



This is to certify that the

thesis entitled

Religious attitudes, response sets,
and perceptions about therapists

presented by

Martin Jay Waalkes

has been accepted towards fulfillment
of the requirements for

Master of Arts Clinical Psychology
_____degree in _____

Major professor

Date 7/30/27



RETURNING MATERIALS:
Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

042604

APR 30 2004

--	--	--

**RELIGIOUS ATTITUDES, RESPONSE SETS,
AND PERCEPTIONS ABOUT THERAPISTS**

**By
Martin Jay Waalkes**

A THESIS

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

MASTER OF ARTS

Department of Psychology

1987

ABSTRACT

RELIGIOUS ATTITUDES, RESPONSE SETS, AND PERCEPTIONS ABOUT THERAPISTS

By

Martin Jay Waalkes

Previous research has suggested a relationship between religiousness and certain behaviors including acceptance of others. Two types of religiousness have been defined. They are Intrinsic and Extrinsic religiousness. Individuals thus characterized by using the Religious Opinion Survey (Allport and Ross, 1967) differ in openmindedness. Intrinsically religious individuals are more openminded in situations not involving religion. Extrinsically religious people are less accepting unless the situation is religious in nature. Female participants (N = 316) were asked to rate the acceptance and potential for pairings of three therapist vignettes with three client vignettes. The participants' religiousness was not found to be a significant factor in the general acceptance of all pairings. Participants did, however, rate therapist-client pairings differently according to the religious content of the vignettes. Participants were sensitive to the therapist's religiousness and the match between therapist and client.

DEDICATION

This Thesis is dedicated to my Grandfather, Martin Wallace Waalkes, who showed me that education and compassionate human understanding are not mutually exclusive.

ACKNOWLEDGMENTS

In struggling through this project I had the helpful assistance of several people. My parents, Bob and Ruth Waalkes, have been very supportive through all of my education. Dr. David Myers, of Hope College, sparked my interest in the psychology of religion and helped me focus in on the subject area. Dr. Norman Abeles helped me choose the actual hypotheses and develop them into a Thesis. Additionally, as chairperson of my committee, Dr. Abeles was very helpful with the numerous revisions and drafts. I greatly appreciate his help. Thanks is also extended to Dr. Ray Frankman and Dr. Elaine Donelson for serving on my masters committee. The late Dr. Terrance Allen also was on my committee and I appreciate the help he gave and the enthusiasm he had for this project in the last year of his life. There are others I wish to thank, like my friends, classmates, and the participants, whose contributions were essential to the completion of the project. Finally, Ellen M. Walters, my future wife, was of immense help in scoring the data, reading drafts, running errands, and providing enthusiasm and moral support. For her help, I am deeply grateful.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	viii
INTRODUCTION	1
Direction for Research in	
Mental Health Care Perception	5
Subject Variables in Religious Research	6
The "College Sophomore" Problem	6
Other Religions	8
Measuring the Religious Variable	9
Traditional Approaches	9
Batson's Approach	11
Allport's Motivational Scale	13
Background of Allport's Scale	13
Content Analysis of Allport's Scales ...	14
The History of the Religious	
Opinion Survey	17
The role of Social Desirability	19
The Intrinsic / Extrinsic concept	
as a Personality Variable	21
Bipolarity vs. Linear Independence	22
Pattern of Results with the ROS	24
Hypotheses for Mental Health Care Perception ...	25
METHODS	27
Subjects	27
Instruments and Materials	27
Allport and Ross (1967) ROS	28
Crowne and Marlowe (1964) SDS	29
Couch and Keniston (1960) ARS	31
Stimulus Narratives	32
Procedure	34
PRE-TEST RESULTS	37
Preliminary Draft Review	37
Pre-test with Subject Pool Participants	38
Client Vignettes	39
Therapist Vignettes	42
Pre-test Conclusions	44

RESULTS	45
Sample Characteristics	45
Demographic Variables	45
Experimental Variables	49
Hypothesis 1	53
Hypothesis 2	54
Hypothesis 3	55
Post-hoc Regressions on Individual Pairings	58
Post-hoc Examination of Patterns in the Independent Variable	67
DISCUSSION	71
Hypothesis 1	71
Hypothesis 2	73
Hypothesis 3	77
Summary of Post-hoc Regressions on Individual Cells	78
Dependent Variable Post-hoc Analysis Discussion	80
NOTE 1	85
NOTE 2	86
APPENDIX 1	87
APPENDIX 2	89
APPENDIX 3	91
APPENDIX 4	92
APPENDIX 5	97
APPENDIX 6	99
APPENDIX 7	103
APPENDIX 8	106
REFERENCES	111

LIST OF TABLES

Table		Page
1	Means and Standard Deviations for Ratings of Client Vignettes	40
2	Means and Standard Deviations for Ratings of Therapist Vignettes	43
3	Representation of Ages in the Sample	45
4	Representation of Class Standing in the Sample	45
5	Representation of Religious Affiliation in the Sample	46
6	Representation of Estimated Frequency of Church Attendance in the Sample	46
7	Percentage Crosstabulation of Participant's Statement of Christianity and Duration of the Choice	47
8	Percentage Crosstabulation of Participant's Statement of Religiousness and Duration of the Choice	48
9	Norms for Intrinsic and Extrinsic From Donahue (1985)	50
10	Representation of the Allport Four-Fold Categories	51
11	Correlation Matrix of Independent Variables ..	53
12	First-Order Pearson Correlation Coefficients of independent and Dependent Variables	57
13	Means, Standard Deviations, and 95 % Confidence Intervals for Acceptance Ratings ..	68

LIST OF FIGURES

Figure		Page
1	Hypothesized Pattern of Acceptance Scores as a Function of Intrinsic and Extrinsic Religiousness	56
2	Means and 95% Confidence Intervals for Acceptance Ratings	84

INTRODUCTION

Attention to the way persons view alternatives for mental health care is an important issue for psychologists. In particular, the roles of personal belief systems that may moderate such perceptions should be of interest to those in control of the marketing of health care services to the community. For individuals with strong religious convictions, there appear to be a multitude of options. Options include the range from pastoral assistance and self-proclaimed religious psychotherapists, to the traditional Psychologist and Counselor role where religious values are kept removed from the therapeutic context. Since these options for mental health care are not necessarily limited to persons with religious convictions, the perception of religious health care providers by non-religious persons is of interest as well.

Previous Research in Mental Health Care Perception

Dougherty and Worthington (1982) were the first to examine empirically the way Christians perceive some of the various psychotherapy options that are explicitly self-labeled as Christian. Included as representatives of this developing area of Christian counseling frameworks were Narramore (1960, 1966), Adams (1970, 1973), Crabb (1977), and Bustanoby

(1976). In their study, Dougherty and Worthington (1982) examined the perceptions of 45 conservative church-attending Christians regarding treatment plans written for a fictitious client. Perceptions were assessed for four treatment plans written by different Christian counselors. Perceptions of the degree of change that was possible, the similarity of the counselors approach to their own religious belief, and the amount each counselor relied on Biblical principles were rated. In addition, participants ranked each of the four counselors on expected effectiveness, willingness to refer a friend, liking of the approach, reliance on biblical principals, and coercive (authoritarian) use of scripture. These same authors found that participants were able to discriminate theoretical differences between the therapists, and were more attracted to seek help from those that they perceived as holding a similar outlook.

Potential clients can discern differences and show preferences between the treatment plans of four therapists all claiming a different, yet Christian, approach. One explanation for the attraction to therapists with similar values is that self-perceived similarity is related to attraction (Schachter, 1951). On the basis of the chosen terminal values in the Rokeach Value Survey (Rokeach, 1968) all participants were divided into "conservative" and "moderate" Christian groups. Results confirmed that the

different groups preferred different counseling styles as indicated by ratings concerning expected effectiveness and perceived similarity.

Dougherty and Worthington's results were from a relatively small sample (n=45), and the low response rate (40%) may have resulted in some degree of self-selection. The self-selection becomes particularly important when it is considered that respondents could be over-represented by those who have an interest in counseling, or have had counseling previously and might be biased to favor those approaches which resemble their own experience (in fact, 27 of the 45 had sought help for past difficulties). This sample was generated from volunteers from conservative Christian congregations in urban centers in the Southeast United States. In general they were well educated and very active in their churches. Because the sample was fairly homogeneous in these regards, more conclusive results may have been obtained with a more diverse group.

Dougherty and Worthington (1982) did not sample non-Christian therapists because they reasoned that Christians would be likely to seek help from Christian sources. Since the similarity of religious values of the therapist and the client can have a pronounced effect on the outcome of psychotherapy (Beutler, Jobe, & Elkins, 1974; Rosenthal, 1955), a strategy on the part of Christians to seek

"Christian" counseling seems to have some support. However, not all Christians necessarily seek or utilize Christian therapy, and in this regard Dougherty and Worthington (1982) do not cover the whole picture of the Christian's perception of mental health options.

In a replication and extension of that research, Worthington and Gascoyne (1985) addressed a few of the questions left unanswered by Dougherty and Worthington (1982) by examining the perceptions of the Christian counseling approaches by non-Christians as well as Christians. Using Dougherty and Worthington's (1982) therapist treatment plans, a group of college students from a large secular university ($N = 225$) were asked to rate the counselors on various predicted effectiveness, religiousness, and similarity to self dimensions. They found that self-labeled non-Christians, while differing in preferences and values from self-labeled Christians, are still open-minded and optimistic about the predicted effectiveness of Christian psychotherapists, although significant difference was found in the appeal of the various treatment plans. Non-Christians also made differentiations about the predicted effectiveness between therapists. When considering their willingness to refer a friend, Christians and non-Christians agreed on referring a Christian to the therapists, but non-Christians were less likely to refer a non-Christian to a Christian therapist.

While both Dougherty and Worthington (1982) and Worthington and Gascoyne (1985) have contributed to the sparsely investigated issue of mental health care perceptions by Christians and non-Christians, they have overlooked the way many mental health choices are made. As Dougherty and Worthington (1982) admit, the choice of a counselor is usually not one of discriminations on subtle issues of technique or emphasis. Rather, persons accept the referrals of other professionals or friends, and otherwise accept clinic policy in assigning therapists. Even if a person were to make the conscious decision to go to a "Christian" counseling center, the presumption that they would be given the opportunity to choose between four distinguishably different approaches is unlikely.

Direction For Research in Mental Health Care Perception

Research needs to investigate the choice of mental health care as it is encountered on more practical and pragmatic terms. Religious persons seeking counseling must first decide whether or not to obtain specifically self-proclaimed Christian counseling (i.e. pastoral counseling or a psychologist/psychiatrist that claims a Christian emphasis), or seek counseling in the secular marketplace. Also of interest should be the perceptions of the viability of such a Christian approach versus a secular approach by non-Christians. While we already know some aspects of how non-

Christians see Christian counselors differently than Christians do, the perception of secular counselors in comparison to the perception of Christian counselors in the view of both Christians and non-Christians is yet to be investigated.

It has already been established that religiousness influences the perception and evaluation of possible sources of mental health assistance (Dougherty and Worthington, 1982; Worthington and Gascoyne, 1985). Because dogmatism and open-mindedness are systematically associated with being religious (Rokeach, 1968; Thompson, 1974), the tendency of religious persons to restrict available options (Gurin, Verhoff, & Feld, 1968) in mental health care could be due to the effects of cognitive rigidity or prejudice rather than religion itself.

Subject Variables and Religious Research

The "college sophomore" problem

Opinions regarding the suitability of various subject populations for research on religiousness are varied. Since much of psychology research involves the "college sophomore" it is plain that the applicability of this research to that population has been questioned. Donahue (1985) is skeptical of the appropriateness of this population in light of the

large amount of religious questioning that occurs in college.

Parker (1971) reviewed 29 studies and concluded that changes which do occur are in the direction from conservative and orthodox to liberal and secular. Parker notes that the change is part of a general trend of development continuing from adolescence, and is accelerated when the student experiences the new environment. Parker notes that this development is slowed again by the time the student is a senior. Parker (1971) also emphasizes the importance of taking into consideration the institution at which the research is conducted. Entrance requirements, reputation, and existing biases towards religion all have an effect on what students will be in the sample and to what extent they would be predisposed to change.

There is concern that results based on samples of college students can not be generalized to other populations. Even with this concern, 53 % of the studies examined by Donahue (1985) which used some form of the Religious Opinion Survey (Allport and Ross, 1967; Feagin, 1964) was on students (33 % of the subjects). The majority of these students were obtained through college psychology courses.

Not all evidence, however, points to the unsuitability of college students for religious research. Hunsberger (1978)

found that among a predominantly Catholic and Protestant sample in a cross-sectional and longitudinal study religiousness does not attenuate over the course of four years at a university. Hunsberger did find that frequency of church attendance decreased and some doubting increases for liberal protestants over the four years, but in general his results support a model of stability in religious ideology that contradicts popular belief of college as a time of religious upheaval. Batson and Ventis (1982) developed much of their popular religious measures on students, and the Allport and Ross Religious opinion survey has received extensive validation on student populations. This predicament has come to the point where it becomes difficult to establish whether the scale is appropriate student populations or whether the scale (and the validations and correlates) is appropriate only for other groups.

Other Religions

Frequently measures of religiousness, particularly those of orthodoxy, are developed out of a framework of a particular religion. As a result, a test that works well discriminating those with Protestant beliefs from non-believers may not discriminate those with Jewish beliefs from non-believers. Furthermore, some tests or tasks are specific in their utility to denominations, and a test that

may yield good results in a Protestant sample may be useless with Catholics.

The majority of research in religiousness has been done with Protestant Christian samples, although Catholic samples are well represented. Some of the items in assessment instruments are specific to religious persons and make applicability for non-believers difficult. For example, "I pray chiefly because I have been taught to pray." (Allport and Ross, 1967), assumes a predisposition to being religious and could make the application of this test to a non-religious sample difficult.

Measuring the Religious Variable:

Traditional approaches

To evaluate the unique contribution of religiousness when a person considers alternative therapy possibilities demands a precise conceptualization of what constitutes a religious person. Social desirability, cognitive inflexibility and other covariates of religion need to be controlled to assure the purity of conclusions on the influence of religion. Because religiousness is a multi-dimensional concept, recognition must also be given to whether the measurement obtained conceptualizes religiousness as a behavior, an attitude, a state of being, a motivation, or a trait.

A definition of religiousness depends on how it is assessed. Ways of defining just what is meant by religiousness is full of complexities that defy simple bipolar explanations, nominal assignment, or rating scales. For example, using church attendance as a measure of religiousness ignores those unable to attend due to long-term illness or other reasons. Asking someone if they are religious frequently yields a complex answer not well conceptualized in a simple "yes" or "no". People often are religious in one way and not another, and many consider themselves as religious without commitment to orthodoxy.

Glock and Stark (1966) developed a method of assessing religious commitment that incorporated several aspects of religious experience including: (1) experiential, (2) ideological, (3) ritualistic, (4) intellectual, and (5) consequential components. In many respects Glock and Stark's work has widened the scientific examination of the religious factor in people's lives into a more comprehensive framework. Their measurement scale quickly became the inspiration for many others who viewed religiousness from more than one aspect (Robinson & Shaver, 1973).

Factor-analytic techniques have also been used to refute simplistic religiousness dimensions in personality, suggesting that religiousness is best described as multi-dimensional (King, 1967). Hunt and King's (1972, 1975)

originally proposed an eleven-factor definition of religiousness. Hilty, Morgan, & Burns (1984) re-examined those eleven factors and distilled a seven-dimension typology that they thought describes religious involvement. These dimensions were labeled personal faith, intolerance of ambiguity, orthodoxy, social conscience, knowledge of religious history, life purpose, and church involvement.

Batson's Approach

One of the more recently developed scales of religiousness is that of Batson and Ventis (1982). The items in their scale form four scales, a few of which bear promise and one which is simply quite puzzling. The scales are different from those of Glock and Stark (1966), and those described by Hilty, Morgan, and Burns (1984) (and therefore that of Hunt and King, 1971) since they describe the origin of support for the maintenance of religiousness in addition to measurements of the quality and depth of the belief.

