

-|---|---|---|---|---|---|---|---|---|
 1 2 3 4 5 6 7 8 9
 Strongly Disagree Strongly Agree

6. Dr. Lois Mayer, an authority on nutrition, says that there is a lot of exaggerations and unnecessary fears about the popular belief that a lot of things we eat are bad for us (will kill us or give us some disease). In her opinion, "the great American supermarket is a wonderful place with a much greater variety of healthy food than has ever been available before. If you know something about nutrition and about shopping, you can go into a typical supermarket and come out with an excellent diet.

-|---|---|---|---|---|---|---|---|---|
1 2 3 4 5 6 7 8 9
Strongly Disagree Strongly Agree

APPENDIX F

Participants Letter

Dear participant,

I am a graduate student in the Clinical Psychology Program at ASU. The questionnaires that you are going to answer are part of a study required for the Master of Arts. The research refers to the relation between religiosity and different personality measures. The study does not need your identification; it will be carried out with complete anonymity and all the information will be kept confidential. Therefore, I would ask you to answer the questions honestly and follow the directions exactly. I also want to remind you of the volunteer nature of your participation. You have the right to terminate participation.

The study will be completed by the end of May. If you are interested, you can contact me, and I will give the results to you.

Thank you very much for your participation.

Sincerely,

Rafaela Davila
ASU Box 17127
Boone, N.C. 28607

VITA

Rafaela Davila was born on October 15, 1953 in Merida, Venezuela. She completed her high school education in Merida, Venezuela. She received the title Licenciante in Psychology in October, 1980 from the Andres Bello Catholic University in Caracas, Venezuela. While at the university, Rafaela Davila worked as an assistant instructor of statistics from October 1977 to July 1980. After graduation she worked from October 1980 to December 1982 as a psychologist with teenagers with behavioral problems. In December 1982 she was awarded a scholarship from the Venezuelan government agency Gran Mariscal de Ayacucho Foundation for graduate training. She began her graduate program in Clinical Psychology in August, 1983 and plans to graduate in December 1985 after she completes her internship requirements.

Ms Davila is a member of the Venezuelan Psychologists Association.

Her permanent address is:

Calle El Bosque # 1-10

Urbanizacion Santa Maria

Merida Edo. Merida. VENEZUELA