The External dimension determines the portion of the religion that can be attributed to the influence of the social environment. This External dimension attempts to assess the pragmatic component of religiousness, searching for the importance of authority figures, social institutions, and other sources of pressure to be religious.

The Internal dimension assesses the degree to which the inner needs for strength, certainty, and direction evokes religiousness.

Orthodoxy is the third dimension, measuring conformity to traditional doctrine, and therefore reveals the qualitative factors of the belief. The Orthodoxy scale measures many of the same ideas that many of the traditional religiousness scales assessed such as a belief in God, creation, the divinity of Christ, and Biblical authority (cf. Glock & Stark, 1966; Faulkner & De Jong, 1965; Putney & Middleton, 1967). Obviously, the Orthodoxy scale considers Evangelical Christianity as the norm for what is "orthodox" and may not be applicable for all populations.

Perhaps the most interesting of the Batson and Ventis scales is one called Quest. Quest was constructed to tap the questioning behaviors, self-examination, and openness to change characteristic of a religious experience. For example, questions ascertain the extent of personal growth from questioning personal belief, the importance of God as an answer to such questioning, and the extent to which such questioning is personally valued. Because the Quest items capture existential questioning rather than a theistic religion its utility may lie in assessing vague religious experiences the more orthodox scales fail to assess.

Because the Quest scale is not a measure of traditional religious concepts, it stands on face validity only. In a review of the measure, Donahue (1985) concludes that the Quest scale's failure to correlate with intuitive parallels (and anything else of interest) renders it relatively useless. Donahue suggests Quest could be measuring everything from normal religious questioning to agnosticism and indiscriminate sophistic "why?" questioning. Research by Kojetin, McIntosh, Bridges, and Spilka (personal communication) supports this conclusion. In this research, Quest was found to correlate positively with religious conflict and personal distress. Personal distress is not the same as Batson's conceptualization of Quest as an open minded searching orientation. In addition, Spilka, Kojetin, and McIntosh (in press) found a negative correlation of the Quest orientation and social desirability which could suggest a non-conventionality that might characterize a sophistic attitude. The Quest concept, and the scale used to measure it, is still in its infancy. Perhaps future research will show it to be more valuable in the conceptualization of religiousness.

Allport's Motivational Scale

Background of the Religious Opinion Survey

Allport, (1954; Allport and Ross, 1967) developed a useful and operational definition of the role of religion in a

person's life (see Donahue, 1985 for a thorough review). Measuring what most agree is motivation for being religious, Allport conceived of two types of religiousness which he first believed to be polar ends of a continuum.

Intrinsic religiousness is inner-directed and is manifest as an internalized driving force, or meaning endowing framework (Donahue, 1985), which guides the thoughts and actions of the person. The Extrinsic person experiences religion as a part of culture, using it to obtain status, become accepted, and as a means to socialize or gain self-justification. In essence, the Intrinsic person lives his religion whereas the Extrinsic uses his religion.

Allport found that intrinsically oriented people behave in a manner consistent with religious values, attending church more regularly, and being less prejudiced. Extrinsically religious persons were found to be more prejudiced, attended church less often, and as Donahue (1985) suggests, generally give religion a bad name.

Content Analysis of Allport's Scales

Hunt and King (1971) conducted a factor analysis to determine which of the multitude of underlying concepts used to assess Intrinsic and Extrinsic religiousness were essential. They scoured Allport's writings, and came up with eleven component dimensions that appeared central to

his descriptions of the Intrinsic/Extrinsic typology. The five that literary investigation yielded to be most important were:

- I. Universal-Parochial: brotherhood and love of neighbor vs. ethnocentrism and exclusion of those unlike oneself.
- II. Unselfish-Selfish: effort to transcend self-centered needs vs. self-serving, protective use for own ends.
- III. Relevance for all of Life: floods whole life with motivation and meaning vs. compartmentalized, not integrated into one's way of life.
- IV. Ultimate-Instrumental: end vs. means; master motive vs. utilitarian uses; intrinsic vs. extrinsic in the axiological sense.
- V. Associational-Communal: involved for religious fellowship and deeper values vs. affiliation for sociability and status. (Hunt and King, 1971 p.343)

Statistical factor analysis showed the Extrinsic dimension to be composed primarily of instrumental and selfish items. The Intrinsic scale was less dominated by a narrow focus, and contained items of several factors (Feagin, 1964 in Hunt and King, 1971). It is this diffuse definition of the Intrinsic scale that has prompted controversy over what exactly the intrinsic scale measures (Donahue, 1985; Hoge, 1972; Hunt & King, 1971). Hoge (1972) has presented an alternative scale to measure the religious motivation aspect that Allport emphasized when he described what constituted religiousness. Hoge's scale also attempted to attenuate the effects of social desirability inherent in the ROS.

Hoge (1972) validated his scale by correlating the subject's classification on the scales with the opinions of ministers familiar with the subjects. The ministers were educated via Allport's writings as to the nature of these categories and independently made judgments as to which of the categories each subject resembled. Hoge's scale adheres to the to the discredited bipolar view of the Intrinsic-Extrinsic concept (Hood, 1971; Donahue, 1985).

Dittes (1971) draws some parallels between the Intrinsic/ Extrinsic concept and the Church/ Sect concept of Troeltsch (Niebuhr, 1929). He contends the intrinsically religious person is similar to the uncorrupted state of religion as it exists in the form of a sect, not yet compromised by the demands of a culture. Dittes charges both conceptualizations as being more prophetic than scientific, as though the authors were pleading for the return of unadulterated form of religion in society and the individual. The "heavy contraband load of value judgment" (Dittes, 1971 p.375) and "careless agglutination of unrelated concepts" at the price of purity cause Dittes (1971) to reject both of the conceptualizations despite their social statements.

Batson and Ventis (1982) saw the Intrinsic scale as a measure of "intense, rigid devotion to orthodox religious beliefs and practices" (p. 147). However, this accusation

is questionable in light of recent research with college students that correlates Intrinsic religiousness with a tolerance for ambiguity (Spilka, Kojetin, and McIntosh, in press).

The Intrinsic-Extrinsic concept appears to be measuring some aspect of the incorporation of a supernatural belief in a person's life. The systems the concept measures and the role of religion within the system is open to conjecture. Strikland and Schaffer (1971) suggest it measures a "belief system", while Vanecko (1966) contends it is a measure of religious behavior. Donahue (1985), after reviewing all the research on the concept, concluded that it is a measure of the persons "attitude towards religion" (p.405). Brown (1964), in reference to Wilson's (1960) Extrinsic scale proposed it was a measure of pervasive personality processes. The most common way of viewing the concept, however, is as though it is an indication of the orientation towards, or motivation for, being religious (Allport and Ross, 1967; Wilson, 1960; Hoge, 1972).

History of the Religious Opinion Survey

Development of the Allport typologies began though a number of articles on religion and prejudice in an attempt to reconcile the seemingly paradoxical correlation of religion and prejudice.

There is a long history in religious cultures of conflict with other religions, and even within religions denominationalism results from an inability to reconcile differences. In light of most religions support of a message of loving others, turning the other cheek, and loving others as ourself, prejudice is not expected to be a characteristic of a religious person or community. Allport attempted to reconcile the paradox by hypothesizing that there must exist different types of religious persons-- people must be motivated to be religious for different reasons. The result was the Intrinsic/ Extrinsic concept and the resulting attempts to measure it.

The original scale is the version developed by Allport and Ross (1967). While Feagin (1964) and Wilson (1960) used versions of the survey before the Allport and Ross version was published, it should be noted that the Allport and Ross (1967) version is considered the original from which the others were derived. In 1964, Feagin published a version of the Religious Opinion Survey (ROS) in which the Intrinsic scale consisted of 6 of the most highly loaded items from the 9 the Allport and Ross (1967) Intrinsic scale uses, and the Extrinsic scale consisted of 5 of the 11 Allport and Ross questions and one that Allport and Ross did not use.

Wilson (1960) developed a version of the ROS which only attempted to measure Extrinsic orientation, assuming that

Intrinsics were those who scored low on the Extrinsic scale. The scale was subject to response set bias, and was overly dependent on the bipolar view of religiousness and rapidly fell into disuse with updated versions.

The Feagin (1964) scale appeared in the literature 3 years before the Allport and Ross (1967) scale in a seemingly unrecognized manner. Although the shorter (Feagin) version has high correlations with the Allport and Ross (1967) "parent" scale ($r = .90$ for Intrinsic, $r = .68$ for Extrinsic, and $r = .78$ for the "full scale" combined score, Hood, 1971), greater reliability, and is regarded as more sophisticated (statistically), the Allport and Ross scale is the most popular version (Hood, 1971). In light of Donahue's (1985) suggestion that the smaller correlation of the two versions of the Extrinsic scale (when compared to the high correlation for the Intrinsic scale) may indicate that they are measuring two different concepts, research that expects to contribute to the understanding of religiousness in the Intrinsic/Extrinsic schema is essentially limited to the bulkier and less reliable Allport and Ross version.

The Role of Social Desirability

Batson and Ventis (1982) (and Batson, 1976) have noted the role of social desirability in specific types of religious persons, so the the pro-social aspects of religion need to

be separated from the rest of religiousness, particularly when the wealth of spurious correlations that could arise as the result of a failure to recognize such a relationship are considered. For example, Batson, Naifeh, and Pate (1978) found that the negative relationship between Intrinsic religiousness and prejudice either was diminished (when measured with a psychometric test) or simply dropped out (when measured behaviorally) if social desirability was controlled.

Some researchers, particularly those with interests in updating the scales (see Hoge, 1972), have employed a measure of social desirability (eg. Crowne and Marlowe, 1964) to examine and control for the social desirability inherent in western religiousness. Hoge (1972) suggests that the attractiveness of the Intrinsic perspective may be due to the perception of the Extrinsic motivation as idolatrous, subordinating God to family, fame, success, etc. While such conjectures are insightful, the problem still remains, and any serious attempt to measure religiousness, particularly with a motivation for religiousness scale such as Allport and Ross's (1967), must address this issue.

Hunsberger and Ennis (1982) present information from three studies that failed to manipulate an effect of social desirability with the participants. Dressing as a priest (with the traditional collar) in one condition, altering the

sponsorship information on the cover sheet in a condition of the second study, or an interview by a minister in the last study all failed (with the exception of the Intrinsic scale in the first experiment) to evoke an effect that could be attributed to social desirability. While this is not proof that social desirability has no effect, the presumed effect was not salient during an interview with a minister.

The Intrinsic / Extrinsic concept as a Personality Variable

Donahue (1985), Hunt and King, (1971), and Kahoe (1974) among others have suggested that the Intrinsic dimension of religiousness may be a robust personality variable aside from being a measure of religiousness. This conclusion is based on a series of findings which show the Intrinsic orientation to be associated with a healthy personality (Bergin et.al., unpublished), Internal locus of control (Kahoe, 1974; Strickland and Shaffer, 1971) lack of anxiety (Bergin, Richards & Masters, unpublished), anxiety over death, (Bolt, 1977; Kahoe & Dunn, 1975), and with certain factors in authoritarianism like conventionalism, superstition, and stereopy (Kahoe, 1977). Kahoe's (1974) report that the Intrinsic scale is correlated to an Intrinsic motivation for the individual seems to support the viability of the Intrinsic measure as a global personality measure on its own merit.

Bipolarity vs. Linear Independence

One of the most important developments in this typology is the frequently replicated finding by Feagin (1964) (see also Hood, 1971) that the Intrinsic and Extrinsic scales are linearly independent of each other. If the Intrinsic and Extrinsic orientations were ends of a bipolar continuum of religiousness, the correlation between the corresponding scales would be $r = -1.0$. However, when Allport and Ross computed the correlation it was much closer to zero. (Allport & Ross (1967) computed $r = -.21$, and the meta-analysis by Donahue (1985) yielded a mean correlation of $r = -.20$, $N = 4952$).

While Allport and Ross made no provisions in the scale for scoring in a four-fold typology which would treat the scales as independent concepts, Allport struggled with the problem of those subjects who answered affirmatively to all questions dealing with religion (Allport, 1966). This category of respondents, those high on both Intrinsic and Extrinsic dimensions, Allport called Indiscriminately pro-religious (Allport and Ross, 1967). The Indiscriminately pro-religious are described as those who saw all religion as good. They have been found to be the most prejudiced, dogmatic, close-minded, and rigid of all respondents to religious questionnaires (Donahue, 1985).

The last remaining group is the Indiscriminately anti-(or non) religious. These respondents see all religion, both Extrinsic and Intrinsic, as undesirable. Because the nature of the items is oriented towards measuring religiousness, a distinction between those participants who might be actively non-religious, or anti-religious (possibly Atheistic) and those who are more passively non-religious is not available with this instrument.

Hood (1971, 1978) examined the benefits of employing the four-fold typology and concluded that the bipolar technique can mask important information, presenting misleading correlations. For example, Hood (1971) found a negative correlation between Extrinsic religiousness as measured by the full scale (assuming bipolarity) and a measure of religious experience. This negative correlation masked a positive correlation of the Intrinsic scale and the religious experience measure, disproportionately representing the correlation of the Extrinsic sub-scale.

Hood (1978) supports the utility of the additional categories. He provides some evidence for Allport's claim that people in the indiscriminately pro-religious category have an inherent conflict and instability that would be evoked when a challenge to religiousness is posed. While some have claimed the classification of typologies on the basis of two independent criteria is psychometrically

unsound (Kahoe, 1976), Hood (1978) claims that the four-fold typology has utility in spite of assignment techniques employed. Hood (1978) gives evidence that the Indiscriminately Pro and Anti-Religious persons do differ from each other and the pure Intrinsics and Extrinsics in a predictable manner. Such differences add credibility to the four-fold classification procedure. The addition of the additional categories that result from treating Intrinsic and Extrinsic as linearly independent constructs adds credibility and increase the predictive validity of the scale.

Pattern of Results with the ROS

When one type of religious person is compared to another in the Allport schema, the results are contingent on the nature of the dependent variable. When the dependent variable is religious in nature (eg. number of religious books picked up while browsing (Hood, 1978), or percentage of income contributed to charity), the hierarchical arrangement of means typically has this pattern: Intrinsics appear most religious or generous, followed by or equal to Indiscriminately pro-religious, followed by Extrinsic, followed by those classified as Non-religious.

Dependent variables that are not religious in nature, but which indicate culturally appropriate adaptation without rigidity (eg. prejudice, Gorsuch & Alshire, 1974, Kahoe,

1974; open-mindedness, Rokeach, 1968; Thompson, 1974) have a different hierarchical arrangement of mean scores: the least adapted and most inflexible are Indiscriminately pro-religious. More flexible are Extrinsic, followed by Non-Religious which are either equal or slightly more rigid than Intrinsic (Donahue, 1985).

Hypotheses For Mental Health Perception

Using the scale developed by Allport and Ross (1967) as a measure of religiousness, this study intends to explore the perception of mental health care providers. Of interest in this paradigm is the acceptance of therapist client combinations as it might be influenced by the religious attitudes of the client in a manner similar to the way Indiscriminately pro-religious people restrict their options with their prejudices. Towards this goal, it is expected that:

- *1. Intrinsic and Extrinsic religiousness are orthogonal constructs, and can validly be used for the division of participants into the four-fold categorization scheme that includes anti-religious and indiscriminately pro-religious categories.
2. Intrinsic and Extrinsic religiousness are uncorrelated with agreement response set bias and social desirability.

3. The perception of psychotherapists is a non-religious dependent variable thought to be mediated by open-mindedness. Controlling for response-set bias and social desirability pressures, Intrinsically religious participants would be more accepting than those who were Anti or Non-religious by embracing therapist-client pairings more readily. It is expected that Extrinsically religious participants will be significantly less accepting of therapist-client pairings, and that the Indiscriminately pro-religious persons would be most encumbered lack of acceptance, seeing only certain therapists as possessing the proper qualifications or philosophies to be helpful.

METHODS

Subjects

Female participants (N= 353) were recruited from Introductory Psychology courses at Michigan State University. Completed test materials were obtained from 316 participants. Participants received credit which counted towards their course grade for participating in the experiment. No intentional attempts to eliminate non-religious persons were employed, and the experiment was posted as "Psychological Referrals". Some of the previous research on religiousness have employed religious screening for participants. For example, Spilka, et. al (in press) required participants to have attended church at least once a month on the average and rate religion as 4 or higher on a seven point scale of importance. Such limitations were avoided in this study in the interest of obtaining a sample which included non-religious persons.

Instruments and Materials

All participants were given a packet which included three personality assessments, an information sheet, and the stimulus narratives with accompanying therapist options. The entire packet required approximately 45 minutes to complete.

Allport and Ross (1967) Religious Opinion Survey

Religiousness was measured using the Allport and Ross (1967) Religious Opinion Survey (ROS) (see Appendix 1). Use of the ROS for measuring religiousness has been well established (Hunt and King, 1974). The scale consists of 20 Likert-type questions with 4 options and no mid-point. The items are scored with 5 points assigned to the extreme score in the direction of the scale characteristic, with 1 point assigned to the extreme score denying the presence of the scale characteristic. No response on an item was scored as the neutral value of 3 points.

The validity of the scales are attested to by the predictive ability of the instrument on both religious and non-religious variables, particularly when the Extrinsic and Intrinsic sub-scales are considered independently (Donahue, 1985). The sub-scales have low correlations with each other ($r=.21$ Allport and Ross, 1967) and lend evidence that they should be treated as independent dimensions. Item to sub-scale reliabilities are generally good, ranging from .58 to .18 (Robinson and Shaver, 1973).

One of the problems with the ROS is inherent response set bias. The way the scales are constructed, a yea-saying respondent would score as an Indiscriminately pro-religious person and yea-saying Intrinsic would therefore be mis-categorized. Since the Indiscriminately pro-religious

person is suspected to be particularly susceptible to response set bias (Kahoe, 1976), the only associated errors would be the categorization of yea-saying Intrinsic, Extrinsic, and Non-religious persons inappropriately in the Indiscriminately pro-religious category. Because there is only the unpublished, experimental scale which deals with this issue (Spilka and Amaro, unpublished), a measure of response set bias (Agreement Response Scale, Couch and Keniston, 1960) was employed to compare yea-saying across groups and to partial out this influence from religiousness when predicting therapist perceptions.

Crowne and Marlowe (1964) Social Desirability Scale

To measure subjects predisposition to social desirable responding the Crowne and Marlowe (1964) Social Desirability Scale (SDS) was employed (see Appendix 2). The SDS measures both culturally acceptable but likely untrue responses, and culturally unacceptable but likely true responses. There are 33 questions on the inventory, and 18 are scored for true and 15 for false responses. The score is derived by adding the number of responses in the keyed direction. This "keyed direction" has been the source of some criticisms of the scale's internal validity. Millham (1974) has noted that items keyed "true" are improbable but desirable items while "false" keyed items are undesirable but probable.

All item are significantly correlated with the total score ($p < .05$) and internal consistency reliability is reported to be $R_{kk} = .88$ (Crowne & Marlowe, 1960). Test-retest reliability was measured at .89 (Crowne and Marlowe, 1960).

There is a great deal of normative data on the SDS for different populations. Among a 1400 participant sample at a Midwestern university that approximates the MSU sample, a mean of 15.1 (s.d.= 5.6) was obtained for males, and 16.8 (s.d. = 5.5) was obtained for females. For comparison of the MSU sample with other populations of students at different universities, Robinson and Shaver (1973) report means in the ranges of 10.1 to 14.4 for males, and 13.5 to 16.0 for females. Means for non-student samples were generally higher.

The SDS has been normed on a variety of populations, and consistently shows predictive validity in experimental situations where a person is invested in presenting an idealized image of him/herself (Robinson and Shaver, 1973). Some reports are less confident of the conceptual claims of the authors who state the test measures "needs of subjects to present themselves in a socially desirable (or undesirable) light" (Crowne and Marlowe, 1960, p.350).

It has also been argued that the SDS may measure a personality variable rather than simply a response style

(Tanaka-Matsumi and Kameoka, 1986). Tanaka-Matsumi and Kameoka (1986) have linked the SDS to measures of depression that would indicate that depressed subjects have a tendency to exhibit self-devaluing responses that register as low social desirability. The degree to which these character types are represented in the sample or in the religious classifications will influence their perception as striving for social acceptance.

Nederhof (1985) makes the distinction between the more conventional "other-deception" component and a "self-deception" (or defensiveness) component. Nederhof (1985) reviewed several studies which assessed the behavioral and conceptual aspects of the SDS and concluded it measures a motive to avoid negative evaluation and a significant component of self-deception. He also concluded the SDS failed to measure the desire to obtain a positive evaluation; one of the common assumptions attributed to the scale and the basis of the inclusion of the SDS in much of the religious research.

Couch and Keniston (1960) Agreement Response Scale

To measure and control for the participants' tendency to respond to items in the intended direction (yea-saying), the Agreement Response Scale (ARS) (Couch and Keniston, 1960) was employed (see Appendix 3). This 15 item test was developed out of the highest item-whole correlating items in

a 360 item scale (Robinson and Shaver, 1973). The split-half reliability estimate of the full scale of 360 items was .85. Shorter versions of the ARS have proven more reliable when using split half procedures. One sample of 20 items had a split-half reliability estimate of .86 for the original sample, and .72 for a second 20 item sample. Test-retest reliability with larger versions of 120 and 240 items was .73 over approximately two weeks (Robinson and Shaver, 1973). Scores on the test are derived from adding the points assigned to a seven point likert type scale where high scores were indicative of an agreement posture. Lack of response was scored as 4 points.

Correlations have been reported indicating a positive relationship between the ARS and impulsivity, and between ARS and dependence. Negative correlations with ARS were reported for indicators of personal stability and acceptance. These relationships lend to the validity of the ARS as a viable measure of the agreeing personality syndrome (Couch and Keniston, 1960).

Stimulus Narratives

Attitudes towards religious versus non-religious psychotherapists were assessed through responses to vignette case material. Pairings of three therapists and three clients were presented to the participants for an assessment of the acceptance of each of the nine possible pairings.

The prepared client vignettes were three short, equal-length case descriptions adapted from portions of several cases in the DSM-III Case Book (APA, 1981). The first vignette describes a person with a problem that is primarily the result of pathological religious belief. The second vignette describes a person whose pathology involves some elements of religious issues, yet is primary centered around a non-religious problem. The final vignette involves no mention of a pathological religious element, but did have some features that could be seen as positive religious influences. See Appendix 4 for reproductions of client vignettes and the therapist-client pairing acceptance questions.

To control for possible gender effects in the case materials, all stimulus narrative materials were written gender neutral. A pretest assured that the cases were of equal perceived severity, length, and treatability, while differing in the centrality of the religious issue.

Therapist options were presented by giving subjects brief descriptions of three therapists (see Appendix 5). The descriptions of the therapists were pre-tested for equality in training and perceived competence with differences in

their religiousness. In the descriptions, one therapist is described as overtly religious in training and practice, one religiously neutral, and the last overtly non-religious.

Procedure

Half of the participants were given the ROS, the SDS, ARS, and the therapist/vignette materials in that order. The other half completed the stimulus narratives first to protect against order effects. The survey was completed in 16 group administrations conducted in an academic classroom. Self-explanatory standard instructions for completing the inventories were printed on the cover-sheet which also contained the consent form (see appendix 6).

The experimenter was a male psychology graduate student (the author), and his responsibilities involved only distribution and collection of the inventories, answering procedural questions, and passive monitoring of the testing, as the test booklet contained all instructions. This method was employed to increase uniformity and minimize demand effects.

With the stimulus narratives, participants were asked in the written instructions to respond to each of the vignettes as if the central character was a friend. Their task was to consider a referral of that friend to each of the three psychotherapists. Special emphasis was placed on the importance of obtaining a good match of therapist and

client, as if one therapist may be more appropriate than another for the client. It was hoped that this would encourage examination of the individual therapist's characteristics (particularly their religiousness), so as to find the "best match". This "best match" was not actually assessed directly. After considering therapist options (the same therapist options were reconsidered for each client) participants were then asked to rate on a Likert-type rating scale of 1 to 5 on the acceptance ratings.

The acceptance ratings the participants were asked to rate included: their comfort in pairing the client with the therapist, their belief that the therapist would be helpful, their belief regarding the difficulty of therapy in this instance, the likelihood that they would refer the client to the therapist, and the quality of the match between the therapist and client for therapy. Their responses were recorded on a five point Likert-type scale with three as the neutral response. All unanswered items were assigned the value of three points.

After the experiment, subjects were given a short presentation of the hypotheses of the experiment and a short background in the study of religiousness from a psychological perspective. They were then given a three-page handout describing the topics of the presentation with references in the case that they would like to do further

reading (see Appendix 7). Special emphasis was placed on the importance of not revealing the nature of the experiment to classmates, who might be biased in their response to the experiment with prior knowledge. At this point, the participants completed the experiment, and were thanked and dismissed.

•

PRE-TEST RESULTS

Evaluation of pretest on therapist and client vignette materials.

Preliminary Draft Review

An initial draft of the vignette materials were distributed to 15 graduate students in Clinical Psychology to obtain their opinions regarding the differences and similarities between the narratives. Therapists were each rated for perceived effectiveness, quality of training, and perceived religiousness. Additionally, the graduate students were asked to give a forced choice response, picking the therapist they saw as most competent, most effective, most religious, least religious, least able to be helpful, and least competent. Open-ended questions ascertained the perceived similarities and differences between the therapists.

Client vignettes were also assessed for their similarities and differences so as to avoid other variables confounding the differences in religiousness. The graduate students were asked to rate each client for their potential for therapy, the severity of their symptoms, and the centrality of the religious issues in the client's pathology. In

addition to the ratings, a series of forced choice questions had the students rank the clients who had the poorest prognosis for therapy, the most troubled with religious issues, the most likely to improve, the greatest amount of religious concerns, the most disturbed from previous functioning, and the one most likely to recover first.

Nine of the students responded. With so few students surveyed, any statistical analysis could be misleading and was therefore not attempted. Instead, refinement of the instrument for an actual pretest (on students obtained through the subject pool) was done through the suggestions of the graduate students. Essentially the results indicated a need to equalize the severity of the pathology of the clients, put more emphasis on the religious aspects of the therapists, and clarify the role of religion in the client vignettes.

Pre-test With Subject Pool Participants

The revised vignettes (see Appendix 4 and Appendix 5) were then given to 19 student participants obtained through the same subject pool procedures used to recruit participants for the actual study for which the vignettes were intended. The same format of rating and ranking therapists and clients was employed as was used with the graduate student evaluations. The only difference between the two pre-tests was the subject pool participants were not asked the open

ended questions, and were ranking refined versions of the therapist and client vignettes. A copy of this evaluation form can be found in Appendix 8.

Client vignettes

The comparison of the three client vignettes on the variable of the rated potential for therapy was done with a one-way repeated measures analysis of variance (ANOVA). Each of the 19 female participants rated each client for the estimated potential for therapeutic improvement on a Likert-type scale that ran from 1 (poor potential) to 5 (excellent potential). Potential for therapy was described as the ability to form a relationship with a therapist and benefit from the process of psychotherapy. Means and standard deviations for these potential ratings, as well as the other client ratings of severity and the role of religion can be found in Table 1.

Table 1
Means and Standard Deviations For Ratings
of Client Vignettes

Attribute	Client		
	Client 1	Client 2	Client 3
Therapy Potential:	3.15	4.10	2.84
	(s.d. = .95)	(.93)	(1.16)
Symptom Severity:	3.42	3.78	3.60
	(1.21)	(.85)	(1.38)
Centrality of Religious Issues:	4.89	3.42	2.36
	(.31)	(1.12)	(1.21)

The one-way repeated measures ANOVA yielded significant main effect for client variation on the rated potential for therapy ($F(2,36) = 5.196, p < .01$). Since this version of the client vignettes was actually used due to time constraints which prevented further pre-testing, interpretations regarding religious differences and client improvement should be tempered with the knowledge that client vignette 2 has a higher perceived potential for therapy and acceptance scores for this client are likely to be inflated.

Differences in symptom severity were assessed using the Likert-type rating and the repeated measures design as well. A rating of "5" indicated that the participant felt the

symptoms were very severe, while a rating of "1" indicated the participants opinion that the symptoms were very superficial. The means and standard deviations for this item can be found in Table 1. A one-way repeated measures ANOVA failed to find a significant difference between clients in the ratings of severity ($F(2,36) = .59, p > .05$).

The centrality of the religious issues was measured and analyzed similarly. This is the dimension for which client vignettes were intended to be different. Ratings ranged from 1 to 5, where 5 indicated the perception of religious issues as very central and 1 indicated the perception of the religious issues as very peripheral. Means and standard deviations can be found in Table 1.

It is likely that the mean for client 3 is higher than what participants would have intended had the question been worded differently. Client 3 was intended to be a client with a positive religious perspective that was not involved with the pathology (i.e. peripheral religiousness). This client's religiousness was intended to be a central and positive aspect of the client's personality. Participants may have responded to the question of the centrality of religion in the pathology for client 3 with the centrality (and not the pathology) in mind. Such responses would serve to inflate artificially the mean and variance of ratings of

the pathological centrality of the client's religion. The one-way repeated measures ANOVA revealed a main effect which indicated a significant difference between the clients on this dimension ($F(2,36) = 36.6, p < .001$).

Therapist vignettes

Similar examination was employed with the therapist vignettes. The therapist vignettes were intended to appear equally effective, and equally trained, differing only in the amount of therapist religiousness. Therapist 1 was intended to be very religious, therapist 2 was written to appear neutrally religious, and therapist 3 was supposed to be anti-religious. The same 19 female subjects rated the therapists as rated the clients. Half the subjects rated the clients first, and half rated the therapists first.

Therapist effectiveness was described as the ability to form a therapeutic relationship and work towards positive change with a client. Ratings for effectiveness ranged from 5, for very effective, to 1, for very ineffective. Mean effectiveness ratings and standard deviations are presented in Table 2 along with means and standard deviations of the other ratings. A one-way repeated measures ANOVA was performed, and the therapists did not differ significantly on the ratings of perceived effectiveness ($F(2,36) = .60, p > .05$).

Table 2
Means and Standard Deviations For Ratings
of Therapist Vignettes

Attribute	Therapist		
	Therapist 1	Therapist 2	Therapist 3
Effectiveness:	3.52 (s.d.=1.22)	3.78 (.85)	3.42 (.90)
Training :	3.94 (1.18)	3.89 (.81)	3.84 (1.17)
Perceived Religiousness:	4.89 (.44)	2.89 (1.05)	2.15 (1.30)

Therapist were tested for perceived similarity in training experiences. Training was described as the degree to which the therapists had been properly educated and received experiences that were relevant to the task of psychotherapy. Lichert style ratings on a scale of 5 (very well trained) to 1 (very poorly trained) were requested for each therapist. Summaries of participants ratings can be seen in Table 2. The one-way repeated measures ANOVA for the training rating yielded no significant effect for therapist differences ($F(2,36) = .20, p > .05$).

The last category participants rated was the therapist's perceived religiousness. This religiousness was described as the extent to which the therapist had an active spiritual

life, and incorporated that spirituality and concern for religion into an integrated lifestyle. A rating of 5 indicated a very religious perspective while the rating of 1 indicated a very non religious perspective. Mean ratings for the therapists can be found in Table 2. The one-way repeated measures ANOVA indicated that a significant difference between the therapists did exist ($F(2,36) = 181.8, p < .001$).

Pretest Conclusions

Therapist vignettes were not found to be significantly different on two issues related to therapy success (training and perceived effectiveness). With the precautions taken to avoid gender references, length of description differences, and other confounding influences, the therapist vignettes appeared to be ready for use in the acceptance pairings. Some caution should be exercised with the client vignettes as a significant main effect for potential for therapy was obtained, but this will not interfere with the proposed hypothesis and would only become an issue with post-hoc analyses.

RESULTS

Sample Characteristics

Demographic variables

Age of participants in the survey was assessed using a five category item. Subjects responses can be found in Table 3.

Table 3

Representation of Ages in the Sample

<u>Age Group</u>	<u>Frequency</u>	<u>% of Sample</u>
18 - 20	268	84.8
21 - 22	40	12.7
23 - 24	5	1.6
25 - 30	2	.6
over 30	1	.3

The class status was also measured by a multiple choice item. The results of this item can be found in Table 4.

Table 4

Representation of Class Standing

<u>Class</u>	<u>Frequency</u>	<u>% of Sample</u>
Freshmen	191	60.4
Sophomores	84	26.6
Juniors	33	10.4
Seniors	8	2.5
Other	0	0.0

The affiliation with traditional categorizations of major religions was assessed with a five-item multiple choice questions. The results of this question can be found in Table 5.

Table 5
Representation of Religious Affiliations

<u>Religion</u>	<u>Frequency</u>	<u>% of Sample</u>
Catholic	145	45.9
Protestant	107	33.9
Jewish	19	6.0
Eastern Rel.	14	4.4
Atheistic/Agnost.	31	9.8

A five item multiple choice question was used to assess frequency of church attendance. Table 6 shows the nature of the sample on this item.

Table 6
Representation of Estimated Frequency
of Church Attendance

<u>Attendance</u>	<u>Frequency</u>	<u>% in Sample</u>
More than once a week	10	3.2
About once a week	76	24.1
At least once a month	64	20.3
A few times a year	138	43.7
Never	28	8.9

Participants were asked if they considered themselves Christian. Additionally, participants were asked how long they would say they had been either Christian or not. Table 7 illustrates this crosstabulation.

Table 7

Percentage Crosstabulation of Participants
Statement of Christianity and Duration of the Choice

<u>Called themselves Christian</u>			
Length of time	Yes	NO	ROW TOTALS
Lifelong	60.1	12.7	72.8
Many years	13.0	2.5	15.5
A few years	5.7	1.6	7.3
Relatively recently	2.5	1.6	4.1
No response	0.3	0.0	0.3
COLUMN TOTALS	81.6	18.4	100.0

Subjects were also asked if they considered themselves religious. Additionally, The participants were asked to give an indication of how long they have or have not considered themselves religious. The crosstabulation that details their responses can be found in Table 8.

Table 8

Percentage Crosstabulation of Participants
Statement of Religiousness and Duration of the Choice

<u>Called themselves Religious</u>			
Length of time	Yes	NO	ROW TOTALS
<hr/>			
Lifelong	35.8	16.5	52.2
Many years	11.7	13.6	25.3
A few years	7.0	7.9	14.9
Relatively recently	2.2	5.1	7.3
No response	0.3	0.0	0.3
COLUMN TOTALS	57.0	43.0	100.0

Participants were asked to rate the importance of religion in their lives. Their response was recorded with a seven integer rating where 1 was described as not important, and 7 described as very important. The mean rating for this item was 4.133, just slightly over the theoretical median of 4.0. Standard deviation for the item was 1.80, making the 95% confidence interval for the population mean span 3.93 to 4.33. Since the confidence interval includes the theoretical median, 4.0, it cannot be determined that the participants were above average in their ratings of the importance of religion in their lives.

Experimental Variables

ROS scores.

Intrinsic religiousness was measured using the 9 item scale of Allport and Ross (1967) where possible scores ranged from 9 to 45 with 27 as the theoretical midpoint. Mean score on this item was 24.32, with a standard deviation of 8.316. The resulting confidence interval was 23.40 to 25.43 ($df = 315$), significantly less than the theoretical midpoint. Skew for the Intrinsic score distribution was .087, and the measure of kurtosis, -.744. The distribution of scores appears essentially normal in shape.

Extrinsic religiousness was measured using the 11 item instrument of Allport and Ross (1967). Possible scores ranged from 11 to 50, with a theoretical midpoint of 33. The mean score on the Extrinsic scale was 28.99 with a standard deviation of 6.13. The resulting 95% confidence interval ranged from 28.31 to 29.69 ($df = 315$) and does not include the theoretical midpoint. Skewness of the distribution was negligible (.044), and kurtosis was -.509. For these purposes, the distribution was considered normal.

Norms for the ROS

Established norms for scores on the Intrinsic and Extrinsic are frequently omitted from publications (Donahue, 1985), so comparison of this sample on the raw values is difficult.

Donahue (1985) summarized and recalculated the means or medians from research by Bolt (1977), Shoemaker & Bolt (1977), Thompson (1974), and Hood (1978). His summaries are listed in Table 9.

Table 9
Norms for Intrinsic and Extrinsic
From Donahue (1985)

Source	sample type	I	E
Bolt (1977)	Conservative Protestants	36.18	21.13
Shoemaker & Bolt (1977)	Conserv. Prot. Students	36.51	21.86
Thompson (1974)	Catholic Mothers	34.30	29.30
	Fathers	28.20	29.70
	Students	29.50	36.70
Hood (1978)	Psych. Students	32.00	36.00

* Thompson's and Hood's data are medians.

Their samples were described as "conservative Protestants (n = 62, and n = 51)", "Catholic adolescents, fathers, and mothers (n = 532 for each type of subject)" and "psychology students(n = 89)" respectively.

Four-fold classification

The breakdown of the participants into the four classifications proposed by Allport and Ross (1967) is

presented in Table 10. The theoretical medians proposed by Donahue (1985) are used as the breakpoints for determining assignment.

Table 10
Representation of the Allport Four-fold Categories

Category	Score on Intrinsic	Score on Extrinsic	Frequency	% of Sample
Indiscrim-				
Pro Relig.	> or = 27	> or = 33	25	7.9
Intrinsic	> or = 27	< 33	107	33.8
Extrinsic	< 27	> or = 33	65	20.5
Anti-Relig.	< 27	< 33	119	37.6

Social Desirability Scale scores.

Social desirability was measured using the Crowne and Marlowe (1964) scale. The mean score obtained by participants was 13.32 with a standard deviation of 5.22. A 95 % confidence interval indicates a population mean between 12.74 and 13.89 (df = 315). The mean score for females from 1400 students sampled in a similar manner at Ohio state was 16.8 (standard deviation 5.5) (Crowne and Marlowe, 1964), but scores in the range of the one obtained here have been obtained from similar samples as well (13.5, n = 86 females at Northwestern University) (Robinson and Shaver, 1973).

Agreement Response Set scores.

Tendencies to respond in a fixed direction were measured with the Couch and Keniston (1960) agreement response set scale. The mean for participants was 63.06 (or 4.24 per item) with a standard deviation of 10.88. The resulting confidence interval for the mean is 61.85 to 64.26 at 95 % level of confidence (df = 315). A theoretically neutral score on this test would be a score of 48. The normative sample for this test was composed of college students from Harvard College and was found to have an item mean of 3.9 (standard deviation = 0.3).

Dependent variable scores.

The dependent variable in this survey was the inferred acceptance of the match between a fictitious therapist and potential client. Participants responded to 5 questions for each possible match of therapist and client. On each of the 5 questions they chose a likert style response that was scored on an integer scale from 1 to 5 with 1 indicating greatest acceptance of the match, 5 indicating a lack of acceptance of the match, and a score of 3 that would indicate a neutral perspective of the match. In all, across the 9 combinations, there was a possibility for scores in the range of 25 to 225. In the sample, however, the actual range was 68 to 158. The mean total acceptance rating was 118.62, with a standard deviation of 12.88. The 95 %

confidence interval for the population mean for the total of the therapist acceptance rating was 117.20 to 120.05 (df = 316).

Hypothesis 1

The first hypothesis proposed that the Intrinsic and Extrinsic scales were linearly independent. This hypothesis was not confirmed in this sample. The correlations of the Intrinsic and Extrinsic variables can be found in Table 11 along with their correlations with other variables. The Intrinsic and Extrinsic religiousness variables were negatively correlated ($r = -.285$, $p < .01$, $df = 314$). The nature of this correlation indicates that a linear relationship exists such that as participants increase in their Intrinsically religious attitudes, they are less likely to hold Extrinsic attitudes towards religion.

Table 11
Correlation Matrix of Independent Variables

<u>Variable</u>	Intrinsic	Extrinsic	SDS	ARS
Intrinsic	1.000	-.285*	.126	-.206*
Extrinsic	-.285*	1.000	-.035	.295*
SDS	.126	-.035	1.000	-.270*
ARS	-.206*	.295*	-.270*	1.000

(* $p < .01$, $df = 314$)

Hypothesis 2

The second hypothesis proposed was that Intrinsic and Extrinsic religiousness were not correlated with social desirability and agreement response set bias. This hypothesis was confirmed for the social desirability scale, but failed to be confirmed for the ARS when significant correlations of ARS with Intrinsic and Extrinsic were found. The correlations of SDS and ARS with the other independent variables can be found in Table 11.

Social desirability, a suspected confounding influence in the correlation of the ROS scales with other variables, was not found to be significantly correlated to either Intrinsic or Extrinsic religiousness in this sample. The correlation of social desirability with Intrinsic religiousness was $r = .126$ (not significant, $p > .01$). The correlation of social desirability with Extrinsic religiousness was $r = -.034$ (not significant, $p > .01$).

Agreement response set, a suspected correlate with the ROS due to the test's unidirectional presentation, was found to be correlated with both the Intrinsic and Extrinsic scales. Extrinsic religiousness correlated with the agreement response set scores positively ($r = .29457$ $df=314$ $p < .01$). The positive correlation would indicate that as the participant was more likely to be Extrinsically oriented, they would also be more likely to respond to questions in an

agreeing posture. Intrinsic religiousness was also significantly related to response set, but was negatively correlated ($r = -.206$, $df = 314$, $p < .01$). A negative correlation would indicate that as participants increased in their Intrinsic orientation, they were less likely to be prone to tacit agreement as measured by the ARS. The alternation of the sign of the correlation of the ARS with the two ROS sub-scales (Intrinsic and Extrinsic) reflects the linear relationship between these variables as described above.

Additionally, but not hypothesized, the agreement response set scale was found to correlate significantly with the social desirability scale ($r = -.270$, $df = 314$, $p < .01$). The nature of this correlation indicates that as the press for social desirability is more evident in a participant, the participant is less likely to respond agreeably.

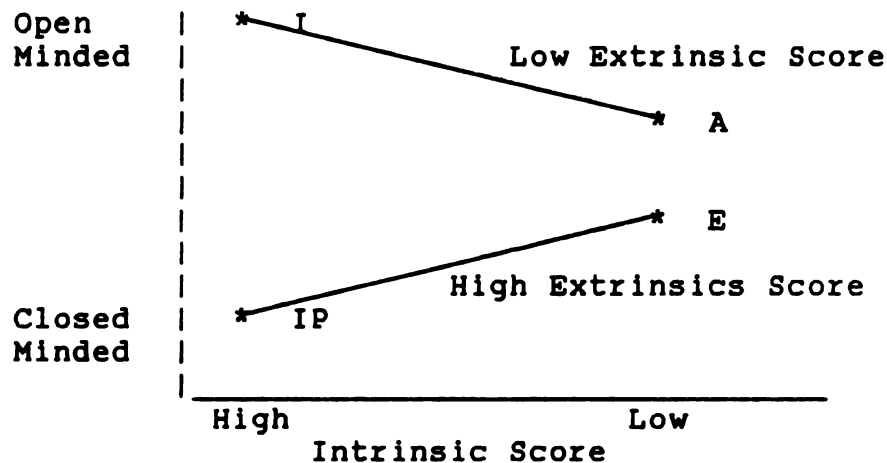
Hypothesis 3

Hypothesis 3 stated that while controlling for the influences of SDS and ARS, a relationship between the Intrinsic and Extrinsic scales and the dependent variable of therapist-client pairing acceptance or open-mindedness would be found with the following properties: the order from open-minded to closed minded is Intrinsic > non-religious > Extrinsic > indiscriminate. Figure 1 illustrates the

hypothesized pattern of results which include a significant main effect for Intrinsic and Extrinsic, and a significant interaction. This hypothesis was not confirmed.

Figure 1

Hypothesized Pattern of Acceptance Scores
As a Function of Intrinsic and Extrinsic Religiousness



I = Intrinsic
A = Anti (or Non) Religious
E = Extrinsic
IP = Indiscriminately Pro-Religious

The failure to find independence of the Intrinsic and Extrinsic scales in Hypothesis 1 prohibits the examination in terms of the fourfold categories and the test of the significant interaction. As a result, Hypothesis 3 is partially untestable (see Note 1). Hypothesis 3 also remains unconfirmed since no significant beta-weight values were obtained which would indicate a relationship between the Intrinsic or Extrinsic scales and the combined acceptance of all the therapist-client pairings (the Total Acceptance Rating) ($p > .05$).

Table 12 illustrates the first order correlations for the Total Acceptance Rating, as well as for all the component cells of the dependent variables (C1T1 to C3T3) (see Note 2 for an explanation of the codes), with the independent variables of interest. First order correlations of the independent variables with the Total Acceptance Rating yielded no significant correlations either ($p > .01$). Multiple R never reached significance, climbing only to $R = .089$ ($p > .05$) with all four variables as predictors.

Table 12
First-Order Pearson Correlation Coefficients
of Independent and Dependent Variables

Dependent Variables	Independent Variables			
	Intrinsic	Extrinsic	SDS	ARS
Total Acceptance Rating	-.045	-.043	.033	.014
C1T1	-.251*	.146	-.072	.135
C1T2	.086	-.042	.054	-.034
C1T3	.093	-.169*	.006	-.107
C2T1	-.240*	.163*	.113	-.003
C2T2	.045	-.042	.033	.027
C2T3	.067	-.123	-.018	.014
C3T1	-.156*	.039	.008	.013
C3T2	.084	.074	.076	-.028
C3T3	.131	-.139	-.037	-.020

(* $p < .01$, $df = 314$)

C = clients

T = therapists

(where C1T1 = the pairing of client 1 with therapist 1)

Post-hoc Regressions on Individual Pairings

It is possible that the use of the total score as the only measure of acceptance could obscure patterns in the data that result in the overall perception that there are no significant influences on acceptance. Towards this goal of looking for patterns in the data, the acceptance scores were divided into nine separate cells according to the nine combinations of therapist and client. Each cell was subjected to multiple regression analysis much like the procedure used above with the total acceptance score.

C1T1 - Religiously central client issues with the religious therapist.

First order correlations showed a significant correlation for Intrinsic religiousness ($r = -.251$, $p < .01$, $df = 314$). This correlation would indicate a tendency for intrinsically inclined participants to accepting and open-minded about the effectiveness of therapy in this pairing. No other first order correlations were significant.

In the hierarchical procedure, the order of acceptance of the remaining variables was Extrinsic, ARS, SDS respectively, although the assigned beta-weights for these remaining were not significant ($p > .01$). Contribution to the square of the multiple correlation coefficient, R^2 ,

beyond the value of .0632 resulting from the first order correlation of Intrinsic was not significant.

Step-wise results on the analysis of the dependent variable for C1T1 (see Note 2) differed slightly, although they were still not significant. Instead of placing Extrinsic as the second variable in the regression equation, step-wise procedures showed ARS to be the next best predictor of the dependent variable for C1T1, followed by Extrinsic and SDS. However, beta-weights and contributions to R^2 were negligible in this instance as well.

C1T2 - Religiously central client issues with a religiously neutral therapist.

First order correlations with the dependent variable for C1T2 showed no independent variables with significant correlations ($p > .01$, $df = 314$). Considered individually, none of the independent variables can provide any useful information about what to expect for the acceptance of the therapist-client pairing.

The hierarchical regression analysis also yielded no statistically significant results. None of the beta-weights had corresponding F values that were significant ($p > .01$, $df(1, 314)$), and the order of inclusion only reflected the first order correlations. Essentially, no conclusions can be drawn from the analysis of the C1T2 pairing.

C1T3 - Religiously central client issues with an anti-religious therapist.

First order correlations show a significant correlation of Extrinsic religiousness with acceptance in the C1T3 pairing ($r = -.169$, $p < .01$, $df = 314$). The nature of this correlation finds Extrinsically oriented participants more likely to be open-minded and accepting of the pairing C1T3. No other first order correlations were found significant.

Examination of the hierarchical multiple regression analysis shows the order of acceptance of the remaining variables as Intrinsic, ARS, SDS. None of these remaining variables, however, had beta-weight values that were significant ($p > .01$, $df(1, 314)$).

Step-wise procedures also failed to surface any significant beta-weight values for variables other than Extrinsic religiousness. The only discrepancy was the ordering of ARS which was given a priority position over Intrinsic religiousness (although neither was significant at the .01 level).

C2T1 - Peripherally evident client issues with a religious therapist.

First order correlations of independent variables with the C2T1 pairing acceptance measurement reveal a significant

correlation for both Intrinsic and Extrinsic religiousness. Intrinsic religiousness was negatively correlated with dependent variable for the C2T1 ($r = -.240$, $p > .01$, $df = 314$) indicating a relationship where Intrinsically oriented participants were more accepting and open-minded about this pairing. Extrinsic religiousness was positively correlated with the variable for C2T1 ($r = .164$, $p < .01$, $df = 314$). The direction of this correlation would indicate a tendency for Extrinsically oriented participants to be less accepting and more closed-minded about the possibilities of this pairing.

In the hierarchical multiple regression solution the order of acceptance of the independent variables was Intrinsic, Extrinsic, SDS, and ARS. The beta-weight values that were significant on the last step were Intrinsic (beta = $-.234$, $F(1, 314) = 16.740$, $p = .000$), and Extrinsic (beta = $.118$, $F(1, 314) = 3.999$, $p = .046$). Also significant on this last step was SDS (beta = $.133$, $F(1, 314) = 5.53$, $p = .019$). The square of the multiple correlation coefficient, R^2 , with all four variables was $.090$. With only the three variables with significant beta-weight values described above $R^2 = .088$. The additional contributions to R^2 from Extrinsic and SDS were $.010$ and $.020$ respectively.

Step-wise regression results ordered the inclusion of the independent variables in the sequence of Intrinsic, SDS,

Extrinsic, and ARS. significant values of beta were obtained of Intrinsic (beta = $-.234$, $F(1, 314) = 16.740$, $p = .000$), and SDS (beta = $.133$, $F(1, 314) = 5.525$, $p = .019$). Unlike the hierarchical results, step-wise procedures failed to place extrinsic in the second position for inclusion, but its value as a predictor was about the same (beta = $.117$, $F(1, 314) = 3.996$, $p = .046$).

Both the hierarchical and step-wise methods seem to indicate that the most valuable predictors of the dependent variable for the C2T1 pairing are Intrinsic, followed by SDS, and then Extrinsic. the contributions of SDS and Extrinsic are not great, together accounting for only 3 % of the variance of the dependent variable.

C2T2 - Peripherally evident client issues with a
religiously neutral therapist.

First order correlations of independent variables with the dependent variable for the C2T2 pairing reveal no significant correlations. Hierarchical multiple regression as well as step-wise methods failed to yield any significant beta values for any of the independent predictors. The square of the multiple correlation coefficient, R^2 , amounted only to $.007$ with all four variables.

C2T3 - Peripherally evident religious client issues with an anti-religious therapist.

Examination of first order correlations of independent Variables with acceptance of the C2T3 pairing reveals none of the variables to be significant at the $p = .01$ probability level. Extrinsic religiousness was found to be negatively correlated with C2T3 scores at a less stringent level of significance ($r = -.123$, $p = .029$, $df = 314$). The nature of this relationship, if it were accepted with this level of significance, would find participants inclined to be Extrinsically religious in orientation to be more open minded for this pairing of therapist and client.

Results of the hierarchical method multiple regression show the only independent variable to achieve any significance is Extrinsic. In the last step of inclusion, beta for Extrinsic was (beta = $-.128$, $F(1, 314) = 4.438$, $p = .036$). Step-wise results also failed to illuminate any additional relationships. Some caution should be exercised in the inference of the significance of the correlation of Extrinsic with the acceptance of the C2T3 pairing as the probability of the correlation ($p = .029$) is higher than the level $p = .01$ that is the standard to protect against an inflated experiment-wise error that could reach well over $p = .05$ and result in the interpretation of some chance correlations.

C3T1 - Positively influential religious client

characteristics with a religious therapist.

First order correlations reveal a significant negative correlation of Intrinsic religiousness with acceptance in the C3T1 pairing ($r = -.156$, $p < .01$, $df = 314$). The nature of this correlation would indicate that either participants inclined to be Intrinsic would be more likely to be accepting of this pairing. No other correlations of the independent variables with the C3T1 pairing were significant.

In both the hierarchical and step-wise regression procedures, the order of acceptance of the independent variables was Intrinsic, SDS, and ARS. Only Intrinsic had a beta value that was significant (beta = $-.162$, $F(1, 314) = 7.998$, $p = .005$). This beta value indicated the tendency for Intrinsic to be more accepting. Extrinsic was not sufficiently related to the pairing to warrant inclusion in either procedure. The square of the multiple correlation coefficient, R^2 , attained only a value of $.0252$ with all three of the included values, reflecting the minimal influence these predictors have on the acceptance rating.

C3T2 - Positively influential religious client
characteristics with a neutral therapist.

Examination of the first order correlations revealed none of the independent variables to be significantly correlated with acceptance of the C3T2 pairing ($p > .05$).

An examination of the hierarchical and step-wise regression analyses found the order of inclusion as Intrinsic, Extrinsic, SDS, and ARS. None of the beta values were significant using either method ($p > .05$). Using the four independent variables as indicators, no useful relationships were revealed that could assist in the prediction of the acceptance in the C3T2 pairing.

C3T3 - Positively influential religious client
characteristics with a non-religious therapist.

Extrinsic religiousness was found to be negatively correlated with acceptance in the C3T3 pairing ($r = -.139$, $p < .05$, $df = 314$). Additionally, first order correlations reveal a significant positive correlation of Intrinsic religiousness with the pairing ($r = .131$, $p < .05$, $df = 314$). The nature of these correlations would indicate that Extrinsically oriented participants are more accepting of the pairing, or that non-Extrinsically oriented participants are more closed-minded and not accepting of the pair. The correlation of the pairing with Intrinsic would indicate that Intrinsically oriented participants would not be

accepting of the client-therapist pairing in this instance. Neither ARS or SDS were significantly correlated with acceptance with this pairing ($p > .05$).

Multiple regression using hierarchical inclusion showed the order of inclusion as Extrinsic, Intrinsic, SDS, and ARS. In the last step of inclusion, only Extrinsic religiousness had a significant beta-weight value, and that value was of marginal significance (beta = $-.117$, $F(1, 314) = 3.773$, $p = .053$). At the last step, as well as all the previous steps of inclusion, the beta value for Intrinsic was not significant (beta = $.109$, $F(1, 314) = 3.403$, $p = .066$). This failure to achieve significance, considering the significance of the first order correlations, is due mostly to the correlation of Intrinsic with Extrinsic, which artificially inflated the correlation of Intrinsic with the acceptance of the pairing. The partial correlation of Intrinsic with the acceptance measure holding Extrinsic constant was not significant ($r_{\text{partial}} = .096$, $p > .05$, $df = 314$). While the equation of the final step indicated that the Extrinsic variable was significant at the $.05$ level, the two previous equations, with Intrinsic, and Intrinsic & SDS as included variables found a slightly, but critical difference in the strength of the beta-weight. In the second and third inclusion steps the value for Extrinsic was beta = $-.111$, $F(1, 314) = 3.65$, $p = .057$. The value of R^2 with only Extrinsic as a variable is $.019$. Inclusion of

Intrinsic increases R^2 by .009 to .028. The change in significance of the overall F-ratio from the one variable solution to the solution of Extrinsic and Intrinsic (in spite of the beta-value for Intrinsic that was not significant) was an increase in the significance from $p = .013$ to $p = .011$. The addition of the remaining variables only served to decrease the overall significance of the equation, and contributed nothing to R^2 .

Results from the step-wise analysis of the results confirmed the hierarchical results as the optimal solution for the inclusion of the variables in the regression equation.

Some caution should be used in the interpretation of the significance of the Extrinsic variable. The beta values were accepted as significant at the $p = .05$ level, not the $p = .01$ level that protects against the experiment-wise error becoming unreasonably large.

Post-hoc examination of patterns in the dependent variable

Table 13 lists the means, standard deviations, and confidence intervals for the 9 5-item sets of questions that correspond to the 9 dependent variables.

Table 13

Means, Standard Deviations and 95 % Confidence
Intervals for Acceptance Ratings

Client	Therapist			
	T1	T2	T3	(T1+T2+T3)/3
C1 mean	13.680	11.953	15.288	13.640
S.D.	4.777	3.282	4.378	1.856
95% CI	13.18-14.17	11.59-12.35	14.80-15.77	13.44-13.85
C2	11.288	11.854	15.601	12.915
	3.482	2.992	3.932	1.778
	10.90-11.67	11.52-12.18	15.17-16.04	12.72-13.11
C3	12.168	11.535	14.965	12.883
	3.747	2.911	3.985	1.859
	11.75-12.58	11.21-11.86	14.52-15.41	12.68-13.10
(C1+C2+C3)	12.379	11.781	15.285	
3	2.804	2.270	3.226	
	12.07-12.69	11.53-12.03	14.93-15.64	

Figure 2 illustrates, graphically, the trends evident in Table 11. A 3 x 3 repeated measures ANOVA was performed with the three client vignettes as one repeated independent variable and the three therapist vignettes as the other within subjects variable. The dependent measure was the total rating of acceptance for all the pairings. A significant main effect was found for therapist ($F(2,314) = 108.84, p < .001$). Table 13 lists the means standard deviations and 95 % confidence intervals for the sum of the acceptance ratings involving all three therapists. The mean acceptance rating for therapist 3 was substantially larger,

indicating a more closed-minded, non-accepting attitude. Examining the 95 % confidence intervals in light of the significant main effect for therapist, therapist 3 appears to account for much of the effect. The confidence intervals for therapist 2 and therapist 1 are much closer in comparison, and the significant distinction between these variables would likely be blurred with the more stringent acceptance level, $p = .01$, that was adopted to protect against unreasonable experiment-wise error.

The ANOVA also yielded a significant main effect for client ($F(2, 314) = 108.84, p < .01$). Table 13 lists the marginal means, standards deviations, and confidence intervals for the sum of the client vignettes' acceptance ratings. The 95 % confidence interval for the mean of the acceptance of client 1 is substantially higher than the confidence intervals indicate the values the population means for client 2 and client 3 could take. This higher acceptance rating indicates the tendency to view client 1, the client with the central pathological religious issues, with less optimism, and would be less accepting of the pairings which included this client.

Figure 2

Means and 95 % Confidence Intervals
For Acceptance Ratings

Insert Figure 2
About Here

The repeated measures ANOVA also was found to have a significant client by therapist interaction ($F(4, 312) = 13.60, p < .01$). Examination of the means and confidence intervals for the individual cells displayed graphically in Figure 2 helps in understanding the source of this interaction. With therapist 1, the 95 % confidence interval for the mean acceptance rating was substantially higher for the first client than the confidence intervals for the means of the remaining two clients on therapist 1. This pairing, therapist 1 with client 1, was the pairing of the client with central issues of a pathological religiousness with the therapist seen to be the most religious. The direction of the relationship indicates that participants saw the therapist as less likely to work well with this client than the therapists ability to work with other clients. The information in Figure 2 does not seem to indicate there are any other patterns that would be responsible for the significant interaction of therapist and client factors.

DISCUSSION

The Main Hypotheses

Hypothesis 1

Hypothesis 1 stated that the Intrinsic and Extrinsic scales would be found orthogonal. This would confirm conclusions similar to Donahue (1984) that claim Intrinsic and Extrinsic represent two distinct motivations for being religious. The study did not confirm this hypothesis, finding the two sub-scales to be linearly related to each other. Instead, the results on the relationship of the sub-scales resemble the original intentions and results of Allport and Ross (1967) which measured a continuum of religious behavior ranging from Intrinsic to Extrinsic.

The traditional ROS bi-polar scoring method is based on the assumption that the Intrinsic and Extrinsic sub-scales are negatively correlated. A significant negative correlation ($-.285$) was obtained in Hypothesis 1, but neither these, nor the original findings have received much support in the literature. The mean correlation across 37 studies where $N = 8271$ yielded $r = -.06$ (Donahue, 1985). Using the Allport and Ross (1967) version of the of the ROS survey (the version with 20 items, and the version used here) and excluding the studies done with the Feagin (1964) version

the correlations between the two scales rise to $r = -.20$, $N=4952$. This correlation is close to the correlation obtained here, as well as Allport and Ross's (1967) original correlation ($r = -.21$). While differences between the two versions could be attributed to the deletion (by Feagin, 1964) of items in one of the scales, consistent negative correlations for the Allport and Ross (1967) version have been ignored, favoring the four-fold conceptualization. The four-fold system splits participants into the Intrinsic, Extrinsic, Indiscriminately Pro-religious, and Anti or Non-religious categories on the basis of scores obtained on the Intrinsic and Extrinsic sub-scales, and assumes the orthogonality of Intrinsic and Extrinsic.

To account for the fluctuation of the correlation of Intrinsic and Extrinsic across studies, Donahue (1984) has proposed the existence of a subject moderator variable that would influence the value of the correlation between Intrinsic and Extrinsic depending on characteristics of the population under study. He suggested religious conservatism could be a moderator of this correlation. In such a case, higher scores on Intrinsic would predispose the relationship for a negative correlation indicative of linearity. He believes that "it seems quite possible that the population value of the I-E [Intrinsic-Extrinsic] correlation is close to zero, representing orthogonal constructs" (Donahue, 1984, p. 404). These results stand in contrast to Donahue's

conclusions. This sample is not overly represented by Intrinsic (see Table 10), nor is it religiously conservative as a denominational college might be (see Tables 6 and 8), yet a significant negative correlation between the the Intrinsic and Extrinsic sub-scales was obtained.

With the amount of variation in the Intrinsic-Extrinsic correlation across studies not attributed to sampling, a moderator variable is an attractive explanation. While this research does not support the conceptualization of religious conservatism as the moderator, the continued use of the four-fold classification technique without an understanding of the way the Intrinsic and Extrinsic sub-scales are related gives the unfounded impression that they are linearly independent. Since this is clearly not the case, more attention to this correlation is necessary before blindly accepting the four-fold construct.

Hypothesis 2

Hypothesis 2 suggested that social desirability would not be correlated with the measures of religiousness. No evidence for correlation of the measures of social desirability with the measures of religiousness was found. Some of the existing literature does identify a relationship between SDS and the ROS. Watson, Hood, Morris, & Hall (1984) found a positive correlation between the four-fold category

"Intrinsic" and SDS. Batson and Ventis (1982) charge that the ROS is flawed by social desirability confounding. It appears that SDS is at least an occasional contaminant of religiousness. The conditions under which the relationship becomes evident are still unclear and may involve moderating variables that give the correlation its transient appearance.

Since the SDS, as measured by Marlowe and Crowne (1960), has received criticism for its claim to be primarily a measure of a tendency to respond in a socially desirable light, it was hoped that the relationships here might lend to a better understanding of the other aspects the SDS might be measuring. The absence of any significant correlations with measures of religiousness precludes any speculation regarding SDS as a personality trait such as defensiveness as it relates to religiousness.

The second part of Hypothesis 2 stated that Agreement Response Set would not be correlated with the measures of religiousness. ARS was found to be significantly correlated with both Intrinsic and Extrinsic religiousness. Participants scoring either high on the Extrinsic scale or low on the Intrinsic scale were more likely to acquiesce. This correlation supports the conceptualization of Intrinsic religiousness as motivated by a meaning endowing framework. A willingness to agree would require occasional denial of

core values and beliefs. The Intrinsically religious person would not feel the need to be pressured into agreeing with statements that run counter to their beliefs.

Extrinsic religiousness is motivated by more peripheral motivation. It is characterized as a religiousness of more superficial practices, traditions, and socialization would be more prone to influence from the environment to acquiesce. The concept of the "true believer" or the unquestioning acquiescence to a demagogic socio-religious leader or movement would characterize the capricious emphatic devotion that would accompany the Indiscriminately pro-religious or Extrinsic person. The ARS syndrome is implicated in this "true believer" personality by the tendency to agree with and show unquestioned support in an enthusiastic manner for a cause or belief.

Additionally, the ARS-ROS correlation documents the problem that warranted its inclusion as a variable of interest. All the items in the ROS are worded in a manner that the endorsing answer indicates an Extrinsic (or non-Intrinsic) response. The correlations of ROS with ARS reflect that some of the score on the ROS is an artifact of response set bias--a problem with many personality inventories (Christie and Lindauer, 1963). The revision of these questions so that a balance of direction in questioning is achieved would help separate this artifactual component of the ARS-ROS

correlation. Hoge (1973) has made one such attempt that has yet to receive validation. Other attempts would help to clarify this problem.

Although no hypotheses were made regarding the relationship of SDS and ARS, a significant negative relationship was found. This relationship would indicate that those participants high in acquiescent qualities are less likely to respond in a socially desirable way. While sounding counter-intuitive, the perception of SDS as a personality variable reflecting need for approval shows this correlation to be similar to one found by Mc Namara and Delamater (1984).

Mc Namara and Delamater (1984) used an assertion inventory that measured discomfort associated with self-assertion and the self-report of the likelihood of engaging in a specific behavior. They found that as SDS increased, assertion increased. They conceptualized SDS as a need for approval and a tendency to describe oneself in unrealistically positive ways. They concluded that the need to be liked (as measured with the SDS) energized the subject to be assertive, where as those with low needs to be liked (possibly depressed participants c.f. Tanaka-Matsumi and Kameoka, 1986) did not have the motivation to be assertive. If the ARS can be conceptualized as the inverse of the assertion index, in that it measures a willingness to

enthusiastically present oneself as unique, a SDS oriented respondent is energized to be an individual, allowing them to score non-agreement oriented responses. Similarly, a defended client has the defensive protection to make non-agreeing responses.

Hypothesis 3

Hypothesis 3, the main hypothesis of the study, suggested that a pattern of results would emerge that would show Intrinsics to be most accepting of therapy options, followed by Anti-religious, Extrinsics, and the relatively unaccepting Indiscriminately pro-religious group. This hypothesis was not confirmed.

The correlation of the Intrinsic scale with the Extrinsic scale prohibited the examination of the results in terms of the more traditional four categories of religiousness on which the hypothesis of therapist-client pairing acceptance was based (see Note 1). Even multiple regression with just Intrinsic, Extrinsic, SDS, and ARS as factors failed to find any significant correlations that would predict acceptance for the Total Acceptance Rating. Reviews like that of Donahue (1984) and others suggest that many variables that are mitigated by open-mindedness, such as therapist acceptance, would correlate with Intrinsic and Extrinsic religiousness in the proposed manner. This was not found to be the case with this study.

Possible reasons why differences in the acceptance of therapist-client pairs was not found for the independent variables would include the possibility that therapist-client acceptance does not vary. This was found not to be true as participants as a whole were more accepting of some pairings than others.

Another alternative for the explanation of the lack of an effect for Intrinsic and Extrinsic in predicting acceptance is that acceptance of therapist-client pairs may not be a factor of open-mindedness, and would therefore not vary with Intrinsic and Extrinsic religious predictors of acceptance related tasks. However, closer examination of individual pairings of therapist and client vignettes showed that religious nature of the clients in the vignettes was predictive of the acceptance of therapy vignettes. The relationship of religiousness and therapist-client acceptance was moderated by the religious nature of the pairing, and not the religiousness of the rating observer.

Summary of the post-hoc multiple regression analyses on individual cells

When the acceptance scores are examined for relationships with the independent variables by examining each pairing of therapist vignette and client vignette individually, a definite pattern emerges that was not evident at the level

of the Total Acceptance Rating (see Table 14). Significant beta values were found for independent variables predicting acceptance involving the first and third therapist vignettes.

The acceptance rating of the first therapist vignette in all three ratings was significantly correlated with Intrinsic religiousness. The nature of this correlation saw Intrinsically oriented participants rating the vignette of therapist 1, the religious therapist, with more acceptance and a more open-minded attitude about the potentials for therapy with all three clients. It is likely that Intrinsic participants, as opposed to Extrinsic participants, felt an alliance with the religious therapist vignette as it was portrayed as an intrinsically religious person. Perhaps seeing it as religious, and having positive religious attitudes, Intrinsic participants judged someone of their belief structure more uniquely qualified to assist clients with religious concerns.

The third therapist vignette, the anti-religious therapist, consistently received acceptance ratings that were correlated with an Extrinsic religious attitude. This relationship found those participants with Extrinsic attitudes more open-minded and optimistic about the potential for therapy for the anti-religious therapist with all three clients vignettes. Alternately, the non-

Extrinsically oriented participants could be more closed-minded and pessimistic about the potentials for therapy with this anti-religious therapist. It seems that Non-Extrinsic participants were most sensitive to the potential mismatches of a anti-religious therapist to clients with religious problems.

Table 14

Significant Beta Values (and their direction)
for Each Pairing of Client and Therapist

	Therapist 1	Therapist 2	Therapist 3
Client 1	I** (neg.)	none	E** (neg.)
Client 2	I** (neg.) E* (pos.) SDS* (pos.)	none	E* (neg.)
Client 3	I** (neg.)	none	E* (neg.)

(**p < .001, df(1, 314))
(*p < .01, df(1, 314))

I = intrinsic
E = Extrinsic
SDS = social desirability

Dependent Variable Post-hoc Analysis Discussion

The post-hoc analysis of the patterns of the dependent variable seems to indicate that participants did discriminate between the acceptability or successfulness of therapy as it depended on the therapist vignettes. Therapist 3, the anti-religious therapist, was the least accepted therapist vignette with all three client vignettes.

In light of the vignettes' perceived equal professional competence, therapist 3 obtained a "negative halo" that colored participants' acceptance of him as a good therapy match with all three client vignettes.

The vignette of the first therapist, on the other hand, was rated with different levels of acceptance with different client combinations. Raters were more accepting of therapist 1 vignette combinations for the client 2 vignette and the client 3 vignette. Client 2 was the vignette with the non-central religious pathology, and client 3 was the vignette with the positive religious contribution. It may be perceived that a therapist of religious conviction would be a bad match or unhelpful to a client with a central pathological religiousness. The general support for the therapist 1 vignette when compared to the vignette for therapist 3 may reflect rater support for therapists who support religious beliefs rather than suppress or reject them.

Indications that discrimination of client's acceptability and therapeutic potential occurred was found as well. Lower acceptance ratings were obtained for the client 1 vignette--the client with central pathological religious concerns. While the vignette of this first client was rated as having the same severity of symptoms in the pre-test, it seems that the nature of the religious concerns cast an impression of

therapy difficulties that the therapists with religious options might have difficulties handling. Participants were more accepting of the neutral therapist with this client. Participants might have thought the religious opinions of the other therapists might hamper their judgment with this religiously troubled client.

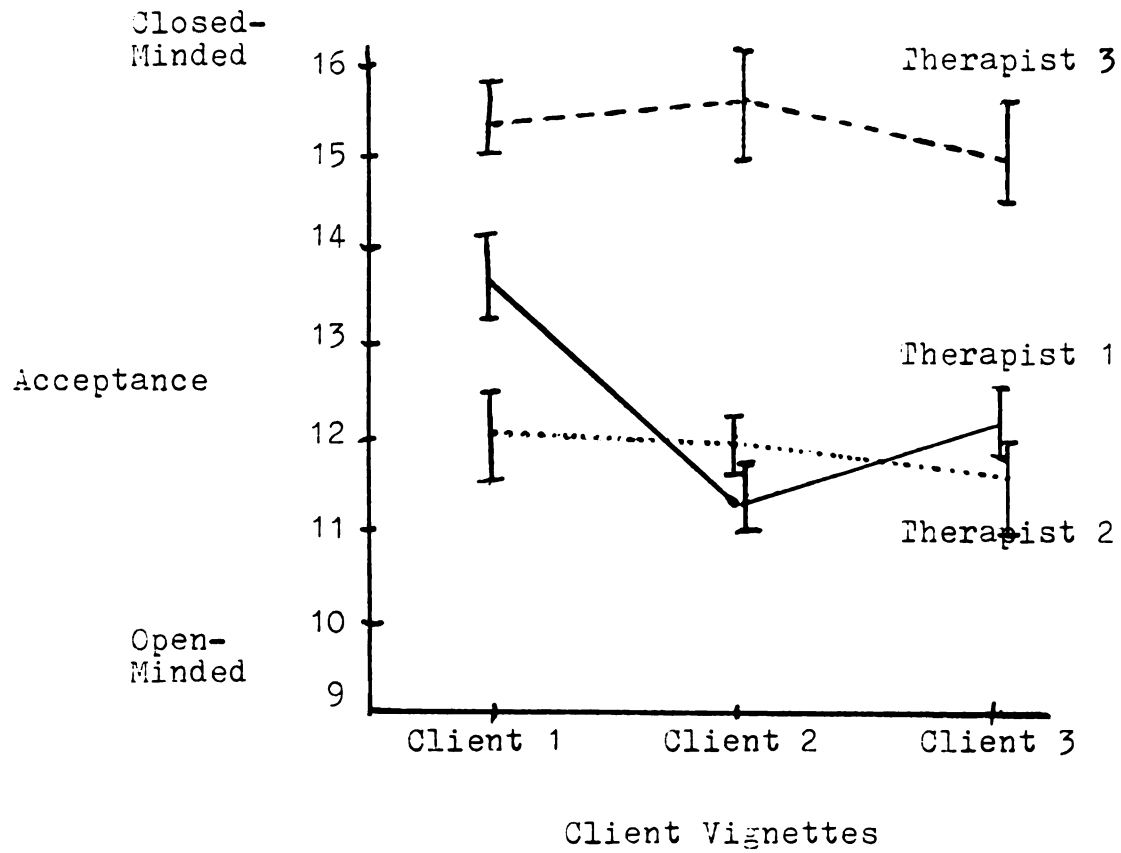
The lower acceptance of the C1T1 pairing when compared to the other client vignettes with therapist 1 vignette indicates that participants are sensitive to issues that might arise in the relationship of therapist to client.

The client 2 vignette, it should be remembered, was rated as having significantly better therapy potential than the other two client vignettes. The role this imbalance plays in the acceptability of the pairings is uncertain, and judgments based on simple examination of the dependent variable patterns should be conscious of this possible influence.

Clearly, the post-hoc analyses have raised questions for which the scales were not validated. For reliable, clear answers on the perception of therapist vignettes which vary in their religiousness and client vignettes that vary in the centrality of religion in their pathology, new vignettes must be constructed and tested. In addition to quality vignettes, dependent variable measures that go beyond the scope of the acceptance ratings employed here should be

considered. In some regards the acceptance measure was difficult to interpret beyond the intended purpose as the component of open-mindedness or dogmatism. A measure "good match" or "good potential" might have provided additional useful information. The items that compose the acceptance score employed in this study might make a good starting place for such scales.

Figure 2
Means and 95% confidence intervals
for acceptance ratings



NOTES

Note 1

The third hypothesis requires the division of the participants into the fourfold classification of the ROS and then determining the acceptance (for each group) of the therapist-client pairings. Traditional methods of analyzing this type of data involved an analysis of variance, with the expected results of a main effect for intrinsic, extrinsic, and a significant interaction. Because of the wish to control for SDS and ARS, unequal subjects in the cells, and the power that is lost when continuous variables like intrinsic and extrinsic are artificially dichotomized, multiple regression was selected for the analysis rather than analysis of variance.

The mainframe computer statistical package SPSS was used to perform the multiple regression computations on the dependent variables measuring the acceptance of therapist and client combinations. The independent variables of intrinsic and extrinsic religiousness, social desirability, and agreement response set scale scores were used as predictor variables in the equations. An independent variable computed as the product of intrinsic and extrinsic religiousness that would represent the effect of the interaction (essential for the interpretation of hypothesis three) was not included in the analyses since the intrinsic and extrinsic scales were found to be linearly related (see Results section, Hypothesis 1), and inclusion would violate the assumptions of independence for the analysis of variance.

The acceptance scores were subjected to both step-wise and hierachical regression procedures. In the step-wise regression, independent variable correlates were included in the solution equation strictly on the basis of their relative value in the ability to generate the best regression solution. In the hierarchical method, which was actually a mix of step-wise and hierarchical methods, intrinsic and extrinsic were given priority to be entered first (in either order), followed by social desirability and agreement response set (in either order). The hierarchical method reflects the intentions of the additional scales most appropriately, including them as a control against flaws of the construction of the intrinsic and extrinsic scales without highlighting them as primary correlates in the solution equation. In the analyses, the results of the hierarchical method will be presented first, with deviations from the order or effect that are evident through step-wise procedures noted afterwards.

Note 2

In most tables and analyses the convention of referring to the component dependent variables by the cell code C?T? will be followed. For example, the acceptance rating for the pairing of therapist 1 with client 1 will be referred to as C1T1. Similarly, The acceptance of the pairing of client 3 with therapist 2 will be noted as C3T2.

APPENDIX 1

Appendix 1

Allport and Ross (1967) version of the ROS:

Intrinsic Scale

1. I try hard to carry my religion over into all my other dealings in life.
2. Quite often I have been keenly aware of the presence of God or of the Divine Being.
3. My religious beliefs are what really lie behind my whole approach to life.
4. The prayers I say when I'm alone carry as much meaning and personal emotion as those said by me during services.
5. Religion is especially important to me because it answers many questions about the meaning of life.
6. It is important to me to spend periods of time in private religious thought and meditation.
7. If not prevented by unavoidable circumstances, I attend church at least once a week or oftener, two or three times a month, once every month or two, rarely.
8. If I were to join a church group, I would prefer to join A) a Bible study group or, B) a social fellowship.
9. I read literature about my faith (or church) frequently, occasionally, rarely, never.

Extrinsic Scale

1. What religion offers most is comfort when sorrow and misfortune strike.
2. One reason for my being a church member is that such membership helps to establish a person in the community.
3. The purpose of prayer is to secure a happy and peaceful life.
4. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.
5. It doesn't matter so much what I believe as long as I lead a moral life.
6. The Church is most important as a place to formulate good social relationships.
7. Although I believe in my religion, I feel there are many more important things in life.
8. I pray chiefly because I have been taught to pray.
9. A primary reason for my interest in religion is that my church is a congenial social activity.
10. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well being.
11. The primary purpose of prayer is to gain relief and protection.

In the materials packet, the scales were mixed through each other according to the standardized order and prefaced by this statement:

The statements below represent a wide variety of opinions and beliefs about religion. We want to know how people differ on these questions and statements. Please read each item carefully and indicate on the score sheet that position which most accurately expresses your true feeling. Sometimes people tend to mark such statements in a way that would be most socially acceptable, rather than the way they really feel. We want the latter -- your true feelings. (Note: if any item is not particularly pertinent to your church or faith, try answering it as you feel you would if it were appropriate for you.) PLEASE MARK THE MOST APPROPRIATE RESPONSE

APPENDIX 2

Appendix 2

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.

- ___ 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- ___ 2. I never hesitate to go out of my way to help someone in trouble.
- ___ 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- ___ 4. I have never intensely disliked anyone.
- ___ 5. On occasion I have had doubts about my abilities to succeed in life.
- ___ 6. I sometimes feel resentful when I don't get my way.
- ___ 7. I am always careful about my manner of dress.
- ___ 8. My table manners at home are as good as when I eat out in a restaurant.
- ___ 9. If I could get into a movie without paying for it and be sure I was not seen, I would probably do it.
- ___ 10. On a few occasions, I have given up doing something because I have thought too little of my ability.
- ___ 11. I like to gossip at times.
- ___ 12. There have been times when I felt like rebelling against authority even though I knew they were right.
- ___ 13. No matter who I'm talking to, I'm always a good listener.
- ___ 14. I can remember "playing sick" to get out of something.
- ___ 15. There have been occasions when I took advantage of someone.

- ___ 16. I'm always willing to admit it when I make a mistake.
- ___ 17. I always try to practice what I preach.
- ___ 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
- ___ 19. I sometimes try to get even, rather than forgive and forget.
- ___ 20. When I don't know something I don't at all mind admitting it.
- ___ 21. I am always courteous, even to people who are disagreeable.
- ___ 22. At times I have really insisted on having things my own way.
- ___ 23. There have been occasions when I have really felt like smashing things.
- ___ 24. I would never think of letting someone else be punished for my wrongdoings.
- ___ 25. I never resent being asked to return a favor.
- ___ 26. I have never been irked when people expressed ideas very different from my own.
- ___ 27. I never make a long trip without checking the safety of my car.
- ___ 28. There have been times when I was quite jealous the good fortune of others.
- ___ 29. I have almost never felt the urge to tell someone off.
- ___ 30. I am sometimes irritated by people who ask favors of me.
- ___ 31. I have never felt that I was punished without cause.
- ___ 32. I sometimes think when people have a misfortune they only get what they deserved.
- ___ 33. I have never deliberately said something that hurt someone's feelings.

APPENDIX 3

APPENDIX 3

For the following questions, please rate how each statement applies to you in terms of the scale below:

- | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|----------|----------|---|--------|-------|----------|----------|
| STRONGLY | SLIGHTLY | | NO | | SLIGHTLY | STRONGLY |
| DISAGREE | DISAGREE | DISAGREE | ANSWER | AGREE | AGREE | AGREE |
| ___ | 1. | Novelty has a great appeal to me. | | | | |
| ___ | 2. | I crave excitement. | | | | |
| ___ | 3. | It is a wonderful feeling to sit surrounded by your possessions. | | | | |
| ___ | 4. | There are only a few things more satisfying than really to splurge on something--books, clothes, furniture, etc. | | | | |
| ___ | 5. | Only the desire to achieve great things will bring a man's mind into full activity. | | | | |
| ___ | 6. | Nothing is worse than an offensive odor. | | | | |
| ___ | 7. | In most conversations, I bounce from topic to topic. | | | | |
| ___ | 8. | I really envy the man who can walk up to anybody and tell him off to his face. | | | | |
| ___ | 9. | I could really shock people if I said all of the dirty things I think. | | | | |
| ___ | 10. | There are few more miserable experiences than going to bed at night knowing you are so upset that worry will not let you sleep. | | | | |
| ___ | 11. | I tend to make decisions on the spur of the moment. | | | | |
| ___ | 12. | Little things upset me. | | | | |
| ___ | 13. | Drop reminders of yourself wherever you go and your life's trail will be remembered. | | | | |
| ___ | 14. | I like nothing better than to have breakfast in bed. | | | | |
| ___ | 15. | My mood is easily influenced by the people around me. | | | | |

APPENDIX 4

APPENDIX 4

CLIENT #1:

You are considering referring your friend to psychotherapy because of a marked decrease in appetite and spontaneity the last three days. In these last few days your friend has done little more than sit in a small room and read religious literature from "fanatical" religious groups. The parents report that your friend had been a "normal" teenager, with good grades, plenty of friends, until about one year ago when solitude and preoccupations began to replace the animated behavior they remembered. In the past six months your friend would occasionally refuse to go to school, and retreated from social interactions. Last month, this friend began talking "gibberish" about spirits, the devil, magic, and being a prophet of God--things that were totally foreign to background previous to a brief encounter with a charismatic "street preacher" about six months ago. Earlier in the week this friend mentioned a wish to enroll in a training institute in order to become a member of the "sacred society, so God can talk to me easier."

RATINGS FOR THERAPIST #1:

- 78. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
- 79. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
- 80. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
- 81. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
- 82. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #2:

- 83. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.

84. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
85. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
86. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
87. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #3:

88. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
89. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
90. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
91. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
92. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

CLIENT #2:

You are considering referring your friend to psychotherapy because thoughts about death, and a fear of falling or fainting has restricted your friend's interactions and resulted in fearfully spending the last three days in bed. Your friend had a comfortable childhood, and grew up in a home where the parents catered to many of your friend's needs in what seemed to be an over-protective situation. In the home environment your friend proved to be socially active and well-liked. More recently, this friend has become quite withdrawn and you are one of only a couple people that this friend considers "close." In the last few months, your friend has made many decisions that seem to be planned attempts to become isolated from both family and friends. Daily activities are restricted as well, and the thought of shopping and doing other domestic errands has become increasingly threatening and are filled with

preoccupations about dying. Now unable to go anywhere, your friend ruminates, "Now that I don't want to die, God will answer my childhood prayers and I will die by falling in front of a truck, or fainting in a parking lot and getting hit..."

RATINGS FOR THERAPIST #1:

93. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
94. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
95. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
96. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
97. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #2:

97. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
98. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
99. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
100. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
101. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #3:

102. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.

103. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
104. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
105. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
106. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

CLIENT #3:

You are considering referring your friend to a psychotherapist after the friend physically attacked another student who was "watching me too closely." Your friend has changed a great deal since your first meeting a year ago. Originally your friend appeared to be a socially oriented person with many friends and had never been involved in drugs or heavy drinking. More recently, your friend has grown restless, uncomfortable, and unhappy with the lack of privacy and peace in the dormitory. Gradually, insomnia and fears of being watched began to bother your friend, and the R.A. reported your friend had complained of a fear of being followed and harassed by the residence hall staff regarding drugs on campus despite not being involved in any such activity. The incident which caused you to suggest that your friend seek help was an attack three days ago on one of the residence hall staff which appears to have been unprovoked. Your friend has told you that relying on his/her spiritual beliefs has been helpful in these confusing moments but feelings of being overwhelmed are still powerful.

RATINGS FOR THERAPIST #1:

107. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
108. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
109. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
110. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.

111. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #2:

112. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
113. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
114. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
115. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
116. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

RATINGS FOR THERAPIST #3:

117. How comfortable are you in referring your friend to this therapist? A. very comfortable B. fairly comfortable C. neutral D. fairly uncomfortable E. very uncomfortable.
118. How helpful do you believe this therapist will be in helping this friend? A. very helpful B. fairly helpful C. neutral D. fairly useless E. very useless.
119. How difficult will it be for this therapist to help this person? A. very difficult B. fairly difficult C. neutral D. fairly easy E. very easy.
120. How likely would you be to refer your friend to this therapist? A. very likely B. fairly likely C. neutral D. fairly unlikely E. very unlikely.
121. Do you think that the match between the therapist and the client is a good one for therapy? A. a very good match B. a fairly good match C. neutral D. a fairly poor match E. a very poor match.

APPENDIX 5

APPENDIX 5

THERAPIST DESCRIPTIONS

THERAPIST #1:

The career of this therapist began as a chaplain in a state psychiatric hospital. When the therapist's interests turned towards the pathological and mental aspect of patients, the therapist decided to return to school and supplement the Masters of Divinity degree with a Ph.D. in clinical psychology. The therapist now works as a psychologist in the wing where former responsibilities included being a chaplain. The therapist finds working in the hospital more rewarding since the career change, and enjoys having an impact on clients. Licensed to practice psychology in the state of Michigan, this therapist also sees a few clients outside of obligations to the hospital. This therapist tries not to tell clients what they should and should not believe, but the previous training and personal values of this therapist bring a decided religious orientation to psychotherapy with clients.

THERAPIST #2:

This therapist's career began as an administrator of an inpatient wing of the local Community Mental Health Center. Although the therapist had a Masters in business administration, a new interest in clinical work was sparked through contact with the patients. The therapist went back to school to get some additional training and subsequently earned a Ph.D. in clinical psychology. Upon the completion of the degree, the therapist changes jobs to that of a psychotherapist. As a licensed psychologist in Michigan, the therapist has been seeing a few clients at home in addition to working at the center. Although the therapist is moderately religious, this therapist places relatively little emphasis on religious issues in psychotherapy when compared to therapist #1.

THERAPIST #3:

This therapist was originally employed as a masters degree trained resource librarian for a large psychiatric hospital. Duties for that job included the research of various topics about which the staff needed information in treating patients. Because the therapist's work as a researcher showed promise in terms of clinical insight, this therapist decided to take the training grant the hospital offered employees wishing to continue their education. Now trained as a Ph.D. in clinical psychologist, and licensed in the state of Michigan, the therapist operates a small private practice of a few clients in addition to duties at the hospital. Because of the new skills acquired in the degree

program a promotion was granted, and the therapist is now a psychologist at the hospital. While the therapist's position is to avoid dictating values to clients, this therapist's atheistic opinions may have some impact on how he/she helps clients work through religious issues.

APPENDIX 6

APPENDIX 6

**Cover letter and consent form
(Version 1, therapist and client materials first condition).**

INFORMATION SHEET and DEPARTMENTAL CONSENT FORM

This research is being conducted by Martin Waalkes under the supervision of Dr. Norman Abeles, Professor of Psychology, the Department of Psychology, Michigan State University.

On the following pages there are descriptions of three psychologists trained in psychotherapy (therapists) and three people that have developed symptoms commonly associated with mental illness (clients). For this part of the experiment you are to read the descriptions of the clients as if the person described is a close friend of yours. Since this person is a close friend, you are concerned that they should get the best type of help possible. You are aware that different types of problems may require different types of help, and you want to make the best match possible between your friend and each of the three therapists described on the next page. For each of the three clients described, please give your opinions about suggesting that this particular friend should see each of the therapists by responding to the questions after each client and marking these responses on the RED ANSWER SHEET provided in this packet. Do NOT put your name on this RED answer sheet.

PLEASE NOTE THAT THE FIRST QUESTION IS NUMBER 78. Please make your responses to each numbered question correspond to the same number on the answer sheet (this will require that you begin marking your answers on the score sheet on number 78). Please proceed through the booklet one page at a time in the order the pages are stapled (do not start with question number 1.)

After you complete the referral exercise there are three brief questionnaires and an informational sheet that need to be completed. These items begin with the number 1 and you should answer them on the space for number 1 on your RED answer sheet. Please be as honest as you can and complete every item. If some item seems inappropriate for you, please try to give some answer that fits best rather than leaving it blank.

All the information in the vignettes and questionnaires will be strictly confidential. No attempts to examine any one person's responses will be made as the responses will only be considered in groups. Your name on the accompanying credit sheet is for participation records only, and will be

removed from the rest of the materials. Since your responses will be essentially anonymous, feel free to be completely honest.

Participation in this experiment usually takes 1/2 hour and is strictly voluntary. There is no guarantee that any beneficial results will come from your participation. If at any time you wish to discontinue your participation in the experiment, for any reason, you may leave without explanation. Since this is intended to be an educational experience for you as well, there will be a five to ten minute explanation of the purpose of this research and some of the background of the instruments that are utilized within the research.

If you wish to find out about the the results of your participation, a summary will be available in the psychology office located in Snyder hall in approximately 6 months, or you may contact MARTIN WAALKES (332-2418) with any questions you may have.

The experiment has been explained to me and I understand the explanation that has been given and what my participation will involve:

SIGNED: _____ DATE: _____
PLEASE DETACH THIS FROM THE TEST BOOKLET AND HAND IN WITH
COURSE CREDIT MATERIALS WHEN YOU ARE FINISHED

Cover letter and consent form
(version 2, questionnaires first condition).

INFORMATION SHEET and DEPARTMENTAL CONSENT FORM

This research is being conducted by Martin Waalkes under the supervision of Dr. Norman Abeles, Professor of Psychology, the Department of Psychology, Michigan State University.

On the following pages there are three questionnaires that need to be completed. Beginning with item number 1, mark your responses on the RED ANSWER SHEET. Do NOT put your name on this Red answer sheet. Please be as honest as you can and complete every item. If some item seems inappropriate for you, please try to give some answer that fits best rather than leaving it blank.

After you complete the questionnaires and informational sheet, you will find descriptions of three psychologists trained in psychotherapy (therapists) and three people that have developed symptoms commonly associated with mental illness (clients). For this part of the experiment you are to read the descriptions of the clients as if the person described is a close friend of yours. Since this person is a close friend, you are concerned that they should get the best type of help possible. You are aware that different types of problems may require different types of help, and you want to make the best match possible between your friend and each of the three therapists described on the next page. For each of the three clients described, please give your opinions about suggesting that this particular friend should see each of the therapists by responding to the questions after each client and marking these responses on the RED ANSWER SHEET.

All the information in the vignettes and questionnaires will be strictly confidential. No attempts to examine any one person's responses will be made as the responses will only be considered in groups. Your name on the accompanying credit sheet is for participation records only, and will be removed from the rest of the materials. Since your responses will be essentially anonymous, feel free to be completely honest.

Participation in this experiment usually takes 1/2 hour and is strictly voluntary. There is no guarantee that any beneficial results will come from your participation. If at any time you wish to discontinue your participation in the experiment, for any reason, you may leave without explanation. Since this is intended to be an educational experience for you as well, there will be a five to ten minute explanation of the purpose of this research and some

of the background of the instruments that are utilized within the research.

If you wish to find out about the the results of your participation, a summary will be available in the psychology office located in Snyder hall in approximately 6 months, or you may contact MARTIN WAALKES (332-2418) with any questions you may have.

The experiment has been explained to me and I understand the explanation that has been given and what my participation will involve:

SIGNED: _____ DATE: _____

APPENDIX 7

•

APPENDIX 7

HANDOUT TO PARTICIPANTS IN "PSYCHOLOGICAL REFERRALS"

Please use this information for you personal understanding of the psychology of religious behavior, but for the integrity of the experiment with future participants please do not discuss it with other Psychology 160 or 170 students until the end of the term. Thank-you

MEASURING RELIGIOUS BEHAVIOR:

Allport and Ross (1967) four-fold typology:

Allport originally postulated two distinctly different ways of being religious. **INTRINSIC** religiousness was described as an inner-directed spirituality that motivates the person. **EXTRINSIC** religiousness is a religion of culture where the person incorporates the church and religion as a part of socialization.

It was soon recognized that there were two additional types of religiousness. Those who were **NON (or ANTI) RELIGIOUS**, who did not respond to either the means or end logic of the intrinsic or extrinsic religiousness. The **INDISCRIMINATELY PRO-RELIGIOUS** were described as unanimously approving of **BOTH** extrinsic and intrinsic religious attitudes -- essentially approving of anything that posed itself as religious.

Other methods of looking at religiousness from a psychological perspective:

Allport was not the only person to see religiousness as understandable in scientific examination. Glock and Stark (1966) identified a multi-dimensional approach that assessed experiential, ideological, ritualistic, intellectual, and consequential components. Batson and Ventis (1982) have speculated about a system that identifies influences on the religiousness of a person from the environment, influences from within the person, and a quality of religious seeking termed "quest" that characterized the personal search for meaning.

The utility of assessing religion:

The utility of personality tests like those explained above has a rich history in psychology. Being able to separate those effects due to a persons religious behaviors and attitudes allows a greater understanding of the motivation of human behaviors. Understanding is prerequisite to making

useful interventions, aside from being useful in its own right.

Although estimates of the percentage of people who believe in a God, or consider themselves religious vary, it is certain that a formidable proportion of the population have religious influences in their personality. With some people this influence is profound, with others it is superficial. Conceptualizations of religious behavior and attitudes must recognize these differences if they are to have utility.

An example of an application of religious assessment to prediction of behavior:

The aforementioned typology of Allport and Ross has been used extensively in psychology to explain and understand behavior. Most frequently it is used to measure those behaviors which would fall under the general heading of dogmatism or open-mindedness. In the 1960's the attention of this was focused on prejudice where psychologists tried to explain the seemingly paradoxical finding of church-going people being more prejudiced than those who didn't attend church. Allport's typology helped explain that intrinsically religious persons were like the non-religious people and maintained an accepting non-prejudiced posture towards others and that the correlation of prejudice and church attendance was mostly accounted for by the indiscriminately pro-religious and extrinsically religious people who are characterized by inflexibility and rigid thinking.

The hypothesis of this experiment:

To remove the effects of responding in a way that would make a person look good to others and that is characterized by a compliant attitude, two extra scales were used. They were the social desirability scale of Crowne and Marlowe (1964), and the Agreement Response Set scale of Couch and Keniston (1960). Since the measures of religiousness are sometimes clouded by these two factors, the additional scales help clarify exactly the effects of religion on the referral exercise. The stories, or vignettes, that you rated therapists effectiveness and acceptance for are an example of open-mindedness. Theoretically any of the therapists could have worked equally well with any of the clients.

In fact, they were all created and tested to be certain that they were perceived the same. However, according to the theory that some religious types are more open minded, it is suspected that differences in the acceptance and perception of the therapist will arise as some of the therapists are outwardly more religious than others. The more open-minded Intrinsics, and the inherently open-minded non-religious persons are thought to be most open-minded when it comes to

choosing a therapist. The extrinsic and indiscriminately pro-religious are suspected to be very dogmatic, in essence believing that only the religious therapist could help the clients.

If you are interested in finding out if these hypotheses are proven, an abstract describing the results will be available in the department of psychology office, 139 Snyder Hall at the beginning of fall term.

If you have any questions about the experiment that you would like to have answered, contact MARTIN WAALKES 332-2418.

Below is a list of some of the key articles in the psychology of religion and religious assessment if you are interested in doing some additional reading.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432-443.

Batson, C. D., & Ventis, W.L. (1982). *The religious experience: A social-psychological perspective*. New York: Oxford University Press.

Couch, A. and Keniston, K. (1960). Yeasayers and naysayers: Agreeing response set as a personality variable. *Journal of Abnormal and Social Psychology*, 60, 151-174.

Crowne, D. P. & Marlowe, D. (1964). *The approval motive: Studies in evaluative dependence*. New York: Wiley.

Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology*. 48, 400-419.

Glock, C. Y. & Stark, R. (1966). *Christian beliefs and anti-Semitism*. New York: Harper & Row.

Rokeach, M. (1960). *The open and closed mind: Investigations into the nature of belief systems and personality systems*. New York: Basic Books.

APPENDIX 8

APPENDIX 8

Pretest questions asked of participants from
the subject pool.

The vignettes are identical to the
narratives in Appendix 4 and Appendix 5.

EVALUATION OF THERAPISTS

Please read the descriptions of the three therapists. While reading these descriptions, be aware of possible differences in training, approach, and other aspects of the therapist's personality or background which could influence effectiveness or their ability to work with different types of clients. Once you have read all three descriptions, please give your opinions on the following questions by circling the corresponding number for each therapist.

Therapist effectiveness: the ability of the therapist to form a therapeutic relationship with the client and work together for positive change in the client's functioning.

	Very Effective					Very Ineffective				
Therapist 1:	5	4	3	2	1					
Therapist 2:	5	4	3	2	1					
Therapist 3:	5	4	3	2	1					

Training: The degree to which the therapist has been properly educated, and has received experiences that are relevant to the task of psychotherapy.

	Very Well-trained					Very Poorly-trained				
Therapist 1:	5	4	3	2	1					
Therapist 2:	5	4	3	2	1					
Therapist 3:	5	4	3	2	1					

Religiousness: The extent to which the therapist has an active spiritual life, and incorporates this spirituality and concern for religion into an integrated lifestyle.

	Very Religious			Very Non-Religious	
Therapist 1:	5	4	3	2	1
Therapist 2:	5	4	3	2	1
Therapist 3:	5	4	3	2	1

Please indicate your opinion on this set of questions by choosing a therapist that best fits the description given. (These 6 items were only used with the graduate student screening)

1. Which of the three therapists would you expect to have the poorest record of effectiveness? (choose one)

- ☐. Therapist 1
- ☐. Therapist 2
- ☐. Therapist 3

2. Which of the three therapists appear most competent? (choose one)

- ☐. Therapist 1
- ☐. Therapist 2
- ☐. Therapist 3

3. Which of the three therapists would appear most effective with young adults? (choose one)

- ☐. Therapist 1
- ☐. Therapist 2
- ☐. Therapist 3

4. Which of the three therapist appear to be the most religious? (choose one)

- ☐. Therapist 1
- ☐. Therapist 2
- ☐. Therapist 3

5. Which of the three therapists would you suspect would be least able to be helpful to clients? (choose one)

- ☐. Therapist 1
- ☐. Therapist 2
- ☐. Therapist 3

6. Which of the three therapist appear to be the least religious? (choose one)

____. Therapist 1

____. Therapist 2

____. Therapist 3

CLIENT EVALUATION

Please read the descriptions of the three clients. While reading these descriptions, be aware of possible differences in onset, duration, frequency, and intensity of the symptoms. Also be aware of personality variables, and characteristics of the case that may provide clues regarding the effectiveness of possible interventions. Once you have read all three descriptions, please give your opinions on the following questions by circling the corresponding number for each client.

Potential for therapy: The ability of the client to form a relationship with a therapist and benefit from the process of psychotherapy.

	Excellent Potential				Poor Potential
Client 1:	5	4	3	2	1
Client 2:	5	4	3	2	1
Client 3:	5	4	3	2	1

Severity of symptoms: The extent to which the symptoms are entrenched in the personality, and the difficulty with which change can be brought about.

	Very Severe				Very Superficial
Client 1:	5	4	3	2	1
Client 2:	5	4	3	2	1
Client 3:	5	4	3	2	1

Role of religion: The extent to which religious issues are central to the development, maintenance, and prognosis of the mental health of the client.

	Very Central			Very Peripheral	
Client 1:	5	4	3	2	1
Client 2:	5	4	3	2	1
Client 3:	5	4	3	2	1

Please indicate your opinion on this set of questions by choosing the client that is best described in terms of the characteristics of the question. (These 6 questions were only asked of the graduate student screening sample.)

1. Which of the clients has the poorest prognosis for therapy? (choose one)

- ___ Client 1
- ___ Client 2
- ___ Client 3

2. Which of the clients seem to be having the most trouble due to religious issues? (choose one)

- ___ Client 1
- ___ Client 2
- ___ Client 3

3. Which of the clients is likely to improve the most? (choose one)

- ___ Client 1
- ___ Client 2
- ___ Client 3

4. Which of the clients has the least amount of religious concerns that contributed to the worsening of the clients condition? (choose one)

- ___ Client 1
- ___ Client 2
- ___ Client 3

5. Which client is most disturbed in relation to the previous normal functioning? (choose one)

- ___ Client 1
- ___ Client 2
- ___ Client 3

6. Which Client would you expect to recover first if all were treated by the same therapist simultaneously? (choose one)

- ☐. Client 1
- ☐. Client 2
- ☐. Client 3

REFERENCES

REFERENCES

- Adams, J. E. (1970). Competent to counsel. Phillipsburg, NJ: Presbyterian and Reformed.
- Adams, J. E. (1973). The Christian counselor's manual. Nutley, NJ: Presbyterian and Reformed.
- Allport, G. W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.
- Allport, G. W. (1966). Traits revisited. American Psychologist, 21, 1-10.
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. Journal of Personality and Social Psychology, 5, 432-443.
- American Psychiatric Association (1981). DSM-III (3rd ed.) case book. Washington D. C.: Author.
- Batson, C. D. (1976). Religion as prosocial: Agent or double agent? Journal for the Scientific Study of Religion, 15, 29-45.
- Batson, C. D., Naifeh, S. J., & Pate, S. (1978). Social desirability, religious orientation and prejudice. Journal for the Scientific Study of Religion, 17, 31-41.
- Batson, C. D., & Ventis, W.L. (1982). The religious experience: A social-psychological perspective. New York: Oxford University Press.
- Bergin, A. E., Richards, P. S., & Masters, K. S. (unpublished-submitted) Intrinsic and extrinsic religiousness in a mormon sample: Relations with anxiety, personality, and self-control. Brigham Young University.
- Beutler, L. E., Jobe, A. M., & Elkins, D. (1974). Outcomes in group psychotherapy: Using persuasion theory to increase treatment efficiency. Journal of Consulting and Clinical Psychology, 42, 547-553.
- Bolt, M. (1977). Religious orientation and death fears. Review of Religious Research, 19, 73-76.
- Brown, L. B. (1964) Classification of religious orientation. Journal for the Scientific Study of Religion, 4, 91-99.

- Bustanoby, A. (1976) You can change your personality; Make it a spiritual asset. Grand Rapids: Zondervan.
- Couch, A. and Keniston, K. (1960). Yeasayers and naysayers: Agreeing response set as a personality variable. Journal of Abnormal and Social Psychology, 60, 151-174.
- Crabb, L. J. Jr. (1977) Effective biblical counseling. Grand Rapids: Zondervan.
- Cristie, R., & Lindhauer, F. (1963) Personality structure. Annual Review of Psychology, 14, 201-230.
- Crowne, D. P & Marlowe, D. (1960) A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 24, 349-354.
- (1964). The approval motive: Studies in evaluative dependence. New York: Wiley.
- Dittes, J. E. (1971). Typing the typologies: Some parallels in the career of church-sect and extrinsic-intrinsic. Journal for the Scientific Study of Religion, 10, 275-383.
- Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. Journal of Personality and Social Psychology. 48, 400-419.
- Dougherty, S. G., & Worthington, E. L. (1982) Preferences of conservative and moderate Christians for four Christian counselor's treatment plans. Journal of Psychology and Theology. 10, 346-354.
- Falkner, J. & De Jong, G. (1966) Religiosity in 5-D: An empirical analysis. Social Forces, 45, 246-254.
- Feagin, J. R. (1964). Prejudice and religious sic types: A focused study of Southern fundamentalists. Journal for the Scientific Study of Religion, 4, 3-18.
- Glock, C. Y. & Stark, R. (1966). Christian beliefs and anti-Semitism. New York: Harper & Row.
- Gorsuch, R. L., & Aleshire, D. (1974). Christian faith and ethnic prejudice: A review and interpretation of the literature. Journal for the Scientific Study of Religion, 13, 281-307.
- Gurin, G., Veroff, J. & Feld, S. (1960) Americans view their mental health. New York: Basic.

- Hilty, D. M., Morgan, R. L., & Burns, J. E. (1984). Hunt and King revisited: Dimensions of religious involvement. Journal for the Scientific Study of Religion, 23, 252-266.
- Hoge, D. R. (1972). A validated intrinsic religious motivation scale. Journal for the Scientific Study of Religion, 11, 181-197.
- Hood, R. W. Jr. (1971). A comparison of the Allport and Feagin scoring procedures for intrinsic/extrinsic religious orientation. Journal for the Scientific Study of Religion, 10, 370-374.
- (1978). The usefulness of the indiscriminately pro and anti categories of religious orientation. Journal for the Scientific Study of Religion, 17, 419-431.
- Hunsberger, B. (1978). The religiosity of college students: Stability and change over years at university. Journal for the Scientific Study of Religion, 17, 159-164.
- Hunsberger, B. and Ennis, J. (1982). Experimenter effects in studies of religious attitudes. Journal for the Scientific Study of Religion, 21, 131-137.
- Hunt, R. A., & King, M. B. (1971). The intrinsic-extrinsic concept: A review and evaluation. Journal for the Scientific Study of Religion, 10, 339-356.
- Kahoe, R. D. (1974). Personality and achievement correlates of intrinsic and extrinsic religious orientation. Journal of Personality and Social Psychology, 29, 812-818.
- (1976). Comment on Thompson's "Open-mindedness and indiscriminant antireligious orientation." Journal for the Scientific Study of Religion, 15, 91-93.
- (1977). Intrinsic religion and authoritarianism: a differentiated relationship. Journal for the Scientific Study of Religion, 16, 179-183.
- Kahoe, R. D., & Dunn, R. F. (1975). The fear of death and religious attitudes and behavior. Journal for the Scientific Study of Religion, 14, 379-382.
- King, M. B. (1967). Measuring the religious variable: Nine proposed dimensions. Journal for the Scientific Study of Religion, 6, 173-190.
- King, M. B. & Hunt, R. (1972) Measuring the religious variable: Replication. Journal for the Scientific Study of Religion, 11, 240-251.

- (1975) Measuring the religious variable: National replication. Journal for the Scientific Study of Religion, 14, 13-22.
- Kojetin, B. A., McIntosh, D. N., Bridges, R. A., and Spilka, B. (personal communication) Quest: Constructive search or religious conflict? A research note. University of Minnesota and University of Denver.
- Mc Namara, J. R., & Delamater, R. J. (1984) The Assertion Inventory: It's relationship to social desirability and sensitivity to rejection. Psychological Reports, 55, 719-724.
- Narramore, C. M. (1960) The psychology of counseling. Grand Rapids: Zondervan.
- (1966) Encyclopedia of psychological problems. Grand Rapids: Zondervan.
- Nederhof, A. J. (1985) Methods of coping with social desirability bias. European Journal of Social Psychology, 15, 263-280.
- Niebuhr, H. R. (1929). The social sources of denominationalism. New York: Holt.
- Parker, C. A. (1971). Changes in religious beliefs of college students. in Strommen, M. P. (ed.) Research on Religious Development: A Comprehensive Handbook. New York: Hawthorne Books.
- Putney, S. & Middleton, R. (1961). Dimensions and correlates of religious ideologies. Social Forces, 39, 285-290.
- Robinson J. P., & Shaver, P. R. (1973). Measures of social psychological attitudes. Ann Arbor, MI: Institute for Social Research.
- Rokeach, M. (1960). The open and closed mind: Investigations into the nature of belief systems and personality systems. New York: Basic Books.
- (1968). Beliefs, attitudes, and values. San Fransisco: Jossey-Bass.
- Rosenthal, D. (1955). Changes in some moral values following psychotherapy. Journal of Consulting Psychology, 19, 431-436.
- Schachter, S. (1951). Deviation, rejection, and communication. Journal of Abnormal and Social Psychology, 46, 190-207.

- Shoemaker, A., and Bolt, M. (1977). The Rokeach Value Survey and perceived Christian values. Journal of Psychology and Theology, 5, 139-142.
- Spilka, B. and Amaro, A. (unpublished 10/1/81) A signal detectability analysis and validation of measures of Intrinsic Extrinsic and Committed and Consensual faith. University of Denver.
- Spilka, B., Kojetin, B., and McIntosh, D. (in press) Forms and measures of personal faith: Questions, correlates, and distinctions. Journal for the Scientific Study of Religion.
- Strickland, B. R., & Shaffer, S. (1971). I-E, I-E, & F. Journal for the Scientific Study of Religion, 10, 366-369.
- Tanaka-Matsumi, J., & Kameoka, V. A. (1986) Reliabilities and concurrent validities of popular self-report measures of depression, anxiety, and social desirability. Journal of Consulting and Clinical Psychology, 54, 328-333.
- Thompson, A. D. (1974). Open-mindedness and indiscrimination (sic) antireligious orientation. Journal for the Scientific Study of Religion, 13, 471-477.
- Watson, P. J., Hood, R. W., Morris, R. J. & Hall, J. R. (1984) Empathy, religious orientation, and social desirability. The Journal of Psychology, 117, 211-216.
- Wilson, W. C. (1960) Extrinsic religious values and prejudice. Journal of Abnormal and Social Psychology, 60, 286-288.
- Worthington, E. L. & Gascoyne (1985). Preferences of Christians and non-Christians for five Christian counselors' treatment plans: a replication and extension. Journal of Psychology and Theology, 13, 29-41.